

**10 MWe Solar Thermal  
Central Receiver Pilot Plant  
Solar Facilities Design Integration**

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**MASTER CONTROL SYSTEM  
AS-BUILT DRAWINGS (RADL ITEM 6-5)  
VOLUME 4 — SDPC  
SECTION 2 — CCM DATA BASES**

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**September 1982**

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**MCDONNELL DOUGLAS ASTRONAUTICS COMPANY  
5301 BOLSA AVENUE  
HUNTINGTON BEACH, CA 92647**

**PREPARED FOR THE  
U.S. DEPARTMENT OF ENERGY  
SOLAR ENERGY  
UNDER CONTRACT DE-AC03-79SF10499**

① 9/16/82

MCDONNELL DOUGLAS AERONAUTICS COMPANY

ENERGY PROGRAMS

5301 Bolsa Avenue, Huntington Beach, California 92647 (714) 896-3311 Telex: 678426

13 September 1982  
A3-130-EP-DSB-330

Department of Energy  
San Francisco Operations Office  
1333 Broadway  
Oakland, California 94612

Attention: Mr. Fred Sass, Contracting Officer

Subject: CONTRACT DE-AC03-79SF10499  
SOLAR FACILITIES DESIGN INTEGRATION  
SUBMITTAL OF MASTER CONTROL SYSTEM AS-BUILT DRAWINGS  
(RADL ITEM 6-5)

Reference: MDAC Letter A3-130-EP-DSB-168, dated 12 May 1982;  
Subject: Distribution Requirements for Remaining  
Phase II RADL Items

Dear Mr. Sass:

Two (2) copies of the subject RADL item are being submitted in accordance with the requirements of the Reference Letter. These drawings represent the as-built configuration of the hardware and software elements comprising the master control system provided by the SFDI for the pilot plant.

The RADL item has been organized into five volumes, as follows:

- Volume 1 - Software Listings
  - Section 1 - Master Information File (MIF) and Beam Characterization System (BCS)
  - Section 2 - Data Acquisition System (DAS), Parts 1 and 2
- Volume 2 - Data Acquisition Remote Multiplexing System (DARMS), Special Heliostat Instrumentation and Meteorological Measurements System (SHIMMS), and Red Line Units (RLU's)
- Volume 3 - Data Acquisition System (DAS), Operating Control System (OCS), and Timing System
- Volume 4 - System Distributed Process Control System (SDPC)
  - Section 1 - Specification and Configuration
  - Section 2 - Configuration Control Module (CCM) Data Bases
  - Section 3 - Drawings
- Volume 5 - Interlock Logic System (ILS)



-2-

Technical questions concerning this document should be directed to D. W. Pearson at (714) 896-3065. Contractual questions should be directed to the undersigned at (714) 896-1340.

Very truly yours,



D. S. Butler  
Contract Administrator  
SFDI Program

DSB:RGR:dd

Enclosure: Master Control System As-Built Drawing, RADL Item 6-5

cc: S. D. Elliott, DOE (1 copy)  
Paul Douglas, SCE (1 copy)

## PREFACE

This document is provided by the McDonnell Douglas Astronautics Company (MDAC) in accordance with Department of Energy Contract No. DE-AC03-79SF10499, Reports and Deliverables List, Item 6-5.

The information contained in this document represents the "as-built" configuration of the master control system. The document has been organized into five volumes, as follows:

Volume 1 - Software Listings

Section 1 - Master Information File (MIF) and Beam  
Characterization System (BCS)

Section 2 - Data Acquisition System (DAS), Parts 1 and 2

Volume 2 - Data Acquisition Remote Multiplexing System (DARMS), Special  
Heliostat Instrumentation and Meteorological Measurements  
System (SHIMMS), and Red Line Units (RLU's)

Volume 3 - Data Acquisition System (DAS), Operating Control System (OCS),  
and Timing System

Volume 4 - System Distributed Process Control System (SDPC)

Section 1 - Specification and Configuration

Section 2 - CCM Data Bases

Section 3 - Drawings

Volume 5 - Interlock Logic System (ILS)

Questions concerning this document should be directed to D.W. Pearson at (714) 896-3065.



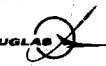
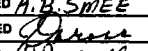

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**DRAWING NO. 1D48186**  
**THERMAL STORAGE SYSTEM CCM DATA BASE**

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DWG NO. 1048180

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	SEE E.O.	8-23-82	W.H.D.

FINISH	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES  TOLERANCES 2 PLACE DEC ± 3 PLACE DEC ± ANGLES ±	CONTRACT NO.		MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		
		ORIGINAL DATE OF DRAWING 82-01-04		MCDONNELL DOUGLAS 		
ODD DASH NUMBERS SHOWN EVEN DASH NUMBERS OPPOSITE	MATERIAL	FIRST RELEASE OF PRINTS 82-01-14				THERMAL STORAGE SYSTEM SDPC DATA BASE
		PREPARED A.B. SMEE 1/4/82	APPROVED  1/7/82	SIZE	FSCM NO.	
PART OR IDENT NO.		CHECKED  1-12-82		B	18355	1048186
FOR USAGE DATA SEE ENGINEERING RECORDS		DESIGN ACTIVITY APPROVAL		CUSTOMER APPROVAL	SCALE	SHEET 1 OF 88

SHEET REVISION RECORD

SHEET NO.	REVISION
1	A
1.1	RESERVE
1.2	A
1.3	A
1.4	A
1.5	A
1.6	A
1.7	A
1.8	A
2	A
3	A
4	A
5	A
6	A
7	A
8	A
9	A
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11	NOT USED
12	NOT USED
13	NOT USED
14	NOT USED
15	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
16	A
17	A
18	A
19	A
20	A
21	A
22	A
23	A
24	A
25	A
26	A
27	A
28	A
29	A
30	NOT USED
31	NOT USED
32	NOT USED
33	NOT USED
34	NOT USED
35	NOT USED
36	NOT USED
37	NOT USED

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
B	18355	1D48186
REV	A	SHEET 1.2

SHEET REVISION RECORD

SHEET NO.	REVISION
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41	NOT USED
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44	NOT USED
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48	NOT USED
49	NOT USED
50	NOT USED
51	A
52	A
53	A
54	A
55	A
56	A
57	A
58	A
59	A

SHEET REVISION RECORD

SHEET NO.	REVISION
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61	A
62	A
63	A
64	A
65	NOT USED
66	A
67	A
68	NOT USED
69	NOT USED
70	NOT USED
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72	NOT USED
73	NOT USED
74	NOT USED
75	NOT USED
76	NOT USED
77	NOT USED
78	NOT USED
79	NOT USED
80	NOT USED

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	<b>1D48186</b>
REV	<b>A</b>	SHEET
		<b>1.3</b>

SHEET REVISION RECORD

SHEET NO.	REVISION
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82	NOT USED
83	A
84	A
85	A
86	NOT USED
87	NOT USED
88	NOT USED
89	NOT USED
90	NOT USED
91	NOT USED
92	NOT USED
93	NOT USED
94	NOT USED
95	NOT USED
96	A
97	A
98	A
99	A
100	NOT USED
101	NOT USED
102	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
103	NOT USED
104	NOT USED
105	NOT USED
106	NOT USED
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109	NOT USED
110	NOT USED
111	NOT USED
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116	NOT USED
117	A
118	A
119	NOT USED
120	NOT USED
121	NOT USED
122	NOT USED
123	NOT USED
124	NOT USED

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
**1D48186**

REV

**A**

SHEET

**1.4**

SHEET REVISION RECORD

SHEET NO.	REVISION
125	NOT USED
126	NOT USED
127	NOT USED
128	NOT USED
129	NOT USED
130	A
131	A
132	A
133	A
134	NOT USED
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139	NOT USED
140	NOT USED
141	NOT USED
142	NOT USED
143	NOT USED
144	NOT USED
145	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
146	NOT USED
147	NOT USED
148	NOT USED
149	NOT USED
150	NOT USED
151	A
152	A
153	NOT USED
154	NOT USED
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159	NOT USED
160	NOT USED
161	NOT USED
162	NOT USED
163	NOT USED
164	A
165	NOT USED
166	NOT USED
167	NOT USED

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. <b>1D48186</b>
REV <b>A</b>	SHEET <b>1.5</b>	

SHEET REVISION RECORD

SHEET NO.	REVISION																			
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169	NOT USED																			
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182	NOT USED																			
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184	NOT USED																			
185	A																			
186	A																			
187	NOT USED																			
188	NOT USED																			
189	NOT USED																			

SHEET REVISION RECORD

SHEET NO.	REVISION																			
190	NOT USED																			
191	NOT USED																			
192	NOT USED																			
193	NOT USED																			
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204	NOT USED																			
205	NOT USED																			
206	NOT USED																			
207	NOT USED																			
208	NOT USED																			
209	NOT USED																			
210	NOT USED																			

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. <b>1D48186</b>
MCDONNELL DOUGLAS		REV <b>A</b>	SHEET <b>1.6</b>	

SHEET REVISION RECORD

SHEET NO.	REVISION
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212	NOT USED
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216	NOT USED
217	NOT USED
218	NOT USED
219	A
220	A
221	A
222	NOT USED
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227	NOT USED
228	NOT USED
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230	NOT USED
231	NOT USED
232	A

SHEET REVISION RECORD

SHEET NO.	REVISION
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236	NOT USED
237	
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245	NOT USED
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248	NOT USED
249	NOT USED
250	NOT USED
251	NOT USED
252	NOT USED
253	A
254	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
**1D48186**

REV **A**

SHEET **17**



### SHEET REVISION RECORD

SHEET NO.	REVISION																			
255	A																			
256	A																			
257	A																			
258	A																			
259	A																			
260	A																			
261	A																			
262	A																			
263	A																			
264	A																			
265	A																			

### SHEET REVISION RECORD

SHEET NO.	REVISION																			

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
 HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. <b>1D48186</b>
REV <b>A</b>	SHEET <b>1.8</b>	

THIS INDEX CONTAINS TAGS FROM THE CCMS AS FOLLOWS:  
 CCM 1 = 0 CCM 2 = 400 CCM 3 = 0 TOTAL = 400

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
1.	AM3102	TSDESSTM MAIN STM	2 1
2.	AM3702	33 51 MAIN OIL	2 8
3.	AM3802	34 52 MAIN OIL	2 20
4.	AM640	TSFT STM OUTPREC	2 86
5.	AM647C	TSFT STM OUTPREC	2 79
6.	AM74B	TSFT CON OUTLVLCV	2 93
7.	C2-1	TSS STN2 RMTCTLR1	2 768
8.	C2-2	TSS STN2 RMTCTLR2	2 767
9.	C2-3	TSS STN2 RMTCTLR3	2 766
10.	C2-4	TSS STN2 RMTCTLR4	2 765
11.	C3-1	TSS STN3 RMTCTLR1	2 764
12.	C4-3	TSS STN4 RMTCTLR3	2 761
13.	FBI3105		2 236
14.	FC3102	TSDESSTM IN FR SP	2 7
15.	FC3410	TSCNDSTM OIL FFWD	2 140
16.	FC3411	CHG OIL OIL FFWD	2 50
17.	FC3702	33 51 FLO SP	2 12
18.	FC3802	34 52 FLO SP	2 30
19.	FCM3105	17 0 CHG DS SPRAY	2 15
20.	FCM3410	TSCNDOTL OIL FLO	2 76
21.	FCM3411	T-1 CHG. OIL FLO	2 48
22.	FCM3710	41 51 OIL FLO	2 46
23.	FCM3810	42 52 OIL FLO	2 43
24.	FCY3410	TSSUBOIL FLO CMD	2 77
25.	FCY3411	CHG OIL FLO CMD	2 138
26.	FI3102	TSDESSTM STM IN	2 20
27.	FI3105	17 0 CHG DS FW IN	2 130
28.	FI3205	13 0 CHG STM IN 1	2 57
29.	FI3211	CHG OIL OILFLO 1	2 220
30.	FI3305	TSCNDSTM STM IN	2 85
31.	FI3310	CHG OIL TRAIN 2	2 222
32.	FI3504	TSBLRCON IN FR PV	2 214
33.	FI3604	TSBLRCON IN FRPV	2 217
34.	FI3706	41 OIL FFWD	2 216
35.	FI3712	TSSUPOIL IN FR PV	2 134
36.	FI3715	41 STM FFWD	2 17
37.	FI3806	42 OIL FFWD	2 219
38.	FI3812	TSSUPOIL IN FR P	2 136
39.	FI3815	42 STM FFWD	2 33
40.	FI3913	TE A PP	2 201
41.	FIL3206	TC MS I1	2 715
42.	FIL3306	TC MS I2	2 713
43.	FIL3413	CHG OIL CHG P301	2 701
44.	FIL3414	CHG OIL CHG P302	2 698
45.	FIL3903	TE OLPP1	2 695
46.	FIL3904	TF OLPP2	2 692
47.	FIL3909	TE AOLPP	2 708
48.	FY3102	TSDESSTM DS FFWD	2 18

MCDONNELL DOUGLAS AERONAUTICS CO.  
 HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D4818E
REV	A	SHEET 2

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
49.	HC3209	19 TC	KCAL1	2 691
50.	HC3309	20 TC	KCAL2	2 690
51.	HS1013	21 0 TS	MS D	2 752
52.	HS1030		T MS SP	2 751
53.	HS1132		T FP OUT	2 608
54.	HS3001		TSU T OL	2 734
55.	HS3002	TSU	UP MAN V	2 735
56.	HS3003	TSU	TK BYP V	2 737
57.	HS3004	TSU	LO MAN V	2 739
58.	HS3005	TSU	AX MAN V	2 741
59.	HS3112		TFT D PP	2 750
60.	HS3116		TC MSI D	2 640
61.	HS3117	STM GEN	TE1 S BY	2 614
62.	HS3118		TE S BY2	2 678
63.	HS3206		TC S O 1	2 728
64.	HS3209	PT3209	TCCAL V1	2 744
65.	HS3218		TC A S 1	2 704
66.	HS3220		TC ST V1	2 742
67.	HS3306		TC S O 2	2 726
68.	HS3309	PT3309	TCGAL V2	2 745
69.	HS3318		TE A S 2	2 711
70.	HS3320		TC ST V1	2 743
71.	HS3413A		TC OLPP1	2 732
72.	HS3413B	CHG OIL	CHG P301	2 723
73.	HS3413C		TC OLPP1	2 733
74.	HS3414A		TC OLPP2	2 727
75.	HS3414B	CHG OIL	CHG P302	2 710
76.	HS3414C		TC OLPP2	2 729
77.	HS3707		TE SH A1	2 746
78.	HS3708		TE BY D1	2 749
79.	HS3717		TESH O 1	2 731
80.	HS3807		TE SH A2	2 747
81.	HS3808		TE BY D2	2 760
82.	HS3817		TESH O 2	2 730
83.	HS3903A		TE P303	2 706
84.	HS3903B		TE OLPP1	2 722
85.	HS3903C		TE OLPP1	2 725
86.	HS3904A		TE P304	2 705
87.	HS3904B		TE OLPP2	2 720
88.	HS3904C		TE OLPP2	2 721
89.	HS3905		TE A OL2	2 702
90.	HS3906		TE A OL1	2 703
91.	HS3907	AUX OIL	P305 SUC	2 740
92.	HS3909		TEA P305	2 724
93.	HS4014	76 47	TSU VENT	2 618
94.	HS4021	76 47	TSU P308	2 610
95.	HS50A		T FW PP	2 748
96.	HS50B		TFP	2 736
97.	HS50C		TFP A-M	2 738
98.	HS6301B		TRLU CHG	2 689
99.	HS6302B		TRLU EXT	2 621
100.	IIH1132		TT FP OU	2 616
101.	IIH3112	P307	T FT D P	2 606
102.	IIH50		T FW PP	2 688
103.	JC3102	FPGS	LOAD SP	2 9
104.	JC3702	33 51	LOAD SP	2 24

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 3	

NO.	TAG NAME	DESCRIPTION	CCM	LOOFID
105.	JC3802	34 52	LOAD SP	2 34
106.	J13413	TSCRG	PWRPV	2 128
107.	J13414		TC P302	2 173
108.	J13403		TC P303	2 211
109.	J13904		TC P304	2 207
110.	LC3110	TSCNDCON	INTLVLS	2 53
111.	LC3111	TSCNDCON	INTLVLS	2 63
112.	LC3505	41 51	BLR LVL	2 42
113.	LC3605	42 52	BLR LVL	2 41
114.	LC74B	TSFT CON	INTLVLS	2 94
115.	LCM3505	41 51	WTR FLO	2 39
116.	LCM3605	42 52	WTR FLO	2 40
117.	LCM74D1	TSFT CON	INTLVLCV	2 97
118.	LCM74D2	TSFT CON	INTLVLCV	2 96
119.	LE-2	TSS EGRM	ILS CMD2	2 757
120.	LI3008		TSU OIL	2 118
121.	LI3112		TSFLT	2 92
122.	LI3213	TSCNDCON	INTLVLS	2 49
123.	LI3219		TC ST L1	2 200
124.	LI3313	TSCNDCON	INTLVLS	2 60
125.	LI3319		TC ST L2	2 197
126.	LI3705	TS EXT	NO.BLR-1	2 215
127.	LI3905	TS EXT	SO.BLR-2	2 218
128.	LIH1013	21 0	TS MS D	2 719
129.	LIH3116		TC MS DL	2 613
130.	M2-1	TSS STN2	RMT MUX1	2 615
131.	M2-1V	TSS STN2	MUX ALM	2 59
132.	M2-2	TSS STN2	RMT MUX2	2 651
133.	M2-2V	TSS STN2	MUX ALM	2 65
134.	M3-1	TSS STN2	RMT MUX1	2 759
135.	M3-1V	TSS STN3	MUX ALM	2 61
136.	ME-2	TSS EGRM	ILS MUX2	2 758
137.	PC3102	TSDESSTM	IN PRESP	2 2
138.	PC3702	33 51	PRES SP	2 26
139.	PC3A02	34 52	PRES SP	2 35
140.	PC640	23 TSFTK	STM DMP	2 88
141.	PC647C	TSFT	INTPRESP	2 223
142.	PCM1003	TSAXSTM	OUTPRECV	2 72
143.	PCM1005	TSAXSTM	OUTPRECV	2 75
144.	PCM3110	TSCNDCON	INTLVLCV	2 51
145.	PCM3111	TSCNDCON	INTLVLCV	2 62
146.	PCM3413	11 PUMP	PMP CTRL	2 66
147.	PCM3414	CHG OIL	PMP CTRL	2 89
148.	PCM3903	35 51	PMP CTRL	2 68
149.	PCM3904	34 52	PMP CTRL	2 91
150.	PCM3910	TSAXOIL	CV	2 71
151.	PD13401	CHG OIL	SUC FILT	2 58
152.	PD13403		302 FILT	2 90
153.	PD1186B		T FW PP	2 619
154.	PI1001F	RSDC STM	JNTPREPV	2 3
155.	PI1020		P DS S 0	2 167
156.	PI1495	LOADCNTA	XFMRPRES	2 661
157.	PI3099		T INS 02	2 648
158.	PI3102	RCVR STM	DS301	2 95
159.	PI3102A	RCVR STM	DS301 IN	2 6
160.	PI3102B	RCVR STM	DS301 IN	2 5

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MURKININGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
<b>MCDONNELL DOUGLAS</b>		REV A	SHEET 4	

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID		
161.	PI3104	TSDSSTM	IN	PREPV	2	132
162.	PI3109	17 0 CHG	DS	FW IN	2	99
163.	PI3114	TSFT	INT	PREPV	2	224
164.	PI3203	TSCNDSTM	IN	PREPV	2	52
165.	PI3208	5 CHGOIL	OIL	OUT1	2	182
166.	PI3209		TC	S I 1	2	199
167.	PI3210		COND	T1	2	146
168.	PI3210A	TSCNDSTM	IN	PREPV	2	56
169.	PI3210B	TSCNDSTM	IN	PREPV	2	55
170.	PI3211	5 CHGOIL	OIL	IN 1	2	181
171.	PI3216		TC	A S 1	2	198
172.	PI3303	TSCNDSTM	IN	PREPV	2	80
173.	PI3308		TC	OL 02	2	185
174.	PI3309		TC	S I 2	2	187
175.	PI3310		TC	OL I2	2	184
176.	PI3311A	TSCNDSTM	IN	PREPV	2	67
177.	PI3311B	TSCNDSTM	IN	PREPV	2	64
178.	PI3316		TC	A S 2	2	186
179.	PI3405	CHG OIL	P301	SUC	2	180
180.	PI3406	CHG OIL	P302	SUC	2	172
181.	PI3450	CHG OIL	P301	DIS	2	178
182.	PI3451	CHG OIL	P302	DIS	2	175
183.	PI3502		TE	B W 1	2	113
184.	PI3602		TE	B W 2	2	115
185.	PI3702		RLR	STMT1	2	148
186.	PI3702A	TSBLRSTM	OUT	PREPV	2	37
187.	PI3702B	TSBLRSTM	OUT	PREPV	2	28
188.	PI3703		TE	B OL1	2	108
189.	PI3713		TE	SHOL1	2	106
190.	PI3714	TSAUXSTM	OUT	PREPV	2	74
191.	PI3802		BLR	STMT2	2	164
192.	PI3802A	TSBLRSTM	OUT	PREPV	2	38
193.	PI3802B	TSBLRSTM	OUT	PREPV	2	36
194.	PI3803		TE	B OL2	2	111
195.	PI3813		TE	SHOL2	2	110
196.	PI3814	TSAUXSTM	OUT	PREPV	2	73
197.	PI3903		TCP	303 I	2	212
198.	PI3904		TCP	304 I	2	208
199.	PI3908		TC	APP I	2	227
200.	PI3911		TCA	OL PP	2	202
201.	PI3950		TCP	303 O	2	209
202.	PI3951		TCP	304 O	2	205
203.	PI4001A	UMU	N2	INLFT	2	681
204.	PI4008		TS	TK PR	2	117
205.	PI635F	PSHP2	INT	PREOR	2	225
206.	PI640F		COND	PR	2	82
207.	PIH3099		TINST	O2	2	685
208.	PIH3117		TE	S BY1	2	716
209.	PIH3118		TE	S BY2	2	607
210.	PIH3118				2	233
211.	QAH4060		TSU	O2	2	238
212.	QAH4061		TSU	H2	2	237
213.	QI4060		TSU	O2	2	231
214.	QI4061		TSU	H2	2	232
215.	QI6004	TS CHARG	TC	OPTRP	2	686
216.	QI6005	TS EXTRT	TE	OPTRP	2	682

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINOTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 5	

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
217.	QI6311	RLU B 1	2	632
218.	QI6312	RLU B 2	2	631
219.	QI6313	RLU B 3	2	630
220.	QI6314	RLU B 4	2	629
221.	QI6315	RLU B 5	2	628
222.	QI6316	RLU B 6	2	627
223.	QI6317	RLU B 7	2	626
224.	QI6318	RLU B 8	2	625
225.	QI6319	T RLU	2	624
226.	QI6320	TSS RLU	2	611
227.	QI6321	T RLU EX	2	623
228.	QI6322	T RLU CH	2	650
229.	SI3413	CHG OIL P301 SPD	2	179
230.	SI3414	CHG OIL P302 SPD	2	174
231.	SI3903	TC P303	2	210
232.	SI3904	TC P304	2	206
233.	TC3102	TSCNDOIL OUTTEMSP	2	10
234.	TC3105	TSPESSTM TMP CTRL	2	23
235.	TC3410	TSCNDOIL OIL TMP	2	87
236.	TC3411	13 TRAN1 OIL TMP	2	204
237.	TC3710	41 51 STM TMP	2	47
238.	TC3810	42 52 STM TMP	2	44
239.	TCM1004	TSAUXSTM OUTTEMCV	2	69
240.	TD3410	TSCNDOIL TR2 MODE	2	763
241.	TD3411	TSCNDOIL TR1 MODE	2	645
242.	TEST		2	235
243.	TEST1	MULT IN	2	221
244.	TEST2	MULT OUT	2	230
245.	TI1003	PV1001 VLV TMP	2	234
246.	TI1494	LOADCNTA XFMRTMP	2	635
247.	TI3006	TSU OL I	2	166
248.	TI3007	TSU TK T LO MAN	2	45
249.	TI3009A	TSU T	2	119
250.	TI3009B	TSU T	2	120
251.	TI3009C	TSU T	2	121
252.	TI3009D	TSU T	2	122
253.	TI3009E	TSU T	2	123
254.	TI3009F	TSU T	2	124
255.	TI3009G	TSU T	2	125
256.	TI3009H	TSU T	2	126
257.	TI3009I	TSU T	2	127
258.	TI3009K	TSU T	2	129
259.	TI3009M	TSU T	2	131
260.	TI3009P	TSU T	2	133
261.	TI3009R	TSU T	2	135
262.	TI3009T	TSU T	2	137
263.	TI3009V	TSU T	2	139
264.	TI3009X	TSU T	2	141
265.	TI3009Z	TSU T	2	98
266.	TI3010R	TSU T	2	145
267.	TI3010D	TSU T	2	147
268.	TI3010F	TSU T	2	149
269.	TI3010G	TSU T	2	150
270.	TI3010H	TSU T	2	151
271.	TI3010I	TSU T	2	152
272.	TI3010J	TSU T	2	153

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048186
REV	A	SHEET	6

NO. TAG NAME DESCRIPTION CCM LOOPID

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
273.	TI3010K	TSU T	2 154
274.	TI3010L	TSU T	2 155
275.	TI3010M	TSU T	2 156
276.	TI3010N	TSU T	2 157
277.	TI3103	TSDSSTM STM IN	2 22
278.	TI3105	DS301 OT	2 144
279.	TI3105A	17 0 CHG DS OUTLT	2 25
280.	TI3105B	17 0 CHG DS OUTLT	2 27
281.	TI3106	17 0 CHG DS OUTLT	2 226
282.	TI3108	17 0 CHG DS FW IN	2 159
283.	TI3204	TSCNPSTM IN TEMPV	2 54
284.	TI3211	5 CHGOIL OIL OUT1	2 70
285.	TI3211A	TSCNDOIL OUTTEMPV	2 13
286.	TI3211B	TSCNDOIL OUTTEMPV	2 11
287.	TI3212	5 CHGOIL OIL OUT1	2 183
288.	TI3214	5 CHGOIL OIL IN 1	2 189
289.	TI3217	TC A S 1	2 193
290.	TI3304	TSCNDSTM IN TEMPV	2 81
291.	TI3310	TC OL 02	2 78
292.	TI3310A	TSCNDOIL OUTTEMPV	2 16
293.	TI3310B	TSCNDOIL OUTTEMPV	2 14
294.	TI3312	TC OL 02	2 191
295.	TI3314	TC OL I2	2 190
296.	TI3317	TC A S 2	2 192
297.	TI3412	CHG OIL PMPS SUC	2 188
298.	TI3503	TE B W 1	2 213
299.	TI3603	TE B W 2	2 165
300.	TI3704	TE B OL1	2 161
301.	TI3710	SH STMT1	2 158
302.	TI3710A	TSSUPSTM OUTTEMPV	2 19
303.	TI3710B	TSSUPSTM OUTTEMPV	2 21
304.	TI3711	TE SHOL1	2 160
305.	TI3804	TE B OL2	2 163
306.	TI3810	SH STMT2	2 196
307.	TI3910A	TSSUPSTM OUTTEMPV	2 32
308.	TI3910B	TSSUPSTM OUTTEMPV	2 31
309.	TI3811	TE SHOL2	2 162
310.	TI3912	TE A OL	2 194
311.	TI3914A	TE OL I1	2 171
312.	TI3914B	TE OL I2	2 195
313.	TIH1482	T RS2	2 680
314.	TIH1483	T RS3	2 633
315.	TIL1482	T RS2	2 679
316.	TIL1483	T RS3	2 649
317.	TREF2-1	TSS STN2 R IPAC 1	2 4
318.	TREF2-2	T IPAC 2	2 142
319.	TREF3-1	TSS STN3 MUX1 TMP	2 143
320.	UD3102A	TS IN PT	2 756
321.	UD3102B	TS CHG C	2 755
322.	UD3102C	TS CHG C	2 754
323.	UD3702A	33 51 OIL MODE	2 639
324.	UD3702B	33 51 OIL MODE	2 638
325.	UD3802A	34 52 OIL MODE	2 637
326.	UD3802B	34 52 OIL MODE	2 636
327.	UI3112	P307 T FT D P	2 605
328.	UI3117	TE S BY1	2 709

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS			REV A	SHEET 7	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
329.	UI3118	TE S BY2	2 665
330.	UI3413	CHG OIL CHG P301	2 700
331.	UI3414	CHG OIL CHG P302	2 697
332.	UI3903	TE OLPP1	2 694
333.	UI3904	TE OLPP2	2 612
334.	UI3909	TE AOLPP	2 707
335.	UIL3206	TC MS I1	2 714
336.	UIL3306	TC MS I2	2 712
337.	ZI1003	AUX SIMS	2 168
338.	ZI1004	P DS W I	2 169
339.	ZI1005	AUX SITS	2 170
340.	ZI1008	AUX SIMS	2 683
341.	ZI1009	AUX SITS	2 684
342.	ZI1013	21 0 TS MS D	2 687
343.	ZI1030	T MS SP	2 718
344.	ZI1132	T FP OUT	2 617
345.	ZI1490	PWR ON LOADCNTA	2 646
346.	ZI1491	PWR ON MCC-B	2 644
347.	ZI1492	UNDRVOLT LOADCNTA	2 663
348.	ZI1493	OVERVOLT LOADCNTA	2 664
349.	ZI3001	TSU I OL	2 666
350.	ZI3002	TSU UP MAN V	2 672
351.	ZI3003	TSU TK BYP V	2 670
352.	ZI3004	TSU LO MAN V	2 669
353.	ZI3005	TSU AX MAN V	2 671
354.	ZI3102	MSTM VLV	2 228
355.	ZI3105	17 0 CHG DS VLV	2 100
356.	ZI3110	TC S O 1	2 103
357.	ZI3111	TC S O 2	2 104
358.	ZI3112	TFT D PP	2 717
359.	ZI3116	TC MS D	2 667
360.	ZI3117	TE S BY1	2 662
361.	ZI3118	TE S BY2	2 652
362.	ZI3206	TC S O 1	2 655
363.	ZI3218	TC A S 1	2 659
364.	ZI3220	TC ST V1	2 653
365.	ZI3306	TC S O 2	2 656
366.	ZI3318	TC A S 2	2 660
367.	ZI3320	TC ST V2	2 654
368.	ZI3410	CHG OIL OIL VLV	2 176
369.	ZI3411	CHG OIL TCV POS	2 177
370.	ZI3413	CHG OIL CHG P301	2 699
371.	ZI3414	CHG OIL CHG P302	2 696
372.	ZI3505	41 51 WTR VLV	2 114
373.	ZI3605	42 52 WTR VLV	2 116
374.	ZI3702	33 51 MOTIL VLV	2 107
375.	ZI3707	TE SH A1	2 677
376.	ZI3708	TE BY D1	2 676
377.	ZI3710	41 51 OIL VLV	2 229
378.	ZI3717	TESH O 1	2 641
379.	ZI3802	34 52 MOTIL VLV	2 112
380.	ZI3807	TE SH A2	2 674
381.	ZI3808	TE BY D2	2 673
382.	ZI3810	42 52 OIL VLV	2 109
383.	ZI3817	TESH O 2	2 675
384.	ZI3903	TE OLPP1	2 693

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048186
REV	A	SHEET 8



NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
385.	ZI3904		2	762
386.	ZI3905		2	634
387.	ZI3906		2	657
388.	ZI3907	AUX OIL	2	658
389.	ZI3909		2	753
390.	ZI3910		2	203
391.	ZI4014	VAPR OUT	2	668
392.	ZI4015	UMU FUME	2	647
393.	ZI4018	FLRSTACK	2	642
394.	ZI4021		2	643
395.	ZI50		2	620
396.	ZI640	TSFLTK	2	84
397.	ZI647C	TSVLV	2	102
398.	ZI74B	TSVLV	2	83
399.	ZI7401	TSVLV	2	105
400.	ZI7402	TSVLV	2	101

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 9	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	FH AL PT AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
1	AM3102	TSDSSTM MAIN STM	MVCU A/M	A C	1 1	12 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
2	PC3102	TSDSSTM IN PRESP	MVCU PID	A C	1 1	6 R	1 PSIG	N N	0.0 1800.0	L N	1458.00 1512.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
3	PI1001F	RSDC STM INTPREPV	MVCU INPT	A M	5 1	10 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
4	TREF2-1	TSS STN2 R IPAC 1	IPAC TCPL	A M	10 1	1 S	8 DEGF	N N	0.0 150.0	L P	0.00 148.50	109.50 90.00	60.00 60.00		MVCU
5	PI3102B	RCVR STM DS301 IN	MVCU INPT	A M	5 1	4 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
6	PI3102A	RCVR STM DS301 IN	MVCU INPT	A M	5 1	3 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
7	FC3102	TSDSSTM IN FR SP	MVCU PID	A C	1 1	3 R	1 KLBH	Y N	0.0 130.0	L N	6.50 128.70	0.00 0.00	0.00 0.00	0% 99%	D CNSL
8	AM3702	33 51 MAIN OIL	MVCU A/M	A C	1 2	11 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	R MVCU
9	JC3102	EPGS LOAD SP	MVCU PID	A C	1 1	1 R	1 KW	N N	0.0 18417.0	L N	0.00 12707.73	0.00 0.00	0.00 0.00	0% 99%	D CNSL
10	TC3102	TSCNDOIL OUTTEMP	MVCU PID	A C	1 1	10 R	1 DEGF	N N	0.0 800.0	L N	560.00 584.00	75.00 74.00	70.00 69.00	0% 99%	D CNSL
11	TI3211B	TSCNDOIL OUTTEMPV	MVCU INPT	A M	5 1	8 R	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	592.00 584.00	0.00 0.00		MVCU
12	FC3702	33 51 FLO SP	MVCU PID	A C	1 2	8 R	1 KLBH	N N	0.0 63.3	L N	5.69 55.03	99.00 99.00	9.00 0.00	0% 99%	D CNSL
13	TI3211A	TSCNDOIL OUTTEMPV	MVCU INPT	A M	5 1	7 R	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	592.00 584.00	0.00 0.00		MVCU
14	TI3310B	TSCNDOIL OUTTEMPV	MVCU INPT	A M	5 1	6 R	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	592.00 584.00	0.00 0.00		MVCU
15	FCM3105	17 0 CHG DS SPRAY	MVCU PID	A C	1 1	24 R	1 KLBH	Y N	0.0 25.0	L N	0.00 24.75	0.00 0.00	0.00 0.00	0% 99%	D CNSL
16	TI3310A	TSCNDOIL OUTTEMPV	MVCU INPT	A M	5 1	5 R	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	592.00 584.00	0.00 0.00		MVCU
17	FI3715	41 STM FFWD	MVCU NODE	A M	5 2	56 R	8 KLBH	N N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00		MVCU

MODONNELL DOUGLAS AERONAUTICS CO.  
MONTGOMERY BEACH, CALIF.

MODONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D48186

REV

A

SHEET

16

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/O C/M	HWY NO DEV AD	INT AC HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
18	FY3102	TSDFSSM DS FFWD	MVCU NODE	A M	5 1	72 R	B KLBH	N N	0.0 130.0	L N	0.00 128.70	0.00 0.00	0.00 0.00		MVCU
19	TI3710A	TSSUPSTM OUTTEMPV	MVCU INPT	A M	5 2	5 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
20	FI3102	TSDFSSM STM IN	MVCU NODE	A M	5 1	52 R	B KLBH	N N	0.0 130.0	L N	0.00 128.70	0.00 0.00	0.00 0.00		MVCU
21	TI3710B	TSSUPSTM OUTTEMPV	MVCU INPT	A M	5 2	6 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
22	TI3103	TSDFSSM STM IN	MVCU INPT	A M	5 1	14 R	B DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
23	TC3105	TSDFSSM TMP CTRL	MVCU PID	A C	1 1	18 R	B DEGF	N N	0.0 800.0	L N	552.00 648.00	84.00 82.00	76.00 75.00	0% 99%	D CNSL
24	JC3702	33 51 LOAD SP	MVCU PID	A C	1 2	3 R	B MW	N N	0.0 18.0	L N	0.00 12.42	0.00 0.00	0.00 0.00	0% 99%	D CNSL
25	TI3105A	17 0 CHG DS OUTLT	MVCU INPT	A M	5 1	11 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	84.00 82.00	0.00 0.00		MVCU
26	PC3702	33 51 PRES SP	MVCU PID	A C	1 2	2 R	B PSIG	N N	0.0 600.0	L N	72.00 432.00	79.00 75.00	12.00 0.00	0% 99%	D CNSL
27	TI3105B	17 0 CHG DS OUTLT	MVCU INPT	A M	5 1	12 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	84.00 82.00	0.00 0.00		MVCU
28	PI3702B	TSBLRSTM OUTPREPV	MVCU INPT	A M	5 2	2 R	B PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
29	AM3802	34 52 MAIN OIL	MVCU A/M	A C	2 1	11 R	B PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	R MVCU
30	FC3802	34 52 FLO SP	MVCU PID	A C	2 1	8 R	B KLBH	N N	0.0 63.3	L N	5.69 55.03	99.00 99.00	9.00 0.00	0% 99%	D CNSL
31	TI3810B	TSSUPSTM OUTTEMPV	MVCU INPT	A M	6 1	6 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
32	TI3810A	TSSUPSTM OUTTEMPV	MVCU INPT	A M	6 1	5 R	B DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
33	FI3815	42 STM FFWD	MVCU NODE	A M	6 1	56 R	B KLBH	N N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00		MVCU
34	JC3802	34 52 LOAD SP	MVCU PID	A C	2 1	3 R	B MW	N N	0.0 18.0	L N	0.00 12.42	0.00 0.00	0.00 0.00	0% 99%	D CNSL

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048186

REV

A

SHEET

17

LOOP	TAG	DESCRI PTIOM	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LG AL LL AL	CO LO CO HI	OUTD SPSEL
35	PC3802	34 52 PRES SP	MVCU PID	A C	2 1	2 R	1 PSIG	N N	0.0 600.0	L N	72.00 432.00	79.00 75.00	12.00 0.00	0% 99%	D CNSL
36	PI3802B	TSBLRSTM OUTPREPV	MVCU INPT	A M	6 1	2 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
37	PI3702A	TSBLRSTM OUTPREPV	MVCU INPT	A M	5 2	1 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
38	PI3802A	TSBLRSTM OUTPREPV	MVCU INPT	A M	6 1	1 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
39	LCM3505	41 51 WTR FLO	MVCU PID	A C	1 2	17 R	1 KLBH	Y N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00	0% 99%	D CNSL
40	LCM3605	42 52 WTR FLO	MVCU PID	A C	2 1	17 R	1 KLBH	Y N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00	0% 99%	D CNSL
41	LC3605	42 52 BLR LVL	MVCU PID	A C	2 1	13 R	1 INCH	N N	37.0 67.0	L N	50.20 54.10	97.00 91.00	10.00 4.00	0% 99%	D CNSL
42	LC3505	41 51 BLR LVL	MVCU PID	A C	1 2	13 R	1 INCH	N N	47.0 67.0	L N	55.80 58.40	97.00 91.00	10.00 4.00	0% 99%	D CNSL
43	FCM3810	42 52 OIL FLO	MVCU PID	A C	2 1	25 R	1 KLBH	Y N	14.5 300.0	L N	14.50 297.15	0.00 0.00	0.00 0.00	0% 99%	R CNSL
44	TC3810	42 52 STM TMP	MVCU PID	A C	2 1	21 R	1 DEGF	N N	0.0 800.0	L N	528.00 552.00	73.00 71.00	64.00 62.00	0% 99%	D CNSL
45	TI3007	TSU TK T LO MAN	IPAC INPT	A M	10 1	2 S	8 DEGF	N N	0.0 800.0	L P.	0.00 792.00	592.00 552.00	0.00 0.00		MVCU
46	FCM3710	41 51 OIL FLO	MVCU PID	A C	1 2	25 R	1 KLBH	Y N	14.5 300.0	L N	14.50 297.15	0.00 0.00	0.00 0.00	0% 99%	R CNSL
47	TC3710	41 51 STM TMP	MVCU PID	A C	1 2	21 R	1 DEGF	N N	0.0 800.0	L N	528.00 552.00	73.00 71.00	64.00 62.00	0% 99%	D CNSL
48	FCM3411	T-1 CHG. OIL FLO	MVCU PID	A C	3 1	12 R	1 KLBH	Y N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	R CNSL
49	LI3213	TSCNDCON INTLVLS	MVCU INPT	A M	2 2	1 R	1 INCH	N N	0.0 30.0	L N	0.00 29.70	0.00 0.00	0.00 0.00		MVCU
50	FC3411	CHG OIL OIL FFWD	MVCU PID	A C	3 1	9 R	1 KLBH	Y N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	D CNSL
51	PCM3110	TSCNDCON INTLVLCV	MVCU PID	A C	2 2	3 R	1 PSIG	N Y	0.0 1800.0	L N	0.00 1404.00	86.00 83.00	74.00 72.00	0% 99%	D CNSL

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 18	

LOOP	TAG	DESCRI PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LQ SP HI	HH AL HI AL	LG AL LL AL	CO LO CO HI	OUTD SPSEL
52	PI3203	TSCNDSTM IN PREPV	MVCU INPT	A M	7 1	6 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	86.80 83.00	74.00 72.00		MVCU
53	LC3110	TSCNDCON INTLVLS	MVCU PID	A C	2 2	1 R	1 INCH	N N	0.0 30.0	L N	0.00 29.70	0.00 0.00	0.00 0.00	0% 99%	D CNSL
54	TI3204	TSCNPSTM IN TEMPV	MVCU INPT	A M	7 1	5 R	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	85.00 82.00	78.00 75.00		MVCU
55	PI3210B	TSCNDSTM IN PREPV	MVCU INPT	A M	6 2	3 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
56	PI3210A	TSCNDSTM IN PREPV	MVCU INPT	A M	6 2	2 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
57	FI3205	13 0 CHG STM IN 1	MVCU NODE	A M	7 1	57 R	8 KLBH	N N	0.0 74.8	L N	0.00 74.01	0.00 0.00	0.00 0.00		MVCU
58	PDI3401	CHG OIL SUC FILT	IPAC INPT	A M	9 1	3 R	1 IH20	N N	0.0 100.0	L N	0.00 99.00	95.00 90.00	0.00 0.00		MVCU
59	M2-1V	TSS STN2 MUX ALM	IPAC INPT	A M	10 1	8 S	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.43 5.30	4.80 4.60		MVCU
60	LI3313	TSCNDCON INTLVLS	MVCU INPT	A M	2 2	4 R	1 INCH	N N	0.0 30.0	L N	0.00 29.70	0.00 0.00	0.00 0.00		MVCU
61	M3-1V	TSS STN3 MUX ALM	IPAC INPT	A M	9 1	8 R	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.20 5.20	4.90 4.90		MVCU
62	PCM3111	TSCNDCON INTLVLCV	MVCU PID	A C	2 2	6 R	1 PSIG	N N	0.0 1800.0	L N	0.00 1422.00	86.00 83.00	74.00 72.00	0% 99%	D CNSL
63	LC3111	TSCNDCON INTLVLS	MVCU PID	A C	2 2	4 R	1 INCH	N N	0.0 30.0	L N	0.00 29.70	0.00 0.00	0.00 0.00	0% 99%	D CNSL
64	PI3311B	TSCNDSTM IN PREPV	MVCU INPT	A M	6 2	6 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
65	M2-2V	TSS STN2 MUX ALM	IPAC INPT	A M	14 1	104 S	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.20 5.20	4.90 4.90		MVCU
66	PCM3413	11 PUMP PMP CTRL	MVCU PID	A C	3 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
67	PI3311A	TSCNDSTM IN PREPV	MVCU INPT	A M	6 2	5 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
68	PCM3903	35 51 PMP CTRL	MVCU PID	A C	3 1	17 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
MURKIN BEACH, CALIF.

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REV

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SHEET

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LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
69	TCM1004	TSAUXSTM OUTTEMCV	MVCU PID	A C	2 2	8 R	1 DEGF	N N	0.0 600.0	L P	330.00 354.00	450.00 426.00	276.00 252.00	0% 99%	D CNSL
70	TI3211	5 CHGOIL OIL OUT1	MVCU NODE	A M	3 1	51 R	1 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
71	PCM3910	TSAUXOIL CV	MVCU PID	A C	3 1	21 R	1 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00	0% 99%	R CNSL
72	PCM1003	TSAUXSTM OUTPRECV	MVCU PID	A C	6 2	7 R	8 PSIG	N N	0.0 90.0	L P	39.60 72.00	84.60 80.10	29.70 0.00	0% 99%	D CNSL
73	PI3814	TSAUXSTM OUTPREPV	MVCU INPT	A M	7 1	10 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
74	PI3714	TSAUXSTM OUTPREPV	MVCU INPT	A M	7 1	9 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
75	PCM1005	TSAUXSTM OUTPRECV	MVCU PID	A C	2 2	9 R	1 PSIG	N N	0.0 90.0	L N	52.20 62.10	94.00 89.00	56.00 0.00	0% 99%	D CNSL
76	FCM3410	TSCNDOIL OIL FLO	MVCU PID	A C	3 1	34 R	1 KLBH	Y N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	R CNSL
77	FCY3410	TSSUBOIL FLO CMD	MVCU A/M	A C	3 1	33 R	1 KLBH	N N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	D MVCU
78	TI3310	TC OL 02	MVCU NODE	A M	3 1	73 R	1 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
79	AM647C	TSFT STM OUTPRECV	MVCU A/M	A C	4 1	4 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
80	PI3303	TSCNDSTM IN PREPV	MVCU INPT	A M	7 1	16 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	86.00 83.00	74.00 72.00		MVCU
81	TI3304	TSCNDSTM IN TEMPV	MVCU INPT	A M	7 1	15 R	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	85.00 82.00	78.00 75.00		MVCU
82	PI640F	COND PR	MVCU INPT	A M	4 1	11 R	1 INHG	N N	0.0 8.0	L N	0.00 7.92	0.00 0.00	0.00 0.00		MVCU
83	ZI74B	TSVLV LFT PV	MVCU INPT	A M	8 1	5 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
84	ZI64C	TSFLTK VV POST	MVCU INPT	A M	8 1	10 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
85	FI3305	TSCNDSTM STM IN	MVCU NODE	A M	7 1	79 R	8 KLBH	N N	0.0 74.8	L N	0.00 74.01	0.00 0.00	0.00 0.00		MVCU

MCDONNELL BOUGLAS AERONAUTICS CO.  
MOUNTAIN VIEW, CALIF.

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HCST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HI AL HI AL	LO AL LL AL	CO LO CU HI	OUTD SPSEL
86	AM640	TSFT STM OUTPREC	MVCU PID	A C	4 1	9 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
87	TC3410	TSCNOOIL OIL TMP	MVCU PID	A C	3 1	26 R	1 DEGF	N N	0.0 800.0	L N	120.00 592.00	75.00 74.00	70.00 69.00	0% 99%	D CNSL
88	PC640	23 TSFTK STM DMP	MVCU PID	A C	4 1	6 R	1 PSIG	N N	0.0 200.0	L N	114.00 150.00	80.00 75.00	0.00 0.00	0% 99%	D CNSL
89	PCM3414	CHG OIL PMP CTRL	MVCU PID	A C	3 1	37 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
90	PDI3403	302 FILT	IPAC INPT	A M	9 1	4 R	1 IH20	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
91	PCM3904	34 52 PMP CTRL	MVCU PID	A C	3 1	39 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
92	LI3112	TSFLTK	MVCU INPT	A M	4 1	1 R	1 INCH	N N	12.0 60.0	L P	12.00 59.52	53.76 50.40	13.44 12.00		MVCU
93	AM74B	TSFT CON OUTLVLCV	MVCU A/M	A C	4 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
94	LC74B	TSFT CON INTLVLSP	MVCU PID	A C	4 1	11 R	1 INCH	N N	12.0 60.0	L N	12.00 59.52	60.00 48.00	24.00 18.00	0% 99%	D CNSL
95	PI3102	RCVR STM DS301	MVCU NODE	A M	5 1	54 R	1 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	99.00 99.00	0.00 0.00		MVCU
96	LCM7402	TSFT CON INTLVLCV	MVCU PID	A C	4 1	16 R	1 INCH	N N	12.0 60.0	L N	12.00 59.52	60.00 48.00	0.00 0.00	0% 99%	D CNSL
97	LCM7401	TSFT CON INTLVLCV	MVCU PID	A C	4 1	17 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
98	TI3009Z	TSU T	IPAC INPT	A M	10 1	3 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
99	PI3109	17 0 CHG DS FW IN	IPAC INPT	A M	10 1	17 S	8 PSIG	N N	0.0 2500.0	L N	0.00 2475.00	0.00 0.00	0.00 0.00		MVCU
100	ZI3105	17 0 CHG DS VLV	IPAC INPT	A M	10 1	18 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
101	ZI7492	TSVLV LFT PV	MVCU INPT	A M	8 1	7 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
102	ZI647C	TSVLV LFT PV	MVCU INPT	A M	8 1	9 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUPTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	QUTD SPSEL
103	ZI3110	TC S 0 1	IPAC INPT	A M	10 1	21 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
104	ZI3111	TC S 0 2	IPAC INPT	A M	10 1	22 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
105	ZI7401	TSVLV LFT PV	MVCU INPT	A M	8 1	6 P	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
106	PI3713	TE SHOLI	IPAC INPT	A M	10 1	49 S	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
107	ZI3702	33 51 MOIL VLV	IPAC INPT	A M	10 1	50 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
108	PI3703	TE B OLI	IPAC INPT	A M	10 1	51 S	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
109	ZI3810	42 52 OIL VLV	IPAC INPT	A M	10 1	53 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
110	PI3813	TE SHOL2	IPAC INPT	A M	10 1	55 S	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
111	PI3803	TE B OL2	IPAC INPT	A M	10 1	81 S	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
112	ZI3802	34 52 MOIL VLV	IPAC INPT	A M	10 1	82 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
113	PI3502	TE B W 1	IPAC INPT	A M	10 1	83 S	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
114	ZI3505	41 51 WTR VLV	IPAC INPT	A M	10 1	84 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
115	PI3602	TE B W 2	IPAC INPT	A M	10 1	85 S	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
116	ZI3605	42 52 WTR VLV	IPAC INPT	A M	10 1	86 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
117	PI4008	TS TK PR	IPAC INPT	A M	10 1	87 S	8 IH20	N N	0.0 20.0	L P	0.00 19.80	19.80 13.00	3.00 0.00		MVCU
118	LI3008	TSU OIL	IPAC INPT	A M	10 1	88 S	8 INCH	N N	2.0 48.5	L N	4.79 41.06	82.00 77.00	11.00 6.00		MVCU
119	TI3009A	TSU T	IPAC INPT	A M	10 1	113 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU

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LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LC AL LL AL	CO LO CO HI	OUTD SPSEL
120	TI3009B	TSU T	IPAC INPT	A M	10 1	114 S	1 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
121	TI3009C	TSU T	IPAC INPT	A M	10 1	115 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
122	TI3009D	TSU T	IPAC INPT	A M	10 1	116 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
123	TI3009E	TSU T	IPAC INPT	A M	10 1	117 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
124	TI3009F	TSU T	IPAC INPT	A M	10 1	118 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
125	TI3009G	TSU T	IPAC INPT	A M	10 1	119 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
126	TI3009H	TSU T	IPAC INPT	A M	10 1	120 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
127	TI3009I	TSU T	IPAC INPT	A M	10 1	145 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
128	J13413	TSCRG PWRPV	IPAC INPT	A M	9 1	113 R	8 KW	N N	0.0 180.0	L N	0.00 178.20	0.00 0.00	0.00 0.00		MVCU
129	TI3009K	TSU T	IPAC INPT	A M	10 1	147 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
130	FI3105	17 0 CHG DS FW IN	MVCU NODE	A M	5 1	65 R	8 KLRH	N N	0.0 25.0	L N	0.00 24.75	0.00 0.00	0.00 0.00		MVCU
131	TI3009M	TSU T	IPAC INPT	A M	10 1	149 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
132	PI3104	TSDSSTM IN PREPV	MVCU INPT	A M	5 1	15 R	8 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
133	TI3009P	TSU T	IPAC INPT	A M	10 1	151 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
134	FI3712	TSSUPOIL IN FR PV	MVCU NODE	A M	5 2	78 R	1 KLRH	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU
135	TI3009R	TSU T	IPAC INPT	A M	10 1	177 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
136	FI3812	TSSUPOIL IN FR P	MVCU NODE	A M	6 1	78 R	1 KLRH	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

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MCDONNELL DOUGLAS

REV

A

SHEET

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LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
137	TI3009T	TSU T	IPAC INPT	A M	10 1	179 S	R DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
138	FCY3411	CHG OIL FLO CMD	MVCU A/M	A C	3 1	11 R	1 KLBH	N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	D MVCU
139	TI3009V	TSU T	IPAC INPT	A M	10 1	181 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
140	FC3410	TSCNDSTM OIL FFWD	MVCU PID	A C	3 1	31 R	1 KLBH	Y N	53.0 645.0	L N	53.00 639.08	0.00 0.00	0.00 0.00	0% 99%	D CNSL
141	TI3009X	TSU T	IPAC INPT	A M	10 1	183 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
142	TREF2-2	T IPAC 2	IPAC TCPL	A M	14 1	1 S	8 DEGF	N	0.0 150.0	L P	0.00 148.50	109.50 90.00	60.00 60.00		MVCU
143	TREF3-1	TSS STN3 MUX1 TMP	IPAC TCPL	A M	9 1	1 R	8 DEGF	N	0.0 100.0	L P	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
144	TI3105	DS301 OT	MVCU NODE	A M	1 1	64 R	1 DEGF	N	0.0 800.0	L P	0.00 792.00	672.00 656.00	608.00 600.00		MVCU
145	TI3010B	TSU T	IPAC INPT	A M	14 1	3 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
146	PI3210	COND T1	MVCU NODE	A M	2 2	52 R	1 PSIG	N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
147	TI30100	TSU T	IPAC INPT	A M	14 1	5 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
148	PI3702	BLRSTMT1	MVCU NODE	A M	1 2	51 R	1 PSIG	N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
149	TI3010F	TSU T	IPAC INPT	A M	14 1	7 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
150	TI3010G	TSU T	IPAC INPT	A M	14 1	8 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
151	TI3010H	TSU T	IPAC INPT	A M	14 1	33 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
152	TI3010I	TSU T	IPAC INPT	A M	14 1	34 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
153	TI3010J	TSU T	IPAC INPT	A M	14 1	35 S	8 DEGF	N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU

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SHEET

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LOOP	TAG	DESCR PTION	DFVCE SUBTY	A/D C/M	Hwy NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LC AL LL AL	CO LO CO HI	OUTP SPSEL
154	TI3010K	TSU T	IPAC INPT	A M	14 1	36 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
155	TI3010L	TSU T	IPAC INPT	A M	14 1	37 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
156	TI3010M	TSU T	IPAC INPT	A M	14 1	38 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
157	TI3010N	TSU T	IPAC INPT	A M	14 1	39 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
158	TI3710	SH STMT1	MVCU NODE	A M	1 2	54 R	1 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
159	TI3108	17 O CHG DS FW IN	IPAC INPT	A M	14 1	65 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
160	TI3711	TE SHOL1	IPAC INPT	A M	14 1	66 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
161	TI3704	TE B OL1	IPAC INPT	A M	14 1	67 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	99.00 69.00	66.00 0.00		MVCU
162	TI3811	TE SHOL2	IPAC INPT	A M	14 1	68 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
163	TI3804	TE B OL2	IPAC INPT	A M	14 1	69 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
164	PI3802	BLRSTMT2	MVCU NODE	A M	2 1	51 R	1 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
165	TI3603	TE B W 2	IPAC INPT	A M	14 1	71 S	8 DEGF	N N	0.0 400.0	L N	0.00 396.00	0.00 0.00	0.00 0.00		MVCU
166	TI3006	TSU OL I	IPAC INPT	A M	14 1	72 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
167	PI1020	P DS S O	IPAC INPT	A M	14 1	97 S	8 PSIG	N N	0.0 99.4	L N	0.00 98.41	0.00 0.00	0.00 0.00		MVCU
168	7I1003	AUX SJMS	IPAC INPT	A M	14 1	98 S	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
169	7I1004	P DS W T	IPAC INPT	A M	14 1	99 S	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
170	7I1005	AUX SITS	IPAC INPT	A M	14 1	100 S	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
171	TI3914A	TE OL I1	IPAC INPT	A M	9 1	2 R	8 DEGF	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
172	PI3406	CHG OIL P302 SUC	IPAC INPT	A M	9 1	33 R	8 PSIA	N N	0.0 60.0	L P	0.00 59.40	59.40 59.40	13.20 10.80		MVCU
173	JI3414	TC P302	IPAC INPT	A M	9 1	34 R	8 KW	N N	0.0 180.0	L N	0.00 178.20	0.00 0.00	0.00 0.00		MVCU
174	SI3414	CHG OIL P302 SPD	IPAC INPT	A M	9 1	35 R	1 RPM	N N	0.0 2250.0	L N	0.00 2025.00	0.00 0.00	0.00 0.00		MVCU
175	PI3451	CHG OIL P302 DIS	IPAC INPT	A M	9 1	36 R	1 PSIG	N N	0.0 120.0	L P	0.00 118.80	104.40 104.40	0.00 0.00		MVCU
176	ZI3410	CHG OIL OIL VLV	IPAC INPT	A M	9 1	37 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
177	ZI3411	CHG OIL TCV POS	IPAC INPT	A M	9 1	38 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
178	PI3450	CHG OIL P301 DIS	IPAC INPT	A M	9 1	39 R	1 PSIG	N N	0.0 120.0	L N	0.00 118.80	88.00 88.00	0.00 0.00		MVCU
179	SI3413	CHG OIL P301 SPD	IPAC INPT	A M	9 1	40 R	1 RPM	N N	0.0 2250.0	L N	0.00 2025.00	0.00 0.00	0.00 0.00		MVCU
180	PI3405	CHG OIL P301 SUC	IPAC INPT	A M	9 1	49 R	8 PSIA	N N	0.0 60.0	L P	0.00 59.40	59.40 59.40	13.20 10.80		MVCU
181	PI3211	5 CHGOIL OIL IN 1	IPAC INPT	A M	9 1	50 R	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
182	PI3208	5 CHGOIL OIL OUT1	IPAC INPT	A M	9 1	51 R	8 PSIG	N N	0.0 100.0	L P	0.00 99.00	70.00 65.00	0.00 0.00		MVCU
183	TI3212	5 CHGOIL OIL OUT1	IPAC INPT	A M	9 1	52 R	8 DEGF	N N	375.0 575.0	L N	375.00 573.00	0.00 0.00	0.00 0.00		MVCU
184	PI3310	TC OL T2	IPAC INPT	A M	9 1	53 R	8 PSIG	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
185	PI3308	TC OL O2	IPAC INPT	A M	9 1	54 R	8 PSIG	N N	0.0 100.0	L P	0.00 99.00	70.00 65.00	0.00 0.00		MVCU
186	PI3316	TC A S 2	IPAC INPT	A M	9 1	55 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
187	PI3309	TC S I 2	IPAC INPT	A M	9 1	56 R	8 PSIG	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DFVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LG AL LL AL	CO LO CO HI	OUTD SPSEL
188	TI3412	CHG OIL PMPS SUC	IPAC INPT	A M	9 1	65 R	8 DEGF	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
189	TI3214	5 CHG OIL OIL IN 1	IPAC INPT	A M	9 1	66 R	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
190	TI3314	TC OL I2	IPAC INPT	A M	9 1	67 R	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
191	TI3312	TC OL 02	IPAC INPT	A M	9 1	68 R	8 DEGF	N N	375.0 575.0	L N	375.00 573.00	0.00 0.00	0.00 0.00		MVCU
192	TI3317	TC A S 2	IPAC INPT	A M	9 1	69 R	8 DEGF	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
193	TI3217	TC A S 1	IPAC INPT	A M	9 1	70 R	8 DEGF	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
194	TI3912	TE A OL	IPAC INPT	A M	9 1	71 R	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
195	TI3914B	TE OL I2	IPAC INPT	A M	9 1	72 R	8 DEGF	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
196	TI3810	SH STMT2	MVCU NODE	A M	2 1	54 R	1 DEGF	N N	0.0 600.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
197	LI3319	TC ST L2	IPAC INPT	A M	9 1	81 R	8 INCH	N N	0.0 30.0	L N	0.00 29.70	99.00 99.00	90.00 0.00		MVCU
198	PI3216	TC A S 1	IPAC INPT	A M	9 1	82 R	8 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
199	PI3209	TC S I 1	IPAC INPT	A M	9 1	83 R	8 PSIG	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
200	LI3219	TC ST L1	IPAC INPT	A M	9 1	84 R	8 INCH	N N	0.0 30.0	L N	0.00 29.70	99.00 99.00	90.00 0.00		MVCU
201	FI3913	TE A PP	IPAC INPT	A M	9 1	85 R	8 KLRH	N N	10.0 115.0	L N	10.00 113.95	0.00 0.00	0.00 0.00		MVCU
202	PI3911	TCAOL PP	IPAC INPT	A M	9 1	86 R	8 PSIG	N N	0.0 60.0	L N	0.00 59.40	0.00 0.00	0.00 0.00		MVCU
203	TI3910	TC AS PC	IPAC INPT	A M	9 1	87 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
204	TC3411	13 TRAN1 OIL TMP	MVCU PID	A C	2 1	4 R	1 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00	0% 99%	0 CNSL

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104818C

REV

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SHEET

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LOOP	TAG	DESCR PTION	DEVIC SUBTY	A/D C/M	Hwy NO DEF AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
205	PI3951	TCP304 0	IPAC INPT	A M	9 1	97 R	8 PSIC	N N	0.0 120.0	L P	0.00 118.80	105.60 105.60	0.00 0.00		MVCU
206	SI3904	TC P304	IPAC INPT	A M	9 1	98 R	8 RPM	N N	0.0 2250.0	L N	0.00 2025.00	0.00 0.00	0.00 0.00		MVCU
207	JI3904	TC P304	IPAC INPT	A M	9 1	99 R	8 KW	N N	0.0 180.0	L N	0.00 178.20	0.00 0.00	0.00 0.00		MVCU
208	PI3904	TCP304 I	IPAC INPT	A M	9 1	100 R	8 PSIA	N N	0.0 60.0	L P	0.00 59.40	59.40 59.40	13.20 10.80		MVCU
209	PI3950	TCP303 0	IPAC INPT	A M	9 1	101 R	8 PSIG	N N	0.0 120.0	L P	0.00 118.80	105.60 105.60	0.00 0.00		MVCU
210	SI3903	TC P303	IPAC INPT	A M	9 1	102 R	8 RPM	N N	0.0 2250.0	L N	0.00 2025.00	0.00 0.00	0.00 0.00		MVCU
211	JI3903	TC P303	IPAC INPT	A M	9 1	103 R	8 KW	N N	0.0 180.0	L N	0.00 178.20	0.00 0.00	0.00 0.00		MVCU
212	PI3903	TCP303 I	IPAC INPT	A M	9 1	104 R	8 PSIA	N N	0.0 60.0	L P	0.00 59.40	59.40 59.40	13.20 10.80		MVCU
213	TI3503	TE B W 1	IPAC INPT	A M	14 1	70 S	8 DEGF	N N	0.0 400.0	L N	0.00 396.00	0.00 0.00	0.00 0.00		MVCU
214	FI3504	TSBLRCON IN FR PV	MVCU NODE	A M	5 2	66 R	8 KLBH	N N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00		MVCU
215	LI3705	TS EXT NO.BLR-1	MVCU INPT	A M	5 2	8 R	8 INCH	N N	47.0 67.0	L N	47.00 66.80	0.00 0.00	0.00 0.00		MVCU
216	FI3706	41 OIL FFWD	MVCU NODE	A M	5 2	77 R	1 KLBH	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
217	FI3604	TSBLRCON IN FRPV	MVCU NODE	A M	6 1	66 R	8 KLBH	N N	0.0 63.3	L N	0.00 62.62	0.00 0.00	0.00 0.00		MVCU
218	LI3805	TS FXT SO.BLR-2	MVCU INPT	A M	2 1	8 R	8 INCH	N N	37.0 67.0	L N	37.00 66.70	0.00 0.00	0.00 0.00		MVCU
219	FI3806	42 OIL FFWD	MVCU NODE	A M	6 1	77 R	1 KLBH	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
220	FI3211	CHG OIL OILFLO 1	MVCU NODE	A M	7 1	85 R	1 KLBH	N N	0.0 645.0	L N	0.00 638.55	0.00 0.00	0.00 0.00		MVCU
221	TFST1	MULT IN	MVCU NODE	A M	3 1	74 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP L O SP HI	HH AL HI AL	LO AL LL AL	CO LO CG HI	OUTD SPSEL
222	FI3310	CHG OIL TRAIN 2	MVCU NODE	A M	7 1	86 R	1 KLBH	N N	0.0 645.0	L N	0.00 638.55	0.00 0.00	0.00 0.00		MVCU
223	PC647C	TSFT INTPRESP	MVCU PID	A C	4 1	1 R	1 PSIG	N N	0.0 200.0	L N	114.00 150.00	80.00 75.00	0.00 0.00	0% 99%	D CNSL
224	PI3114	TSFT INTPREPV	MVCU INPT	A M	8 1	3 R	8 PSIG	N N	0.0 200.0	L N	0.00 198.00	65.00 55.00	0.00 0.00		MVCU
225	PI635F	PSHP2 INTPREOR	MVCU INPT	A M	8 1	2 R	8 PSIG	N N	0.0 190.0	L N	0.00 188.10	0.00 0.00	0.00 0.00		MVCU
226	TI3106	17 O CHG OS OUTLT	IPAC INPT	A M	10 1	19 S	8 DEGF	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
227	PI3908	TC APP I	IPAC INPT	A M	9 1	88 R	1 PSIA	N N	0.0 30.0	L N	0.00 29.70	99.00 99.00	2.00 0.00		MVCU
228	ZI3102	MSTM VLV	IPAC INPT	A M	10 1	20 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
229	ZI3710	41 51 OIL VLV	IPAC INPT	A M	10 1	23 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
230	TEST2	MULT OUT	MVCU NODE	A M	3 1	77 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
231	QI4060	TSU 02	IPAC INPT	A M	9 1	115 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
232	QI4061	TSU H2	IPAC INPT	A M	9 1	114 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
233	PITEST		MVCU PID	A C	1 1	40 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
234	TI1003	PV1001 VLV TMP	IPAC INPT	A M	10 1	4 S	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
235	TEST		MVCU INPT	A M	1 1	1 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
236	FBI3105		MVCU INPT	A M	1 1	13 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
237	GAH4061	TSU H2	IPAC INPT	A M	9 1	114 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
238	GAH4060	TSU 02	IPAC INPT	A M	9 1	115 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

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LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
605	UI3112	P307 T FT D P	IPAC INPT	D M	11 1	68 R	1 N	TROUBL NORMAL	N Y	1 Y	R G	
606	IIH3112	P307 T FT D P	IPAC INPT	D M	11 1	108 R	1 N	HI AMP NORMAL	N Y	1 Y	R G	
607	PIH3118	TE S BY2	IPAC INPT	D M	11 1	51 R	1 N	HI P 2 NORMAL	N Y	1 Y	R G	
608	HS1132	T FP OUT	MCON OUTP	D C	16 2	38 S	1 N	OPEN CLOSE	N N	2 N	R G	
610	HS4021	76 47 TSU P308	MCON OUTP	D C	16 2	3 S	1 N	RUN STOP	N N	2 N	R G	
611	QI6320	TSS RLU	IPAC INPT	D M	11 1	111 R	1 N	TRIP NORMAL	Y Y	1 Y	R G	
612	UI3904	TE OLPP2	IPAC INPT	D M	11 1	88 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 51	



LOOP	TAG	DESCRI PTION	DFVCE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
613	LH3116	TC MS DL	IPAC INPT	D M	11 1	57 R	1 N	HI LEV NORMAL	Y Y	1 Y	R G	
614	HS3117	STM GEN TE1 S BY	MCON OUTP	D C	16 2	42 S	8 N	OPEN CLOSE	N N	2 N	R G	
615	M2-1	TSS STN2 RMT MIX1	MLD IPAC		10 1		R N					G G
616	I1H1132	TT FP OU	IPAC INPT	D M	11 1	104 R	1 N	TROUBL NORMAL	N Y	1 Y	R G	
617	Z1I1132	T FP OUT	IPAC MILP	D M	11 1	102 R	1 N	OPEN CLOSED	N N	2 Y	R G	
618	HS4014	76 47 TSU VENT	MCON OUTP	D C	16 2	2 S	1 N	OPEN CLOSED	N N	2 N	R G	
619	PDIL86B	T FW PP	IPAC INPT	D M	11 1	48 R	1 N	LONPSH NORMAL	Y Y	1 Y	R G	
620	Z1I50	T FW PP	IPAC MILP	D M	11 1	45 R	1 N	RUN STOPPE	N N	2 Y	R G	
621	HS6302B	TRLU EXT	MCON OUTP	D C	16 2	40 S	4 N	RESET NORMAL	N N	2 N	R G	
623	Q16321	T RLU FX	IPAC INPT	D M	11 1	100 R	1 N	READY TRIP E	Y N	1 Y	G R	
624	Q16319	T RLU	IPAC INPT	D M	11 1	99 R	1 N	ALARM NORMAL	Y Y	1 Y	R C	
625	Q16318	RLU B 8	IPAC INPT	D M	11 1	98 R	1 N	1 0	N Y	1 Y	R G	
626	Q16317	RLU B 7	IPAC INPT	D M	11 1	97 R	1 N	1 0	N Y	1 Y	R G	
627	Q16316	RLU B 6	IPAC INPT	D M	11 1	96 R	1 N	1 0	N Y	1 Y	R G	
628	Q16315	RLU B 5	IPAC INPT	D M	11 1	95 R	1 N	1 0	N Y	1 Y	R G	
629	Q16314	RLU B 4	IPAC INPT	D M	11 1	94 R	1 N	1 0	N Y	1 Y	R G	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 52	

LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
630	QI6313	RLU B 3	IPAC INPT	D M	11 1	93 R	1 N	1 0	N Y	1 Y	R G	
631	QI6312	RLU B 2	IPAC INPT	D M	11 1	92 R	1 N	1 0	N Y	1 Y	R G	
632	QI6311	RLU B 1	IPAC INPT	D M	11 1	91 R	1 N	1 0	N Y	1 Y	R G	
633	TIH1483	T RS3	IPAC INPT	D M	9 1	179 R	8 N	HI NORMAL	N Y	1 N	R G	
634	ZI3905	TE A 0L2	IPAC MILP	D M	9 1	177 R	1 N	OPEN CLOSED	N N	2 N	R G	
635	TI1494	LOADCNTA XFMRTMP	IPAC INPT	D M	9 1	153 R	8 N	HI NORMAL	Y Y	1 N	G G	
636	UD3802B	34 52 OIL MODE	MVCU NODE	D M	2 1	71 R	1 N	FLOW LOAD	N N	2 N	G G	
637	UD3802A	34 52 OIL MODE	MVCU NODE	D M	2 1	70 R	1 N	NORMAL PRES	N N	2 N	G G	
638	UD3702B	33 51 OIL MODE	MVCU NODE	D M	1 2	71 R	1 N	FLOW LOAD	N N	2 N	G G	
639	UD3702A	33 51 OIL MODE	MVCU NODE	D M	1 2	70 R	1 N	NORMAL PRES	N N	2 N	G G	
640	HS3116	TC MST D	MCON GUTP	D C	16 2	41 S	8 N	OPEN CLOSE	N N	2 N	R G	
641	ZI3717	TESH 0 1	IPAC MILP	D M	14 1	149 S	1 N	OPEN CLOSED	N N	2 N	R G	
642	ZI4018	FLRSTACK MN FLAME	IPAC MILP	D M	9 1	186 R	1 N	NOFLAM NORMAL	Y Y	1 Y	R G	
643	ZI4021	HEP PUMP	IPAC INPT	D M	9 1	185 R	1 N	RUN STOP	N Y	1 N	R G	
644	ZI1491	PWR ON MCC-B	IPAC INPT	D M	9 1	146 R	0 N	OFF NORMAL	N Y	1 N	R G	
645	TD3411	TSCNDOIL TRJ MODE	MVCU NODE	D C	3 1	70 R	1 N	FLOW TEMP	N N	2 N	G Y	
646	ZI1490	PWR ON LOADCNTA	IPAC INPT	D M	9 1	145 R	0 N	OFF NORMAL	N Y	1 N	R G	

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HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1848180

REV

A

SHEET

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LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
647	ZI4015	UMU FUME FAN DISC	IPAC MILP	D M	9 1	181 R	1 N	OPFN CLOSED	N N	2 N	R G	
648	PI3059	T JNS 02	IPAC INPT	D M	14 1	120 S	1 N	LO NORMAL	N N	2 N	R G	
649	TIL1483	T PS3	IPAC INPT	D M	9 1	180 R	1 N	LO NORMAL	N Y	1 N	R G	
650	0I6322	T FLU CH	IPAC INPT	D M	11 1	101 R	1 N	READY TRIP C	Y N	1 Y	G R	
651	M2-2	TSS STN2 RMT MUX2	MLD IPAC		14 1		1 N					G G
652	ZI3118	TE S BY2	IPAC MILP	D M	11 1	63 R	1 N	OPEN CLOSED	N N	2 Y	R G	
653	ZI3220	TC ST V1	IPAC MILP	D M	9 1	175 R	1 N	OPEN CLOSED	N N	2 N	R G	
654	ZI3320	TC ST V2	IPAC MILP	D M	9 1	173 R	1 N	OPEN CLOSED	N N	2 N	R G	
655	ZI3206	TC S 0 1	IPAC MILP	D M	9 1	171 R	1 N	OPEN CLOSED	N N	2 N	R G	
656	ZI3306	TC S 0 2	IPAC MILP	D M	9 1	169 R	1 N	OPEN CLOSED	N N	2 N	R G	
657	ZI3906	TE A 0L1	IPAC MILP	D M	9 1	167 R	1 N	OPFN CLOSED	N N	2 N	G R	
658	ZI3907	AUX OIL P305 SUC	IPAC MILP	D M	9 1	165 R	1 N	AUXMAN UP MAN	N N	2 N	R G	
659	ZI3218	TC A S 1	IPAC MILP	D M	9 1	163 R	1 N	OPEN CLOSED	N N	2 N	R G	
660	ZI3318	TC A S 2	IPAC MILP	D M	9 1	161 R	1 N	OPEN CLOSED	N N	2 N	R G	
661	PI1495	LOADCNTA XFMRPRES	IPAC INPT	D M	9 1	154 R	0 N	HI NORMAL	N Y	1 N	G G	
662	ZI3117	TE S BY1	IPAC MILP	D M	11 1	58 R	1 N	OPEN CLOSED	N N	2 Y	R G	
663	ZI1492	UNDRVOLT LOADCNTA	IPAC INPT	D M	9 1	148 R	0 N	ON OFF	N Y	1 N	R G	

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MURKINSON BEACH, CALIF.

MCDONNELL DOUGLAS

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1D48186

REV

A

SHEET

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LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	GN CLR OF CLR	HY1 CLR HY2 CLR
664	ZI1493	OVERVOLT LOADCNTA	IPAC INPT	D M	9 1	147 R	0 N	ON OFF	N Y	1 N	R G	
665	UI3118	TE S BY2	IPAC INPT	D M	11 1	52 R	1 N	3817CL 38170P	Y Y	1 Y	R G	
666	ZI3001	TSU I CL	IPAC MILP	D M	14 1	191 S	1 N	OPEN CLOSED	N N	2 N	R G	
667	ZI3116	TC MS D	IPAC MILP	D M	14 1	187 S	1 N	OPEN CLOSED	N N	2 N	R G	
668	ZI4014	VAPR OUT TSU PCV	IPAC MILP	D M	14 1	185 S	1 N	OPEN CLOSED	N N	2 N	R G	
669	ZI3004	TSU LO MAN V	IPAC MILP	D M	14 1	183 S	1 N	OPEN CLOSED	N N	2 N	R G	
670	ZI3003	TSU TK BYP V	IPAC MILP	D M	14 1	181 S	1 N	OPEN CLOSED	N N	2 N	R G	
671	ZI3005	TSU AX MAN V	IPAC MILP	D M	14 1	179 S	1 N	OPEN CLOSED	N N	2 N	R G	
672	ZI3002	TSU UP MAN V	IPAC MILP	D M	14 1	177 S	1 N	OPEN CLOSED	N N	2 N	R G	
673	ZI3808	TE BY D2	IPAC MILP	D M	14 1	159 S	1 N	OPEN CLOSED	N N	2 N	R G	
674	ZI3807	TE SH A2	IPAC MILP	D M	14 1	157 S	1 N	OPEN CLOSED	N N	2 N	R G	
675	ZI3817	TESH D 2	IPAC MILP	D M	14 1	155 S	1 N	OPEN CLOSED	N N	2 N	R G	
676	ZI3708	TE BY D1	IPAC MILP	D M	14 1	153 S	1 N	OPEN CLOSED	N N	2 N	R G	
677	ZI3707	TE SH A1	IPAC MILP	D M	14 1	151 S	1 N	OPEN CLOSED	N N	2 N	R G	
678	HS3118	TE S BY2	MCON OUTP	D C	16 2	43 S	4 N	OPEN CLOSE	N N	2 N	R G	
679	TIL1482	T RS2	IPAC INPT	D M	14 1	130 S	8 N	LO NORMAL	N Y	1 N	R G	
680	TIH1482	T RS2	IPAC INPT	D M	14 1	129 S	8 N	HJ NORMAL	N Y	1 N	R G	

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1048186

REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
681	PI4001A	UMU N2 INLFT	IPAC INPT	D M	9 1	183 R	8 N	LO PR NORMAL	N Y	1 N	R G	
682	QI6005	TS EXTRT TE OPTPP	IPAC INPT	D M	11 1	110 R	1 N	TSGTRP NORMAL	Y Y	1 Y	R G	
683	ZI1008	AUX SIMS	IPAC MILP	D M	14 1	123 S	1 N	OPEN CLOSED	N N	2 N	R G	
684	ZI1009	AUX SITS	IPAC MILP	D M	14 1	121 S	0 N	OPEN CLOSED	N N	2 Y	R G	
685	PIH3099	TINST 02	IPAC INPT	D M	14 1	120 S	1 N	OPEN CLOSED	N N	2 N	R G	
686	QI6004	TS CHARG TC OPTRP	IPAC INPT	D M	11 1	109 R	1 N	TCHTRP NORMAL	Y Y	1 Y	R G	
687	ZI1013	21 0 TS MS D	IPAC MILP	D M	11 1	55 S	1 N	OPEN CLOSED	N N	2 Y	R G	
688	IIM50	T FW PP	IPAC INPT	D M	11 1	47 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	
689	HS6301B	TRLU CHG	MCON OUTP	D C	16 2	39 S	4 N	RESET NORMAL	N N	2 N	R G	
690	HC3309	20 TC RCAL2	IPAC OUTP	D C	9 1	130 R	1 N	OPEN CLOSED	N N	2 N	R G	
691	HC3209	19 TC RCAL1	IPAC OUTP	D C	9 1	129 R	1 N	OPEN CLOSED	N N	2 N	R G	
692	FIL3904	TE OLPP2	IPAC INPT	D M	11 1	87 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
693	ZI3903	TE OLPP1	IPAC MILP	D M	11 1	85 R	1 N	RUN STOP	N N	2 Y	R G	
694	UI3903	TE OLPP1	IPAC INPT	D M	11 1	84 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	
695	FIL3903	TE OLPP1	IPAC INPT	D M	11 J	83 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
696	ZI3414	CHG OIL CHG P302	IPAC MILP	D M	11 1	81 R	1 N	RUN STOP	N N	2 Y	R G	
697	UI3414	CHG OIL CHG P302	IPAC INPT	D M	11 1	80 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	

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1D48186

REV

A

SHEET

56

LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLP OF CLR	HY1 CLP HY2 CLR
698	FIL3414	CHG OIL CHG P302	IPAC INPT	D M	11 1	79 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
699	ZI3413	CHG OIL CHG P301	IPAC MILP	D M	11 1	77 R	1 N	RUN STOP	N N	2 Y	R G	
700	UI3413	CHG OIL CHG P301	IPAC INPT	D M	11 1	76 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	
701	FIL3413	CHG OIL CHG P301	IPAC INPT	D M	11 1	75 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
702	HS3905	TE A 0L2	MCON OUTP	D C	16 2	18 S	4 N	OPEN CLOSE	N N	2 N	R G	
703	HS3906	TE A 0L1	MCON OUTP	D C	16 2	17 S	4 N	OPEN CLOSE	N N	2 N	R G	
704	HS3218	TC A S 1	MCON OUTP	D C	16 2	16 S	4 N	OPEN CLOSE	N N	2 N	R G	
705	HS3904A	TE P304	MCON OUTP	D C	16 2	37 S	1 N	START STOP	N N	2 N	R G	
706	HS3903A	TE P303	MCON OUTP	D C	16 2	36 S	1 N	START STOP	N N	2 N	R G	
707	UI3909	TE A0LPP	IPAC INPT	D M	11 1	74 R	1 N	TROUBL NORMAL	Y Y	1 Y	R G	
708	FIL3909	TE A0LPP	IPAC INPT	D M	11 1	73 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
709	UI3117	TE S RY1	IPAC INPT	D M	11 1	50 R	1 N	3717CL 3717DP	Y Y	1 Y	R G	
710	HS3414B	CHG OIL CHG P302	MCON OUTP	D C	16 2	35 S	1 N	START STOP	N N	2 N	R G	
711	HS3318	TE A S 2	MCON OUTP	D C	16 2	15 S	4 N	OPEN CLOSE	N N	2 N	R G	
712	UIL3306	TC MS 12	IPAC INPT	D M	11 1	70 R	1 N	NO OPN NORMAL	N Y	1 Y	R G	
713	FIL3306	TC MS 12	IPAC INPT	D M	11 1	69 R	1 N	LO FLO NORMAL	N Y	1 Y	R G	
714	UIL3206	TC MS 11	IPAC INPT	D M	11 1	68 R	1 N	NO OPN NORMAL	N Y	1 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

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SIZE

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1048186

REV

A

SHEET

57

LOOP	TAG	DESCR PTION	DEVICE SURT	A/D C/H	Hwy NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
715	FIL3206	TC MS J1	IPAC INPT	D M	11 1	67 R	1 N	LG FLO NORMAL	N Y	1 Y	R G	
716	PIH3117	TE S BY1	IPAC INPT	D M	11 1	49 R	1 N	HI P 1 NORMAL	Y Y	1 Y	R G	
717	ZI3112	TFT D PP	IPAC MILP	D M	11 1	65 R	1 N	RUN STOP	N N	2 Y	R G	
718	ZI1030	T MS SP	IPAC MILP	D M	11 1	61 R	1 N	OPEN CLOSED	N N	2 Y	R G	
719	LIH1013	21 D TS MS D	IPAC INPT	D M	11 1	54 R	1 N	HI LEV NORMAL	N Y	1 Y	R G	
720	HS3904B	TE OLPP2	IPAC MILP	D M	11 1	19 R	1 N	START STOP	N N	2 Y	R G	
721	HS3904C	TE OLPP2	IPAC MILP	D M	11 1	17 R	1 N	AUTO MANUAL	N N	2 Y	Y W	
722	HS3903B	TE OLPP1	IPAC MILP	D M	11 1	15 R	1 N	START STOP	N N	2 Y	R W	
723	HS3413B	CHG OIL CHG P301	MCON OUTP	D C	16 2	34 S	1 N	START STOP	N N	2 N	R G	
724	HS3909	TEA P305	MCON OUTP	D C	16 2	33 S	1 N	START STOP	N N	2 N	R G	
725	HS3903C	TE OLPP1	IPAC MILP	D M	11 1	13 R	1 N	AUTO MANUAL	N N	2 Y	Y W	
726	HS3306	TC S 0 2	MCON OUTP	D C	16 2	32 S	4 N	OPEN CLOSE	N N	2 N	R G	
727	HS3414A	TC OLPP2	IPAC MILP	D M	11 1	11 R	1 N	START STOP	N N	2 Y	R G	
728	HS3206	TC S 0 1	MCON OUTP	D C	16 2	31 S	4 N	OPEN CLOSE	N N	2 N	R G	
729	HS3414C	TC OLPP2	IPAC MILP	D M	11 1	9 R	1 N	AUTO MANUAL	N N	2 Y	Y W	
730	HS3817	TESH 0 2	MCON OUTP	D C	16 2	30 S	4 N	OPEN CLOSE	N N	2 N	R G	
731	HS3717	TESH 0 1	MCON OUTP	D C	16 2	29 S	4 N	OPEN CLOSE	N N	2 N	R G	

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SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
REV A	SHEET 58	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL OM	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
732	HS3413A	TC OLPP1	IPAC MILP	D M	11 1	7 R	1 N	START STOP	N N	2 Y	R G	
733	HS3413C	TC OLPP1	IPAC MILP	D M	11 1	5 R	1 N	AUTO MANUAL	N N	2 Y	Y W	
734	HS3001	TSU I OL	MCON OUTP	D C	16 2	28 S	4 N	OPEN CLOSE	N N	2 N	R G	
735	HS3002	TSU UP MAN V	MCON OUTP	D C	16 2	27 S	4 N	OPFN CLOSE	N N	2 N	R G	
736	HS50B	TFP	IPAC MILP	D M	11 1	3 R	1 N	START STOP	N N	2 Y	R G	
737	HS3003	TSU TK BYP V	MCON OUTP	D C	16 2	26 S	4 N	OPEN CLOSE	N N	2 N	R G	
738	HS50C	TFP A-M	IPAC MILP	D M	11 1	1 R	1 N	AUTO MANUAL	N N	2 Y	Y W	
739	HS3004	TSU LO MAN V	MCON OUTP	D C	16 2	25 S	4 N	OPEN CLOSE	N N	2 N	R G	
740	HS3907	AUX OIL P305 SUC	MCON OUTP	D C	16 2	24 S	4 N	AUXMAN UP MAN	N N	2 N	R G	
741	HS3005	TSU AX MAN V	MCON OUTP	D C	16 2	23 S	4 N	OPEN CLOSE	N N	2 N	R G	
742	HS3220	TC ST V1	MCON OUTP	D C	16 2	22 S	4 N	OPEN CLOSE	N N	2 N	R G	
743	HS3320	TC ST V1	MCON OUTP	D C	16 2	21 S	4 N	OPEN CLOSE	N N	2 N	R G	
744	HS3209	PT3209 TCCAL V1	MCON OUTP	D C	16 2	20 S	4 N	OPEN CLOSE	N N	2 N	R G	
745	HS3309	PT3309 TCGAL V2	MCON OUTP	D C	16 2	19 S	4 N	OPEN CLOSE	N N	2 N	R G	
746	HS3707	TE SH A1	MCON OUTP	D C	16 2	14 S	4 N	OPEN CLOSE	N N	2 N	R G	
747	HS3807	TE SH A2	MCON OUTP	D C	16 2	13 S	4 N	OPEN CLOSE	N N	2 N	R G	
748	HS50A	T FW PP	MCON OUTP	D C	16 2	1 S	4 N	START STOP	N N	2 N	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

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LOOP	TAG	DESCRIP TION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV R	ON CLR OF CLR	HY1 CLR HY2 CLR
749	HS3708	TE BY D1	MCON OUTP	D C	16 2	11 S	4 N	OPEN CLOSE	N N	2 N	R G	
750	HS3112	TFT D PP	MCON OUTP	D C	16 2	10 S	1 N	START STOP	N N	2 N	R G	
751	HS1030	T MS SP	MCON OUTP	D C	16 2	8 S	4 N	OPEN CLOSE	N N	2 N	R G	
752	HS1013	21 0 TS MS D	MCON OUTP	D C	16 2	4 S	4 N	OPEN CLOSE	N N	2 N	R G	
753	Z13909	TE AOLPP	IPAC MILP	D M	11 1	71 R	1 N	RUN STOP	N N	2 Y	R G	
754	UD3102C	TS CHG C	MVCU NODE	D C	5 1	67 R	1 N	LOAD FLOW	N N	2 N	G G	
755	UD3102B	TS CHG C	MVCU NODE	D C	5 1	66 R	8 N	NORMAL PRESS	N N	2 N	G G	
756	UD3102A	TS IN PT	MVCU NODE	D C	5 1	65 R	8 N	PT3102 PT1001	N N	2 N	G G	
757	LE-2	TSS EQRM ILS CMD2	MLD MCON		16 2		1 N					G G
758	ME-2	TSS EQRM ILS MUX2	MLD IPAC		11 1		1 N					G G
759	M3-1	TSS STN2 RMT MUX1	MLD IPAC		9 1		1 N					G G
760	HS3808	TE BY D2	MCON OUTP	D C	16 2	12 S	4 N	OPEN CLOSED	N N	2 N	R G	
761	C4-3	TSS STN4 RMTCTLR3	MLD MVCU		4 1		1 N					G G
762	Z13904	TE OLPP2	IPAC INPT	D M	11 1	89 R	1 N	RUN STOP	N N	2 Y	R G	
763	TD3410	TSCND0IL TR2 MODE	MVCU NODE	D C	3 1	90 R	1 N	FLOW TEMP	N N	2 N	G Y	
764	C3-1	TSS STN3 RMTCTLR1	MLD MVCU		3 1		1 N					G G
765	C2-4	TSS STN2 RMTCTLR4	MLD MVCU		2 2		1 N					G G

MCDONNELL DOUGLAS AERONAUTICS CO.  
MURKINOTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

60

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
766	C2-3	TSS STN2 RMTCLR3	MLD MVCU		2 1	T	1 N					G R
767	C2-2	TSS STN2 RMTCLR2	MLD MVCU		1 2	T	1 N					G G
768	C2-1	TSS STN2 RMTCLR1	MLD MVCU		1 1	T	1 N					G G

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D48186

REV

A

SHEET

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LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-1										HIGHWAY NO.	1	FEVICF	1
1	01 PID NORMAL	OUT 51 IN1 2 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	18.000 2.399 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED N RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 16.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00					
2	12 SQUARF ROOT	OUT 52 IN1 1	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0			IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
3	01 PID NORMAL	OUT 53 IN1 52 IN2 51 IN3 58 IN4 57	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.918 38.896 0.000 0.000 0.000	AUTO/MAN A HI DY LM Y LO DY LM Y CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC Y	BAK CALC PT 1 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00					
4	10 HIGH SELECTOR	OUT 54 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
5	21 ANALOG SWITCH	OUT 55 IN1 10 IN2 0	IN3 0 IN4 54	DIGIN1 65 DIGIN2 65	AUTO/MANUAL A OUTPUT LIMITING N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
6	01 PID NORMAL	OUT 56 IN1 55 IN2 0 IN3 58 IN4 57	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	4.500 11.998 0.110 0.000 0.000	AUTO/MAN M HI DY LM Y LO DY LM Y CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E F GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00					
7	21 ANALOG SWITCH	OUT 57 IN1 56 IN2 0	IN3 0 IN4 53	DIGIN1 66 DIGIN2 66	AUTO/MANUAL A OUTPUT LIMITING N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
8	10 HIGH SELECTOR	OUT 58 IN1 57 IN2 0 IN3 0 IN4 0	K5(BIAS)	4.982	AUTO/MANUAL A OUTPUT LIMITING N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
9	10 HIGH SELECTOR	OUT 59 IN1 5 IN2 6 IN3 7 IN4 8	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 62	

LINE ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-1 HIGHWAY NO. 1 DEVICE 1

10	01 PID NORMAL	OUT 60 IN1 59 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	20.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E F GAIN ENABLED Y RESET ENABLD N	N D E Y N	RATE FNAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC FT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
11	07 ADD / SUBTRACT	OUT 61 IN1 57 IN2 60 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			OUT LO ALARM 0.00 OUT HI ALARM 43.76 OUT RAMP RATE 0.00	
12	04 AUTO MANUAL	OUT 33 IN1 61	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0			IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
14	10 HIGH SELECTOR	OUT 64 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
15	12 SQUARE ROOT	OUT 65 IN1 13	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -0.513 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
16	13 FUNCTION GENERATOR	OUT 66 IN1 70			AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 24.98 X1 7.99 Y1 24.98 X2 19.98	Y2 49.99 X3 43.98 Y3 74.99 X4 79.98	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE 0.00
17	13 FUNCTION GENERATOR	OUT 67 IN1 70			AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 24.98 X1 7.99 Y1 24.98 X2 59.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00
18	19 PID REMOTE TUNING	OUT 68 IN1 64 IN2 0 IN3 66 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	20.000 7.677 0.110 0.000 0.000	AUTO/MAN A K2 RM TU N K3 RM TU N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	N D P Y Y	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818E
MCDONNELL DOUGLAS		REV A	SHEET 63	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-1										HIGHWAY NO.	1	DEVICE	1	
19	08 MULTIPLIER	OUT	69	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1	68	K5(BIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2	67			BACK CALCULATION	Y	OUT RAMP RATE	0.00						
		IN3	0			BACK CALC POINTER	18								
		IN4	0												
20	12 SQUARE ROOT	OUT	70	K1(GAIN)	1.000	AUTO/MANUAL	A	IN LO ALARM	0.00						
		IN1	1	K2(PV BIAS)	0.000	OUTPUT LIMITING	N	IN HI ALARM	99.98						
				K3(THRESHD)	0.000	BACK CALCULATION	N	OUT LO ALARM	0.00						
				K5(BIAS)	0.000	BACK CALC POINTER	0	OUT HI ALARM	99.98						
								OUT RAMP RATE	0.00						
21	13 FUNCTION GENERATOR	OUT	71	AUTO/MANUAL	A	Y0	0.00	Y2	26.18	Y4	79.19	OUT RAMP RATE	0.00		
		IN1	14	BACK CALCULATION	N	X1	43.30	X3	49.99	X5	63.30				
				BACK CALC POINTER	0	Y1	0.00	Y3	47.89	Y5	99.98				
				NO. OF POINTS	6	X2	46.69	X4	56.68	Y6	0.00				
22	08 MULTIPLIER	OUT	72	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1	70	K5(BIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2	71			BACK CALCULATION	N	OUT RAMP RATE	0.00						
		IN3	0			BACK CALC POINTER	0								
		IN4	0												
23	07 ADD / SUBTRACT	OUT	73	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1	69	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2	72	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00						
		IN3	67	K4(GAIN)	0.000	BACK CALC POINTER	19								
		IN4	0	K5(BIAS)	0.000										
24	01 PID NORMAL	OUT	34	K1(GAIN)	0.137	AUTO/MAN M	PV INVERTED	N	RATE ENAB	N	BAK CALC PT	23	OUT LO AL	0.00	
		IN1	65	K2(RESET)	119.998	HI DY LM	N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2	73	K3(RATE)	0.000	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	99.98	OUT RMP RA	0.00
		IN3	0	K4(FILTER)	0.000	CASCADE	Y	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4	0	K5	0.000	CON/NORM	N	RESET ENABLD	Y	BACK CALC	Y	PV HI ALARM	99.98		

McDONNELL DOUGLAS AERONAUTICS CO. <small>MARTINSON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
McDONNELL DOUGLAS		REV A	SHEET 64	

LINE

ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-1

HIGHWAY NO. 1 DEVICE 1

40	01 PID	OUT 88	K1(GAIN)	10.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00
	NORMAL	IN1 88	K2(RESET)	0.998	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED N	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 66	

LINE DIGITAL CONFIGURATION TABLE CCM#2 MVCU C2-1 HIGHWAY NO. 1 DEVICE 1

1	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 71 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
2	02 OR LOGICAL	OUTPUT 72	INPUT1 71 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV Y IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
3	11 DUAL PULSE	OUTPUT1 73 OUTPUT2 0	INPUT1 72		OUT1 INV N OUT2 INV Y		
4	05 AND MODE XFR	MODE XFR TABLE 3	INPUT1 73 INPUT2 67 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
5	11 DUAL PULSE	OUTPUT1 0 OUTPUT2 74	INPUT1 67		OUT1 INV Y OUT2 INV N		
6	06 OR MODE XFR	MODE XFR TABLE 4	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 67	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C2-1 HIGHWAY NO. 1 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	24
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	24
3	1 06 ANALOG (AUTO XFR)	0.000	1

<small>MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.</small>		
<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048186
<small>REV</small> A	<small>SHEET</small> 84	



LINE                          DIGITAL CONFIGURATION TABLE    CCM#2    MVCU C2-1                          HIGHWAY NO.    1    DEVICE    1

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148	09 TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
				INPUT2	0	SET			IN2 INV	Y	
				INPUT3	0	AUTO/MAN	A		IN3 INV	Y	
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
				INPUT2	0				IN2 INV	Y	
				INPUT3	0				IN3 INV	Y	
				INPUT4	0				IN4 INV	Y	
				INPUT5	0				IN5 INV	Y	
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN	A		IN1 INV	Y	
				INPUT2	0				IN2 INV	Y	
				INPUT3	0				IN3 INV	Y	
				INPUT4	0				IN4 INV	Y	
				INPUT5	0				IN5 INV	Y	

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS			REV A	SHEET 83	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C2-1 HIGHWAY NO. 1 DEVICE 1

TABLE ENTRY DESCRIPTION VALUE LINE

4  
1 05 ANALOG (MAN XFR + OUTPUT SEL) 19.976 1

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 85	

LINE ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-2 HIGHWAY NO. 1 DEVICE 2

1	10 HIGH SELECTOR	OUT 51 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
2	01 PID NORMAL	OUT 52 IN1 51 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.988 5.997 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM Y DIRECT/REV D LO DY LM Y RATE ON PV/E E CASCADE N CON/NORM C	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
3	01 PID NORMAL	OUT 53 IN1 7 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 5.997 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM Y DIRECT/REV D LO DY LM Y RATE ON PV/E E CASCADE N CON/NORM C	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
4	10 HIGH SELECTOR	OUT 54 IN1 5 IN2 6 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
5	13 FUNCTION GENERATOR	OUT 55 IN1 54	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 26.03 X1 55.87 Y1 46.52 X2 61.25	Y2 48.45 X3 64.98 Y3 49.65 X4 72.48	Y4 51.77 X5 99.98 Y5 58.14 Y6 0.00	OUT RAMP RATE	0.00	
6	12 SQUARE ROOT	OUT 56 IN1 3	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		
7	09 DIVIDER	OUT 57 IN1 56 IN2 55	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.500 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
8	01 PID NORMAL	OUT 58 IN1 57 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 5.997 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM Y DIRECT/REV D LO DY LM Y RATE ON PV/E F CASCADE N CON/NORM C	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
9	21 ANALOG SWITCH	OUT 34 IN1 52 IN2 53	IN3 52 IN4 58	DIGIN1 71 DIGIN2 70	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO.  
MONTGOMERY BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048186

REV

A

SHEET

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LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-2										HIGHWAY NO.	1	DEVICE	2							
10	10 HIGH SELECTOR	OUT 60 IN1 34 IN2 0 IN3 0 IN4 0	K5(BIAS)	4.982	AUTO/MANUAL OUTPUT LIMITING	A N						OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00				
11	04 AUTO MANUAL	OUT 33 IN1 34	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0						IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
13	01 PID NORMAL	OUT 63 IN1 8 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.298 0.000 0.000 49.988	AUTO/MAN HI DY LM N LO DY LM N CASCADE N CON/NORM C	A N N N C	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N R E Y Y	PATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL	0.00	OUT HI AL	99.98	OUT RMP RA	0.00	SP RMP RAT	0.00	
15	07 ADD / SUBTRACT	OUT 65 IN1 63 IN2 56 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 0.500 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 13						OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00				
16	12 SQUARE ROOT	OUT 66 IN1 9	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	0.500 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0						IN LO ALARM	0.00	IN HI ALARM	49.72	OUT LO ALARM	0.00	OUT HI ALARM	18.36	OUT PAMP RATE	0.00
17	01 PID NORMAL	OUT 35 IN1 66 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	20.000 148.997 0.000 0.000 0.000	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	M N N N N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN FNABLED RESET ENABLD	N R E Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N Y	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	15 0.00 99.98 0.00 99.98	OUT LO AL	0.00	OUT HI AL	99.98	OUT RMP RA	0.00	SP RMP RAT	0.00	

MCDONNELL DOUGLAS ASTRONAUTICS CO. MURKINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 97	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-2										HIGHWAY NO.	1	DEVICE	2
21	01 PID NORMAL	OUT 71 IN1 54 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	50.000 5.699 0.110 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	N R E Y Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	0.00 99.98 99.98 0.00 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00			
22	13 FUNCTION GENERATOR	OUT 72 IN1 76			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 24.98 X1 9.99 Y1 24.98 X2 74.99	Y2 99.98 X3 99.98 Y3 99.98 X4 99.98	Y4 99.98 X5 99.98 Y5 99.98 Y6 99.98		OUT RAMP RATE 0.00				
23	08 MULTPLIFP	OUT 73 IN1 71 IN2 72 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 21				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
24	07 ADD / SUBTRACT	OUT 74 IN1 73 IN2 11 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 0.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 23				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
25	01 PID NORMAL	OUT 36 IN1 10 IN2 74 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 0.815 0.200 0.000 -10.012	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	N D E Y Y	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC Y	BAK CALC PT 24 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	0.00 99.98 99.98 0.00 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00			
26	03 RATIO STATION	OUT 76 IN1 10 IN2 0	K1(GAIN) K2 K3 K5(BIAS)	1.699 0.000 0.000 9.988	AUTO/MANUAL A CASCADE ENABLED N CONSOLE/NORMAL N OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0				PV LO ALARM 12.21 PV HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
27	13 FUNCTION GENERATOR	OUT 77 IN1 11			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 0.00 X1 1.49 Y1 0.00 X2 1.98	Y2 1.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE 0.00				

MCDONNELL DOUGLAS AERONAUTICS CO. MURKIN BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 98	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-2										HIGHWAY NO.	1	DEVICE	2
28	13 FUNCTION GENERATOR	OUT 78 IN1 10	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 X1 Y1 X2	0.00 1.49 0.00 1.98	Y2 X3 Y3 X4	1.98 0.00 99.98 0.00	Y4 X5 Y5 Y6	0.00 0.00 0.00 0.00	OUT RAMP RATE	0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048166
MCDONNELL DOUGLAS		REV A	SHEET 99	

LINE	DIGITAL CONFIGURATION TABLE		COMM2	MVCU CP-2	HIGHWAY NO.	1	DEVICE	2
148	09	TIMER	OUTPUT 190	INPUT1 189	TIMER	OUT INV N	IN1 INV Y	
				INPUT2 0	SET 2		IN2 INV Y	
				INPUT3 0	AUTO/MAN A		IN3 INV Y	
149	04	OR TRIG LOG	OUTPUT 191	INPUT1 190	AUTO/MAN A	OUT INV N	IN1 INV N	
				INPUT2 0			IN2 INV Y	
				INPUT3 0			IN3 INV Y	
				INPUT4 0			IN4 INV Y	
				INPUT5 0			IN5 INV Y	
150	06	OR MODE XFR	MODE XFR TABLE 2	INPUT1 191	AUTO/MAN A		IN1 INV Y	
				INPUT2 0			IN2 INV Y	
				INPUT3 0			IN3 INV Y	
				INPUT4 0			IN4 INV Y	
				INPUT5 0			IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS			REV A	SHEET 117	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C2-2 HIGHWAY NO. 1 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	11
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	25
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	11
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	25

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 118	



LINE ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-3 HIGHWAY NO. 2 DEVICE 1

1	10 HIGH SELECTOR	OUT 51 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
2	01 PID NORMAL	OUT 52 IN1 51 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.984 5.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM Y LO DY LM Y CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
3	01 PID NORMAL	OUT 53 IN1 7 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 5.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM Y LO DY LM Y CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
4	10 HIGH SELECTOR	OUT 54 IN1 5 IN2 6 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
5	13 FUNCTION GENERATOR	OUT 55 IN1 54	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 26.01 X1 55.85 Y1 46.52 X2 61.25	Y2 48.45 X3 64.96 Y3 49.65 X4 72.48	Y4 51.72 X5 99.98 Y5 58.12 Y6 0.00	OUT RAMP RATE	0.00
6	12 SQUARE ROOT	OUT 56 IN1 3	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
7	09 DIVIDER	OUT 57 IN1 56 IN2 55	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.500 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.02 37.51 7.94	
8	01 PID NORMAL	OUT 58 IN1 57 IN2 0 IN3 60 IN4 34	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 5.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM Y LO DY LM Y CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
9	21 ANALOG SWITCH	OUT 34 IN1 52 IN2 53	IN3 52 IN4 58	DIGIN1 71 DIGIN2 70	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	

MCDONNELL DOUGLAS ASTRONAUTICS CO. MURKIN BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 130	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-3										HIGHWAY NO.	2	DEVICE	1
10	10 HIGH SELECTOR	OUT 60 IN1 34 IN2 0 IN3 0 IN4 0	K5(BIAS)	4.982	AUTO/MANUAL	A	OUTPUT LIMITING	N	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
11	04 AUTO MANUAL	OUT 33 IN1 34	K5(BIAS)	0.000	AUTO/MANUAL	M	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00
					BACK CALCULATION	N	BACK CALC POINTER	0	OUT HI ALARM	99.98	OUT RAMP RATE	0.00		
13	01 PID NORMAL	OUT 63 IN1 8 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.298 0.000 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 PV LO ALARM 0.00 PV HI ALARM 99.98					
15	07 ADD / SUBTRACT	OUT 65 IN1 63 IN2 56 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 0.500 0.000 0.000 -50.012	AUTO/MANUAL	A	OUTPUT LIMITING	N	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
					BACK CALCULATION	Y	BACK CALC POINTER	13						
16	12 SQUARE ROOT	OUT 66 IN1 9	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	0.500 0.000 0.000 0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00
					BACK CALCULATION	N	BACK CALC POINTER	0	OUT HI ALARM	99.98	OUT RAMP RATE	0.00		
17	01 PID NORMAL	OUT 35 IN1 66 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(PATE) K4(FILTER) K5	20.000 148.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC Y	BAK CALC PT 15	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 PV LO ALARM 0.00 PV HI ALARM 99.98					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 131	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-3										HIGHWAY NO.	2	DEVICE	1	
21	01 PID NORMAL	OUT 71	K1(GAIN)	5.148	AUTO/MAN	M	PV INVERTED	N	RATE ENAB	N	PAK CALC	PT	0	OUT LO AL	0.00
		IN1 54	K2(RESET)	1.433	HI DY LM	N	DIRECT/REV	R	SP LIMITG	Y	SP LO ALARM	0.00	OUT HI AL	99.98	
		IN2 42	K3(RATE)	-0.129	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	Y	SP HI ALARM	99.98	OUT RMP RA	0.00	
		IN3 39	K4(FILTER)	-0.044	CASCADE	Y	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.00	
		IN4125	K5	-673.040	CON/NORM	N	RESET ENABLD	Y	BACK CALC	Y	PV HI ALARM	99.98			
22	13 FUNCTION GENERATOR	OUT 72	AUTO/MANUAL		A	Y0	24.98	Y2	99.98	Y4	0.00	OUT RAMP RATE	0.00		
		IN1 76	BACK CALCULATION		N	X1	9.99	X3	99.98	X5	0.00				
			BACK CALC POINTER		0	Y1	24.98	Y3	99.98	Y5	0.00				
			NO. OF POINTS		4	X2	74.99	X4	0.00	Y6	0.00				
23	08 MULTIPLIER	OUT 73	K1(GAIN)	1.000	AUTO/MANUAL				A	OUT LO ALARM	0.00				
		IN1 71	K5(BIAS)	0.000	OUTPUT LIMITING				N	OUT HI ALARM	99.98				
		IN2 72			BACK CALCULATION				Y	OUT RAMP RATE	0.00				
		IN3 0			BACK CALC POINTER				21						
		IN4 0													
24	07 ADD / SUBTRACT	OUT 74	K1(GAIN)	1.000	AUTO/MANUAL				A	OUT LO ALARM	0.00				
		IN1 73	K2(GAIN)	0.000	OUTPUT LIMITING				N	OUT HI ALARM	99.98				
		IN2 11	K3(GAIN)	0.000	BACK CALCULATION				Y	OUT RAMP RATE	0.00				
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER				23						
		IN4 0	K5(BIAS)	0.000											
25	01 PID NORMAL	OUT 36	K1(GAIN)	2.000	AUTO/MAN	M	PV INVERTED	N	RATE ENAB	Y	BAK CALC	PT	24	OUT LO AL	0.00
		IN1 10	K2(RESET)	0.815	HI DY LM	N	DIRECT/REV	D	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98	
		IN2 74	K3(RATE)	0.201	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	99.98	OUT RMP RA	0.00	
		IN3 0	K4(FILTER)	0.000	CASCADE	Y	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.00	
		IN4 0	K5	0.000	CON/NORM	N	RESET ENABLD	Y	BACK CALC	Y	PV HI ALARM	99.98			
26	03 RATIO STATION	OUT 76	K1(GAIN)	1.000	AUTO/MANUAL				A	PV LO ALARM	9.99				
		IN1 10	K2	0.000	CASCADE ENABLED				N	PV HI ALARM	99.98				
		IN2 0	K3	0.000	CONSOLE/NORMAL				N	OUT LO ALARM	0.00				
			K5(BIAS)	9.988	OUTPUT LIMITING				N	OUT HI ALARM	99.98				
					BACK CALCULATION				N	OUT RAMP RATE	0.00				
			BACK CALC POINTER				0								
27	13 FUNCTION GENERATOR	OUT 77	AUTO/MANUAL		A	Y0	0.00	Y2	1.98	Y4	0.00	OUT RAMP RATE	0.00		
		IN1 11	BACK CALCULATION		N	X1	1.49	X3	0.00	X5	0.00				
			BACK CALC POINTER		0	Y1	0.00	Y3	99.98	Y5	0.00				
			NO. OF POINTS		4	X2	1.98	X4	0.00	Y6	0.00				

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048180
MCDONNELL DOUGLAS		REV A	SHEET 132	

LINE

ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-3

HIGHWAY NO. 2 DEVICE 1

28	13 FUNCTION GENERATOR	OUT 78 INI 10	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 X1 Y1 X2	0.00 1.49 0.00 1.98	Y2 X3 Y3 X4	1.98 0.00 99.98 0.00	Y4 X5 Y5 Y6	0.00 0.00 0.00 0.00	OUT RAMP RATE 0.00
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MCDONNELL DOUGLAS AERONAUTICS CO. MONTGOMERY BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 133	

LINE	DIGITAL CONFIGURATION TABLE				CCM#2	MVCU C2-3	HIGHWAY NO.	2	DEVICE	1	
148	09 TIMER	OUTPUT	180	INPUT1	189	TIMER		OUT INV	N	IN1 INV	Y
				INPUT2	0	SFT	2			IN2 INV	Y
				INPUT3	0	AUTO/MAN	A			IN3 INV	Y
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
				INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN	A			IN1 INV	Y
				INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS			REV A	SHEET 151	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C2-3 HIGHWAY NO. 2 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	11
	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	25
2	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	11
	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	25

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 152	

LINE ANALOG CONFIGURATION TABLE CCM#2 MVCU C2-4 HIGHWAY NO. 2 DEVICE 2

1	01 PID NORMAL	OUT 51	K1(GAIN)	0.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 1	K2(RESET)	0.600	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED N	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
2	10 HIGH SELECTOR	OUT 52	K5(BIAS)	0.000	AUTO/MANUAL		A	OUT LO ALARM 0.00	
		IN1 2			OUTPUT LIMITING		N	OUT HI ALARM 99.98	
		IN2 3						OUT RAMP RATE 0.00	
		IN3 0							
		IN4 0							
3	01 PID NORMAL	OUT 33	K1(GAIN)	3.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 52	K2(RESET)	5.997	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
4	01 PID NORMAL	OUT 54	K1(GAIN)	0.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 4	K2(RESET)	0.600	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED N	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
5	10 HIGH SELECTOR	OUT 55	K5(BIAS)	0.000	AUTO/MANUAL		A	OUT LO ALARM 0.00	
		IN1 5			OUTPUT LIMITING		N	OUT HI ALARM 99.98	
		IN2 6						OUT RAMP RATE 0.00	
		IN3 0							
		IN4 0							
6	01 PID NORMAL	OUT 34	K1(GAIN)	3.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 56	K2(RESET)	5.997	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
7	01 PID NORMAL	OUT 35	K1(GAIN)	2.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 7	K2(RESET)	1.996	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.390	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
8	01 PID NORMAL	OUT 36	K1(GAIN)	2.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 9	K2(RESET)	0.998	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.390	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	
9	01 PID NORMAL	OUT 37	K1(GAIN)	1.000	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 9	K2(RESET)	0.000	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.390	CASCADE N	GAIN ENABLED N	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD N	BACK CALC N	PV HI ALARM 99.98	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

REV	A	SHEET	164
SIZE	B	FSCM NO.	18355
		DRAWING NO.	1D48186

LINE	DIGITAL CONFIGURATION TABLE				CCM#2	MVCU C2-4	HIGHWAY NO.	2	DEVICE	2		
148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER		OUT INV	N	IN1 INV	Y
					INPUT2	0	SET	?			IN2 INV	Y
					INPUT3	0	AUTO/MAN	A			IN3 INV	Y
149	04	OR	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
		TRIG LOG			INPUT2	0					IN2 INV	Y
					INPUT3	0					IN3 INV	Y
					INPUT4	0					IN4 INV	Y
					INPUT5	0					IN5 INV	Y
150	06	OR	MODE XFR		INPUT1	191	AUTO/MAN	A			IN1 INV	Y
		MODE XFR	TABLE	?	INPUT2	0					IN2 INV	Y
					INPUT3	0					IN3 INV	Y
					INPUT4	0					IN4 INV	Y
					INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 185	



MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C2-4

HIGHWAY NO. 2 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
<hr/>				
1				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	7
	4	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	8
	5	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
2				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	7
	4	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	8
	5	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 186	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C3-1										HIGHWAY NO.	3	DEVICE	1
1	10 HIGH SELECTOR	OUT 51	K5(BIAS)	0.000	AUTO/MANUAL	A							OUT LO ALARM	0.00
		IN1 1			OUTPUT LIMITING	N							OUT HI ALARM	71.23
		IN2 2											OUT RAMP RATE	0.00
		IN3 0												
		IN4 0												
2	13 FUNCTION GENERATOR	OUT 52	AUTO/MANUAL	A	Y0 9.99	Y2 99.98	Y4 0.00						OUT RAMP RATE	0.00
		IN1 3	BACK CALCULATION	N	X1 7.99	X3 0.00	X5 0.00							
			BACK CALC POINTER	0	Y1 9.99	Y3 99.98	Y5 0.00							
			NO. OF POINTS	4	X2 43.98	X4 0.00	Y6 0.00							
3	13 FUNCTION GENERATOR	OUT 53	AUTO/MANUAL	A	Y0 19.98	Y2 99.98	Y4 0.00						OUT RAMP RATE	0.00
		IN1 3	BACK CALCULATION	N	X1 7.99	X3 0.00	X5 0.00							
			BACK CALC POINTER	0	Y1 19.98	Y3 99.98	Y5 0.00							
			NO. OF POINTS	4	X2 23.98	X4 0.00	Y6 0.00							
4	19 PID REMOTE TUNING	OUT 54	K1(GAIN)	1.047	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0				OUT LO AL	0.00
		IN1 51	K2(RESET)	0.137	K2 RM TU Y	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00				OUT HI AL	99.98
		IN2 0	K3(RATE)	0.267	K3 RM TU Y	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98				OUT RMP RA	0.00
		IN3 53	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00				SP RMP RAT	0.00
		IN4 53	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98					
5	08 MULTIPLIER	OUT 55	K1(GAIN)	1.000	AUTO/MANUAL	A							OUT LO ALARM	0.00
		IN1 54	K5(BIAS)	0.000	OUTPUT LIMITING	N							OUT HI ALARM	99.98
		IN2 52			BACK CALCULATION	Y							OUT RAMP RATE	0.00
		IN3 0			BACK CALC POINTER	4								
		IN4 0												
6	07 ADD / SUBTRACT	OUT 56	K1(GAIN)	0.637	AUTO/MANUAL	A							OUT LO ALARM	0.00
		IN1 5	K2(GAIN)	-0.156	OUTPUT LIMITING	N							OUT HI ALARM	99.98
		IN2 6	K3(GAIN)	0.000	BACK CALCULATION	N							OUT RAMP RATE	0.00
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0								
		IN4 0	K5(BIAS)	29.280										
7	12 SQUARE ROOT	OUT 57	K1(GAIN)	1.000	AUTO/MANUAL	A							IN LO ALARM	0.00
		IN1 4	K2(PV BIAS)	0.000	OUTPUT LIMITING	N							IN HI ALARM	99.98
			K3(THRESHD)	0.000	BACK CALCULATION	N							OUT LO ALARM	0.00
			K5(BIAS)	0.000	BACK CALC POINTER	0							OUT HI ALARM	99.98
													OUT RAMP RATE	0.00
8	08 MULTIPLIER	OUT 58	K1(GAIN)	1.000	AUTO/MANUAL	A							OUT LO ALARM	0.00
		IN1 57	K5(BIAS)	0.000	OUTPUT LIMITING	N							OUT HI ALARM	99.98
		IN2 56			BACK CALCULATION	N							OUT RAMP RATE	0.00
		IN3 0			BACK CALC POINTER	0								
		IN4 0												
9	01 PID NORMAL	OUT 59	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0				OUT LO AL	0.00
		IN1 0	K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00				OUT HI AL	99.98
		IN2 58	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98				OUT RMP RA	0.00
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00				SP RMP RAT	0.00
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD N	BACK CALC N	PV HI ALARM	99.98					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 198	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C3-1										HIGHWAY NO.	3	DEVICE	1
10	07 ADD / SUBTRACT	OUT 60 IN1 55 IN2 59 IN3 52 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 5				OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
11	04 AUTO MANUAL	OUT 61 IN1 60	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 10				IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		
12	01 PID NORMAL	OUT 33 IN1 3 IN2 61 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.348 59.999 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	11 0.00 99.98 1.20 9.62		OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00		
15	01 PID NORMAL	OUT 34 IN1 33 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.125 11.998 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98		OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00		
17	01 PID NORMAL	OUT 35 IN1 66 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.500 1.199 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E F GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98		OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00		

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 199	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C3-1										HIGHWAY NO.	3	DEVICE	1
20	10 HIGH SELECTOR	OUT 70 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
21	01 PID NORMAL	OUT 36 IN1 70 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.000 0.000 0.390 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENBLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98			OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00		
23	10 HIGH SELECTOR	OUT 73 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 71.21 0.00		
24	13 FUNCTION GENERATOR	OUT 74 IN1 13			AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 7.99 Y1 9.99 X2 43.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00		
25	13 FUNCTION GENERATOR	OUT 75 IN1 13			AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 19.98 X1 7.99 Y1 19.98 X2 23.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00		
26	19 PID REMOTE TUNING	OUT 76 IN1 73 IN2 0 IN3 75 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.750 0.073 0.267 0.000 0.000	AUTO/MAN A K2 RM TU Y K3 RM TU N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENBLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98			OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00		
27	08 MULTIPLIER	OUT 77 IN1 76 IN2 74 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 26					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 200	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C3-1										HIGHWAY NO.	3	DEVICE	1
28	07 ADD / SUBTRACT	OUT 78 IN1 15 IN2 16 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	0.637 -0.156 0.000 0.000 29.280	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
29	12 SQUARE ROOT	OUT 79 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	99.98 0.00 99.98 0.00 0.00						
30	08 MULTIPLIER	OUT 80 IN1 79 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
31	01 PID NORMAL	OUT 81 IN1 0 IN2 80 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	A N N Y N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00				
32	07 ADD / SUBTRACT	OUT 82 IN1 77 IN2 81 IN3 74 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 27	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
33	04 AUTO MANUAL	OUT 83 IN1 82	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 32	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						
34	01 PID NORMAL	OUT 37 IN1 13 IN2 83 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.348 59.999 0.110 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	M N N Y N	PV INVERTED N DIRECT/REV D RATE ON PV/E F GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 33 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00				
35	13 FUNCTION GENERATOR	OUT 85 IN1 3	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 0.00 X1 1.49 Y1 0.00 X2 1.98	Y2 1.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 X6 0.00	OUT RAMP RATE	0.00					
36	13 FUNCTION GENERATOR	OUT 86 IN1 13	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 0.00 X1 1.49 Y1 0.00 X2 1.98	Y2 1.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 X6 0.00	OUT RAMP RATE	0.00					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 201	

LINE

ANALOG CONFIGURATION TABLE CCM#2 MVCU C3-1

HIGHWAY NO. 3 DEVICE 1

37	01 PID	OUT 38	K1(GAIN)	0.125	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	4.98
	NORMAL	IN1 37	K2(PESET)	11.998	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT Y	SP HI ALARM	99.98	OUT RMP RA	19.90
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98		
39	01 PID	OUT 39	K1(GAIN)	0.500	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00
	NORMAL	IN1 88	K2(RESET)	1.199	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2 0	K3(PATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	19.90
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98		

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048186

REV

A

SHEET

202

LINE                                  DIGITAL CONFIGURATION TABLE    CCM#2    MVCU C3-1                                  HIGHWAY NO.    3    DEVICE    1

1	11 DUAL PULSE	OUTPUT1 71 OUTPUT2 72	INPUT1 70			OUT1 INV N OUT2 INV N	
2	06 OR MODE XFR	MODE XFR TABLE 3	INPUT1 71 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
3	06 OR MODE XFR	MODE XFR TABLE 4	INPUT1 72 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 93 OUTPUT2 94	INPUT1 90			OUT1 INV N OUT2 INV N	
5	06 OR MODE XFR	MODE XFR TABLE 5	INPUT1 93 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	06 OR MODE XFR	MODE XFR TABLE 6	INPUT1 94 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48186

REV

A

SHEET

203





MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C3-1

HIGHWAY NO. 3 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	12
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	15
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	21
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	34
	6 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	37
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	39
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	15
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	17
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	21
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	34
	6 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	37
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	39
3	1 05 ANALOG (MAN XFR + OUTPUT SEL)	15.482	11

MCDONNELL DOUGLAS AERONAUTICS CO. MARTINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 220	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C3-1 HIGHWAY NO. 7 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
4	1	06 ANALOG (AUTO XFR)	0.000	11
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	15.482	33
6	1	06 ANALOG (AUTO XFR)	0.000	33

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MURKIN BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 221	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C4-3										HIGHWAY NO.	4	DEVICE	1
1	01 PID NORMAL	OUT 51 IN1 3 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	10.000 1.199 0.000 0.000 0.000	AUTO/MAN M HI DY LM Y LO DY LM Y CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	N D E Y Y	RATE ENAB N SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 57.48 SP HI ALARM 74.99 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89				
2	13 FUNCTION GENERATOR	OUT 52 IN1 4			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 0.00 X1 58.66 Y1 0.00 X2 66.67	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE 0.00				
3	07 ADD / SUBTRACT	OUT 53 IN1 51 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 1					OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00				
4	04 AUTO MANUAL	OUT 37 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 3					IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 9.89				
6	01 PID NORMAL	OUT 56 IN1 3 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	8.000 1.199 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	N D E Y Y	RATE ENAB N SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 57.48 SP HI ALARM 74.99 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89				
7	13 FUNCTION GENERATOR	OUT 57 IN1 11			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 0.00 X1 74.99 Y1 0.00 X2 84.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE 0.00				
8	07 ADD / SUBTRACT	OUT 58 IN1 56 IN2 57 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 6					OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00				
9	04 AUTO MANUAL	OUT 36 IN1 58	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 8					IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 9.89				

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 232	

LINE	ANALOG CONFIGURATION TABLE CCM#2 MVCU C4-3										HIGHWAY NO.	4	DEVICE	1
11	01 PID NORMAL	OUT 61 IN1 1 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	14.398 1.497 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENBLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 29.99 SP HI ALARM 47.99 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89					
12	13 FUNCTION GENERATOR	OUT 62 IN1 2		AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 0.00 X1 60.51 Y1 0.00 X2 65.79	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00					
13	07 ADD / SUBTRACT	OUT 63 IN1 61 IN2 62 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 11			OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00						
14	04 AUTO MANUAL	OUT 33 IN1 63	K5(BIAS)	0.000	AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 13			IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 9.89						
16	01 PID NORMAL	OUT 35 IN1 1 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	8.000 0.856 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENBLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 29.99 SP HI ALARM 47.99 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89					
17	01 PID NORMAL	OUT 34 IN1 35 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.797 0.856 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENBLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 90.99 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89					

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048186

REV

A

SHEET

233

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DIGITAL CONFIGURATION TABLE CCM#2 MVCU C4-3 HIGHWAY NO. 4 DEVICE 1

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148	09 TIMER	OUTPUT 190	INPUT1 189 INPUT2 0 INPUT3 0	TIMER SET 2 AUTO/MAN A	OUT INV N	IN1 INV Y IN2 INV Y IN3 INV Y
149	04 OR TRIG LOG	OUTPUT 191	INPUT1 190 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
150	06 OR MODE XFR	MODE XFR TABLE 2	INPUT1 191 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
<small>MCDONNELL DOUGLAS</small>		REV A	SHEET 253	

MODE TRANSFER CONFIGURATIONS CCM#2 MVCU C4-3 HIGHWAY NO. 4 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	14
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	16
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	14
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	16

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 254	

MVCU SUMMARY  
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MVCU	REMARK	HIWAY	DEVICE	ANALOG			DIGITAL			MODE XFR			TOTAL NONCOMPARE
				USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	
C2-1		1	1	23	17	0	9	141	0	4	32	0	0
C2-2		1	2	21	19	0	3	147	0	2	34	0	0
C2-3		2	1	21	19	0	3	147	0	2	34	0	0
C2-4		2	2	9	31	0	3	147	0	2	34	0	0
C3-1		3	1	30	10	0	9	141	0	6	30	0	0
C4-3		4	1	17	23	0	9	141	0	2	34	0	0

ANOMALY SUMMARY  
\*\*\*\*\*

I/O PROCESSING = 0 MLD DATA INPJT = \*09 ADDED/MISSING MLD = 0 NONCOMPARE = 0

ANOMALY CODE  
\*\*\*\*\*

E0000001 = BLANK INBEEDED IN TAG NAME	*NR*	= LOOP NOT RESPONDING
E0000010 = EIGHT CHARACTER TAG NAME	MISSING	= LOOP MISSING IN CCM
E0000100 = 100% CAL VALUE LESS THAN 0% CAL VALUE	ADDED	= LOOP NOT IN COMPARISON FILE
E0001000 = HIGH SET POINT LESS THAN LOW SET POINT	CHNGD-IS	= LOOP DIFFERENT THAN COMPARISON
E0010000 = HIGH CONTROL OUTPUT LESS THAN L0W	FILENAME	= BASELINE LOOP FOR COMPARISON
E0100000 = INCONSISTENT ALARM SETTING	NNNN	= LOOP NO. DENOTES COMPARISON FILE
E1000000 = INCONSISTENT ALARM SETTING	NO TAG OR	DESCRIPTION
E0000000 = OUT OF RANGE DATA DETECTED	BAD CHARACTER	NOTES

MCDONNELL DOUGLAS HUNTINGTON BEACH, CALIF.		NO TAG OR DESCRIPTION NOTES	SIZE <b>B</b>	SCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV	<b>A</b>	SHEET 265	

OSP STATION B  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 14 16:14

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

OSP STATION B  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 14 16:06

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3-	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1 COMPENSATION			
2	LINEAR	-0030	.0102
3	LINEAR	1.000	5.005
4	LINEAR	1.000	5.005
5	UNDEFINED		
6	UNDEFINED		
7	LINEAR	4.500	5.500
8	LINEAR	4.500	5.500

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
33	LINEAR	1.000	5.005
34	LINEAR	1.000	5.005
35	LINEAR	1.000	5.005
36	LINEAR	1.000	5.005
37	LINEAR	1.000	5.005
38	LINEAR	1.000	5.005
39	LINEAR	1.000	5.005
40	LINEAR	1.000	5.005

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 256	



OSP STATION B  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 14 16:13

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4-	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 4 CONVERSION TYPE	0Z VOLTAGE	100Z VOLTAGE
49	LINEAR	1.000	5.005
50	LINEAR	1.000	5.005
51	LINEAR	1.000	5.005
52	LINEAR	1.000	5.005
53	LINEAR	1.000	5.005
54	LINEAR	1.000	5.005
55	LINEAR	1.000	5.005
56	LINEAR	1.000	5.005

OSP STATION A  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 17:55

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5-	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 5 CONVERSION TYPE	0Z VOLTAGE	100Z VOLTAGE
65	LINEAR	-.0030	.0102
66	LINEAR	-.0030	.0149
67	LINEAR	-.0030	.0149
68	LINEAR	1.000	5.005
69	LINEAR	-.0030	.0102
70	LINEAR	-.0030	.0102
71	LINEAR	-.0030	.0149
72	LINEAR	-.0030	.0102

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D48186

REV

A

SHEET

257

OSP STATION A  
IPAC TAG: N3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 17:55

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6-	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

OSP STATION B  
IPAC TAG: N3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 14 16:15

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6-	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 6 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
81	LINEAR	1.000	5.005
82	LINEAR	1.000	5.005
83	LINEAR	1.000	5.005
84	LINEAR	1.000	5.005
85	LINEAR	1.000	5.005
86	LINEAR	1.000	5.005
87	LINEAR	1.000	5.005
88	LINEAR	1.000	5.005

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 6 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
81	LINEAR	1.000	5.005
82	LINEAR	1.000	5.005
83	LINEAR	1.000	5.005
84	LINEAR	1.000	5.005
85	LINEAR	1.000	5.005
86	LINEAR	1.000	5.005
87	LINEAR	1.000	5.005
88	LINEAR	1.000	5.005

MCDONNELL DOUGLAS AERONAUTICS CO. HARTINGTON BEACH, CALIF.  MCDONNELL DOUGLAS	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
	REV <b>A</b>	SHEET 258	

OSP STATION B  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 14 16:15

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7-	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 7 CONVERSION		0% VOLTAGE	100% VOLTAGE
	TYPE			
97	LINEAR		1.000	5.005
98	LINEAR		1.000	5.005
99	LINEAR		1.000	5.005
100	LINEAR		1.000	5.005
101	LINEAR		1.000	5.005
102	LINEAR		1.000	5.005
103	LINEAR		1.000	5.005
104	LINEAR		1.000	5.005

OSP STATION A  
IPAC TAG: M3-1

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 17:57

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8-	ANALOG INPUT	113 TO 120
9	DIGITAL OUTPUTS	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 8 CONVERSION		0% VOLTAGE	100% VOLTAGE
	TYPE			
113	LINEAR		1.000	5.005
114	UNDEFINED			
115	UNDEFINED			
116	UNDEFINED			
117	UNDEFINED			
118	UNDEFINED			
119	UNDEFINED			
120	UNDEFINED			

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48186
MCDONNELL DOUGLAS		REV A	SHEET 259	

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:29

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1	COMPENSATION		
2	LINEAR	-0.030	.0149
3	LINEAR	-0.030	.0149
4	LINEAR	1.000	5.005
5	UNDEFINED		
6	UNDEFINED		
7	LINEAR	4.000	5.501
8	LINEAR	4.500	5.500

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:30

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 2 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
17	LINEAR	1.000	5.005
18	LINEAR	1.000	5.005
19	LINEAR	1.000	5.005
20	LINEAR	1.000	5.005
21	LINEAR	1.000	5.005
22	LINEAR	1.000	5.005
23	LINEAR	1.000	5.005
24	UNDEFINED		

MCDONNELL DOUGLAS AERONAUTICS CO.  
WANTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
B

FSCM NO.  
18355

DRAWING NO.  
1D48186

REV

A

SHEET 260

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:31

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3-	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE	100Z	
		0Z VOLTAGE	VOLTAGE
33	UNDEFINED		
34	UNDEFINED		
35	UNDEFINED		
36	UNDEFINED		
37	UNDEFINED		
38	UNDEFINED		
39	UNDEFINED		
40	UNDEFINED		

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:34

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4-	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 4 CONVERSION TYPE	100Z	
		0Z VOLTAGE	VOLTAGE
49	LINEAR	1.000	5.005
50	LINEAR	1.000	5.005
51	LINEAR	1.000	5.005
52	UNDEFINED		
53	LINEAR	1.000	5.005
54	UNDEFINED		
55	LINEAR	1.000	5.005
56	UNDEFINED		

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
B

FSCM NO.  
18355

DRAWING NO.  
1D48186

REV

A

SHEET 261

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:34

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6-	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 6 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
81	LINEAR	1.000	5.005
82	LINEAR	1.000	5.005
83	LINEAR	1.000	5.005
84	LINEAR	1.000	5.005
85	LINEAR	1.000	5.005
86	LINEAR	1.000	5.005
87	LINEAR	1.000	5.005
88	LINEAR	1.000	5.005

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:34

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8-	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 8 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
113	LINEAR	-.0030	.0149
114	LINEAR	-.0030	.0149
115	LINEAR	-.0030	.0149
116	LINEAR	-.0030	.0149
117	LINEAR	-.0030	.0149
118	LINEAR	-.0030	.0149
119	LINEAR	-.0030	.0149
120	LINEAR	-.0030	.0149

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48186

REV

A

SHEET

262

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:35

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10-	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 10 CONVERSION	
	TYPE	0% VOLTAGE
145	LINEAR	-.0030
146	LINEAR	-.0030
147	LINEAR	-.0030
148	LINEAR	-.0030
149	LINEAR	-.0030
150	LINEAR	-.0030
151	LINEAR	-.0030
152	LINEAR	-.0030

OSP STATION B  
IPAC TAG: M2-1

IPAC ADDRESS 01 HIGHWAY 10

81 DEC 11 07:35

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	UNUSED IN IPAC	65 TO ?
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	ANALOG INPUT	113 TO 120
9	UNUSED IN IPAC	129 TO ?
10	ANALOG INPUT	145 TO 152
11	UNUSED IN IPAC	161 TO ?
12-	ANALOG INPUT	177 TO 184

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 12 CONVERSION	
	TYPE	0% VOLTAGE
177	LINEAR	-.0030
178	LINEAR	-.0030
179	LINEAR	-.0030
180	LINEAR	-.0030
181	LINEAR	-.0030
182	LINEAR	-.0030
183	LINEAR	-.0030
184	LINEAR	-.0030

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D48186

REV

A

SHEET 263

OSP STATION B  
IPAC TAG: M2-2

IPAC ADDRESS 01 HIGHWAY 14

81 DEC 11 07:37

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

OSP STATION B  
IPAC TAG: M2-2

IPAC ADDRESS 01 HIGHWAY 14

81 DEC 11 07:38

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3-	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1	COMPENSATION		
2	LINEAR	-.0030	.0149
3	LINEAR	-.0030	.0149
4	LINEAR	-.0030	.0149
5	LINEAR	-.0030	.0149
6	LINEAR	-.0030	.0149
7	LINEAR	-.0030	.0149
8	LINEAR	-.0030	.0149

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
33	LINEAR	-.0030	.0149
34	LINEAR	-.0030	.0149
35	LINEAR	-.0030	.0149
36	LINEAR	-.0030	.0149
37	LINEAR	-.0030	.0149
38	LINEAR	-.0030	.0149
39	LINEAR	-.0030	.0149
40	LINEAR	-.0030	.0149

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48186

REV

A

SHEET 264



## OSP STATION B

IPAC TAG: M2-2

IPAC ADDRESS 01 HIGHWAY 14

81 DEC 11 07:40

## IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5-	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

## IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7-	ANALOG INPUT	97 TO 104
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

## ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 5 CONVERSION	
	TYPE	
65	LINEAR	-0.0030 .0149
66	LINEAR	-0.0030 .0149
67	LINEAR	-0.0030 .0149
68	LINEAR	-0.0030 .0149
69	LINEAR	-0.0030 .0149
70	LINEAR	-0.0030 .0149
71	LINEAR	-0.0030 .0149
72	LINEAR	-0.0030 .0149

## ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 7 CONVERSION	
	TYPE	
97	LINEAR	1.000 5.005
98	LINEAR	1.000 5.005
99	LINEAR	1.000 5.005
100	LINEAR	1.000 5.005
101	UNDEFINED	
102	UNDEFINED	
103	UNDEFINED	
104	LINEAR	4.500 5.500

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48186

REV

A

SHEET 265

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**DRAWING NO. 1D48187  
ELECTRICAL POWER GENERATION SYSTEM  
CCM DATA BASE**

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↓ DWG NO. 1D48187 | SH |

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	SEE E.O.	8-23-82	W.H.D

FINISH	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES  TOLERANCES, 2 PLACE DEC ± 3 PLACE DEC ± ANGLES ±	CONTRACT NO.	MCDONNELL DOUGLAS ASTRONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		
		ORIGINAL DATE OF DRAWING 82-01-01	<div style="text-align: right;">MCDONNELL DOUGLAS </div>		
ODD DASH NUMBERS SHOWN EVEN DASH NUMBERS OPPOSITE	MATERIAL	FIRST RELEASE OF PRINTS 82-01-14			ELECTRICAL POWER GENERATION SYSTEM SDPC DATA BASE
		PREPARED A.B. SMEE 1/4/82			
PART OR IDENT NO.	FOR USAGE DATA SEE ENGINEERING RECORDS	APPROVED  1/7/82	SIZE	FSCM NO.	DRAWING NO.
		CHECKED  1/12/82	B	18355	1D48187
		DESIGN ACTIVITY APPROVAL	CUSTOMER APPROVAL	SCALE	

SHEET REVISION RECORD

SHEET NO.	REVISION
1	A
1.1	RESERVE
1.2	A
1.3	A
1.4	A
1.5	A
2	A
3	A
4	A
5	A
6	A
7	A
8	A
9	A
10	A
11	A
12	A
13	NOT USED
14	NOT USED
15	NOT USED
16	A
17	A
18	A

SHEET REVISION RECORD

SHEET NO.	REVISION
19	A
20	A
21	A
22	A
23	A
24	A
25	A
26	A
27	A
28	A
29	NOT USED
30	NOT USED
31	NOT USED
32	NOT USED
33	NOT USED
34	NOT USED
35	NOT USED
36	NOT USED
37	NOT USED
38	A
39	A
40	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
B	18355	1D48187
REV	A	SHEET 1.2

SHEET REVISION RECORD

SHEET NO.	REVISION
41	A
42	A
43	A
44	A
45	A
46	A
47	A
48	A
49	A
50	A
51	A
52	A
53	A
54	A
55	A
56	A
57	A
58	A
59	A
60	A
61	A
62	A

SHEET REVISION RECORD

SHEET NO.	REVISION
63	A
64	A
65	A
66	A
67	NOT USED
68	NOT USED
69	NOT USED
70	NOT USED
71	NOT USED
72	NOT USED
73	NOT USED
74	NOT USED
75	NOT USED
76	NOT USED
77	NOT USED
78	NOT USED
79	NOT USED
80	NOT USED
81	NOT USED
82	NOT USED
83	A
84	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

**ID 48187**

REV

**A**

SHEET

**1.3**

SHEET REVISION RECORD

SHEET NO.	REVISION
85	NOT USED
86	NOT USED
87	NOT USED
88	NOT USED
89	NOT USED
90	NOT USED
91	NOT USED
92	NOT USED
93	NOT USED
94	NOT USED
95	NOT USED
96	A
97	A
98	A
99	A
100	NOT USED
101	A
102	NOT USED
103	NOT USED
104	NOT USED
105	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
106	NOT USED
107	NOT USED
108	NOT USED
109	NOT USED
110	NOT USED
111	NOT USED
112	NOT USED
113	NOT USED
114	NOT USED
115	NOT USED
116	NOT USED
117	A
118	A
119	A
120	A
121	A
122	A
123	A
124	A
125	A
126	A
127	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48187

REV

A

SHEET

1.4



THIS INDEX CONTAINS TAGS FROM THE CCMS AS FOLLOWS:  
 CCM 1 = 0 CCM 2 = 0 CCM 3 = 583 TOTAL = 583

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
1.	AI706	12 68 1HTR PH	3 126
2.	AI707	12 68 1HTR HYZ	3 127
3.	AI715	12 68 FW 02	3 130
4.	AI716	12 68 DEA PH	3 134
5.	AI719	10 67 HW PH	3 151
6.	AI729	11 67 IL DEM PH	3 140
7.	AI733	10 67 HW SODIUM	3 36
8.	AI735	10 67 HW 02	3 148
9.	AIC207	6 00 CW CIRC PH	3 3
10.	AIC725	9 67 HYDZ SPD	3 70
11.	AM24A	20 87 2HTR LVL	3 17
12.	C4-1	EPGSSTN4 RMTCTLR1	3 764
13.	C4-2	EPGSSTN4 RMTCTLR2	3 499
14.	CI1205	7 59 MKUP DEM	3 191
15.	CI1206	7 59 POLISHER	3 154
16.	CI241	6 63 CW CONDTVY	3 108
17.	CI708	12 68 1H CONDT	3 128
18.	CI717	12 68 DEA CAT	3 136
19.	CI718	12 68 1HTR CAT	3 129
20.	CI720	10 67 HW CATION C	3 153
21.	CI727	11 67 IL DEM CAT	3 138
22.	CI728	11 67 IL DEM COND	3 143
23.	CI736	10 67 HW CONDT	3 149
24.	CIC726	9 67 AMM SPD	3 131
25.	EAI5100	60 GEN VOLT BAL	3 702
26.	EHL5100	60 GEN 0-U VOLT	3 597
27.	EI5001	66 91 A01-2BKR	3 77
28.	EI5015	77 0 B02 BKP	3 195
29.	EI5020	75 0 B01 VOLT	3 158
30.	EI5100	59 0 GEN VOLT	3 125
31.	EIH5100	60 GEN OVR EXC	3 598
32.	EIH965	60 0 SHFTVOLT	3 596
33.	EIL5015	77 480V R02 UV	3 650
34.	EIL5020	75 480V B01 UV	3 539
35.	EIL5100	60 GEN LOSS FLO	3 600
36.	ESH5100	63 OVR EXC	3 522
37.	ESI5100	60 GEN VOLT BAL	3 533
38.	ESL5100	63 VOLT HZ	3 587
39.	ESL5110	60 OVR EXC	3 530
40.	EY5100	60 GEN DIST B-U	3 602
41.	FAI5251	90 0 EXH FAN	3 419
42.	FI113A	16 66 COND-DEA	3 89
43.	FI113B	19 66 2HTR DEA	3 90
44.	FI1601	8 0 SEPWSTFL	3 152
45.	FI35B	19 66 TS FW PP	3 88
46.	FIH1703	7 59 RW TK SW PP	3 509
47.	FIH958	35 STM SL SPRAY	3 576
48.	FIL1703	7 59 SW RECIRC	3 410

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
 HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048187

REV

A

SHEET

2



NO.	TAG NAME	DESCRIPTION	CCM LOOPID
49.	FIL958	35 STM SL SPRAY	3 574
50.	FIT35A	19 66 FFP FLO	3 87
51.	FYIP3B	19 00 DEA FLO	3 156
52.	GE5100	GROSS KW	3 27
53.	HC926CD	MS PRES IPR I-0	3 10
54.	HC937CD	57 ADM APR I-0	3 98
55.	HI856AM	34 EH P938B	3 507
56.	HI858AM	34 EH P938A	3 406
57.	HIC659	20 84 DA VENT	3 80
58.	HIC901	SV POSI ADM SV	3 6
59.	HS1	22 72 TSS FEED	3 746
60.	HS1008	AUX SIMS	3 414
61.	HS1008C	AUX SIMS	3 415
62.	HS110	15 87 FW BYPAS	3 760
63.	HS1202A	7 59 DEMIN PP	3 416
64.	HS131A	16 65 COND PP	3 492
65.	HS131C	16 00 COND PP	3 449
66.	HS140	15 86CON VAC BRKR	3 759
67.	HS155	15 86CON A-R-PP	3 747
68.	HS207	6 64 PMP CT ACID	3 710
69.	HS20RH	4 64 CT CTR FAN	3 720
70.	HS20RL	4 64 CT CTR FAN	3 722
71.	HS209	4 00 CT SPRAY	3 698
72.	HS213H	4 64 CT WEST FAN	3 742
73.	HS213L	4 64 CT WEST FAN	3 743
74.	HS222	3 63 CW P905 MOV	3 687
75.	HS229	4 63 CTBP MOV	3 758
76.	HS232H	4 64 CT EAST FAN	3 712
77.	HS232L	4 64 CT EAST FAN	3 715
78.	HS242A	3 63 SO. CIRC	3 677
79.	HS243	3 63 CW P906 MOV	3 690
80.	HS260A	3 63 NO. CIRC	3 680
81.	HS3	08 0 SIREN	3 412
82.	HS31	22 72 AXB FEED	3 745
83.	HS313	2 62 BCW PMP	3 749
84.	HS4	08 0 STROBE	3 390
85.	HS449	9 00 HYDRZ PP	3 708
86.	HS450	9 00 AMONA PP	3 707
87.	HS5001	74 91 4K AQ1-2FDR	3 476
88.	HS5003	75 91 4K SX1 BKR	3 477
89.	HS5004	76 91 4K LD CTR A	3 478
90.	HS5006	77 91 4K CTX1 BKR	3 479
91.	HS5007	78 92 4K HFLO 1-W	3 480
92.	HS5008	22 91 4K AXB BKR	3 481
93.	HS5009	78 92 4K HFLO 2-E	3 482
94.	HS5010	74 91 4K WELL BKR	3 483
95.	HS5015	77 94 B02 FDR	3 488
96.	HS5017	480V ABF BKR	3 469
97.	HS5020	75 93 R01 FDR	3 441
98.	HS5021	81 93 B0A FDR	3 485
99.	HS5022	81 93 B0C FDR	3 486
100.	HS5025	81 93 PPA FDR	3 487
101.	HS51A	08 0 GATE	3 389
102.	HS51B	126 GATE	3 615
103.	HS52	08 0 GATE	3 380
104.	HS52A	1 61 E-AIR CP	3 490

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D48187
REV	A	SHEET 3

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
105.	HS625	1 61 W-AIR CP	3 491
106.	HS609	26 82REF 1EXT DRN	3 762
107.	HS615	25 0 BEF 2EXT DRN	3 444
108.	HS616	36 TG AD ST DR	3 464
109.	HS617	36 MN ST DR	3 761
110.	HS620	28 82 OPEN ALL	3 498
111.	HS620A	28 82 TRIP ALL	3 527
112.	HS623	26 82AFT 1EXT DRN	3 443
113.	HS624	26 82 1EXT MOV	3 730
114.	HS625	26 82 1EXT NRV	3 725
115.	HS626	25 83 2EXT MOV	3 728
116.	HS627	25 83 2EXT NRV	3 497
117.	HS628	21 84 3EXT MOV	3 726
118.	HS629A	21 84 3EXT NRV	3 496
119.	HS629B	21 84 3EXT NRV	3 495
120.	HS630	18 85 4EXT MOV	3 724
121.	HS631	18 85 4EXT NRV	3 493
122.	HS637	18 85BFR 4EXT DRN	3 736
123.	HS650	21 84REF 3EXT DRN	3 735
124.	HS652	18 85AFT 4EXT DRN	3 734
125.	HS660	15 COND N2 BLNKT	3 408
126.	HS675	25 83AFT 2EXT DRN	3 733
127.	HS676	21 84AFT 3EXT DRN	3 732
128.	HS71	22 72 AXB FP	3 744
129.	HS856A	34 SO.EH PP	3 703
130.	HS856AM	34 EH P938B	3 716
131.	HS858A	34 NO.FH PP	3 701
132.	HS858AM	34 EH P938A	3 718
133.	HS903	36 78 TG AD BSD	3 757
134.	HS904	36 78 TG AD ASD	3 756
135.	HS905	36 TG MN BSD	3 448
136.	HS906	36 78 TG MN ASD	3 447
137.	HS935	3581 STM SEAL DR	3 446
138.	HS941	36 78 CSBP DRN	3 737
139.	HS958	3581SEAL EXH PP	3 705
140.	HS960	3581SEAL EXCS STM	3 752
141.	HS982	3581TURB STM SEAL	3 751
142.	HS990	3581SEAL HP SL DR	3 750
143.	HS991	3581 STM LP SL DR	3 749
144.	HS999	36 78 TG AD ST DR	3 731
145.	HSI5103	65 90 BYPASS	3 398
146.	HSI5104	65 90 LN DISC	3 397
147.	HSI5105	65 90 RK DISC	3 396
148.	HSI5106	65 90 LN GND DISC	3 395
149.	IDH5002	66 0 AX1 DIFF	3 512
150.	IDH5100	60 GE GEN DIFF	3 607
151.	IDH5101	60 GEN UNITDIFF	3 594
152.	IH1703A	7 59 RSWP OUT	3 549
153.	IH1703B	7 59 RSWP OUT	3 515
154.	IH5100A	60 0 OVR CNT	3 592
155.	IH5200A	65 0 MX1 OVL	3 407
156.	II242	CIRC WTR PUMP 906	3 185
157.	II260	CIRC WTR PUMP 905	3 101
158.	II50	14 0 TS FW PP	3 187
159.	II5001	74 0 4K AD1-2BKR	3 75
160.	II5003	75 91 4K SX1 RKR	3 79

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		
SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
REV A	SHEET 4	

NO.	TAG NAME	DESCRIPTION	CCM	LOGPID
161.	II5004	76 91 4K LD CTR A	3	82
162.	II5006	77 91 4K CTX1 BKR	3	112
163.	II5010	74 0 4K WELL BKR	3	192
164.	II5015	77 0 F02 BKR	3	64
165.	II5020	75 00 B01 AMPS	3	25
166.	II5021	81 93 B0A BUS	3	26
167.	II5100	51 GEN AMPS	3	122
168.	II5102	65 0 33KV BKR	3	85
169.	II65100	63 GEN FLD GND	3	589
170.	IIH110	15 FW BYP	3	679
171.	IIH131	16 00 COND PP	3	475
172.	IIH140	15 00CON VAC BRKR	3	676
173.	IIH155	15 COND A-R-PP	3	686
174.	IIH208	CTFAN901	3	639
175.	IIH213	CTFAN902	3	632
176.	IIH222	3 00 CW P905 MOV	3	614
177.	IIH229	4 00 CTBP MOV	3	713
178.	IIH232	CTFAN903	3	741
179.	IIH242	3 00 CW P906	3	719
180.	IIH243	3 00 CW P906 MOV	3	610
181.	IIH260	3 00 CW P905	3	442
182.	IIH313	2 00 BCW FMP	3	714
183.	IIH44	RFP	3	663
184.	IIH5001	74 0 4KV A01-2FDR	3	672
185.	IIH5002	66 0 AX1 OVLD	3	501
186.	IIH5003	75 4KV SX1 BKR	3	669
187.	IIH5004	76 0 4K LD CTR A	3	666
188.	IIH5006	77 0 4K CTX1 BKR	3	660
189.	IIH5007	78 4KV HELO 1-W	3	656
190.	IIH5008	22 0 4K AXB BKR	3	653
191.	IIH5009	78 4KV HELO 2-E	3	646
192.	IIH5010	74 0 4K WELL BKR	3	542
193.	IIH5015	77 480V B02 FDR	3	470
194.	IIH5017	480V ABF BKR	3	472
195.	IIH5020	75 0 B01 FMR	3	537
196.	IIH5021	81 0 B0A FDR	3	541
197.	IIH5022	81 0 B0C FDR	3	557
198.	IIH5025	81 0 PPA FDR	3	554
199.	IIH506	81 0 TS FW PP	3	682
200.	IIH5100	60 GEN STAT CMD	3	606
201.	IIH5101	60 GEN ANTI MTR	3	601
202.	IIH5200	65 0 33K MX1 GND	3	556
203.	IIH524	1 00 AIR COMP 901	3	617
204.	IIH524A	1 61 AIR COMP 901	3	692
205.	IIH525	1 00 AIR COMP 902	3	411
206.	IIH525A	1 61 AIR COMP 902	3	393
207.	IIH624	26 00 1EXT MOV	3	664
208.	IIH626	25 00 2EXT MOV	3	657
209.	IIH628	21 00 3EXT MOV	3	740
210.	IIH630	18 00 4EXT MOV	3	647
211.	IIH660	15 COND N2 BLNKT	3	423
212.	IIH71	22 0 AXB FP	3	651
213.	IIH820	33 T-G DC LO PP	3	508
214.	IIH822	82 0 OVE MTR	3	588
215.	IIH826	83 0 LO P926	3	590
216.	IIH827	82 0 LO P927	3	545

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4E187
MCDONNELL DOUGLAS		REV A	SHEET 5	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
217.	IIH856	34 FH P930B	3 688
218.	IIH858	34 EH P938A	3 544
219.	IIH903	36 78 TG AD RSD	3 700
220.	IIH904	36 TG AD ASD	3 694
221.	IIH905	36 TG MN RSD	3 689
222.	IIH906	36 TG MN ASD	3 681
223.	IIH935	35 STM SEAL DR	3 675
224.	IIH958	35 OSEAL EXH PP	3 439
225.	IIH960	35 SEAL EXCS STM	3 670
226.	IIH964	83 0 TURN GR	3 550
227.	IIH965	60 0 SHFTAMPS	3 578
228.	IIH982	35 TURB STM SEAL	3 665
229.	IIH990	35 OSEAL HP SL DR	3 659
230.	IIH991	35 STM LP SL DR	3 654
231.	ISI5015	77 480V B02 GND	3 422
232.	ISI5020	75 480V B01 GND	3 540
233.	JAI5250	60 LUBUS PWR LOSS	3 642
234.	JI242	03 0 PUMP 906	3 62
235.	JI260	03 0 PUMP 905	3 99
236.	JI50	14 0 TS FW PP	3 193
237.	JI5001	74 4KV A01-2BKR	3 76
238.	JI5003	75 91 4K SX1 BKR	3 78
239.	JI5004	76 91 4K LD CTR A	3 81
240.	JI5006	77 91 4K CTX1 BKR	3 111
241.	JI5021	81 93 MCC BOA	3 186
242.	JI5100	60 GEN WATT	3 123
243.	JI5101	59 90 GEN KVAR	3 124
244.	JI5102A	65 0 NET KW	3 74
245.	JIC5100	49 LOADCONT	3 35
246.	JYI5100	REL EFF	3 51
247.	KY5100	60 GFN NEG PHSE	3 523
248.	KY5100A	60 GEN NEG PHSE	3 450
249.	KY5101	60 GEN OUT STEP	3 599
250.	LC24A	20 0 2HTR LVL	3 5
251.	LC83B	17 66 DEA LVL	3 37
252.	LCM146A	17 87 HW MAKE UP	3 159
253.	LCM146B	17 87 HW DRAW OFF	3 166
254.	LCM24B	20 0 2HTR DMP	3 2
255.	LCM83B	17 66 COND FLO	3 119
256.	LE-3		3 612
257.	LI103	27 0 4HTR LVL	3 95
258.	LI146	HOTWELL	3 109
259.	LI160	16 65 CON STOR	3 30
260.	LI1602	8 0 SEPTKLV	3 584
261.	LI1701A	7 59 WW RAW TK	3 505
262.	LI1701B	7 59 WW RAW TK	3 577
263.	LI1703	759W-WTR RAW TK	3 586
264.	LI23	27 00 2HTR LVL	3 84
265.	LI253	3 64 CW CT LEVEL	3 103
266.	LI310	2 62 BCW SURGE TK	3 66
267.	LI438	9 67 AMONA TK	3 71
268.	LI440	9 67 HYDR2 TK	3 69
269.	LI7	25 00 1HTR-LVL	3 83
270.	LI79	20 87 DEA LVL	3 93
271.	LIC104	18 85 4HTR LVL	3 14
272.	LIC210	3 63 SW CT LV RG	3 4

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D48187
REV	A	SHEET 6

NO.	TAG NAME	DESCRIPTION	CCM LOOPID	
273.	LIC#	26 0	1HTR LVL	3 199
274.	LIC#3A	17 66	DEA DUMP	3 16
275.	LIC#3B	17 66	DEA LVL	3 91
276.	LIH1203	7 59	DEMIN TK	3 582
277.	LIH637	18 85BFR	4EXT DRN	3 386
278.	LIH650	21 0	3EXT DRN	3 387
279.	LIH652	18 85AFT	4EXT DRN	3 388
280.	LIH676	21 0	3EXT DRN	3 391
281.	LIH#04	#	DEM SUMP	3 695
282.	LIH#34	33 TG	L.O. TK	3 553
283.	LIH#72	34	EH TANK	3 459
284.	LIH#89	60	LIQ DFT	3 552
285.	LIL1203	7 59	DEMIN TK	3 583
286.	LIL208	4 64 CT	FAN #01	3 636
287.	LIL213	4 64 CT	FAN #02	3 630
288.	LIL232	4 64 CT	FAN #03	3 618
289.	LIL#34	33 TG	L.O. TK	3 546
290.	LIL#72	34	EH TANK	3 548
291.	LILL833	33 TG	L.O. TK	3 403
292.	LILL872	34	EH TANK	3 402
293.	LIM#3B	17 66	LEV A-M	3 92
294.	M4-1	EPGSSTN4	RMT MUX1	3 766
295.	M4-1V	EPGSSTN4	MUX1 ALM	3 12
296.	M4-2	EPGSSTN4	RMT MUX2	3 765
297.	M4-2V	EPGSSTN4	MUX2 ALM	3 203
298.	M4-3	EPGSSTN4	RMT MUX3	3 763
299.	M4-3V	EPGSSTN4	MUX3 ALM	3 205
300.	ME-3	EPGSSTN4	ILS MUX3	3 768
301.	PALL864	34	EH PR	3 382
302.	PCM647A	20 00	DEA PRES	3 24
303.	PCM#26	49 SET P	MS IPL	3 7
304.	PCM#37	57 SET P	ADM APL	3 201
305.	PDAH405	11 00 IL	DEM DP	3 704
306.	PDAH407	11 00 IL	DEM 1 DP	3 706
307.	PDAH448	11 00 IL	DEM 2 DP	3 711
308.	POI#25	5 86COND	WB DIFF	3 104
309.	POI#37	33 TG	OIL FLTR	3 176
310.	POI#66	32 0	NPSH	3 155
311.	POI#86G	NPSH		3 19
312.	PI1611	31 0	HTR2-IDP	3 96
313.	PI1635	31 0	HTR3-2DP	3 100
314.	PI1647	31 0	HTR4-3DP	3 105
315.	PI127	16 65	COND PR	3 97
316.	PI240	3 00	CW HDR	3 106
317.	PI312	2 62	BCW PR	3 68
318.	PI34	32 0	TS FW PR	3 196
319.	PI532	1 61 AIR	SERV AIR	3 73
320.	PI540	1 61 AIR	INST AIR	3 72
321.	PI611	26 82	1HTR PR	3 94
322.	PI635	25 83	2PT HTR	3 107
323.	PI640R	15 0	CONDENS	3 206
324.	PI640G	15 86	CONDENS	3 57
325.	PI647		3PT HEAT	3 102
326.	PI655	18 85	4HTR PR	3 132
327.	PI77	20 0	DEA PRES	3 86
328.	PI812	33 80 TG	L.O. PR	3 189

MCDONNELL DOUGLAS AERONAUTICS CO. WINTHROP BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 7	

NO.	TAG NAME	DESCRIPTION	CCM LOGPID	
329.	PIR68	34	EH SYSTM	3 198
330.	PI926	45 78	MAIN STM	3 44
331.	PI937	45	ADM PRES	3 42
332.	PI953	45	STM CHST	3 177
333.	PI992	45 0	1STG PR	3 54
334.	PI997	45 0	7 STG PR	3 59
335.	PI997A	SUMMER	OUTPUT	3 157
336.	PIH167	8 0	SPARG LN	3 452
337.	PIH5002	66 0	AX1 PR	3 503
338.	PIH5200	65 0 33K	MX1 PRES	3 558
339.	PIH521	1 61 AIR	RCVR AIR	3 432
340.	PIH957	1586COND	EXH PR	3 568
341.	PIHH957	15 00CON	FXH PR	3 565
342.	PIL505	1 61 AIR	COMP 901	3 384
343.	PIL515	1 61 AIR	COMP 902	3 383
344.	PIL521	1 61 AIR	RCVR AIR	3 433
345.	PIL810	33 TG	L.O. PR	3 555
346.	PIL866	34	EH PR	3 551
347.	PIL908	49 0	OVR RPM	3 573
348.	PIL912	49 0	OIL TRIP	3 575
349.	PIL913	60 00 TG	PRE-EMER	3 513
350.	PILL811	33 TG	L.O. PR	3 571
351.	PY647R		SUMMER	3 160
352.	QA5001	82 0	UPS TRBL	3 591
353.	QA5002	82 0	DC1 TBL	3 536
354.	QA5005	R2 XFMR	XBRL TBL	3 525
355.	QA5250	63 GEN	VOLT-HZ	3 521
356.	QA15003	75 00	SX1 XFMR	3 535
357.	QA15004	R2 OSWBD	DC TBL	3 534
358.	QA16000		MSTRTRIP	3 560
359.	QA16001		R TRIP	3 562
360.	QA16002	125 90	T-G TRIP	3 564
361.	QA16003		SD TRIP	3 566
362.	QA16004		TC TRIP	3 567
363.	QA16005		TC TRIP	3 569
364.	QIH1206	7 59	POLISHER	3 580
365.	SHLF100	60 GEN	O-U FREQ	3 453
366.	SI916	41 0 TG	SPEED	3 21
367.	SIC907	49	SPD LOAD	3 38
368.	SIL907	64 TG	SPD SIGL	3 514
369.	TC1022	43 78	ENTHALPY	3 405
370.	TC1025	42 78	ENTHALPY	3 404
371.	TC354	61 79	GEN PCW	3 67
372.	TC659	58 TG	ADM S-HT	3 41
373.	TC661	50 76 TG	MS S-HT	3 47
374.	TD11022	43 0	MAIN STM	3 32
375.	TD11025	42 0	DFL TEMP	3 20
376.	TD11105		DIFFTEMP	3 188
377.	TD1952	43 78	DEL TEMP	3 23
378.	TD1954	LP DTEMP	CASE DIF	3 28
379.	TD1996	42 0	DEL TEMP	3 18
380.	TEST			3 146
381.	TH5100A	63	EXC TMP	3 451
382.	TH5100B	63	EXC TMP	3 516
383.	TI1022	33 0	MAIN STM	3 33
384.	TI1025	58	ADM STM	3 22

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048187
REV	A	SHEET 8

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
385.	TI1105A	23 70RFP THST BRG	3	135
386.	TI1105B	23 70RFP P OB BRG	3	137
387.	TI1105C	23 70RFP P IB BRG	3	139
388.	TI1105D	23 70RFP PMP CASE	3	141
389.	TI1105E	23 70RFP H OIL IN	3	142
390.	TI1105F	24 70RFP M OB BRG	3	144
391.	TI1105G	24 70RFP M IB BRG	3	145
392.	TI1105H	23 70RFP H OIL OT	3	121
393.	TI1105K	SEALINBD	3	392
394.	TI1105L	SEALOUTB	3	381
395.	TI1105M	23 70RFP THST BRG	3	150
396.	TI115	18 66 4HTR IN	3	147
397.	TI128	30 HOTWELL	3	133
398.	TI13	26 0 2HTR OUT	3	60
399.	TI216	5 86 CW COND IN	3	52
400.	TI217	5 86 CW COND OUT	3	53
401.	TI322	2 62 BRG CWHX OUT	3	55
402.	TI354A	61 79 GEN STAT	3	43
403.	TI354B	61 79 GEN STAT	3	46
404.	TI354C	61 79 GEN STAT	3	49
405.	TI354D	61 79 GEN STAT	3	56
406.	TI354E	61 79 GEN STAT	3	61
407.	TI354F	61 79 GEN STAT	3	63
408.	TI40	23 0 FW TEMP	3	39
409.	TI447	9 00 CAUST TK	3	194
410.	TI60	30 0 TS FW T	3	48
411.	TI65R	22 72 AXB STM	3	58
412.	TI836	33 TG L.O. TK	3	165
413.	TI90	22 0 RFP SUCTION	3	45
414.	TI920A	38 80 TB TH BR FR	3	183
415.	TI920B	38 80 TB TH BR FR	3	184
416.	TI920C	38 80 TB TH BR RR	3	180
417.	TI920D	38 80 TB TH BR RR	3	181
418.	TI920E	37 80 TG TH BR DR	3	182
419.	TI923	38 80 TB 1BR METL	3	178
420.	TI924	37 80 TG 1BRG OIL	3	179
421.	TI945	44 78 TG MAIN STM	3	114
422.	TI946	44 78 TG ADM STM	3	115
423.	TI952A	44 78 TG ST CH IN	3	9
424.	TI952B	44 78 TG STCH OUT	3	9
425.	TI954A	43 78 TG 1 STC IN	3	31
426.	TI954B	44 79 TG 1STG OUT	3	29
427.	TI956	15 EXH TEMP	3	34
428.	TI962A	38 80 TB 2BR METL	3	163
429.	TI962C	37 80 TG 2BRG OIL	3	164
430.	TI968A	62 79AIR A CLR O	3	167
431.	TI968B	62 79AIR A CLR I	3	168
432.	TI97	18 66 4HTR OUT	3	40
433.	TI970A	62 79AIR B CLR O	3	169
434.	TI970B	62 79AIR B CLR I	3	170
435.	TI972A	62 79AIR C CLR O	3	171
436.	TI972B	62 79AIR C CLR I	3	172
437.	TI974A	62 79AIR D CLR O	3	173
438.	TI974B	62 79AIR D CLR I	3	204
439.	TI978	38 80 TB 3BR METL	3	161
440.	TI980	37 80 TG 3BRG OIL	3	162

MCDONNELL DOUGLAS AERONAUTICS CO.  
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MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

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1048187

REV

A

SHEET

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NO.	TAG NAME	DESCRIPTION	CCM LOOPID
441.	TI996A	42 0 6 STG IN	3 13
442.	TI996B	42 0 6STG OUT	3 15
443.	TIC308	33 TG L.O. TMP	3 1
444.	TIH166	32 0 TS FW PP	3 465
445.	TIH506	1 61 AIR COMP 901	3 604
446.	TIH516	1 61 AIR COMP 902	3 605
447.	TIH955	49 0 4STG TMP	3 563
448.	TIH956	15 00 FXH TMP	3 572
449.	TIH984	60 0 GEN FIRE	3 431
450.	TIHH956	15 FXH TMP	3 570
451.	TIL166	32 0 TS FW PP	3 532
452.	TREF4-1	EPGSSTN4 MUX1 TMP	3 11
453.	TREF4-2	EPGSSTN4 MUX2 TMP	3 110
454.	TREF4-3	EPGSSTN4 MUX3 TEP	3 120
455.	TSI254	127 0 SUB-THS	3 418
456.	TTRIP	49 0 UNIT TRP	3 753
457.	UA5002	66 0 AX1 GND	3 502
458.	UA5026	77 0 CT XFMR	3 524
459.	UAI5200	65 0 MX1 XFMR	3 420
460.	UI1703	7 59 RW TK SW PP	3 440
461.	UI5008	73 0 AXB TRBL	3 438
462.	UI5200	60 33KV GEN LKUP	3 504
463.	UI5250	60 0 TG T TRIP	3 608
464.	UI5251	60 0 TG CON MON	3 579
465.	UI689	22 72 AXB TRBL	3 699
466.	UI820	33 T-G DC LO PP	3 436
467.	US15002	66 0 LCKUPBUS	3 529
468.	US1820	33 DC LO PP	3 738
469.	WI919A	39 0 TB LOAD	3 50
470.	WI919B	39 0 TB LOAD	3 65
471.	XI918	41 80 TG 1BR VIB	3 118
472.	XI961	41 80 TG 2BR VIB	3 117
473.	XI976	41 80 TG 3BR VIB	3 116
474.	XIH208	4 64 CT FAN 901	3 634
475.	XIH213	4 64 CT FAN 902	3 628
476.	XIH232	4 64 CT FAN 903	3 616
477.	XIH915	39 0 VIB	3 561
478.	XIHH915	39 0 VIB	3 559
479.	XIL915A	41 TSI INST	3 500
480.	YI5555	FIREPANL FIREALRM	3 754
481.	YI5555B	HALONSYS EQUIPRM	3 519
482.	YI5555C	HALONSYS CR FLOOR	3 517
483.	YI5555D	FIREPANL LOSCFPWR	3 518
484.	YI5555E	HALONSYS T HOUS 4	3 520
485.	ZI110	15 FW BYPAS	3 767
486.	ZI131	16 65 COND PP	3 684
487.	ZI140	15 86CON VAC BRKR	3 721
488.	ZI155	15 65CON A-R-PP	3 437
489.	ZI1703A	7 59 SO SW PP	3 401
490.	ZI1703B	7 59 NO SW PP	3 400
491.	ZI207	6 00 PMP CT ACID	3 619
492.	ZI208H	4 64 CT FAN 901	3 641
493.	ZI208L	4 64 CT FAN 901	3 643
494.	ZI213H	4 64 CT FAN 902	3 625
495.	ZI213L	4 64 CT FAN 902	3 626
496.	ZI222	3 63 CW F905 MOV	3 609

MCDONNELL DOUGLAS AERONAUTICS CO.  
 MONTGOMERY BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D48187
REV	A	SHEET 10



NO.	TAG NAME	DESCRIPTION	CCM LOOPID
497.	ZI220	4 63 CTBP MOV	3 717
498.	ZI232H	4 64 CT FAN 903	3 622
499.	ZI232L	4 64 CT FAN 903	3 624
500.	ZI242	3 63 SO.CIRC	3 723
501.	ZI243	3 63 CW P906 MOV	3 613
502.	ZI260	3 63 NO.CIRC	3 729
503.	ZI313	2 62 BCW PMP	3 417
504.	ZI449	9 67 HYDRZ PP	3 611
505.	ZI446	E 91 R F PUMP	3 696
506.	ZI450	9 67 AMONA PP	3 623
507.	ZI5001	74 91 4K A01-2FDR	3 454
508.	ZI5002	A01-2	3 640
509.	ZI5003	75 91 4K SX1 BKR	3 455
510.	ZI5004	76 91 4K LD CTR A	3 456
511.	ZI5006	77 91 4K CTX1 BKR	3 457
512.	ZI5007	78 92 4K HELO 1-W	3 458
513.	ZI5008	22 91 4K AXB BKR	3 727
514.	ZI5009	78 92 4K HELO 2-E	3 461
515.	ZI5010	74 91 4K WELL BKR	3 463
516.	ZI5015	77 94 B02 FDR	3 468
517.	ZI5017	480V ABF BKR	3 471
518.	ZI5020	75 93 B01 FDR	3 464
519.	ZI5021	81 93 B0A FDR	3 528
520.	ZI5022	81 93 B0C FDR	3 466
521.	ZI5025	81 93 PPA FDR	3 467
522.	ZI506	81 93 TS FW PP	3 693
523.	ZI5100A	60 GEN 252-GS	3 531
524.	ZI5102A	60 33KV CB 501	3 585
525.	ZI524	1 61 AIR E-AIR CP	3 474
526.	ZI525	1 61 AIR W-AIR CP	3 409
527.	ZI609	26 0 BEF 1EXT DRN	3 648
528.	ZI615	25 0 BEF 2EXT DRN	3 645
529.	ZI616	36 TG AD ST DR	3 644
530.	ZI617	36 TG MN ST DR	3 638
531.	ZI623	26 0 AFT 1EXT DRN	3 637
532.	ZI624	26 82 1EXT MOV	3 667
533.	ZI626	25 00 2EXT MOV	3 661
534.	ZI628	21 00 3EXT MOV	3 655
535.	ZI629B	21 84 3EXT NRV	3 427
536.	ZI630	18 85 4EXT MOV	3 649
537.	ZI631	18 85 4HTR NRV	3 426
538.	ZI637	18 85BER 4EXT DRN	3 635
539.	ZI650	21 0 BEF 3EXT DRN	3 633
540.	ZI652	18 85AFT 4EXT DRN	3 631
541.	ZI660	15 COND M2 BLNKT	3 435
542.	ZI675	25 0 AFT 2EXT DRN	3 629
543.	ZI676	21 84AFT 3EXT DRN	3 627
544.	ZI71	22 72 AXB FP	3 652
545.	ZI715	12 68 DSOLV 02	3 755
546.	ZI733	12 68 SALT	3 526
547.	ZI820B	33 DC LO PP	3 425
548.	ZI856	34 EH P938B	3 434
549.	ZI858	34 EH P938A	3 739
550.	ZI901	58 78 ADM SV	3 445
551.	ZI903	36 78 TG AD BSD	3 709
552.	ZI904	36 TG AD ASD	3 697

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 11	

NO.	TAG NAME	DESCRIPTION	CCM LOGPID
553.	ZI905	36 78 TG MN BSD	3 691
554.	ZI906	36 78 TG MN ASD	3 683
555.	ZI917A	39 80 TB THRUST A	3 113
556.	ZI917B	39 80 THRUST B	3 197
557.	ZI917C	41 80 TG ECC	3 198
558.	ZI935	35 STM SEAL DR	3 678
559.	ZI940	49 78 MS C VV	3 175
560.	ZI941	36 78 CSBF DRN	3 424
561.	ZI943	57 78 ADM C VV	3 174
562.	ZI958	35 OSEAL EXH PP	3 621
563.	ZI960	35 SEAL EXCS STM	3 673
564.	ZI964	83 0 TURN GR	3 547
565.	ZI982	3581TURB STM SEAL	3 668
566.	ZI990	35 OSEAL HP SL DR	3 662
567.	ZI991	35 STM LP SL DR	3 658
568.	ZI999	36 TG AD ST DR	3 671
569.	ZIH917C	39 0 TG ECC	3 399
570.	ZIHH917	39 0 TH BRG	3 620
571.	ZIL940	49 0 T-G MS C VV	3 385
572.	ZIL943	57 TG ADM CVV	3 511
573.	ZILL940	49 0 T-G MS C VV	3 510
574.	ZISH917	39 0 TH BRG	3 506
575.	ZY242	CRCPP906	3 685
576.	ZY260	CRCPP905	3 674
577.	ZY50	81 0 TS FW PP	3 603
578.	ZY5015	77 480V B02 FDR	3 469
579.	ZY5017	480V ABF BKR	3 421
580.	ZY5020	75 0 B01 FDR	3 543
581.	ZY5021	81 0 B0A FDR	3 538
582.	ZY5022	81 0 B0C FDR	3 595
583.	ZY5025	81 0 PPA FDR	3 593

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS			REV A	SHEET 12	

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HI AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
1	TIC308	33 TG L.O. TMP	MVCU PID	A C	1 2	1 R	1 DEGF	Y N	70.0 170.0	L P	70.00 169.00	135.00 125.00	75.00 70.00	0% 99%	R CNSL
2	LCM24B	20 0 2HTR DMP	MVCU PID	A C	1 1	5 S	1 INCH	N N	0.0 10.0	L N	0.00 9.90	0.00 0.00	0.00 0.00	0% 99%	D CNSL
3	AIC207	6 00 CW CIRC PH	MVCU PID	A C	1 2	2 R	1 PH	N N	6.0 10.0	L N	6.00 9.96	55.00 50.00	38.00 25.00	0% 99%	D CNSL
4	LIC210	3 63 SW CT LV RG	MVCU PID	A C	1 2	3 R	1 PCT	N N	0.0 100.0	L P	0.00 99.00	95.00 90.00	60.00 55.00	0% 99%	D CNSL
5	LC24A	20 0 2HTR LVL	MVCU PID	A C	1 1	2 R	1 INCH	N N	0.0 10.0	L N	0.00 9.90	75.00 68.00	18.00 13.00	0% 99%	D CNSL
6	HIC901	SV POSI ADM SV	MVCU MANL	A C	1 2	4 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 95%	D MVCU
7	PCM926	49 SET P MS IPL	MVCU PID	A C	1 2	8 R	1 PSIA	N N	600.0 1500.0	L N	600.00 1491.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
8	TI952A	44 78 TG ST CH IN	MVCU INPT	A M	1 2	4 R	1 DEGF	N N	320.0 1100.0	L N	320.00 320.00	75.00 50.00	0.00 0.00		MVCU
9	TI952B	44 78 TG STCH OUT	MVCU INPT	A M	1 2	3 R	1 DEGF	N N	320.0 1100.0	L N	320.00 1092.20	75.00 50.00	0.00 0.00		MVCU
10	HC926CD	MS PRES IPR I-0	MVCU PID	A C	1 2	7 R	1 LB	N N	0.0 100.0	L N	2.00 30.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
11	TREF4-1	EPGSSTN4 MUX1 TMP	IPAC TCPL	A M	2 1	1 S	1 DEGF	N N	0.0 100.0	L N	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
12	M4-1V	EPGSSTN4 MUX1 ALM	IPAC INPT	A M	2 1	24 S	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.49 5.20	4.80 4.50		MVCU
13	TI996A	42 0 6 STG IN	MVCU INPT	A M	1 2	8 R	1 DEGF	N N	100.0 800.0	L N	100.00 793.00	75.00 50.00	0.00 0.00		MVCU
14	LIC104	18 85 4HTR LVL	MVCU PID	A C	1 1	6 R	1 INCH	N N	0.0 10.0	L N	0.00 9.90	46.00 35.00	18.00 15.00	0% 99%	R CNSL
15	TI996B	42 0 6STG OUT	MVCU INPT	A M	1 2	7 R	1 DEGF	N N	100.0 800.0	L N	100.00 793.00	75.00 50.00	0.00 0.00		MVCU
16	LIC83A	17 66 DEA DUMP	MVCU PID	A C	1 1	10 R	1 INCH	N N	0.0 65.0	L N	0.00 64.35	0.00 0.00	0.00 0.00	0% 99%	D CNSL
17	AM24A	20 87 2HTR LVL	MVCU A/M	A C	1 1	4 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

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FSCM NO.

18355

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1048187

REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	CUTO SPSEL
18	TDI996	42 0 DEL TEMP	MVCU NODE	A M	1 2	53 R	1 DEGF	N N	-350.0 350.0	L P	-350.00 343.00	189.00 175.00	-175.00 -189.00		MVCU
19	PDIC866	NPSH	MVCU PID	A C	1 1	12 R	1 INCH	N N	0.0 400.0	L N	108.00 188.00	0.00 0.00	0.00 0.00	0% 25%	D CNLS
20	TDI1025	42 0 DEL TEMP	MVCU NODE	A M	1 2	52 R	1 DEGF	N N	-300.0 300.0	L P	-300.00 294.00	162.00 150.00	-150.00 -162.00		MVCU
21	SI916	41 0 TG SPFED	MVCU INPT	A M	1 2	22 R	1 RPM	N N	0.0 4500.0	L P	0.00 4455.00	3960.00 3780.00	180.00 180.00		MVCU
22	TI1025	58 ADM STM	MVCU INPT	A M	1 2	11 R	1 DEGF	N N	0.0 600.0	L P	0.00 594.00	594.00 594.00	0.00 0.00		MVCU
23	TDI952	43 78 DEL TEMP	MVCU NODE	A M	1 2	51 R	1 DEGF	N N	-390.0 390.0	L P	-390.00 382.20	210.60 195.00	-195.00 -210.60		MVCU
24	PCM647A	20 00 DEA PRES	MVCU PID	A C	1 1	15 R	1 PSIA	N Y	0.0 75.0	L P	2.25 50.25	66.75 54.75	15.00 5.25	0% 99%	D CNLS
25	II5020	75 00 801 AMPS	IPAC INPT	A M	9 1	39 R	1 AMPS	N N	0.0 1000.0	L N	0.00 1188.00	0.00 0.00	0.00 0.00		MVCU
26	II5021	81 93 80A BUS	IPAC INPT	A M	6 1	133 S	1 AMPS	N N	0.0 800.0	L N	0.00 792.00	0.00 0.00	0.00 0.00		MVCU
27	GE5100	GROSS KW	MVCU TOTI	A C	1 2	30 R	1 KW	N N	0.0 28802.0	L N	0.00 28513.98	0.00 0.00	0.00 0.00		MVCU
28	TDI954	LP DTEMP CASE DIF	MVCU NODE	A M	1 2	50 R	1 DEGF	N N	-395.0 395.0	L P	-395.00 387.10	213.30 197.50	-197.50 -213.30		MVCU
29	TI954B	44 79 TG 1STG OUT	MVCU INPT	A M	1 2	1 R	1 DEGF	N N	310.0 1100.0	L N	310.00 1092.10	75.00 50.00	0.00 0.00		MVCU
30	LI160	16 65 CON STOR	IPAC INPT	A M	2 1	37 S	1 FFET	N N	0.0 20.8	L P	0.00 20.59	18.30 17.68	7.90 7.49		MVCU
31	TI954A	43 78 TG 1 STG IN	MVCU INPT	A M	1 2	2 R	1 DEGF	N N	310.0 1100.0	L N	310.00 1092.10	75.00 62.00	0.00 0.00		MVCU
32	TDI1022	43 0 MAIN STM	MVCU NODE	A M	1 2	49 R	1 DEGF	N N	-395.0 395.0	L P	-395.00 387.10	197.50 173.80	-173.80 -197.50		MVCU
33	TI1022	33 0 MAIN STM	MVCU INPT	A M	1 2	10 R	1 DEGF	N N	0.0 1000.0	L P	0.00 990.00	990.00 990.00	0.00 0.00		MVCU
34	TI956	15 EXH TEMP	IPAC INPT	A M	6 1	66 S	1 DEGF	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
REV A	SHEET 17	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	Hwy NO DEFV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LC AL LL AL	CO LO CO HI	OUTD SPSEL
35	JIC5100	49 LOADCONT	MVCU PID	A C	1 2	23 R	1 KW	Y N	0.0 28800.0	L N	0.00 28512.00	0.00 0.00	0.00 0.00	0% 99%	0 CNSL
36	AI733	10 67 HW SODIUM	MVCU NODE	A M	1 2	70 R	1 PPB	N N	0.0 100.0	L N	0.00 99.00	99.00 20.00	0.00 0.00		MVCU
37	LC83B	17 66 DEA LVL	MVCU PID	A C	1 1	37 R	1 INCH	N N	0.0 65.0	L N	0.00 64.35	80.00 68.00	41.00 38.00	0% 99%	D CNSL
38	SIC907	49 SPD LOAD	MVCU PID	A C	1 2	26 R	1 PCT	Y N	3.5 8.5	L N	3.50 8.45	0.00 0.00	0.00 0.00	0% 99%	D CNSL
39	TI40	23 0 FW TEMP	IPAC TCPL	A M	2 1	2 S	1 DEGF	N N	0.0 400.0	L P	0.00 396.00	292.00 280.00	0.00 0.00		MVCU
40	TI97	18 66 4HTR OUT	IPAC TCPL	A M	2 1	3 S	1 DEGF	N N	0.0 250.0	L N	0.00 247.50	0.00 0.00	0.00 0.00		MVCU
41	TC659	58 TG ADM S-HT	MVCU OUTP	A M	1 2	8 R	1 DEGF	N N	0.0 200.0	L P	0.00 198.00	198.00 198.00	70.00 50.00		MVCU
42	PI937	45 ADM PRES	MVCU INPT	A M	1 2	29 R	1 PSIG	N N	150.0 400.0	L N	150.00 397.50	0.00 0.00	0.00 0.00		MVCU
43	TI354A	61 79 GEN STAT	MVCU INPT	A M	1 1	5 R	1 DEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		MVCU
44	PI926	45 78 MAIN STM	MVCU INPT	A M	1 2	31 R	1 PSIA	N N	600.0 1500.0	L N	600.00 1491.00	0.00 0.00	0.00 0.00		MVCU
45	TI90	22 0 RFP SUCTION	IPAC TCPL	A M	2 1	4 S	1 DEGF	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU
46	TI354B	61 79 GEN STAT	MVCU INPT	A M	1 1	6 P	1 DEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		MVCU
47	TC661	50 76 TG MS S-HT	MVCU OUTP	A M	1 2	9 R	1 DEGF	N N	0.0 500.0	L P	0.00 495.00	495.00 495.00	125.00 100.00		MVCU
48	TI60	30 0 TS FW T	IPAC TCPL	A M	2 1	5 S	1 DEGF	N N	100.0 400.0	L N	100.00 397.00	0.00 0.00	0.00 0.00		MVCU
49	TI354C	61 79 GEN STAT	MVCU INPT	A M	1 1	7 R	1 DEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		CNSL
50	WI919A	30 0 TR LOAD	IPAC INPT	A M	2 1	83 S	1 LB	N N	0.0 9999.0	L N	0.00 9899.01	99.00 99.00	0.00 0.00		MVCU
51	JYI5100	REL EFF	MVCU NODE	A M	1 2	62 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48187

REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HGST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
52	TI216	5 86 CW COND IN	IPAC TCPL	A M	2 1	7 S	1 DEGF	N N	40.0 140.0	L N	40.00 139.00	0.00 0.00	0.00 0.00		MVCU
53	TI217	5 86 CW COND OUT	IPAC TCPL	A M	2 1	.8 S	1 DEGF	N N	40.0 140.0	L N	40.00 139.00	0.00 0.00	0.00 0.00		MVCU
54	PI992	45 0 1STG PR	MVCU INPT	A M	1 2	21 R	1 PSIA	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
55	TI322	2 62 BRG CWHX OUT	IPAC TCPL	A M	2 1	17 S	1 DEGF	N N	30.0 150.0	L P	30.00 148.80	110.40 99.60	30.00 30.00		MVCU
56	TI354D	61 79 GEN STAT	MVCU INPT	A M	1 1	8 R	1 DEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		MVCU
57	PI640G	15 86 CONDENSER	MVCU INPT	A M	1 2	19 R	1 INHG	N N	0.0 8.0	L P	0.00 7.92	7.92 4.56	0.00 0.00		MVCU
58	TI658	22 72 AXR STM	IPAC TCPL	A M	2 1	18 S	1 DEGF	N N	0.0 450.0	L N	0.00 445.50	83.00 78.00	56.00 50.00		MVCU
59	PI997	45 0 7 STG PR	MVCU INPT	A M	1 1	18 R	1 PSIA	N N	0.0 450.0	L N	0.00 445.50	0.00 0.00	0.00 0.00		MVCU
60	TI13	26 0 2HTR OUT	IPAC TCPL	A M	2 1	19 S	1 DEGF	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
61	TI354E	61 79 GEN STAT	MVCU INPT	A M	1 1	9 R	1 DEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		MVCU
62	J1242	03 0 PUMP 906	IPAC INPT	A M	2 1	20 S	1 KW	N N	0.0 240.0	L N	0.00 237.60	0.00 0.00	0.00 0.00		MVCU
63	TI354F	61 79 GEN STAT	MVCU INPT	A M	1 1	10 R	1 LEGF	N N	77.0 257.0	L P	77.00 255.20	221.00 197.60	77.00 77.00		MVCU
64	II5015	77 0 B02 BKR	IPAC INPT	A M	2 1	22 S	1 AMPS	N N	0.0 1200.0	L N	0.00 1188.00	0.00 0.00	0.00 0.00		MVCU
65	WI919B	39 0 TB LOAD	IPAC INPT	A M	2 1	23 S	1 LB	N N	0.0 99996.0	L N	0.00 98996.03	99.00 99.00	0.00 0.00		MVCU
66	LI310	2 62 BCW SURGE TK	IPAC INPT	A M	2 1	33 S	1 INCH	N N	0.0 120.0	L P	0.00 118.80	108.00 84.00	36.00 24.00		MVCU
67	TC354	61 79 GEN BCW	MVCU PID	A C	1 1	20 R	1 DEGF	N N	77.0 257.0	L N	77.00 255.20	0.00 0.00	0.00 0.00	0% 99%	P CNSL
68	PI312	2 62 BCW PR	IPAC INPT	A M	2 1	34 S	1 PSIG	N N	0.0 80.0	L P	0.00 79.20	69.60 69.60	20.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1748187
MCDONNELL DOUGLAS		REV A	SHEET 19	

LOOP	TAG	DESCRI PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
69	LI440	9 67 HYDRZ TK	IPAC INPT	A M	2 1	35 S	1 INCH	N N	0.0 36.0	L P	0.00 35.64	29.88 29.88	6.12 6.12		MVCU
70	AIC725	9 67 HYDZ SPD	MVCU PID	A C	1 1	21 R	1 PPB	N N	0.0 100.0	L N	0.00 99.00	75.00 30.00	10.00 0.00	0% 99%	D CNSL
71	LI438	9 67 AMONA TK	IPAC INPT	A M	2 1	36 S	1 INCH	N N	0.0 36.0	L N	0.00 35.64	83.00 83.00	17.00 17.00		MVCU
72	PI540	1 61 AIP INST ATR	IPAC INPT	A M	2 1	38 S	1 PSIG	N N	0.0 150.0	L P	0.00 148.50	148.50 148.50	94.50 0.00		MVCU
73	PI532	1 61 AIP SERV ATR	IPAC INPT	A M	2 1	39 S	1 PSIG	N N	0.0 150.0	L P	0.00 148.50	148.50 148.50	90.00 0.00		MVCU
74	JI5102A	65 0 NET KW	IPAC INPT	A M	6 1	24 S	1 KW	N N	0.0 18417.0	L N	0.00 18232.83	0.00 0.00	0.00 0.00		MVCU
75	II5001	74 0 4K A01-2BKR	IPAC INPT	A M	2 1	50 S	1 AMPS	N N	0.0 400.0	L N	4.00 396.00	0.00 0.00	0.00 0.00		MVCU
76	JI5001	74 4KV A01-2BKR	IPAC INPT	A M	2 1	51 S	1 KW	N N	0.0 2800.0	L N	0.00 2772.00	0.00 0.00	0.00 0.00		MVCU
77	EI5001	66 91 A01-2BKR	IPAC INPT	A M	2 1	52 S	1 VAC	N N	0.0 5250.0	L N	0.00 5197.50	0.00 0.00	0.00 0.00		MVCU
78	JI5003	75 91 4K SX1 BKR	IPAC INPT	A M	2 1	53 S	1 KW	N N	0.0 1050.0	L N	0.00 1039.50	0.00 0.00	0.00 0.00		MVCU
79	II5003	75 91 4K SX1 BKR	IPAC INPT	A M	2 1	54 S	1 AMPS	N N	0.0 150.0	L N	0.00 148.50	0.00 0.00	0.00 0.00		MVCU
80	HIC659	20 84 DA VENT	MVCU MANL	A C	1 1	23 P	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
81	JI5004	76 91 4K LD CTR A	IPAC INPT	A M	2 1	55 S	1 KW	N N	0.0 1050.0	L N	0.00 1039.50	0.00 0.00	0.00 0.00		MVCU
82	II5004	76 91 4K LD CTR A	IPAC INPT	A M	2 1	56 S	1 AMPS	N N	0.0 150.0	L N	0.00 148.50	0.00 0.00	0.00 0.00		MVCU
83	LI7	25 00 1HTR-LVL	IPAC INPT	A M	2 1	65 S	1 INCH	N N	0.0 18.0	L N	0.00 17.82	42.00 38.00	7.00 6.00		MVCU
84	LI23	27 00 2HTR LVL	IPAC INPT	A M	2 1	66 S	1 INCH	N N	0.0 20.0	L N	0.00 19.80	35.00 30.00	13.00 10.00		MVCU
85	II5102	65 0 33KV BKR	IPAC INPT	A M	6 1	18 S	1 AMPS	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU

MC DONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MC DONNELL DOUGLAS

SIZE

**B**

FSCM NO.

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1D48187

REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SURTYP	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LG SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	CUTD SPSEL
86	PI77	20 0 DEA PRFS	IPAC INPT	A M	2 1	68 S	1 PSIA	N N	0.0 75.0	L N	0.00 60.00	76.00 71.00	24.00 24.00		MVCU
87	FI135A	19 66 RFP FLO	MVCU NODE	A M	1 1	58 R	1 GPM	N N	0.0 345.0	L N	0.00 341.55	0.00 0.00	0.00 0.00		MVCU
88	FI35B	19 66 TS FW PP	MVCU NODE	A M	1 1	57 R	1 GPM	N N	0.0 236.0	L N	0.00 233.64	0.00 0.00	0.00 0.00		MVCU
89	FI113A	16 66 COND-DEA	MVCU NODE	A M	1 1	60 R	1 GPM	N N	0.0 441.0	L N	0.00 436.59	0.00 0.00	0.00 0.00		MVCU
90	FI113B	19 66 2HTR DEA	MVCU NODE	A M	1 1	59 R	1 GPM	N N	0.0 204.0	L N	0.00 201.96	0.00 0.00	0.00 0.00		MVCU
91	LIC83B	17 66 DEA LVL	MVCU PID	A C	1 1	29 R	1 INCH	N N	0.0 65.0	L P	0.00 64.35	52.00 44.20	26.65 24.70	0% 99%	R CNSL
92	LIM83B	17 66 LEV A-M	MVCU A/M	A C	1 1	31 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	R MVCU
93	LI79	20 87 DEA LVL	IPAC INPT	A M	2 1	69 S	1 INCH	N N	0.0 65.0	L N	0.00 64.35	97.00 83.00	50.00 46.00		MVCU
94	PI611	26 82 1HTR PR	MVCU INPT	A M	1 1	23 R	1 PSIG	N N	0.0 450.0	L N	0.00 445.50	0.00 0.00	0.00 0.00		MVCU
95	LI103	27 0 4HTR LVL	IPAC INPT	A M	2 1	70 S	1 INCH	N N	0.0 22.0	L N	0.00 21.78	21.00 16.00	8.00 7.00		MVCU
96	PFI611	31 0 HTR2-1DP	MVCU NODE	A M	1 1	63 R	1 NONE	N N	0.0 1.0	L N	0.00 0.99	0.00 0.00	0.00 0.00		MVCU
97	PI127	16 65 COND PR	IPAC INPT	A M	2 1	71 S	1 PSIG	N N	0.0 250.0	L P	0.00 247.50	247.50 247.50	135.00 0.00		MVCU
98	HC937CD	57 ADM APR I-0	MVCU MANL	A C	1 2	5 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
99	J1260	03 0 PUMP 905	IPAC INPT	A M	2 1	81 S	1 KW	N N	0.0 240.0	L N	0.00 237.61	0.00 0.00	0.00 0.00		MVCU
100	PFI635	31 0 HTR3-2DP	MVCU NODE	A M	1 1	64 R	1 NONE	N N	0.0 1.0	L N	0.00 0.99	95.00 90.00	10.00 5.00		MVCU
101	I1260	CIRC WTR PUMP 905	IPAC INPT	A M	2 1	84 S	1 AMPS	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU
102	PI647	3PT HEAT	MVCU INPT	A M	1 1	26 R	1 PSIA	N N	0.0 75.0	L N	0.00 74.25	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

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REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SF HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	CUTD SPSEL
103	LI253	3 64 CW CT LEVEL	IPAC INPT	A M	2 1	85 S	1 PCT	N N	0.0 100.0	L P	0.00 99.00	95.00 90.00	60.00 55.00		MVCU
104	PDI225	5 86COND WB DIFF	IPAC INPT	A M	2 1	86 S	1 INCH	N N	0.0 400.0	L P	0.00 396.02	360.01 360.01	0.00 0.00		MVCU
105	PF1647	31 0 HTF4-3DP	MVCU NODE	A M	1 1	65 R	1 NONE	N N	0.0 1.0	L N	0.00 0.99	95.00 90.00	10.00 5.00		MVCU
106	PI240	3 00 CW HDR	IPAC INPT	A M	2 1	87 S	1 PSIG	N N	0.0 80.0	L P	0.00 79.20	79.20 29.60	8.00 8.00		MVCU
107	PI635	25 83 2PT HTR	MVCU INPT	A M	1 1	24 R	1 PSIA	N N	14.0 204.0	L N	14.00 202.10	99.00 99.00	0.00 0.00		MVCU
108	CI241	6 63 CW CONDTVTY	IPAC INPT	A M	2 1	88 S	1 UMHO	N N	0.0 10000.0	L N	0.00 9900.00	99.00 50.00	0.00 0.00		MVCU
109	LI146	HOTWELL	MVCU INPT	A M	1 1	4 R	1 INCH	N N	0.0 36.0	L N	0.00 35.64	0.00 0.00	0.00 0.00		MVCU
110	TREF4-2	EPGSSTN4 MUX2 TMP	IPAC TCPL	A M	6 1	1 S	1 DEGF	N N	0.0 100.0	L N	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
111	J15006	77 91 4K CTX1 BKR	IPAC INPT	A M	2 1	99 S	1 KW	N N	0.0 1050.0	L N	0.00 1039.50	0.00 0.00	0.00 0.00		MVCU
112	I15006	77 91 4K CTX1 BKR	IPAC INPT	A M	2 1	100 S	1 AMPS	N N	0.0 150.0	L N	0.00 148.50	0.00 0.00	0.00 0.00		MVCU
113	Z1917A	39 80 TB THRUST A	IPAC INPT	A M	2 1	104 S	1 MILS	N N	-30.0 30.0	L P	-30.00 29.40	7.80 4.20	-16.20 -19.80		MVCU
114	T1945	44 78 TG MAIN STM	IPAC INPT	A M	6 1	2 S	1 DEGF	N N	310.0 1100.0	L N	310.00 1092.10	67.00 55.00	0.00 0.00		MVCU
115	T1946	44 78 TG ADM STM	IPAC INPT	A M	6 1	3 S	1 DEGF	N N	310.0 1100.0	L N	310.00 1092.10	50.00 20.00	0.00 0.00		MVCU
116	X1976	41 80 TG 3BR VIR	IPAC INPT	A M	6 1	4 S	1 MILS	N N	0.0 15.0	L N	0.00 14.85	67.00 33.00	0.00 0.00		MVCU
117	X1961	41 80 TG 2BR VIR	IPAC INPT	A M	6 1	5 S	1 MILS	N N	0.0 15.0	L N	0.00 14.85	67.00 33.00	0.00 0.00		MVCU
118	X1918	41 80 TG 1BR VIR	IPAC INPT	A M	6 1	6 S	1 MILS	N N	0.0 15.0	L N	0.00 14.85	67.00 33.00	0.00 0.00		MVCU
119	LCM83B	17 66 COND FLO	MVCU PID	A C	1 1	38 R	1 INCH	Y N	0.0 65.0	L P	0.00 64.35	52.00 44.20	26.65 24.70	0% 99%	R CNLSL

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

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REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LI AL	CO LO CO HI	OUTD SPSEL
120	TREF4-3	EP6SSTN4 MUX3 TEP	IPAC TCPL	A M	9 1	1 R	1 DEGF	N N	0.0 100.0	L N	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
121	TI1105H	23 70RFP H OIL QT	IPAC TCPL	A M	6 1	98 S	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	185.00 175.00	0.00 0.00		MVCU
122	II5100	51 GEN AMPS	IPAC INPT	A M	6 1	20 S	1 AMPS	N N	0.0 800.0	L P	0.00 792.00	592.00 576.00	0.00 0.00		MVCU
123	JI5100	60 GEN WATT	IPAC INPT	A M	6 1	21 S	1 KW	N N	0.0 28800.0	L P	0.00 28512.00	27936.00 27360.00	0.00 0.00		MVCU
124	JI5101	59 90 GEN KVAR	IPAC INPT	A M	6 1	22 S	1 KVAR	N N	-28.8 28.8	L N	-28.80 28.22	0.00 0.00	0.00 0.00		MVCU
125	EI5100	59 0 GEN VOLT	IPAC INPT	A M	6 1	23 S	1 KV	N N	0.0 18.0	L N	0.00 17.82	0.00 0.00	0.00 0.00		MVCU
126	AI706	12 68 1HTR PH	IPAC INPT	A M	6 1	33 S	1 PH	N N	8.0 10.0	L N	8.00 9.98	90.00 85.00	68.00 60.00		MVCU
127	AI707	12 68 1HTR HYZ	IPAC INPT	A M	6 1	34 S	1 PPB	N N	0.0 100.0	L N	0.00 99.00	75.00 30.00	10.00 0.00		MVCU
128	CI708	12 68 1H CONDT	IPAC INPT	A M	6 1	35 S	1 UMHO	N N	0.0 10.0	L N	0.00 9.90	99.00 99.00	70.00 50.00		MVCU
129	CI718	12 68 1HTR CAT	IPAC INPT	A M	6 1	36 S	1 UMHO	N N	0.0 1.0	L N	0.00 0.99	50.00 15.00	0.00 0.00		MVCU
130	AI715	12 68 FW O2	IPAC INPT	A M	6 1	37 S	1 PPB	N N	0.0 100.0	L N	0.00 99.00	10.00 5.00	0.00 0.00		MVCU
131	CIC726	9 67 AMM SPD	MVCU PID	A C	1 1	22 R	1 UMHO	N N	0.0 10.0	L N	0.00 9.90	99.00 99.00	70.00 50.00	0% 99%	D CNSL
132	PI655	18 85 4HTR PR	MVCU INPT	A M	1 1	17 R	1 PSIA	N N	0.0 25.0	L N	0.00 24.75	99.00 99.00	0.00 0.00		MVCU
133	TI128	30 HOTWELL	IPAC TCPL	A M	2 1	6 S	1 DEGF	N N	50.0 200.0	L N	50.00 198.50	0.00 0.00	0.00 0.00		MVCU
134	AI716	12 68 DEA PH	IPAC INPT	A M	6 1	38 S	1 PH	N N	8.0 10.0	L N	8.00 9.98	90.00 85.00	68.00 60.00		MVCU
135	TI1105A	23 70RFP THST RFG	IPAC TCPL	A M	9 1	2 R	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	190.00 180.00	0.00 0.00		MVCU
136	CI717	12 68 DEA CAT	IPAC INPT	A M	6 1	39 S	1 UMHO	N N	0.0 1.0	L N	0.00 0.99	50.00 15.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
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REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LI AL	CO LO CO HI	CUTD SPSEL
137	TI1105B	23 70RFP P OB BRG	IPAC TCPL	A M	9 1	3 P	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	210.00 200.00	0.00 0.00		MVCU
138	CI727	11 67 IL DEM CAT	IPAC INPT	A M	6 1	40 S	1 UMHO	N N	0.0 1.0	L N	0.00 0.99	50.00 15.00	0.00 0.00		MVCU
139	TI1105C	23 70RFP P IB BRG	IPAC TCPL	A M	9 1	4 R	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	190.00 180.00	0.00 0.00		MVCU
140	AI729	11 67 IL DEM PH	IPAC INPT	A M	6 1	49 S	1 PH	N N	6.0 8.0	L N	6.00 7.98	90.00 75.00	25.00 15.00		MVCU
141	TI1105D	23 70RFP PMP CASE	IPAC TCPL	A M	9 1	5 R	8 DEGF	N N	0.0 400.0	L N	0.00 396.00	99.00 73.00	0.00 0.00		MVCU
142	TI1105E	23 70RFP H OIL IN	IPAC TCPL	A M	9 1	6 R	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	185.00 175.00	0.00 0.00		MVCU
143	CI728	11 67 IL DEM COND	IPAC INPT	A M	6 1	50 S	1 UMHO	N N	0.0 1.0	L N	0.00 0.99	75.00 50.00	0.00 0.00		MVCU
144	TI1105F	24 70RFP M OB BRG	IPAC TCPL	A M	9 1	7 R	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	190.00 180.00	0.00 0.00		MVCU
145	TI1105G	24 70RFP M IB BRG	IPAC TCPL	A M	9 1	8 R	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	190.00 180.00	0.00 0.00		MVCU
146	TEST		MVCU NODE	A M	1 1	66 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
147	TI115	18 66 4HTR IN	IPAC TCPL	A M	6 1	97 S	1 DEGF	N N	60.0 200.0	L N	60.00 198.60	0.00 0.00	0.00 0.00		MVCU
148	AI735	10 67 HW 02	IPAC INPT	A M	6 1	52 S	1 PPB	N N	0.0 100.0	L N	0.00 99.00	10.00 5.00	0.00 0.00		MVCU
149	CI736	10 67 HW CONDT	IPAC INPT	A M	6 1	53 S	1 UMHO	N N	0.0 10.0	L N	0.00 9.90	99.00 99.00	70.00 50.00		MVCU
150	TI1105M	23 70RFP THST BRG	IPAC TCPL	A M	9 1	99 S	8 DEGF	N N	0.0 250.0	L P	0.00 247.50	210.00 200.00	0.00 0.00		MVCU
151	AI719	10 67 HW PH	IPAC INPT	A M	6 1	54 S	1 PH	N N	8.0 10.0	L N	8.00 9.98	90.00 85.00	68.00 60.00		MVCU
152	FI1601	8 0 SEFWSTFL	IPAC INPT	A M	9 1	34 R	8 GPM	N N	0.0 595.0	L N	0.00 589.05	0.00 0.00	0.00 0.00		MVCU
153	CI720	10 67 HW CATION C	IPAC INPT	A M	6 1	55 S	1 UMHO	N N	0.0 1.0	L N	0.00 0.99	50.00 15.00	0.00 0.00		MVCU

MC DONNELL DOUGLAS ASTRONAUTICS CO.  
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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
154	CI1206	7 59 POLISHER	IPAC INPT	A M	9 1	35 R	1 UMHO	N N	0.0 1.0	L P	0.00 0.99	0.65 0.50	0.00 0.00		MVCU
155	POI86G	32 0 NPSH	MVCU INPT	A M	1 1	27 R	1 INCH	N N	0.0 400.0	L P	0.00 396.00	396.00 396.00	120.00 104.00		MVCU
156	FYI83B	19 00 DEA FLO	MVCU NODE	A M	1 1	52 R	1 GPM	N N	-220.5 220.5	L N	-220.51 216.10	0.00 0.00	0.00 0.00		MVCU
157	PI997A	SUMMER OUTPUT	MVCU NODE	A M	1 1	67 R	1 PSIA	N N	0.0 450.0	L N	0.00 445.50	0.00 0.00	0.00 0.00		MVCU
158	F15020	75 0 BO1 VOLT	IPAC INPT	A M	9 1	38 R	1 VAC	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
159	LCM146A	17 87 HW MAKE UP	MVCU PID	A C	1 1	7 R	1 INCH	N N	0.0 36.0	L P	0.00 35.64	35.64 35.64	11.88 7.92	0% 99%	D CNSL
160	PY647B	SUMMER	MVCU NODE	A M	1 1	50 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
161	TI97R	38 80 TB 3BR METL	IPAC INPT	A M	6 1	67 S	1 DEGF	N N	75.0 225.0	L P	75.00 223.50	175.50 165.00	75.00 75.00		MVCU
162	TI980	37 80 TG 3BRG OIL	IPAC INPT	A M	6 1	68 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	165.00 160.00	75.00 75.00		MVCU
163	TI962A	38 80 TB 2BR METL	IPAC INPT	A M	6 1	69 S	1 DEGF	N N	75.0 200.0	L P	75.00 198.75	198.75 165.00	75.00 75.00		MVCU
164	TI962C	37 80 TG 2BRG OIL	IPAC INPT	A M	6 1	70 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	165.00 160.00	75.00 75.00		MVCU
165	TI836	33 TG L.O. TK	IPAC INPT	A M	2 1	98 S	1 DEGF	N N	70.0 170.0	L N	70.00 169.00	75.00 65.00	5.00 0.00		MVCU
166	LCM146B	17 87 HW DRAW OFF	MVCU PID	A C	1 1	8 R	1 INCH	N N	0.0 36.0	L P	0.00 35.64	34.92 27.36	0.00 0.00	0% 99%	D CNSL
167	TI968A	62 79AIR A CLR O	IPAC INPT	A M	6 1	81 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	99.00 99.00	0.00 0.00		MVCU
168	TI968B	62 79AIR A CLR I	IPAC INPT	A M	6 1	82 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	20.00 13.00	0.00 0.00		MVCU
169	TI970A	62 79AIR B CLR O	IPAC INPT	A M	6 1	83 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	99.00 99.00	0.00 0.00		MVCU
170	TI970B	62 79AIR B CLR I	IPAC INPT	A M	6 1	84 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	20.00 13.00	0.00 0.00		MVCU

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV 'SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
171	TI972A	62 79AIR C CLR O	IPAC INPT	A M	6 1	85 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	20.00 13.00	0.00 0.00		MVCU
172	TI972B	62 79AIR C CLR T	IPAC INPT	A M	6 1	86 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	99.00 99.00	0.00 0.00		MVCU
173	TI974A	62 79AIR D CLR O	IPAC INPT	A M	6 1	87 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	20.00 13.00	0.00 0.00		MVCU
174	ZI943	57 78 ADM C VV	MVCU INPT	A M	1 2	25 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
175	ZI940	49 78 MS C VV	MVCU INPT	A M	1 2	26 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
176	PDI837	33 TG OIL FLTR	IPAC INPT	A M	6 1	104 S	1 PSIG	N N	0.0 20.0	L P	0.00 19.80	10.00 10.00	0.00 0.00		MVCU
177	FI953	45 STM CHST	IPAC INPT	A M	6 1	65 S	1 PSIA	N N	200.0 1500.1	L N	200.00 1487.06	0.00 0.00	0.00 0.00		MVCU
178	TI923	38 80 TR 1BR METL	IPAC INPT	A M	6 1	114 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	174.00 165.00	75.00 75.00		MVCU
179	TI924	37 80 TG 1BRG OIL	IPAC INPT	A M	6 1	115 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	165.00 160.00	75.00 75.00		MVCU
180	TI920C	38 80 TR TH BR RR	IPAC INPT	A M	6 1	116 S	1 DEGF	N N	75.0 175.0	L N	75.00 174.00	99.00 90.00	0.00 0.00		MVCU
181	TI920D	38 80 TR TH BR RR	IPAC INPT	A M	6 1	117 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	174.00 165.00	75.00 75.00		MVCU
182	TI920E	37 80 TG TH BR DR	IPAC INPT	A M	6 1	118 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	170.00 160.00	75.00 75.00		MVCU
183	TI920A	38 80 TR TH BR FR	IPAC INPT	A M	6 1	119 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	174.00 165.00	75.00 75.00		MVCU
184	TI920B	38 80 TR TH BR FR	IPAC INPT	A M	6 1	120 S	1 DEGF	N N	75.0 175.0	L P	75.00 174.00	174.00 165.00	75.00 75.00		MVCU
185	II242	CIRC WTP PUMP 906	IPAC INPT	A M	6 1	129 S	1 AMPS	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU
186	JI5021	81 93 MCC BOA	IPAC INPT	A M	6 1	130 S	1 KW	N N	0.0 640.0	L N	0.00 633.60	0.00 0.00	0.00 0.00		MVCU
187	II50	14 0 TS FW PP	IPAC INPT	A M	6 1	131 S	1 AMPS	N N	0.0 300.0	L N	0.00 297.00	0.00 0.00	0.00 0.00		MVCU

<b>MC DONNELL DOUGLAS AERONAUTICS CO.</b> HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
REV A		SHEET 26		

LOOP	TAG	DESCRIPTION	DEVICE SUPTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
188	TO11105	DIFFTEMP	IPAC TCPL	A M	6 1	102 S	1 DEGF	N N	-120.0 120.0	L N	-120.00 117.60	92.00 75.00	25.00 8.00		MVCU
189	PI812	33 80 TG L.O. PR	IPAC INPT	A M	6 1	135 S	1 PSIG	N N	0.0 60.0	L P	0.00 59.40	59.40 15.00	19.80		MVCU
190	PI868	34 EH SYSTM	IPAC INPT	A M	6 1	136 S	1 PSIG	N N	0.0 3000.0	L P	0.00 2970.00	1890.00 1800.00	0.00 0.00		MVCU
191	CI1205	7 59 MKUP DEM	IPAC INPT	A M	9 1	33 R	8 UMHO	N N	0.0 1.0	L P	0.00 0.00	0.90 0.90	0.00 0.00		MVCU
192	II5010	74 0 4K WELL BKR	IPAC INPT	A M	6 1	56 S	1 AMPS	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
193	J150	14 0 TS FW PP	IPAC INPT	A M	6 1	132 S	1 KW	N N	0.0 240.0	L N	0.00 237.60	0.00 0.00	0.00 0.00		MVCU
194	TI447	9 00 CAUST TK	IPAC TCPL	A M	6 1	103 S	1 DEGF	N N	50.0 150.0	L N	50.00 149.00	50.00 50.00	20.00 20.00		MVCU
195	E15015	77 0 B02 BKR	IPAC INPT	A M	2 1	21 S	1 VAC	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
196	PI34	32 0 TS FW PR	IPAC INPT	A M	2 1	67 S	1 PSIG	N N	0.0 700.0	L N	0.00 693.00	0.00 0.00	0.00 0.00		MVCU
197	Z1917B	39 80 THRUST B	IPAC INPT	A M	6 1	7 S	1 MILS	N N	-30.0 30.0	L P	-30.00 29.40	7.00 4.20	-16.20 -19.80		MVCU
198	Z1917C	41 80 TG ECC	IPAC INPT	A M	2 1	97 S	1 MILS	N N	-10.0 10.0	L N	-10.00 9.80	0.00 0.00	0.00 0.00		MVCU
199	LIC8	26 0 1HTR LVL	MVCU PID	A C	1 1	1 R	1 INCH	N N	0.0 10.0	L P	0.00 9.90	7.60 6.80	1.30 1.10	0% 99%	R CNSL
201	PCM937	57 SET P ADM APL	MVCU PID	A C	1 2	6 R	1 PSIA	N N	150.0 400.0	L N	150.00 397.50	99.00 99.00	0.00 0.00	0% 99%	D CNSL
203	M4-2V	EPGSSTN4 MUX2 ALM	IPAC INPT	A M	6 1	8 S	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.20 5.20	4.90 4.90		MVCU
204	TI974B	62 79AIR D CLR I	IPAC INPT	A M	6 1	88 S	1 DEGF	N N	59.0 239.0	L N	59.00 237.20	99.00 99.00	0.00 0.00		MVCU

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LOOP	TAG	DESCR PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SF HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
205	M4-3V	EPGSSN4 MUX3 ALM	TPAC INPT	A M	9 1	40 R	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.20 5.20	4.90 4.90		MVCU
206	PI640B	15 0 CONDENS	TPAC INPT	A M	2 1	101 S	1 INHG	N N	0.0 30.0	L P	0.00 29.70	8.10 4.50	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 28	

LOOP	TAG	DESCRI PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN POST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLF OF CLR	HY1 CLP HY2 CLP
380	HS52	08 0 GATE	MCON OUTP	D C	15 3	115 S	1 N	STOP RESET	N N	2 N	R G	
381	TI1105L	SEALOUTB	IPAC INPT	D M	10 1	31 R	1 N	HI NORMAL	Y Y	1 Y	R G	
382	PALL864	34 EH PR	IPAC INPT	D M	9 1	155 R	1 N	PR LOL NORMAL	Y Y	1 N	R G	
383	PIL515	1 61 AIR COMP 902	IPAC INPT	D M	6 1	163 S	1 N	LO OIL NORMAL	Y Y	1 N	R G	
384	PIL505	1 61 AIR COMP 901	IPAC INPT	D M	6 1	162 S	1 N	LO OIL NORMAL	Y Y	1 N	R G	
385	ZIL940	49 0 T-G MS C VV	IPAC INPT	D M	9 1	88 R	1 N	NOLOAD NORMAL	Y Y	1 N	R G	
386	LIH637	18 85BFR 4EXT DRN	IPAC INPT	D M	10 1	97 R	1 N	LVL HI NORMAL	Y Y	1 Y	R G	
387	LIH650	21 0 3EXT DRN	IPAC INPT	D M	10 1	153 R	1 N	LVL HI NORMAL	Y Y	1 Y	R G	
388	LIH652	18 85AFT 4EXT DRN	IPAC INPT	D M	10 1	40 R	1 N	LVL HI NORMAL	Y Y	1 Y	R G	
389	HS51A	08 0 GATE	MCON OUTP	D C	15 3	114 S	1 N	OPEN	N N	2 N	R G	
390	HS4	08 0 STROBE	MCON OUTP	D C	15 3	112 S	1 N	STROBE OFF	N N	2 N	R G	
391	LIH676	21 0 3EXT DRN	IPAC INPT	D M	10 1	129 S	1 N	LVL HI NORMAL	Y Y	1 Y	R G	

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REV

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SHEET

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LOOP	TAG	DESCR PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PF INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
392	TI1105K	SEALINBD	IPAC INPT	D M	10 1	30 R	1 N	HI NORMAL	Y Y	1 Y	R G	
393	I1H525A	1 61 AIP COMP 962	IPAC INPT	D M	10 1	163 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
395	HSI5106	65 90 LN GND DISC	MCON OUTP	D C	15 3	109 S	1 N	CLOSED OPEN	N N	2 N	R G	
396	HSI5105	65 90 RK DISC	MCON OUTP	D C	15 3	108 S	1 N	CLOSED OPEN	N N	2 N	R G	
397	HSI5104	65 90 LN DISC	MCON OUTP	D C	15 3	107 S	1 N	CLOSED OPEN	N N	2 N	R G	
398	HSI5103	65 90 BYPASS	MCON OUTP	D C	15 3	106 S	1 N	CLOSED OPEN	N N	2 N	R G	
399	ZIH917C	39 D TG ECC	IPAC INPT	D M	9 1	122 R	1 N	ECC HI NORMAL	Y Y	1 N	R G	
400	ZI1703B	7 59 NO SW PP	IPAC MILP	D M	10 1	35 R	1 N	704 ON PP OFF	N N	2 Y	R G	
401	ZI1703A	7 59 SO SW PP	IPAC MILP	D M	10 1	27 R	1 N	703 ON PP OFF	N N	2 Y	R G	
402	LILL872	34 EH TANK	IPAC INPT	D M	9 1	93 R	1 N	LVLTRP NORMAL	Y Y	1 N	R G	
403	LILL833	33 TG L.O. TK	IPAC INPT	D M	9 1	118 R	1 N	LVLTRP NORMAL	Y Y	1 N	R G	
404	TC1025	42 78 ENTHALPY	IPAC INPT	D M	6 1	188 S	1 N	ADMSTM NORMAL	Y Y	1 N	R G	
405	TC1022	43 78 ENTHALPY	IPAC INPT	D M	6 1	189 S	1 N	MN STM NORMAL	Y Y	1 N	R G	
406	HI858AM	34 EH P938A	IPAC INPT	D M	2 1	151 S	1 N	AUTO MAN	N N	2 N	Y G	
407	I1H5200A	65 D MX1 OVL	IPAC INPT	D M	2 1	173 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
408	HS660	15 COND N2 BLNKT	MCON OUTP	D C	15 3	104 S	1 N	OPNMOV CL MOV	N N	2 N	R G	

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
409	ZI525	1 61 AIR W-AIR CP	IPAC INPT	D M	10 1	165 R	1 N	902 ON CP OFF	N N	2 Y	R G	
410	FIL1703	7 59 SW RECIRC	IPAC INPT	D M	10 1	180 R	1 N	LO FLO NORMAL	Y Y	1 Y	R G	
411	IIH525	1 00 AIR COMP 902	IPAC INPT	D M	10 1	166 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
412	HS3	08 0 SIREN	MCON OUTP	D C	15 3	111 S	1 N	SIREN OFF	N N	2 N	R G	
414	HS1008	AUX SIMS	MCON OUTP	D C	15 3	122 S	1 N	OPEN CLOSE	N N	2 N	R G	
415	HS1008C	AUX SIMS	MCON OUTP	D C	15 3	121 S	1 N	AUTO MANUAL	N N	2 N	W Y	
416	HS1202A	7 59 DEM IN PP	MCON OUTP	D C	15 3	120 S	1 N	START STOP	N N	2 N	R G	
417	ZI313	2 62 BCW PMP	IPAC INPT	D M	10 1	98 S	1 N	BCW ON PP OFF	N N	2 Y	R G	
418	TSI254	127 0 SUB-TH5	IPAC INPT	D M	9 1	111 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
419	FAI5251	90 0 EXH FAN	IPAC INPT	D M	6 1	169 S	1 N	FNFAIL NORMAL	N Y	1 N	R G	
420	UAI5200	65 0 MX1 XFMR	IPAC INPT	D M	2 1	168 S	1 N	TRBL NORMAL	Y Y	1 N	P G	
421	ZY5017	480V ABF BKP	IPAC INPT	D M	10 1	132 R	1 N	TEST NORMAL	N N	2 Y	R G	
422	ISI5015	77 480V B02 GND	IPAC INPT	D M	10 1	140 R	1 N	BUSGND NORMAL	N Y	1 Y	R G	
423	IIH660	15 COND N2 BLNKT	IPAC INPT	D M	2 1	133 S	1 N	OVLTRP NORMAL	N Y	1 N	R G	
424	ZI941	36 78 CSBP DRN	IPAC MILP	D M	10 1	90 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
425	ZI820B	33 DC LO PP	IPAC INPT	D M	9 1	50 R	1 N	DCP ON PP OFF	Y Y	1 N	R G	

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SHEET

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LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLP	HY1 CLR HY2 CLR
426	ZI631	18 85 4HTP NRV	IPAC MILP	D M	9 1	101 R	1 N	NV OP NVTRIP	N N	1 N	R G	
427	ZI629B	21 84 3EXT NRV	IPAC MILP	D M	9 1	105 R	1 N	NVOPEN NVTRIP	N N	1 N	R G	
431	TIH984	60 0 GEN FIRE	IPAC INPT	D M	9 1	134 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
432	PIH521	1 61 AIR RCVR AIR	IPAC INPT	D M	9 1	133 R	1 N	HIPRES NORMAL	Y Y	1 N	R G	
433	PIL521	1 61 AIR RCVR AIR	IPAC INPT	D M	9 1	132 R	1 N	LOPRES NORMAL	Y Y	1 N	R G	
434	ZI856	34 EH P938B	IPAC INPT	D M	9 1	131 R	1 N	EHB ON PP OFF	Y Y	2 N	R G	
435	ZI660	15 COND N2 BLNKT	IPAC MILP	D M	10 1	183 R	1 N	OPEN CLOSED	N N	2 Y	R G	
436	UI820	33 T-G DC LO PP	IPAC INPT	D M	9 1	127 R	1 N	OVRCRT NORMAL	Y Y	1 N	R G	
437	ZI155	15 65CON A-R-PP	IPAC INPT	D M	10 1	144 R	1 N	ARP ON PP OFF	N N	2 Y	R G	
438	UI5008	73 0 AXR TRBL	IPAC INPT	D M	2 1	189 S	1 N	TRUBL NORMAL	Y Y	1 N	R G	
439	IIH958	35 OSEAL EXH PP	IPAC INPT	D M	10 1	175 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
440	UI1703	7 59 RW TK SW PP	IPAC INPT	D M	10 1	29 R	1 N	NO FLD NORMAL	Y Y	1 Y	R G	
441	HS5020	75 93 B01 FDR	MCON OUTP	D C	15 7	88 S	1 N	CLOSE OPEN	N N	2 N	R G	
442	IIH260	3 00 CW P905	IPAC INPT	D M	10 1	45 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
443	HS623	26 R2AFT TEXT DRN	MCON OUTP	D C	15 3	34 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
444	HS615	25 0 REF 2FXT DRN	MCON OUTP	D C	15 3	28 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
445	ZI901	5R 78 ADM SV	IPAC MILP	D M	10 1	148 R	1 N	OPEN CLOSED	N Y	2 Y	R G	
446	HS935	3581 STM SEAL DR	MCON OUTP	D C	15 3	15 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
447	HS906	36 78 TG MN ASD	MCON OUTP	D C	15 3	13 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
448	HS905	36 TG MN BSD	MCON OUTP	D C	15 3	12 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
449	HS131C	16 00 COND PP	IPAC MILP	D M	10 1	1 R	1 N	AUTO MANUAL	N N	2 Y	R W	
450	KY5100A	60 GEN NEG PHSE	IPAC INPT	D M	9 1	92 R	1 N	ALARM NORMAL	Y Y	1 N	R G	
451	TH5100A	63 EXC TMP	IPAC INPT	D M	9 1	76 R	1 N	TMP HI NORMAL	Y Y	1 Y	R G	
452	PIH167	8 0 SPARG LN	IPAC INPT	D M	2 1	131 S	1 N	PR HI NORMAL	N Y	1 N	R G	
453	SHL5100	60 GEN O-U FREQ	IPAC INPT	D M	9 1	58 R	1 N	C F F NORMAL	Y Y	1 N	R G	
454	ZI5001	74 91 4K A01-2FDR	IPAC INPT	D M	10 1	65 R	1 N	CLOSED OPEN	N N	2 Y	R G	
455	ZI5003	75 91 4K SXI BKR	IPAC INPT	D M	10 1	69 R	1 N	CLOSED OPEN	N N	2 Y	R G	
456	ZI5004	76 91 4K LD CTR A	IPAC INPT	D M	10 1	73 R	1 N	CLOSED OPEN	N N	2 Y	R G	
457	ZI5006	77 91 4K CTX1 BKR	IPAC INPT	D M	10 1	77 R	1 N	CLOSED OPEN	N N	2 Y	R G	
458	ZI5007	78 92 4K HELO 1-W	IPAC INPT	D M	10 1	81 R	1 N	CLOSED OPEN	N N	2 Y	R G	
459	LIH872	34 EH TANK	IPAC INPT	D M	9 1	159 R	1 N	LVL HI NORMAL	Y Y	1 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
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REV A	SHEET 42	

LOOP	TAG	DESCR PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL CM	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
461	ZI5009	78 92 4K HFOLO 2-E	IPAC INPT	D M	10 1	89 R	1 N	CLOSED OPEN	N N	2 Y	R G	
463	ZI5010	74 91 4K WELL BKR	IPAC INPT	D M	10 1	92 R	1 N	CLOSED OPEN	N N	2 Y	R G	
464	ZI5020	75 93 B01 FDR	IPAC INPT	D M	10 1	101 R	1 N	CLOSED OPEN	N N	2 Y	R G	
465	TIH166	32 0 TS FW PP	IPAC INPT	D M	2 1	130 S	1 N	HI TMP NORMAL	Y Y	1 N	R G	
466	ZI5022	81 93 B0C FDR	IPAC INPT	D M	10 1	107 R	1 N	CLOSED OPEN	N N	2 Y	R G	
467	ZI5025	81 93 PPA FDR	IPAC INPT	D M	10 1	110 R	1 N	CLOSED OPEN	N N	2 Y	R G	
468	ZI5015	77 94 B02 FDR	IPAC INPT	D M	10 1	113 R	1 N	CLOSED OPEN	N N	2 Y	R G	
469	ZY5015	77 480V B02 FDR	IPAC INPT	D M	10 1	116 R	1 N	TEST NORMAL	N N	2 Y	R G	
470	IIH5015	77 480V B02 FDR	IPAC INPT	D M	10 1	119 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
471	ZI5017	480V ABF BKR	IPAC INPT	D M	10 1	122 R	1 N	CLOSED OPEN	N N	2 Y	R G	
472	IIH5017	480V ABF BKR	IPAC INPT	D M	10 1	125 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
474	ZI524	1 61 AIR E-AIR CP	IPAC INPT	D M	10 1	170 R	1 N	901 ON CP OFF	N N	2 Y	R G	
475	IIH131	16 00 COND PP	IPAC INPT	D M	10 1	152 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
476	HS5001	74 91 4K A01-2FDR	MCON OUTP	D C	15 3	80 S	1 N	CLOSE OPEN	N N	2 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
477	HS5003	75 91 4K SX1 BKR	MCON OUTP	D C	15 3	81 S	1 N	CLOSE OPEN	N N	2 N	R G	
478	HS5004	76 91 4K LD CTR A	MCON OUTP	D C	15 3	82 S	1 N	CLOSE OPEN	N N	2 N	R G	
479	HS5006	77 91 4K CTX1 BKR	MCON OUTP	D C	15 3	83 S	1 N	CLOSE OPEN	N N	2 N	R G	
480	HS5007	78 92 4K HELO 1-W	MCON OUTP	D C	15 3	85 S	1 N	CLOSE OPEN	N N	2 N	R G	
481	HS5008	22 91 4K AXB BKR	MCON OUTP	D C	15 3	84 S	1 N	CLOSE OPEN	N N	2 N	R G	
482	HS5009	78 92 4K HELO 2-E	MCON OUTP	D C	15 3	86 S	1 N	CLOSE OPEN	N N	2 N	R G	
483	HS5010	74 91 4K WELL BKR	MCON OUTP	D C	15 3	87 S	1 N	CLOSE OPEN	N N	2 N	R G	
484	HS616	36 TG AD ST DR	MCON OUTP	D C	15 3	29 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
485	HS5021	81 93 BOA FDR	MCON OUTP	D C	15 3	89 S	1 N	CLOSE OPEN	N N	2 N	R G	
486	HS5022	81 93 BOC FDR	MCON OUTP	D C	15 3	90 S	1 N	CLOSE OPEN	N N	2 N	R G	
487	HS5025	81 93 PPA FDR	MCON OUTP	D C	15 3	91 S	1 N	CLOSE OPEN	N N	2 N	R G	
488	HS5015	77 94 B02 FDR	MCON OUTP	D C	15 3	92 S	1 N	CLOSE OPEN	N N	2 N	R G	
489	HS5017	480V ABF BKR	MCON OUTP	D C	15 3	94 S	1 N	CLOSE OPEN	N N	2 N	R G	
490	HS524	1 61 E-AIR CP	MCON OUTP	D C	15 3	78 S	1 N	START STOP	N N	2 N	R G	
491	HS525	1 61 W-AIR CP	MCON OUTP	D C	15 3	79 S	1 N	START STOP	N N	2 N	R G	
492	HS131A	16 65 COND PP	MCON OUTP	D C	15 3	25 S	1 N	START STOP	N N	2 N	R G	
493	HS631	18 85 4EXT NRV	MCON OUTP	D C	15 3	102 S	1 N	OPEN CLOSE	N N	2 N	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

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SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
REV A	SHEET 44	

LOOP	TAC	DESCR PTION	DEVICE SUBTY	A/D C/M	Hwy NO DEV AD	INT AD Hwy TY	SCAN HOST	GN DESC OFF DES	DI AL AL GN	AL PH INV D	ON CLR OF CLR	HY1 CLR HY2 CLP
495	HS629B	21 R4 3EXT NRV	MCON OUTP	D C	15 3	101 S	1 N	OPEN CLOSE	N N	2 N	R G	
496	HS629A	21 R4 3EXT NRV	MCON OUTP	D C	15 3	100 S	1 N	OPFN CLOSE	N N	2 N	R G	
497	HS627	25 R3 2EXT NRV	MCON OUTP	D C	15 3	99 S	1 N	OPEN CLOSE	N N	2 N	R G	
498	HS620	28 R2 OPEN ALL	MCON OUTP	D C	15 3	97 S	1 N	RESET OFF	N N	2 N	R G	
499	C4-2	EPGSSTN4 RMTCTLR2	MLD MVCU		1 2		1 N					G G
500	XIL915A	41 TSI INST	IPAC INPT	D M	9 1	135 R	1 N	TRUBLE NORMAL	Y Y	1 N	R G	
501	IIH5002	66 0 AX1 OVLD	IPAC INPT	D M	9 1	150 R	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
502	UA5002	66 0 AX1 GND	IPAC INPT	D M	9 1	149 R	1 N	GROUND NORMAL	Y Y	1 N	R G	
503	PIH5002	66 0 AX1 PR	IPAC INPT	D M	9 1	148 R	1 N	SDN PR NORMAL	Y Y	1 N	R G	
504	UI5200	60 33KV GEN LKUP	IPAC INPT	D M	9 1	146 R	1 N	LOCKED NORMAL	Y Y	1 N	R G	
505	LI1701A	7 59 WW RAW TK	IPAC INPT	D M	9 1	123 R	1 N	SER LO NORMAL	Y Y	1 N	R G	
506	ZISH917	39 0 TH BRG	IPAC INPT	D M	9 1	120 R	1 N	TH HI NORMAL	Y Y	1 N	R G	
507	HI856AM	34 EH P938B	IPAC INPT	D M	2 1	152 S	1 N	AUTO MAN	N N	2 N	Y G	
508	IIH820	33 T-G DC LO PP	IPAC INPT	D M	9 1	128 R	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
509	FIH1703	7 59 RW TK SW PP	IPAC INPT	D M	10 1	32 R	1 N	HI FLO NORMAL	Y Y	1 Y	R G	
510	ZILL940	49 0 T-G MS C VV	IPAC INPT	D M	9 1	87 R	1 N	LOLOAD NORMAL	Y Y	1 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DFVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HYI CLR HY? CLR
511	ZIL943	57 TG ADM CVV	IPAC INPT	D M	9 1	86 R	1 N	NOLOAD NORMAL	Y Y	1 N	R G	
512	IDH5002	66 0 AX1 DIFF	IPAC INPT	D M	9 1	80 R	1 N	B D D NORMAL	Y Y	1 N	R G	
513	PIL913	60 00 TG PRE-EMER	IPAC INPT	D M	9 1	78 R	1 N	LCKOUT NORMAL	Y Y	1 Y	R G	
514	SIL907	64 TG SPD SIGL	IPAC INPT	D M	9 1	77 R	1 N	FAILED NORMAL	Y Y	1 N	R G	
515	IH1703B	7 59 RSWP OUT	IPAC INPT	D M	2 1	150 S	1 N	TROUBL NORMAL	Y Y	2 N	R G	
516	TH5100B	63 EXC TMP	IPAC INPT	D M	9 1	75 R	1 N	TMP HI NORMAL	Y Y	1 Y	R G	
517	YI5555C	HALONSYS CR FLOOR	IPAC INPT	D M	9 1	71 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
518	YI5555D	FIREPANL LOSOPWR	IPAC INPT	D M	9 1	68 R	1 N	PWRLOS NORMAL	Y Y	1 N	R G	
519	YI5555B	HALONSYS EQUIPRM	IPAC INPT	D M	9 1	72 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
520	YI5555E	HALONSYS T HOUS 4	IPAC INPT	D M	9 1	67 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
521	QA5250	63 GEN VOLT-HZ	IPAC INPT	D M	9 1	64 R	1 N	S T V NORMAL	Y Y	1 Y	R G	
522	FSH5100	63 OVR EXC	IPAC INPT	D M	9 1	60 R	1 N	REGMAN NORMAL	Y Y	1 Y	R G	
523	KY5100	60 GEN NEG PHSE	IPAC INPT	D M	9 1	51 R	1 N	S G C NORMAL	Y Y	1 N	R G	
524	UA5026	77 0 CT XFMR	IPAC INPT	D M	6 1	168 S	1 N	TROUBL NORMAL	N Y	1 N	R G	
525	QA5005	82 XFMR XBRLR TPL	IPAC INPT	D M	6 1	167 S	1 N	TROUBL NORMAL	Y Y	1 N	R G	
526	ZI733	12 68 SALT	IPAC MILP	D M	9 1	109 R	1 N	HOTWEL DEMIN	N N	2 N	Y Y	
527	HS620A	2R 82 TRIP ALL	MCON OUTP	D C	15 3	96 S	1 N	TRIP OFF	N N	2 N	R G	

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
528	ZI5021	81 93 BOA FDP	IPAC INPT	D M	10 1	104 R	1 N	CLOSED OPEN	N N	2 Y	R G	
529	USI5002	66 0 LCKUPBUS	IPAC INPT	D M	2 1	167 S	1 N	BUSLKD NORMAL	Y Y	1 N	R G	
530	FSL5110	60 OVR EXC	IPAC INPT	D M	2 1	184 S	1 N	ALARM NORMAL	Y Y	1 N	R G	
531	ZI5100A	60 GEN 252-GS	IPAC INPT	D M	10 1	168 R	1 N	ON LIN OFFLIN	Y Y	2 N	R G	
532	TIL166	32 0 TS FW PP	IPAC INPT	D M	2 1	129 S	1 N	LO TMP NORMAL	Y Y	1 N	R G	
533	ESI5100	60 GEN VOLT BAL	IPAC INPT	D M	2 1	177 S	1 N	CFVB NORMAL	Y Y	1 N	R G	
534	QAI5004	82 OSWHD DC TBL	IPAC INPT	D M	2 1	161 S	1 N	TROUBL NORMAL	Y Y	1 N	R G	
535	QAI5003	75 00 SX1 XFMR	IPAC INPT	D M	6 1	192 S	1 N	TRUBL NORMAL	Y Y	1 N	R G	
536	QA5002	82 0 DC1 TBL	IPAC INPT	D M	6 1	191 S	1 N	DC1TBL NORMAL	Y Y	1 N	R G	
537	IIH5020	75 0 B01 FMR	IPAC INPT	D M	6 1	183 S	1 N	OV TRT NORMAL	Y Y	1 N	R G	
538	ZY5021	81 0 BOA FDP	IPAC INPT	D M	6 1	190 S	1 N	TFST NORMAL	N N	2 N	R G	
539	FIL5020	75 480V B01 UV	IPAC INPT	D M	6 1	182 S	1 N	BUS UV NORMAL	Y Y	1 N	R G	
540	ISI5020	75 480V B01 GND	IPAC INPT	D M	6 1	181 S	1 N	BUSGND NORMAL	Y Y	1 N	R G	
541	IIH5021	81 0 BOA FDP	IPAC INPT	D M	6 1	187 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
542	IIH5010	74 0 4K WELL BKR	IPAC INPT	D M	6 1	177 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
543	ZY5020	75 0 B01 FDP	IPAC INPT	D M	6 1	186 S	1 N	TEST NORMAL	N N	2 N	R G	
544	IIH858	34 EH P938A	IPAC INPT	D M	9 1	158 R	1 N	OVLTRP NORMAL	Y Y	1 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVIC SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DEF	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
545	IIH827	82 0 LO P927	IPAC INPT	D M	6 1	174 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
546	LIL834	33 TG L.O. TK	IPAC INPT	D M	9 1	157 R	1 N	LVL LO NORMAL	Y Y	1 Y	R G	
547	ZI964	83 0 TURN GR	IPAC INPT	D M	6 1	172 S	1 N	TRG ON TRGOFF	N N	2 N	R G	
548	LIL872	34 EH TANK	IPAC INPT	D M	9 1	156 R	1 N	LVL LO NORMAL	Y Y	1 Y	R G	
549	IH1703A	7 59 RSWP OUT	IPAC INPT	D M	2 1	149 S	1 N	TROUBL NORMAL	Y Y	2 N	R G	
550	IIH964	83 0 TURN GR	IPAC INPT	D M	6 1	171 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
551	PIL866	34 EH PR	IPAC INPT	D M	9 1	154 R	1 N	LOW PR NORMAL	Y Y	1 N	R G	
552	LIH989	60 LIQ DET	IPAC INPT	D M	6 1	170 S	1 N	HI LVL NORMAL	Y Y	1 N	R G	
553	LIH834	33 TG L.O. TK	IPAC INPT	D M	9 1	153 R	1 N	LVL HI NORMAL	Y Y	1 Y	R G	
554	IIH5025	81 0 PPA FDR	IPAC INPT	D M	6 1	164 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
555	PIL810	33 TG L.O. PR	IPAC INPT	D M	9 1	152 R	1 N	LO PR NORMAL	Y Y	1 Y	R G	
556	IIH5200	65 0 33K MX1 GND	IPAC INPT	D M	9 1	147 R	1 N	GROUND NORMAL	Y Y	1 N	R G	
557	IIH5022	81 0 BOC FDR	IPAC INPT	D M	6 1	161 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
558	PIH5200	65 0 33K MX1 PRES	IPAC INPT	D M	9 1	145 R	1 N	SDN PR NORMAL	Y Y	1 N	R G	
559	XIHH915	39 0 VIB	IPAC INPT	D M	6 1	160 S	1 N	HI HI NORMAL	Y Y	1 Y	R G	
560	QAI6000	MSTRTRIP	IPAC INPT	D M	9 1	144 R	1 N	M TRIP NORMAL	Y Y	1 N	R G	
561	XIH915	39 0 VIB	IPAC INPT	D M	6 1	159 S	1 N	HI NORMAL	Y Y	1 Y	R G	

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REV

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SHEET

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LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLF OF CLR	HY1 CLR HY2 CLR
562	QAI6001	R TRIP	IPAC INFT	D M	9 1	143 R	1 N	R TRIP NORMAL	Y Y	1 N	R G	
563	TIH955	49 0 4STG TMP	IPAC INPT	D M	6 1	153 S	1 N	TMP HI NORMAL	Y Y	1 N	R G	
564	QAI6002	125 90 T-G TRIP	IPAC INPT	D M	9 1	142 R	1 N	TRIP NORMAL	Y Y	1 N	R G	
565	PIHH957	15 00CON EXH PR	IPAC INPT	D M	6 1	152 S	1 N	FR HH NORMAL	Y Y	1 N	R G	
566	QAI6003	SD TRIP	IPAC INPT	D M	9 1	141 R	1 N	SDTRIP NORMAL	Y Y	1 N	R G	
567	QAI6004	TC TRIP	IPAC INPT	D M	9 1	140 R	1 N	TCRIP NORAL	Y Y	1 N	R G	
568	PIH957	1586COND EXH PR	IPAC INPT	D M	6 1	151 S	1 N	PR HI NORMAL	Y Y	1 N	R G	
569	QAI6005	TE TRIP	IPAC INPT	D M	9 1	139 R	1 N	TETRIP NORMAL	Y Y	1 N	R G	
570	TIHH956	15 EXH TMP	IPAC INPT	D M	6 1	150 S	1 N	TMP HH NORMAL	Y Y	1 N	R G	
571	PILLR11	33 TG L.O. PR	IPAC INPT	D M	9 1	130 R	1 N	LL PR NORMAL	Y Y	1 N	R G	
572	TIH956	15 00 EXH TMP	IPAC INPT	D M	6 1	149 S	1 N	TMP HI NORMAL	Y Y	1 N	R G	
573	PIL908	49 0 OVR RPM	IPAC INPT	D M	9 1	129 R	1 N	TRIP NORMAL	Y Y	1 N	R G	
574	FIL958	35 STM SL SPRAY	IPAC INPT	D M	6 1	148 S	1 N	FLO LO NORMAL	N Y	1 N	R G	
575	PIL912	49 0 OIL TRIP	IPAC INPT	D M	9 1	126 R	1 N	OILTRP NORMAL	Y Y	1 Y	R G	
576	FIH958	35 STM SL SPRAY	IPAC INPT	D M	6 1	147 S	1 N	FLO HI NORMAL	N Y	1 N	R G	
577	LI1701R	7 59 WW RAW TK	IPAC INPT	D M	9 1	124 R	1 N	FIRELO NORMAL	Y Y	1 N	R G	
578	TIH965	60 0 SHFTAMPS	IPAC INPT	D M	9 1	137 R	1 N	AMPSHI NORMAL	Y Y	1 Y	R G	

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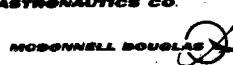
REV

A

SHEET

49

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DFV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HYP CLR
579	UI5251	60 0 TG CON MON	IPAC INPT	D M	9 1	69 R	1 N	COMMON NORMAL	Y Y	1 N	R G	
580	0IH1206	7 59 POLISHER	IPAC INPT	D M	9 1	119 R	1 N	TROUBL NORMAL	N Y	1 Y	R G	
582	LIH1203	7 59 DEMIN TK	IPAC INPT	D M	9 1	117 R	1 N	HI NORMAL	Y Y	1 N	R G	
583	LIL1203	7 59 DEMIN TK	IPAC INPT	D M	9 1	116 R	1 N	LO NORMAL	Y Y	1 N	R G	
584	LI1602	8 0 SEPTKLV	IPAC INPT	D M	9 1	115 R	1 N	HI LVL NORMAL	Y Y	2 Y	R G	
585	ZI5102A	60 33KV CB 501	IPAC INPT	D M	2 1	179 S	1 N	CLOSED OPEN	N N	2 N	R G	
586	LI1703	759W-WTR RAW TK	IPAC INPT	D M	9 1	113 R	1 N	HI NORMAL	Y Y	1 N	R G	
587	ESL5100	63 VOLT HZ	IPAC INPT	D M	9 1	63 R	1 N	OVRXIT NORMAL	Y Y	1 N	R G	
588	IIH822	82 0 OVE MTR	IPAC INPT	D M	9 1	94 R	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
589	II65100	63 GEN FLD GND	IPAC INPT	D M	9 1	62 R	1 N	H F A NORMAL	Y Y	1 Y	R G	
590	IIH826	83 0 LO P926	IPAC INPT	D M	9 1	91 R	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
591	GA5001	82 0 UPS TRRL	IPAC INPT	D M	9 1	90 R	1 N	UPSTRL NORMAL	Y Y	1 N	R G	
592	IH5100A	60 0 OVR CNT	IPAC INPT	D M	9 1	61 R	1 N	OVRCRT NORMAL	Y Y	1 N	R G	
593	ZY5025	81 0 PPA FDR	IPAC INPT	D M	9 1	85 R	1 N	TEST NORMAL	N N	2 N	R G	
594	IDH5101	60 GEN UNITQIFF	IPAC INPT	D M	9 1	59 R	1 N	B D D NORMAL	Y Y	1 N	R G	
595	ZY5022	81 0 BOC FDR	IPAC INPT	D M	9 1	84 R	1 N	TEST NORMAL	N N	2 N	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
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REV A	SHEET 50	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON FLR OF CLR	HY1 CLR HY2 CLR
596	EIH965	60 0 SHFTVOLT	IPAC INPT	D M	9 1	138 R	1 N	VOLTHI NORMAL	Y Y	1 Y	R G	
597	EHL5100	60 GEN 0-U VOLT	IPAC INPT	D M	9 1	57 R	1 N	I A V NORMAL	Y Y	1 N	R G	
598	EIH5100	60 GEN OVR EXC	IPAC INPT	D M	9 1	56 R	1 N	S V NORMAL	Y Y	1 N	R G	
599	KY5101	60 GEN OUT STEP	IPAC INPT	D M	9 1	55 R	1 N	G S Y NORMAL	Y Y	1 N	R G	
600	EIL5100	60 GEN LOSS FLD	IPAC INPT	D M	9 1	54 R	1 N	C E H NORMAL	Y Y	1 N	R G	
601	IIH5101	60 GEN ANTI MTR	IPAC INPT	D M	9 1	53 R	1 N	G G P NORMAL	Y Y	1 N	R G	
602	EY5100	60 GEN DIST B-U	IPAC INPT	D M	9 1	52 R	1 N	I J C V NORMAL	Y Y	1 N	R G	
603	ZY50	81 0 TS FW PP	IPAC INPT	D M	9 1	83 R	1 N	TEST NORMAL	N N	2 N	R G	
604	TIH506	1 61 AIR COMP 901	IPAC INPT	D M	9 1	82 R	1 N	TEMPHI NORMAL	N Y	1 N	R G	
605	TIH516	1 61 AIR COMP 902	IPAC INPT	D M	9 1	81 R	1 N	TEMPHI NORMAL	N Y	1 N	R G	
606	IIH5100	60 GEN STAT GND	IPAC INPT	D M	9 1	74 R	1 N	I A V NORMAL	Y Y	1 N	R G	
607	IDH5100	60 GE GEN DIFF	IPAC INPT	D M	9 1	73 R	1 N	C F D NORMAL	Y Y	1 N	R G	
608	UI5250	60 0 TG T TRIP	IPAC INPT	D M	9 1	70 R	1 N	T TRIP NORMAL	Y Y	1 N	R G	
609	ZI222	3 63 CW P985 MOV	IPAC MILP	D M	10 1	191 R	1 N	MOVOPN MOV CL	N N	2 Y	R G	
610	IIH243	3 00 CW P906 MOV	IPAC INPT	D M	10 1	190 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
611	ZI440	9 67 HYDRZ PP	IPAC INPT	D M	10 1	178 R	1 N	HYD ON PP OFF	N N	2 Y	R G	
612	LE-3		MLD MCON		15 3	S	1 N					G

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REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
613	ZI243	3 63 CW P906 MOV	IPAC MILP	D M	10 1	188 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
614	IIH222	3 00 CW P905 MOV	IPAC INPT	D M	10 1	187 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
615	HS51B	126 GATE	MCON OUTP	D C	15 3	113 S	1 N	CLOSE	N N	2 N	R G	
616	XIH232	4 64 CT FAN 903	IPAC INPT	D M	10 1	174 R	1 N	VIB HI NORMAL	N Y	1 Y	R G	
617	IIH524	1 00 AIR COMP 901	IPAC INPT	D M	10 1	171 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
618	LIL232	4 64 CT FAN 903	IPAC INPT	D M	10 1	173 R	1 N	OIL LO NORMAL	Y Y	1 Y	R G	
619	ZI207	6 00 PMP CT ACID	IPAC INPT	D M	10 1	176 R	1 N	PMP ON PMPOFF	N N	2 Y	R G	
620	ZIHH917	39 0 TH BRG	IPAC INPT	D M	9 1	160 R	1 N	TRIP NORMAL	Y Y	1 N	R G	
621	ZI958	35 0SEAL EXH PP	IPAC INPT	D M	10 1	181 R	1 N	EXH ON EXHOFF	N N	2 Y	R G	
622	ZI232H	4 64 CT FAN 903	IPAC INPT	D M	10 1	169 R	1 N	HI SPD FN OFF	N N	2 Y	R G	
623	ZI450	9 67 AMONA PP	IPAC INPT	D M	10 1	179 R	1 N	AMM ON PP OFF	N N	2 Y	R G	
624	ZI232L	4 64 CT FAN 903	IPAC INPT	D M	10 1	167 R	1 N	LO SPD FN OFF	N N	2 Y	R G	
625	ZI213H	4 64 CT FAN 902	IPAC INPT	D M	10 1	164 R	1 N	HI SPD FN OFF	N N	2 Y	R G	
626	ZI213L	4 64 CT FAN 902	IPAC INPT	D M	10 1	162 R	1 N	LO SPD FN OFF	N N	2 Y	R G	
627	ZI676	21 84AFT 3FXT DRN	IPAC MILP	D M	10 1	126 R	1 N	MOVOPN MOV CL	N N	2 Y	R G	
628	XIH213	4 64 CT FAN 902	IPAC INPT	D M	10 1	160 R	1 N	VIB HI NORMAL	Y Y	1 Y	R G	
629	ZI675	25 0 AFT 2FXT DRN	IPAC MILP	D M	10 1	123 R	1 N	MOV OP MOV CL	N N	2 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
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REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUETY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
630	LIL213	4 64 CT FAN 902	IPAC INPT	D M	10 1	159 R	1 N	OIL LO NORMAL	Y Y	1 Y	R C	
631	ZI652	18 85AFT 4EXT DRN	IPAC MILP	D M	10 1	120 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
632	IIH213	CTFAN902	IPAC INPT	D M	10 1	158 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
633	ZI650	21 0 BEF 3EXT DRN	IPAC MILP	D M	10 1	117 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
634	XIH208	4 64 CT FAN 901	IPAC INPT	D M	10 1	156 R	1 N	VIB HI NORMAL	Y Y	1 Y	R G	
635	ZI637	18 85BFR 4EXT DRN	IPAC MILP	D M	10 1	114 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
636	LIL208	4 64 CT FAN 901	IPAC INPT	D M	10 1	155 R	1 N	OIL LO NORMAL	Y Y	1 Y	R G	
637	ZI623	26 0 AFT 1EXT DRN	IPAC MILP	D M	10 1	111 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
638	ZI617	36 TG MN ST DR	IPAC MILP	D M	10 1	108 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
639	IIH208	CTFAN901	IPAC INPT	D M	10 1	154 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
640	ZI5002	A01-2	IPAC INPT	D M	10 1	65 R	1 N	OVLTRP NORMAL	N Y	1 N	R G	
641	ZI208H	4 64 CT FAN 901	IPAC INPT	D M	10 1	151 R	1 N	HI SPD FN OFF	N N	2 Y	R G	
642	JAI5250	60 LUBUS PWR LOSS	IPAC INPT	D M	9 1	125 R	1 N	PWROFF PWR ON	Y Y	1 N	R G	
643	ZI208L	4 64 CT FAN 901	IPAC INPT	D M	10 1	150 R	1 N	LO SPD FN OFF	N N	2 Y	R G	
644	ZI616	36 TG AD ST DR	IPAC MILP	D M	10 1	105 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
645	ZI615	25 0 BEF 2EXT DRN	IPAC MILP	D M	10 1	102 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
646	IIH5009	78 4KV HELO 2-E	IPAC INPT	D M	2 1	190 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	

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SIZE

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REV

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SHEET

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LOOP	TAG	DESCR PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
647	IIH630	18 00 4EXT MOV	IPAC INPT	D M	10 1	147 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
648	ZI609	26 0 BFF 1EXT DRN	IPAC MILP	D M	10 1	99 P	1 N	MOV OP MOV CL	N N	2 Y	R G	
649	ZI630	18 #5 4EXT MOV	IPAC MILP	D M	10 1	145 R	1 N	EXT OP EXT CL	N N	2 Y	R G	
650	EIL5015	77 480V B02 UV	IPAC INPT	D M	10 1	136 R	1 N	BUS UV NORMAL	N Y	1 Y	R G	
651	JIH71	22 0 AXB FP	IPAC INPT	D M	10 1	95 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
652	ZI71	22 72 AXB FP	IPAC MILP	D M	10 1	93 R	1 N	XRP ON PP OFF	N N	2 Y	R G	
653	IIH5008	22 0 4K AXB BKR	IPAC INPT	D M	2 1	185 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
654	IIH991	35 STM LP SL DR	IPAC INPT	D M	10 1	88 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
655	ZI628	21 00 3EXT MOV	IPAC MILP	D M	10 1	141 R	1 N	EXT OP EXT CL	N N	2 Y	R G	
656	IIH5007	78 4KV HELO 1-W	IPAC INPT	D M	2 1	181 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
657	IIH626	25 00 2EXT MOV	IPAC INPT	D M	10 1	139 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
658	ZI991	35 STM LP SL DR	IPAC MILP	D M	10 1	86 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
659	IIH990	35 OSEAL HP SL DR	IPAC INPT	D M	10 1	84 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
660	IIH5006	77 0 4K CTX1 BKR	IPAC INPT	D M	2 1	178 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
661	ZI626	25 00 2EXT MOV	IPAC MILP	D M	10 1	137 R	1 N	EXT OP EXT CL	N N	2 Y	R G	
662	ZI990	35 OSEAL HP SL DR	IPAC MILP	D M	10 1	82 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
663	IIH44	RFP	IPAC INPT	D M	2 1	174 S	1 N	OVLTRP NORMAL	N Y	1 N	R G	

MC DONNELL DOUGLAS AERONAUTICS CO.  
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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI 'AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
664	IIH624	26 00 1EXT MOV	IPAC INPT	D M	10 1	135 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
665	IIH982	35 TURB STM SEAL	IPAC INPT	D M	10 1	80 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
666	IIH5004	76 0 4K LD CTR A	IPAC INPT	D M	2 1	170 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
667	ZI624	26 82 1EXT MOV	IPAC MILP	D M	10 1	133 R	1 N	EXT OP EXT CL	N N	2 Y	R G	
668	ZI982	3581TURB STM SEAL	IPAC MILP	D M	10 1	78 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
669	IIH5003	75 4KV SX1 BKR	IPAC INPT	D M	2 1	166 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
670	IIH960	35 SEAL EXCS STM	IPAC INPT	D M	10 1	76 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
671	ZI999	36 TG AD ST DR	IPAC MILP	D M	10 1	130 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
672	IIH5001	74 0 4KV A01-2FDR	IPAC INPT	D M	2 1	162 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
673	ZI960	35 SEAL EXCS STM	IPAC MILP	D M	10 1	74 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
674	ZY260	CRCPP905	IPAC INPT	D M	2 1	160 S	1 N	TEST NORMAL	N N	2 N	R G	
675	IIH935	35 STM SEAL DR	IPAC INPT	D M	10 1	72 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
676	IIH140	15 00CON VAC BRKR	IPAC INPT	D M	2 1	158 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
677	HS242A	3 63 SO. CIRC	MCON OUTP	D C	15 3	77 S	1 N	START STOP	N N	2 N	R G	
678	ZI935	35 STM SEAL DR	IPAC MILP	D M	10 1	70 R	1 N	MOVOPN MOV CL	N N	2 Y	R G	
679	IIH110	15 FW BYP	IPAC INPT	D M	2 1	157 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
680	HS260A	3 63 NO. CIPC	MCON OUTP	D C	15 3	76 S	1 N	START STOP	N N	2 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DFV AD	INT AD HWY TY	SCAN POST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	GN CLR OF CLF	HY1 CLR HY2 CLF
681	IIH906	36 TG MN ASD	IPAC INPT	D M	10 1	68 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
682	IIH506	81 0 TS FW PP	IPAC INPT	D M	2 1	156 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
683	ZI906	36 78 TG MN ASD	IPAC MILP	D M	10 1	66 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
684	ZI131	16 65 COND PP	IPAC INPT	D M	10 1	177 R	1 N	PMP ON PP OFF	N N	2 Y	R G	
685	ZY242	CRCPP906	IPAC INPT	D M	10 1	64 R	1 N	TEST NORMAL	N N	2 Y	R G	
686	IIH155	15 CONU A-R-PP	IPAC INPT	D M	2 1	147 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
687	HS222	3 63 CW P905 MOV	MCON OUTP	D C	15 3	74 S	1 N	OPNMOV CL MOV	N N	2 N	G G	
688	IIH856	34 EH P938B	IPAC INPT	D M	2 1	142 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	
689	IIH905	36 TG MN BSD	IPAC INPT	D M	10 1	63 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
690	HS243	3 63 CW P906 MOV	MCON OUTP	D C	15 3	73 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
691	ZI905	36 78 TG MN BSD	IPAC MILP	D M	10 1	61 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
692	IIH524A	1 61 AIR COMP 901	IPAC INPT	D M	10 1	161 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
693	ZI506	81 93 TS FW PP	IPAC INPT	D M	10 1	26 R	1 N	CLOSED OPEN	N N	2 Y	R G	
694	IIH904	36 TG AD ASD	IPAC INPT	D M	10 1	60 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
695	LIH804	8 DEM SUMP	IPAC INPT	D M	2 1	140 S	1 N	HI LVL NORMAL	Y Y	1 N	R G	
696	ZI446	E 91 R F PUMP	IPAC INPT	D M	10 1	25 R	1 N	RFP ON PP OFF	Y N	1 Y	R G	
697	ZI904	36 TG AD ASD	IPAC MILP	D M	10 1	58 R	1 N	OPEN CLOSED	N N	2 Y	R G	

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REV

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SHEET

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LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PF INV D	ON CLP OF CLR	HY1 CLR HY2 CLR
698	HS209	4 00 CT SPRAY	MCON OUTP	D C	15 3	69 S	1 N	SPRAY DRY	N N	2 N	R G	
699	UI689	22 72 AXR TREL	IPAC INPT	D M	2 1	138 S	1 N	TROUBL NORMAL	Y Y	1 N	R G	
700	IIH903	36 78 TG AD BSD	IPAC INPT	D M	10 1	57 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
701	HS858A	34 NO.EH PP	MCON OUTP	D C	15 3	67 S	1 N	START STOP	N N	2 N	R G	
702	EAT5100	60 GEN VOLT BAL	IPAC INPT	D M	2 1	177 S	1 N	CFVB NORMAL	Y Y	1 N	R G	
703	HS856A	34 SO.EH PP	MCON OUTP	D C	15 3	66 S	1 N	START STOP	Y Y	2 N	R G	
704	PDAH405	11 00 IL DEM DP	IPAC INPT	D M	2 1	136 S	1 N	DPHI NORMAL	Y Y	1 N	R G	
705	HS958	3581SEAL EXH PP	MCON OUTP	D C	15 3	63 S	1 N	START STOP	N N	2 N	R G	
706	PDAH407	11 00 IL DEM 1 DP	IPAC INPT	D M	2 1	135 S	1 N	V901HI NORMAL	Y Y	1 N	R G	
707	HS450	9 00 AMONA PP	MCON OUTP	D C	15 3	61 S	1 N	START STOP	N N	2 N	R G	
708	HS449	9 00 HYDRZ PP	MCON OUTP	D C	15 3	60 S	1 N	START STOP	N N	2 N	R G	
709	ZI903	36 78 TG AD BSD	IPAC MILP	D M	10 1	55 R	1 N	MOV DP MOV CL	N N	2 Y	R G	
710	HS207	6 64 PMP CT ACTD	MCON OUTP	D C	15 3	59 S	1 N	START STOP	N N	2 N	R G	
711	PDAH448	11 00 IL DEM 2 DP	IPAC INPT	D M	2 1	134 S	1 N	V902HI NORMAL	Y Y	1 N	R G	
712	HS232H	4 64 CT EAST FAN	MCON OUTP	D C	15 3	57 S	1 N	STARTH STOP	N N	2 N	R G	
713	IIH229	4 00 CTBP MOV	IPAC INPT	D M	10 1	54 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
714	IIH313	2 00 RCW PMP	IPAC INPT	D M	2 1	132 S	1 N	OVLTRP NORMAL	Y Y	1 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/O C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DFS	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
715	HS232L	4 64 CT EAST FAN	MCON OUTP	D C	15 3	56 S	1 N	STARTL STOP	N N	2 N	R G	
716	HS856AM	34 EH P938B	MCON OUTP	D C	15 3	68 S	1 N	AUTO MAN	N N	2 N	Y G	
717	ZI229	4 63 CTBP MOV	IPAC MILP	D M	10 1	52 P	1 N	MOV OP MOV CL	N N	2 Y	R G	
718	HS858AM	34 EH P938A	MCON OUTP	D C	15 3	65 S	1 N	AUTO MAN	N N	2 N	Y G	
719	IIH242	3 00 CW P906	IPAC INPT	D M	10 1	51 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
720	HS208H	4 64 CT CTR FAN	MCON OUTP	D C	15 3	51 S	1 N	STARTH STOP	N N	2 N	R G	
721	ZI140	15 86CON VAC BRKR	IPAC MILP	D M	10 1	49 R	1 N	MOVOPN MOV CL	N N	2 Y	R G	
722	HS208L	4 64 CT CTR FAN	MCON OUTP	D C	15 3	50 S	1 N	STARTL STOP	N N	2 N	R G	
723	ZI242	3 63 SO.CTRC	IPAC INPT	D M	10 1	48 R	1 N	906 ON PP OFF	N N	2 Y	R G	
724	HS630	18 85 4EXT MOV	MCON OUTP	D C	15 3	48 S	1 N	OPNEXT CL EXT	N N	2 N	R G	
725	HS625	26 82 1EXT NRV	MCON OUTP	D C	15 3	98 S	1 N	OPNRV CL NRV	N N	2 N	R G	
726	HS628	21 84 3EXT MOV	MCON OUTP	D C	15 3	47 S	1 N	OPNEXT CL EXT	N N	2 N	R G	
727	ZI5008	22 91 4K AXB BKR	IPAC INPT	D M	10 1	65 R	1 N	CLOSED OPEN	Y N	1 Y	R G	
728	HS626	25 83 2EXT MOV	MCON OUTP	D C	15 3	46 S	1 N	OPNEXT CL EXT	N N	2 N	R G	
729	ZI260	3 63 NO.CIRC	IPAC INPT	D M	10 1	182 R	1 N	905 ON PP OFF	N N	2 Y	R G	
730	HS624	26 82 1EXT MOV	MCON OUTP	D C	15 3	44 S	1 N	OPNEXT CL EXT	N N	2 N	R G	
731	HS999	36 78 TG AD ST DR	MCON OUTP	D C	15 3	43 S	1 N	OPNMOV CL MOV	N N	2 N	R G	

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REV

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SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
732	HS676	21 84AFT 3EXT DRN	MCON OUTP	D C	15 3	42 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
733	HS675	25 83AFT 2EXT DRN	MCON OUTP	D C	15 3	40 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
734	HS652	18 85AFT 4EXT DRN	MCON OUTP	D C	15 3	39 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
735	HS650	21 84BEF 3EXT DRN	MCON OUTP	D C	15 3	38 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
736	HS637	18 85BFR 4EXT DRN	MCON OUTP	D C	15 3	35 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
737	HS941	36 78 CSBP DRN	MCON OUTP	D C	15 3	36 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
738	USI820	33 DC LO PP	IPAC INPT	D M	9 1	136 R	1 N	AUTO MANUAL	N Y	1 N	R G	
739	ZI858	34 EH P938A	IPAC INPT	D M	6 1	176 S	1 N	EHA ON PP OFF	Y Y	2 N	R G	
740	IIH628	21 00 3EXT MOV	IPAC INPT	D M	10 1	143 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
741	IIH232	CTFAN903	IPAC INPT	D M	10 1	172 R	1 N	OVLTRP NORMAL	Y Y	1 Y	R G	
742	HS213H	4 64 CT WEST FAN	MCON OUTP	D C	15 3	54 S	1 N	STARTR STOP	N N	2 N	R G	
743	HS213L	4 64 CT WEST FAN	MCON OUTP	D C	15 3	53 S	1 N	STARTR STOP	N N	2 N	R G	
744	HS71	22 72 AXB FP	MCON OUTP	D C	15 3	3 S	1 N	ENABLE DISABL	N N	2 N	R G	
745	HS31	22 72 AXB FEED	MCON OUTP	D C	15 3	2 S	1 Y	OPN VV CL VV	N N	2 N	R G	
746	HS1	22 72 TSS FEED	MCON OUTP	D C	15 3	1 S	1 Y	OPN VV CL VV	N N	2 N	R G	
747	HS155	15 86COM A-R-PP	MCON OUTP	D C	15 3	24 S	1 N	START STOP	N N	2 N	R G	
748	HS313	2 62 BCW PMP	MCON OUTP	D C	15 3	23 S	1 N	START STOP	N N	2 N	R G	

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REV

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SHEET

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LOOP	TAG	DFSCRI PTTON	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
749	HS991	3581 STM LP SL DR	MCON OUTP	D C	15 3	20 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
750	HS990	3581SEAL HP SL DR	MCON OUTP	D C	15 3	19 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
751	HS982	3581TURB STM SEAL	MCON OUTP	D C	15 3	17 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
752	HS960	3581SEAL EXCS STM	MCON OUTP	D C	15 3	16 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
753	TTRIP	49 0 UNIT TRP	IPAC INPT	D M	10 1	128 R	1 N	T TRIP NORMAL	Y Y	1 Y	R G	
754	YI5555	FIREPANL FIREALRM	IPAC INPT	D M	9 1	151 R	1 N	FIRE NORMAL	Y Y	1 N	R G	
755	ZI715	12 68 DSOLV 02	IPAC INPT	D M	9 1	107 R	1 N	DEA 1 HTR	N N	2 N	R G	
756	HS904	36 78 TG AD ASD	MCON OUTP	D C	15 3	11 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
757	HS903	36 78 TG AD BSD	MCON OUTP	D C	15 3	9 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
758	HS229	4 63 CTBP MOV	MCON OUTP	D C	15 3	8 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
759	HS140	15 86CON VAC BRKR	MCON OUTP	D C	15 3	7 S	1 N	OPNMOV CL MOV	N N	1 N	G G	
760	HS110	15 87 FW BYPAS	MCON OUTP	D C	15 3	6 S	4 N	OPEN CLOSE	N N	2 N	R G	
761	HS617	36 MN ST DR	MCON OUTP	D C	15 3	31 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
762	HS609	26 82BEF TEXT DRN	MCON OUTP	D C	15 3	27 S	1 N	OPNMOV CL MOV	N N	2 N	R G	
763	M4-3	EPGSSTN4 RMT MUX3	MLD IPAC		9 1		1 N					G G
764	C4-1	EPGSSTN4 RMTCTLR1	MLD MVCU		1 1		1 N					G G
765	M4-2	EPGSSTN4 RMT MUX2	MLD IPAC		6 1		1 N					G G

MCBONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCBONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48187

REV

A

SHEET

60

LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	OT AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
766	M4-1	EPGSSTN4 RMT MUX1	MLD IPAC		2 1		1 N					G G
767	ZI110	15 FW BYPAS	IPAC MILP	D M	10 1	46 R	1 N	MOV OP MOV CL	N N	2 Y	R G	
768	ME-3	EPGSSTN4 ILS MUX3	MLD IPAC		10 1		1 N					G G

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 61	

LINE ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-1 HIGHWAY NO. 1 DEVICE 1

1	01 PID NORMAL	OUT 33 IN1 1 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.998 0.000 0.390 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
2	01 PID NORMAL	OUT 49 IN1 2 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	4.000 0.998 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
3	07 ADD / SUBTRACT	OUT 50 IN1 49 IN2 67 IN3 68 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 -1.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 2			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
4	04 AUTO MANUAL	OUT 34 IN1 50	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 3			IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
5	01 PID NORMAL	OUT 35 IN1 2 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	4.000 0.998 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E F GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
6	01 PID NORMAL	OUT 36 IN1 3 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.998 0.000 0.390 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
7	01 PID NORMAL	OUT 37 IN1 4 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 4.999 0.000 0.100 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 10.90 SP RMP RAT 0.00
8	01 PID NORMAL	OUT 38 IN1 4 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 0.998 0.000 0.100 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT Y PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 24.98 OUT RMP RA 19.90 SP RMP RAT 0.00
9	07 ADD / SUBTRACT	OUT 51 IN1 24 IN2 26 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	2.531 -1.000 0.000 0.000 18.657	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0			OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. WORTHINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 62	



LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-1										HIGHWAY NO.	1	DEVICE	1
10	01 PID NORMAL	OUT 48 IN1 25 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	24.000 1.996 0.000 0.390 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	N D P Y Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00				
11	13 FUNCTION GENERATOR	OUT 67 IN1 51			A N 0 4	Y0 99.98 X1 13.28 Y1 99.98 X2 19.98	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00					
12	13 FUNCTION GENERATOR	OUT 68 IN1 26			A N 0 4	Y0 0.00 X1 58.66 Y1 0.00 X2 66.67	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00					
15	01 PID NORMAL	OUT 45 IN1 26 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 1.497 0.000 0.390 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	N R E Y Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 13 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 4.88 SP RMP RAT 0.00				
17	10 HIGH SELECTOR	OUT 54 IN1 5 IN2 6 IN3 7 IN4 0	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
18	10 HIGH SELECTOR	OUT 55 IN1 8 IN2 9 IN3 10 IN4 0	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 63	

LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-1										HIGHWAY NO.	1	DEVICE	1				
19	10 HIGH SELECTOR	OUT 56 IN1 54 IN2 55 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00				
20	01 PID NORMAL	OUT 39 IN1 56 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.449 0.998 0.000 0.390 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT Y PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 79.98 0.00 0.00							
21	01 PID NORMAL	OUT 42 IN1 22 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	3.000 0.096 0.000 0.390 0.000	AUTO/MAN M PV INVERTED N HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG Y BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00							
22	01 PID NORMAL	OUT 40 IN1 21 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	3.000 0.096 0.000 0.390 0.000	AUTO/MAN M PV INVERTED N HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG Y BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00							
23	05 MANUAL LOADER	OUT 44 IN1 0	OUTPUT LIMITING	N	PV LO ALARM	0.00	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00						
24	12 SQUARE ROOT	OUT 57 IN1 29	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
25	12 SQUARE ROOT	OUT 58 IN1 30	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
26	12 SQUARE ROOT	OUT 59 IN1 31	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
27	12 SQUARE ROOT	OUT 60 IN1 32	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUTPUT LIMITING	N	IN LO ALARM	0.00	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 64	

LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-1										HIGHWAY NO.	1	DEVICE	1
28	07 ADD / SUBTRACT	OUT 52	K1(GAIN)	-0.535	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 57	K2(GAIN)	-0.785	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 58	K3(GAIN)	0.461	BACK CALCULATION	N	OUT RAMP RATE	0.00						
		IN3 59	K4(GAIN)	1.000	BACK CALC POINTER	0								
		IN4 60	K5(BIAS)	49.988										
29	01 PID NORMAL	OUT 53	K1(GAIN)	4.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00			
		IN1 25	K2(RESET)	0.499	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	64.98			
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E P	OUT LIMIT Y	SP HI ALARM	99.98	OUT RMP RA	0.00			
		IN3 0	K4(FILTER)	0.390	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00			
		IN4 0	K5	49.988	CON/NORM C	RESET ENABLED Y	BACK CALC N	PV HI ALARM	99.98					
30	07 ADD / SUBTRACT	OUT 66	K1(GAIN)	0.699	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 53	K2(GAIN)	0.297	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 52	K3(GAIN)	0.000	BACK CALCULATION	Y	OUT RAMP RATE	0.00						
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	29								
		IN4 0	K5(BIAS)	49.988										
31	04 AUTO MANUAL	OUT 47	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00						
		IN1 66			OUTPUT LIMITING	Y	IN HI ALARM	0.00						
					BACK CALCULATION	Y	OUT LO ALARM	0.00						
					BACK CALC POINTER	30	OUT HI ALARM	99.98						
						OUT RAMP RATE	19.90							
32	09 DIVIDER	OUT 63	K1(GAIN)	0.422	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 24	K2(NUMBIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 23	K3(DENBIAS)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00						
			K5(BIAS)	0.000	BACK CALC POINTER	0								
33	09 DIVIDER	OUT 64	K1(GAIN)	0.367	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 26	K2(NUMBIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 24	K3(DENBIAS)	13.578	BACK CALCULATION	N	OUT RAMP RATE	0.00						
			K5(BIAS)	0.000	BACK CALC POINTER	0								
34	09 DIVIDER	OUT 65	K1(GAIN)	0.332	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 17	K2(NUMBIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 26	K3(DENBIAS)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00						
			K5(BIAS)	0.000	BACK CALC POINTER	0								
36	07 ADD / SUBTRACT	OUT 71	K1(GAIN)	0.098	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 52	K2(GAIN)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	0.00						
		IN2 0	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00						
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0								
		IN4 0	K5(BIAS)	0.000										

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 65	

LINE

ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-1

HIGHWAY NO. 1 DEVICE 1

37	01 PID NORMAL	OUT 70	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 71	K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD N	BACK CALC N	PV HI ALARM 99.98	
38	01 PID NORMAL	OUT 80	K1(GAIN)	10.000	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
		IN1 25	K2(RESET)	0.499	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 0.00	OUT HI AL 87.99
		IN2 70	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT Y	SP HI ALARM 99.98	OUT RMP RA 0.00
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.00
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
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DIGITAL CONFIGURATION TABLE    CCM#3    MVCU C4-1    HIGHWAY NO. 1    DEVICE 1

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148	09 TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y
				INPUT2	0	SET    2			IN2 INV	Y
				INPUT3	0	AUTO/MAN    A			IN3 INV	Y
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN    A	OUT INV	N	IN1 INV	N
				INPUT2	0				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN    A			IN1 INV	Y
				INPUT2	0				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS			REV A	SHEET 83	

MODE TRANSFER CONFIGURATIONS CCM#3 MVCU C4-1

HIGHWAY NO. 1 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
1				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	5
	4	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	5	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
	6	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	13
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	16
	8	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	10
	9	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	20
	10	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	21
	11	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
	12	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	31
2				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	5
	4	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	5	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
	6	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	13
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	16
	8	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	10
	9	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	20
	10	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	21
	11	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
	12	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	31

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048187

REV

A

SHEET

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LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-2										HIGHWAY NO.	1	DEVICE	2	
1	01 PID	OUT 39	K1(GAIN)	2.000	AUTO/MAN	A	PV INVERTED	N	RATE ENAB	N	BAK CALC	PT	0	OUT LO AL	0.00
	NORMAL	IN1 9	K2(RESET)	1.199	HI DY LM	N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98	
		IN2 65	K3(RATE)	0.000	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	99.98	OUT RMP RA	9.89	
		IN3 0	K4(FILTER)	0.390	CASCADE	Y	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	9.89	
		IN4 0	K5	49.988	CON/NORM	N	RESET ENABLD	Y	BACK CALC	N	PV HI ALARM	99.98			
2	01 PID	OUT 38	K1(GAIN)	6.000	AUTO/MAN	M	PV INVERTED	N	RATE ENAB	N	BAK CALC	PT	0	OUT LO AL	0.00
	NORMAL	IN1 64	K2(RESET)	1.996	HI DY LM	N	DIRECT/REV	D	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98	
		IN2 0	K3(RATE)	0.000	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	99.98	OUT RMP RA	9.89	
		IN3 0	K4(FILTER)	0.390	CASCADE	N	GAIN ENABLED	Y	PV TRACKG	Y	PV LO ALARM	0.00	SP RMP RAT	9.89	
		IN4 0	K5	49.988	CON/NORM	C	RESET ENABLD	Y	BACK CALC	N	PV HI ALARM	99.98			
3	01 PID	OUT 35	K1(GAIN)	6.000	AUTO/MAN	A	PV INVERTED	N	RATE ENAB	N	BAK CALC	PT	0	OUT LO AL	0.00
	NORMAL	IN1 5	K2(RESET)	1.996	HI DY LM	N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98	
		IN2 0	K3(RATE)	0.000	LO DY LM	N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	99.98	OUT RMP RA	4.88	
		IN3 0	K4(FILTER)	0.390	CASCADE	N	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	4.88	
		IN4 0	K5	0.000	CON/NORM	C	RESET ENABLD	Y	BACK CALC	N	PV HI ALARM	99.98			
4	05 MANUAL	OUT 46	OUTPUT LIMITING		N	PV LO ALARM	0.00	OUT LO ALARM	0.00						
	LOADER	IN1 0				PV HI ALARM	99.98	OUT HI ALARM	99.98			OUT RAMP RATE	0.98		
5	04 AUTO	OUT 44	K5(BIAS)	0.000	AUTO/MANUAL	M					IN LO ALARM	0.00			
	MANUAL	IN1 0				OUTPUT LIMITING	N				IN HI ALARM	99.98			
						BACK CALCULATION	N				OUT LO ALARM	0.00			
						BACK CALC POINTER	0				OUT HI ALARM	99.98			
											OUT RAMP RATE	0.00			
6	01 PID	OUT 47	K1(GAIN)	1.000	AUTO/MAN	M	PV INVERTED	N	RATE ENAB	N	BAK CALC	PT	0	OUT LO AL	29.99
	NORMAL	IN1 27	K2(RESET)	0.998	HI DY LM	N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	59.98	
		IN2 0	K3(RATE)	0.000	LO DY LM	N	RATE ON PV/E	P	OUT LIMIT	Y	SP HI ALARM	99.98	OUT RMP RA	0.98	
		IN3 0	K4(FILTER)	0.390	CASCADE	N	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.98	
		IN4 0	K5	49.988	CON/NORM	C	RESET ENABLD	Y	BACK CALC	N	PV HI ALARM	99.98			
7	05 MANUAL	OUT 43	OUTPUT LIMITING		N	PV LO ALARM	0.00	OUT LO ALARM	0.00						
	LOADER	IN1 0				PV HI ALARM	99.98	OUT HI ALARM	99.98			OUT RAMP RATE	0.00		
8	01 PID	OUT 48	K1(GAIN)	1.000	AUTO/MAN	M	PV INVERTED	N	RATE ENAB	N	BAK CALC	PT	0	OUT LO AL	29.99
	NORMAL	IN1 30	K2(RESET)	0.998	HI DY LM	N	DIRECT/REV	R	SP LIMITG	Y	SP LO ALARM	0.00	OUT HI AL	59.98	
		IN2 0	K3(RATE)	1.000	LO DY LM	N	RATE ON PV/E	P	OUT LIMIT	Y	SP HI ALARM	99.98	OUT RMP RA	0.98	
		IN3 0	K4(FILTER)	0.390	CASCADE	N	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.98	
		IN4 0	K5	49.988	CON/NORM	C	RESET ENABLD	Y	BACK CALC	N	PV HI ALARM	99.98			
9	07 ADD /	OUT 49	K1(GAIN)	1.262	AUTO/MANUAL	A					OUT LO ALARM	0.00			
	SUBTRACT	IN1 10	K2(GAIN)	-1.000	OUTPUT LIMITING	N					OUT HI ALARM	99.98			
		IN2 4	K3(GAIN)	0.000	BACK CALCULATION	N					OUT RAMP RATE	0.00			
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0									
		IN4 0	K5(BIAS)	10.745											

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 96	

LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-2				HIGHWAY NO.	1	DEVICE	2	
10	07 ADD / SUBTRACT	OUT 50	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	
		IN1 2	K2(GAIN)	-1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
		IN2 1	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0			
		IN4 0	K5(BIAS)	49.988					
11	07 ADD / SUBTRACT	OUT 51	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	
		IN1 4	K2(GAIN)	-1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
		IN2 3	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0			
		IN4 0	K5(BIAS)	49.988					
12	07 ADD / SUBTRACT	OUT 52	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	
		IN1 11	K2(GAIN)	-1.168	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
		IN2 8	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0			
		IN4 0	K5(BIAS)	33.309					
13	07 ADD / SUBTRACT	OUT 53	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	
		IN1 8	K2(GAIN)	-1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
		IN2 7	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0			
		IN4 0	K5(BIAS)	49.988					
14	13 FUNCTION GENERATOR	OUT 65	AUTO/MANUAL	A	Y0 29.99	Y2 44.98	Y4 0.00	OUT RAMP RATE	0.00
		IN1 22	BACK CALCULATION	N	X1 79.98	X3 0.00	X5 0.00		
			BACK CALC POINTER	0	Y1 44.98	Y3 0.00	Y5 0.00		
			NO. OF POINTS	3	X2 0.00	X4 0.00	Y6 0.00		
18	13 FUNCTION GENERATOR	OUT 58	AUTO/MANUAL	A	Y0 60.83	Y2 66.67	Y4 71.16	OUT RAMP RATE	0.00
		IN1 29	BACK CALCULATION	N	X1 16.78	X3 49.99	X5 83.17		
			BACK CALC POINTER	0	Y1 63.98	Y3 68.99	Y5 72.99		
			NO. OF POINTS	7	X2 33.19	X4 66.79	Y6 74.65		

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048187

REV

A

SHEET

97

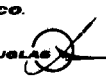


LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-2										HIGHWAY NO.	1	DEVICE	2
19	07 ADD / SUBTRACT	OUT 40 IN1 11 IN2 58 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	3.000 -3.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
20	13 FUNCTION GENERATOR	OUT 59 IN1 31	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 48.60 X1 11.09 Y1 50.28 X2 22.20	Y2 51.79 X3 33.31 Y3 53.09 X4 55.53	Y4 55.58 X5 77.75 Y5 57.68 Y6 59.58	OUT RAMP RATE	0.00					
21	07 ADD / SUBTRACT	OUT 41 IN1 59 IN2 10 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	-2.000 2.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
22	13 FUNCTION GENERATOR	OUT 70 IN1 16	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 0.10 X1 15.04 Y1 0.39 X2 24.98	Y2 0.98 X3 32.53 Y3 1.98 X4 42.47	Y4 4.98 X5 49.99 Y5 9.99 Y6 74.99	OUT RAMP RATE	0.00					
23	01 PID NORMAL	OUT 63 IN1 32 IN2 60 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 1.996 0.000 0.390 49.988	AUTO/MAN H HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.98 0.98			
24	13 FUNCTION GENERATOR	OUT 61 IN1 21	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 99.98 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00					
25	09 DIVIDER	OUT 62 IN1 32 IN2 61	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
26	01 PID NORMAL	OUT 45 IN1 23 IN2 63 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 1.996 0.000 0.000 49.988	AUTO/MAN H HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG Y BACK CALC Y	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	23 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.98 0.98			
27	13 FUNCTION GENERATOR	OUT 64 IN1 6	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 0.00 X1 19.98 Y1 9.99 X2 39.98	Y2 39.98 X3 59.98 Y3 59.98 X4 79.98	Y4 89.99 X5 99.98 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00					

McDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
McDONNELL DOUGLAS		REV A	SHEET 98	

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LINE	ANALOG CONFIGURATION TABLE CCM#3 MVCU C4-2				HIGHWAY NO.	1	DEVICE	2		
28	16 DUAL RATE ALARM	OUT1 65	K1(A-ALARM)	8.523	AUTO/MANUAL					
		OUT2 0	K2(B-ALARM)	-8.547					A ALARM MODE	H
		IN1 18	K3(A-DEADB)	0.830					B ALARM MODE	L
			K4(B-DEADB)	0.830						
30	06 INTEGRATOR TOTALIZER	IN1 32	K1(CNTRATE)	102.398	99.976 AUTO/MANUAL					
			K2	0.000					PV LO ALARM	0.00
			K3	0.000					PV HI ALARM	0.00
			K4							
			K5	0.000						

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS 		REV A	SHEET 99	



LINE	DIGITAL CONFIGURATION TABLE				CCM#3	MVCU C4-2	HIGHWAY NO.	1	DEVICE	2				
148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT	INV	N	IN1	INV	Y	
					INPUT2	0	SET				IN2	INV	Y	
					INPUT3	0	AUTO/MAN	A			IN3	INV	Y	
149	04	OR	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT	INV	N	IN1	INV	N
	TRIG	LOG			INPUT2	0						IN2	INV	Y
					INPUT3	0						IN3	INV	Y
					INPUT4	0						IN4	INV	Y
					INPUT5	0						IN5	INV	Y
150	06	OR	MODE XFR		INPUT1	191	AUTO/MAN	A				IN1	INV	Y
	MODE	XFR	TABLE	2	INPUT2	0						IN2	INV	Y
					INPUT3	0						IN3	INV	Y
					INPUT4	0						IN4	INV	Y
					INPUT5	0						IN5	INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF. MCDONNELL DOUGLAS	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048187
REV	A	SHEET	117

MODE TRANSFER CONFIGURATIONS CCM#3 MVCU C4-2 HIGHWAY NO. 1 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	4
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	8
	6 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	26
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	4
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	6
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	8
	6 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	26
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
3	1 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	4
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	5
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	6
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	7
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	8
	6 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	23
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	26

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048187
MCDONNELL DOUGLAS		REV A	SHEET 118	

## MVCU SUMMARY

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MVCU	REMARK	HIWAY	DEVICE	ANALOG			DIGITAL			MODE XFR			TOTAL NONCOMPARE
				USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	
C4-1		1	1	35	5	0	3	147	0	2	34	0	0
C4-2		1	2	28	12	0	4	146	0	3	33	0	0

## ANOMALY SUMMARY

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I/O PROCESSING = 0 MLD DATA INPUT = +66 ADDED/MISSING MLD = 0 NONCOMPARE = 0

## ANOMALY CODE

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E0000001 = BLANK INBEDDED IN TAG NAME	*NR* = LOOP NOT RESPONDING
E0000010 = EIGHT CHARACTER TAG NAME	MISSING = LOOP MISSING IN CCM
E0000100 = 100% CAL VALUE LESS THAN 0% CAL VALJE	ADDED = LOOP NOT IN COMPARISON FILE
E0001000 = HIGH SET POINT LESS THAN LOW SET POINT	CHNGD-IS = LOCF DIFFERENT THAN COMPARISON
E0010000 = HIGH CONTROL OUTPUT LESS THAN LOW	FILENAME = BASELINE LOOP FOR COMPARISON
E0100000 = INCONSISTENT ALARM SETTING	NNND = LOOP NO. DENOTES COMPARISON FILE
E1000000 = INCONSISTENT ALARM SETTING	
E0000000 = OUT OF RANGE DATA DETECTED	

MCDONNELL DOUGLAS AERONAUTICS PP TAG 3A DESCRIPTION NOTES DRAWING NO. 1D48187

MCDONNELL DOUGLAS  
HUNTINGTON BEACH, CALIF.

EAD CHARACTER

SIZE  
REV B 18355

MCDONNELL DOUGLAS

REV

A

SHEET 110

OSP STATION A  
IPAC TAG: N4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 11 07:46

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

SLOT 1 POINT NO.	CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1	COMPENSATION		
2	THERMOCOUPLE	J	
3	THERMOCOUPLE	J	
4	THERMOCOUPLE	J	
5	THERMOCOUPLE	J	
6	THERMOCOUPLE	J	
7	THERMOCOUPLE	J	
8	THERMOCOUPLE	J	

ANALOG INPUT POINT CONVERSIONS

SLOT 2 POINT NO.	CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
17	THERMOCOUPLE	J	
18	THERMOCOUPLE	J	
19	THERMOCOUPLE	J	
20	LINEAR	1.000	5.011
21	LINEAR	1.000	5.011
22	LINEAR	1.000	5.011
23	LINEAR	1.000	5.011
24	LINEAR	4.500	5.500

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1D48187
MCDONNELL DOUGLAS	REV	A	SHEET 120

OSP STATION A  
IPAC TAG: M4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 11 07:46

IPAC TAG: M4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 11 07:46

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3-	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4-	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION	
	TYPE	VOLTAGE
33	LINEAR	1.000 5.011
34	LINEAR	1.000 5.011
35	LINEAR	1.000 5.011
36	LINEAR	1.000 5.011
37	LINEAR	1.000 5.011
38	LINEAR	1.000 5.011
39	LINEAR	1.000 5.011
40	LINEAR	1.000 5.011

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 4 CONVERSION	
	TYPE	VOLTAGE
49	LINEAR	1.000 5.011
50	LINEAR	1.000 5.011
51	LINEAR	1.000 5.011
52	LINEAR	1.000 5.011
53	LINEAR	1.000 5.011
54	LINEAR	1.000 5.011
55	LINEAR	1.000 5.011
56	LINEAR	1.000 5.011

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 121	



IPAC TAG: M4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 11 07:46

OSP STATION A

IPAC TAG: M4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 23 18:03

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5-	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6-	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

SLOT 5 POINT NO.	CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
65	LINEAR	1.000	5.011
66	LINEAR	1.000	5.011
67	LINEAR	1.000	5.011
68	LINEAR	1.000	5.011
69	LINEAR	1.000	5.011
70	LINEAR	1.000	5.011
71	LINEAR	1.000	5.011
72	UNDEFINED		

ANALOG INPUT POINT CONVERSIONS

SLOT 6 POINT NO.	CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
81	LINEAR	1.000	5.011
82	LINEAR	1.000	5.011
83	LINEAR	1.000	5.011
84	LINEAR	1.000	5.011
85	LINEAR	1.000	5.011
86	LINEAR	1.000	5.011
87	LINEAR	1.000	5.011
88	LINEAR	1.000	5.011

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48187

REV

A

SHEET

122

OSP STATION A  
IPAC TAG: M4-1

IPAC ADDRESS 01 HIGHWAY 02

81 DEC 23 18:04

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7-	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8-	ANALOG INPUT	113 TO 120
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 7 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
97	LINEAR	1.000	5.011
98	LINEAR	1.000	5.011
99	LINEAR	1.000	5.011
100	LINEAR	1.000	5.011
101	LINEAR	1.000	5.011
102	LINEAR	-.2500	5.011
103	LINEAR	-.2500	5.011
104	LINEAR	1.000	5.011

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 8 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
113	UNDEFINED		
114	UNDEFINED		
115	UNDEFINED		
116	UNDEFINED		
117	UNDEFINED		
118	UNDEFINED		
119	UNDEFINED		
120	UNDEFINED		

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1D48187
MCDONNELL DOUGLAS	REV	A	SHEET
			123

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:04

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1	COMPENSATION		
2	LINEAR	1.000	5.011
3	LINEAR	1.000	5.011
4	LINEAR	1.000	5.011
5	LINEAR	1.000	5.011
6	LINEAR	1.000	5.011
7	LINEAR	1.000	5.011
8	LINEAR	4.500	5.500

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 2 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
17	LINEAR	1.000	5.011
18	LINEAR	1.000	5.011
19	LINEAR	1.000	5.011
20	LINEAR	1.000	5.011
21	LINEAR	1.000	5.011
22	LINEAR	1.000	5.011
23	LINEAR	1.000	5.011
24	LINEAR	1.000	5.011

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 124	

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:08

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3-	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4-	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE		0% VOLTAGE	100% VOLTAGE
	POINT NO.	TYPE		
33	33	LINEAR	1.000	5.011
34	34	LINEAR	1.000	5.011
35	35	LINEAR	1.000	5.011
36	36	LINEAR	1.000	5.011
37	37	LINEAR	1.000	5.011
38	38	LINEAR	1.000	5.011
39	39	LINEAR	1.000	5.011
40	40	LINEAR	1.000	5.011

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 4 CONVERSION TYPE		0% VOLTAGE	100% VOLTAGE
	POINT NO.	TYPE		
49	49	LINEAR	1.000	5.011
50	50	LINEAR	1.000	5.011
51	51	LINEAR	1.000	5.011
52	52	LINEAR	1.000	5.011
53	53	LINEAR	1.000	5.011
54	54	LINEAR	1.000	5.011
55	55	LINEAR	1.000	5.011
56	56	LINEAR	1.000	5.011

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 125	

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:08

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5-	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6-	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 5 CONVERSION	
	TYPE	100% VOLTAGE
65	LINEAR	5.011
66	LINEAR	5.011
67	LINEAR	5.011
68	LINEAR	5.011
69	LINEAR	5.011
70	LINEAR	5.011
71	LINEAR	5.011
72	LINEAR	5.011

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 6 CONVERSION	
	TYPE	100% VOLTAGE
81	LINEAR	5.011
82	LINEAR	5.011
83	LINEAR	5.011
84	LINEAR	5.011
85	LINEAR	5.011
86	LINEAR	5.011
87	LINEAR	5.011
88	LINEAR	5.011

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 126	

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:08

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7-	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 7 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
97	THERMOCOUPLE J		
98	THERMOCOUPLE K		
99	THERMOCOUPLE K		
100	THERMOCOUPLE J		
101	LINEAR	1.000	5.011
102	THERMOCOUPLE K		
103	THERMOCOUPLE K		
104	LINEAR	1.000	5.011

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:09

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8-	ANALOG INPUT	113 TO 120
9	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 8 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
113	LINEAR	1.000	5.011
114	LINEAR	1.000	5.011
115	LINEAR	1.000	5.011
116	LINEAR	1.000	5.011
117	LINEAR	1.000	5.011
118	LINEAR	1.000	5.011
119	LINEAR	1.000	5.011
120	LINEAR	1.000	5.011

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48187

REV

A

SHEET

127

OSP STATION A  
IPAC TAG: M4-2

IPAC ADDRESS 01 HIGHWAY 06

81 DEC 23 18:09

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	ANALOG INPUT	97 TO 104
8	ANALOG INPUT	113 TO 120
9-	ANALOG INPUT	129 TO 136
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 9 CONVERSION TYPE	0%	100%
		VOLTAGE	VOLTAGE
129	LINEAR	1.000	5.011
130	LINEAR	1.000	5.011
131	LINEAR	1.000	5.011
132	LINEAR	1.000	5.011
133	LINEAR	1.000	5.011
134	LINEAR	1.000	5.011
135	LINEAR	1.000	5.011
136	LINEAR	1.000	5.011

OSP STATION A  
IPAC TAG: M4-3

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 18:14

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	DIGITAL INPUT	49 TO 64
5	DIGITAL INPUT	65 TO 80
6	DIGITAL INPUT	81 TO 96
7	DIGITAL INPUT	97 TO 112
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0%	100%
		VOLTAGE	VOLTAGE
1	COMPENSATION		
2	THERMOCOUPLE	K	
3	THERMOCOUPLE	K	
4	THERMOCOUPLE	K	
5	THERMOCOUPLE	K	
6	THERMOCOUPLE	K	
7	THERMOCOUPLE	K	
8	THERMOCOUPLE	K	

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 128	

OSP STATION A  
IPAC TAG: M4-3

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 18:15

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	DIGITAL INPUT	49 TO 64
5	DIGITAL INPUT	65 TO 80
6	DIGITAL INPUT	81 TO 96
7	DIGITAL INPUT	97 TO 112
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 2 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
17	LINEAR	1.000	5.011
18	UNDEFINED		
19	UNDEFINED		
20	UNDEFINED		
21	UNDEFINED		
22	UNDEFINED		
23	UNDEFINED		
24	UNDEFINED		

OSP STATION A  
IPAC TAG: M4-3

IPAC ADDRESS 01 HIGHWAY 09

81 DEC 23 18:15

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3-	ANALOG INPUT	33 TO 40
4	DIGITAL INPUT	49 TO 64
5	DIGITAL INPUT	65 TO 80
6	DIGITAL INPUT	81 TO 96
7	DIGITAL INPUT	97 TO 112
8	DIGITAL INPUT	113 TO 128
9	DIGITAL INPUT	129 TO 144
10	DIGITAL INPUT	145 TO 160
11	DIGITAL INPUT	161 TO 176
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
33	LINEAR	1.000	5.011
34	LINEAR	1.000	5.011
35	LINEAR	1.000	5.011
36	LINEAR	1.000	5.011
37	LINEAR	1.000	5.011
38	LINEAR	1.000	5.011
39	LINEAR	1.000	5.011
40	LINEAR	4.500	5.005

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48187
MCDONNELL DOUGLAS		REV A	SHEET 129	




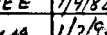

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**DRAWING NO. 1D48188**  
**RECEIVER SYSTEM CCM DATA BASE**

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↓ DWG NO. 1D48188 | SH |

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	SEE E.O.	8-24-82	W.H. Dorr

FINISH	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES  TOLERANCES 2 PLACE DEC ± 3 PLACE DEC ± ANGLES ±	CONTRACT NO.	MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		
		ORIGINAL DATE OF DRAWING 82-01-04	MCDONNELL DOUGLAS 		
ODD DASH NUMBERS SHOWN EVEN DASH NUMBERS OPPOSITE	MATERIAL	FIRST RELEASE OF PRINTS 82-01-14			RECEIVER SYSTEM SDPC DATA BASE
		PREPARED A.B. SMEE 1/4/82			
PART OR IDENT NO.	FOR USAGE DATA SEE ENGINEERING RECORDS	APPROVED  1/7/82	SIZE B	FSCM NO. 18355	DRAWING NO. 1D48188
		CHECKED  1/12/82	DESIGN ACTIVITY APPROVAL	SCALE	SHEET 1 OF 284
		CUSTOMER APPROVAL			

SHEET REVISION RECORD

SHEET NO.	REVISION
1	A
1.1	RESERVE
1.2	A
1.3	A
1.4	A
1.5	A
1.6	A
1.7	A
1.8	A
1.9	A
1.10	A
1.11	A
1.12	A
1.13	A
2	A
3	A
4	A
5	A
6	A
7	A
8	A
9	A
10	A

SHEET REVISION RECORD

SHEET NO.	REVISION
11	A
12	A
13	A
14	A
15	NOT USED
16	A
17	A
18	A
19	A
20	A
21	A
22	A
23	A
24	A
25	A
26	A
27	A
28	A
29	A
30	A
31	A
32	A
33	A

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	<b>1D48/88</b>
REV	A	SHEET 1.2

SHEET REVISION RECORD

SHEET NO.	REVISION
34	A
35	A
36	A
37	A
38	A
39	A
40	A
41	A
42	A
43	A
44	A
45	NOT USED
46	A
47	A
48	A
49	A
50	A
51	A
52	A
53	A
54	A
55	A

SHEET REVISION RECORD

SHEET NO.	REVISION
56	A
57	A
58	A
59	A
60	A
61	A
62	A
63	A
64	A
65	A
66	A
67	A
68	A
69	A
70	A
71	A
72	A
73	A
74	NOT USED
75	NOT USED
76	NOT USED
77	NOT USED
78	NOT USED

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

**1D48188**

REV

**A**

SHEET

**13**

SHEET REVISION RECORD

SHEET NO.	REVISION																			
79	NOT USED																			
80	NOT USED																			
81	NOT USED																			
82	NOT USED																			
83	A																			
84	A																			
85	A																			
86	A																			
87	A																			
88	A																			
89	A																			
90	NOT USED																			
91	NOT USED																			
92	NOT USED																			
93	NOT USED																			
94	NOT USED																			
95	NOT USED																			
96	A																			
97	A																			
98	A																			
99	A																			
100	A																			

SHEET REVISION RECORD

SHEET NO.	REVISION																			
101	A																			
102	A																			
103	A																			
104	A																			
105	A																			
106	A																			
107	A																			
108	NOT USED																			
109	NOT USED																			
110	NOT USED																			
111	NOT USED																			
112	NOT USED																			
113	NOT USED																			
114	NOT USED																			
115	NOT USED																			
116	NOT USED																			
117	A																			
118	A																			
119	A																			
120	A																			
121	A																			
122	A																			
123	A																			

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48188

REV

SHEET

A

1.4

SHEET REVISION RECORD

SHEET NO.	REVISION
124	NOT USED
125	NOT USED
126	NOT USED
127	NOT USED
128	NOT USED
129	NOT USED
130	A
131	A
132	A
133	A
134	A
135	A
136	A
137	A
138	A
139	A
140	A
141	A
142	NOT USED
143	NOT USED
144	NOT USED
145	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
146	NOT USED
147	NOT USED
148	NOT USED
149	NOT USED
150	NOT USED
151	A
152	A
153	A
154	A
155	A
156	A
157	A
158	NOT USED
159	NOT USED
160	NOT USED
161	NOT USED
162	NOT USED
163	NOT USED
164	A
165	A
166	A
167	A
168	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48188

REV

A

SHEET

1.5

SHEET REVISION RECORD

SHEET NO.	REVISION																			
169	A																			
170	A																			
171	A																			
172	A																			
173	A																			
174	A																			
175	A																			
176	NOT USED																			
177	NOT USED																			
178	NOT USED																			
179	NOT USED																			
180	NOT USED																			
181	NOT USED																			
182	NOT USED																			
183	NOT USED																			
184	NOT USED																			
185	A																			
186	A																			
187	A																			
188	A																			
189	A																			
190	A																			

SHEET REVISION RECORD

SHEET NO.	REVISION																			
191	A																			
192	NOT USED																			
193	NOT USED																			
194	NOT USED																			
195	NOT USED																			
196	NOT USED																			
197	A																			
198	A																			
199	A																			
200	A																			
201	A																			
202	A																			
203	A																			
204	A																			
205	A																			
206	A																			
207	A																			
208	A																			
209	A																			
210	NOT USED																			
211	NOT USED																			
212	NOT USED																			
213	NOT USED																			

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	<b>ID 48188</b>
REV	A	SHEET 16

SHEET REVISION RECORD

SHEET NO.	REVISION
214	NOT USED
215	NOT USED
216	NOT USED
217	NOT USED
218	NOT USED
219	A
220	A
221	A
222	A
223	A
224	A
225	A
226	NOT USED
227	NOT USED
228	NOT USED
229	NOT USED
230	NOT USED
231	NOT USED
232	A
233	A
234	A
235	A

SHEET REVISION RECORD

SHEET NO.	REVISION
236	A
237	A
238	A
239	A
240	A
241	A
242	A
243	A
244	NOT USED
245	NOT USED
246	NOT USED
247	NOT USED
248	NOT USED
249	NOT USED
250	NOT USED
251	NOT USED
252	NOT USED
253	A
254	A
255	A
256	A
257	A
258	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

REV

FSCM NO.

**18355**

A

DRAWING NO.

**1D48188**

SHEET

**17**



SHEET REVISION RECORD

SHEET NO.	REVISION
259	
260	NOT USED
261	NOT USED
262	NOT USED
263	NOT USED
264	NOT USED
265	NOT USED
266	A
267	A
268	A
269	A
270	A
271	A
272	A
273	A
274	A
275	A
276	A
277	A
278	NOT USED
279	NOT USED
280	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
281	NOT USED
282	NOT USED
283	NOT USED
284	NOT USED
285	NOT USED
286	NOT USED
287	A
288	A
289	A
290	A
291	A
292	A
293	A
294	NOT USED
295	NOT USED
296	NOT USED
297	NOT USED
298	NOT USED
299	NOT USED
300	A
301	A
302	A
303	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. <b>ID 48188</b>
REV A	SHEET 1.8	

SHEET REVISION RECORD

SHEET NO.	REVISION
304	A
305	A
306	A
307	A
308	A
309	A
310	A
311	A
312	NOT USED
313	NOT USED
314	NOT USED
315	NOT USED
316	NOT USED
317	NOT USED
318	NOT USED
319	NOT USED
320	NOT USED
321	A
322	A
323	A
324	A
325	A

SHEET REVISION RECORD

SHEET NO.	REVISION
326	A
327	A
328	NOT USED
329	NOT USED
330	NOT USED
331	NOT USED
332	NOT USED
333	NOT USED
334	A
335	A
336	A
337	A
338	A
339	A
340	A
341	A
342	A
343	A
344	A
345	A
346	NOT USED
347	NOT USED
348	NOT USED

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
**1D48188**

REV

**A**

SHEET

**1.9**

SHEET REVISION RECORD

SHEET NO.	REVISION
349	NOT USED
350	NOT USED
351	NOT USED
352	NOT USED
353	NOT USED
354	NOT USED
355	A
356	A
357	A
358	A
359	A
360	A
361	A
362	NOT USED
363	NOT USED
364	NOT USED
365	NOT USED
366	NOT USED
367	NOT USED
368	A
369	A
370	A

SHEET REVISION RECORD

SHEET NO.	REVISION
371	A
372	A
373	A
374	A
375	A
376	NOT USED
377	NOT USED
378	NOT USED
379	NOT USED
380	NOT USED
381	NOT USED
382	NOT USED
383	NOT USED
384	NOT USED
385	NOT USED
386	NOT USED
387	NOT USED
388	NOT USED
389	A
390	A
391	A
392	A
393	NOT USED

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
**1D48188**

REV  
**A**

SHEET  
**1.10**

SHEET REVISION RECORD

SHEET NO.	REVISION
394	NOT USED
395	NOT USED
396	NOT USED
397	NOT USED
398	NOT USED
399	NOT USED
400	NOT USED
401	NOT USED
402	A
403	A
404	A
405	NOT USED
406	NOT USED
407	A
408	A
409	NOT USED
410	NOT USED
411	NOT USED
412	NOT USED
413	NOT USED
414	NOT USED
415	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
416	NOT USED
417	NOT USED
418	NOT USED
419	NOT USED
420	NOT USED
421	NOT USED
422	NOT USED
423	A
424	A
425	A
426	NOT USED
427	NOT USED
428	NOT USED
429	NOT USED
430	NOT USED
431	NOT USED
432	NOT USED
433	NOT USED
434	NOT USED
435	NOT USED
436	A
437	A
438	A

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
**ID48188**

REV  
A

SHEET  
1.11

SHEET REVISION RECORD

SHEET NO.	REVISION
439	A
440	A
441	A
442	NOT USED
443	NOT USED
444	NOT USED
445	NOT USED
446	NOT USED
447	NOT USED
448	NOT USED
449	NOT USED
450	NOT USED
451	NOT USED
452	NOT USED
453	NOT USED
454	NOT USED
455	NOT USED
456	NOT USED
457	A
458	A
459	A
460	NOT USED

SHEET REVISION RECORD

SHEET NO.	REVISION
461	NOT USED
462	NOT USED
463	NOT USED
464	NOT USED
465	NOT USED
466	NOT USED
467	NOT USED
468	NOT USED
469	NOT USED
470	A
471	A
472	NOT USED
473	NOT USED
474	NOT USED
475	NOT USED
476	NOT USED
477	NOT USED
478	NOT USED
479	NOT USED
480	NOT USED
481	NOT USED
482	NOT USED
483	NOT USED

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
B	18355	1D48188
REV	A	SHEET 1.12



THIS INDEX CONTAINS TAGS FROM THE CCMS AS FOLLOWS:  
 CCM 1 = 687 CCM 2 = 0 CCM 3 = 0 TOTAL = 687

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
1.	A4-1	ANALOG C STA 4	1 3
2.	AM1000	RSFT	1 271
3.	AM1001	R SD	1 360
4.	AM1105	VLV A-M VLV CTRL	1 57
5.	AM1105A	RFP SPD	1 424
6.	AM1105B	RFP SPD	1 425
7.	AM1105C	RFP SPD	1 426
8.	AM647B	RSFT	1 274
9.	AM74A	RSFT	1 279
10.	AMT1001	RSTRIP	1 483
11.	C1-1	RSS STN1 RMTCTLR1	1 768
12.	C1-10	RSS STN1 RMTCTL10	1 759
13.	C1-11	RSS STN1 RMTCTL11	1 559
14.	C1-2	RSS STN1 RMTCTLR2	1 767
15.	C1-3	RSS STN1 RMTCTLR3	1 766
16.	C1-4	RSS STN1 RMTCTLR4	1 765
17.	C1-5	RSS STN1 RMTCTLR5	1 764
18.	C1-6	RSS STN1 RMTCTLR6	1 763
19.	C1-7	RSS STN1 RMTCTLR7	1 762
20.	C1-8	RSS STN1 RMTCTLR8	1 761
21.	C1-9	RSS STN1 RMTCTLR9	1 760
22.	C2-5	RSS STN2 RMTCTLR5	1 758
23.	C4-4	RSS STN4 RMTCTLR4	1 757
24.	FBI2230	PH FLOBS	1 472
25.	FBI2231	PH FLOBS	1 473
26.	FBI2232	PH FLOBS	1 474
27.	FBI2301	4 FLOSQ	1 454
28.	FBI2302	5 FLOSQ	1 455
29.	FBI2303	6 FLOSQ	1 456
30.	FBI2401	7 FLOSQ	1 457
31.	FBI2402	8 FLOSQ	1 458
32.	FBI2403	9 FLOSQ	1 459
33.	FBI2501	10 FLOSQ	1 460
34.	FBI2502	11 FLOSQ	1 461
35.	FBI2503	12 FLOSQ	1 462
36.	FBI2601	13	1 463
37.	FBI2602	14 FLOSQ	1 464
38.	FBI2603	15 FLOSQ	1 465
39.	FBI2701	16 FLOSQ	1 466
40.	FBI2702	17 FLOSQ	1 467
41.	FBI2703	18 FLOSQ	1 468
42.	FBI2801	19 FLOSQ	1 469
43.	FBI2802	20 FLOSQ	1 470
44.	FBI2803	21 FLOSQ	1 471
45.	FC2301A	PANEL 04 FLO-FLUX	1 12
46.	FC2301B	PANEL 04 FLO TEMP	1 13
47.	FC2301C	PANEL 04 FLO TEMP	1 278
48.	FC2302A	PANEL 05 FLO-FLUX	1 26

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 2	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
49.	FC2302B	PANEL 05 FLO-TEMP	1 27
50.	FC2303A	PANEL 06 FLO-FLUX	1 40
51.	FC2303B	PANEL 06 FLO-TEMP	1 42
52.	FC2401A	PANEL 07 FLO-FLUX	1 55
53.	FC2401B	PANEL 07 FLO-TEMP	1 56
54.	FC2402A	PANEL 08 FLO-FLUX	1 75
55.	FC2402B	PANEL 08 FLO TEMP	1 76
56.	FC2403A	PANEL 09 FLO-FLUX	1 111
57.	FC2403B	PANEL 09 FLO TEMP	1 112
58.	FC2501A	PANEL 10 FLO-FLUX	1 83
59.	FC2501B	PANEL 10 FLO TEMP	1 85
60.	FC2502A	PANEL 11 FLO-FLUX	1 103
61.	FC2502B	PANEL 11 FLO-TEMP	1 105
62.	FC2503A	PANEL 12 FLO FLUX	1 125
63.	FC2503B	PANEL FLO TEMP	1 126
64.	FC2601A	PANEL 13 FLO FLUX	1 138
65.	FC2601B	PANEL 13 FLO TEMP	1 139
66.	FC2602A	PANEL 14 FLO-FLUX	1 152
67.	FC2602B	PANEL 14 FLO-TEMP	1 153
68.	FC2603A	PANEL 15 FLO-FLUX	1 174
69.	FC2603B	PANEL 15 FLO-TEMP	1 176
70.	FC2701A	PANEL 16 FLO FLUX	1 179
71.	FC2701B	PANEL 16 FLO TEMP	1 180
72.	FC2702A	PANEL 17 FLO FLUX	1 197
73.	FC2702B	PANEL 17 FLO TEMP	1 199
74.	FC2703A	PANEL 18 FLO-FLUX	1 207
75.	FC2703B	PANEL 18 FLO-TEMP	1 208
76.	FC2801A	PANEL 19 FLO-FLUX	1 231
77.	FC2801B	PANEL 19 FLO-TEMP	1 233
78.	FC2802A	PANEL 20 FLO FLUX	1 234
79.	FC2802B	PANEL 20 FLO TEMP	1 236
80.	FC2803A	PANEL 21 FLO FLUX	1 249
81.	FC2803B	PANEL 21 FLO TEMP	1 250
82.	FCM2301	PANEL RB04 FLO	1 14
83.	FCM2302	PANEL RB05 FLO	1 28
84.	FCM2303	PANEL RB06 FLO	1 43
85.	FCM2401	PANEL RB07 FLO	1 445
86.	FCM2402	PANEL RB08 FLO	1 80
87.	FCM2403	PANEL RB09 FLO	1 117
88.	FCM2501	PANEL RB10 FLO	1 87
89.	FCM2502	PANEL RB11 FLO	1 107
90.	FCM2503	PANEL RB12 FLO	1 127
91.	FCM2601	PANEL RB13 FLO	1 140
92.	FCM2602	PANEL RB14 FLO	1 154
93.	FCM2603	PANEL RB15 FLO	1 178
94.	FCM2701	PANEL RB16 FLO	1 181
95.	FCM2702	PANEL RB17 FLO	1 201
96.	FCM2703	PANEL RB18 FLO	1 427
97.	FCM2801	PANEL RB19 FLO	1 235
98.	FCM2802	PANEL RB20 FLO	1 237
99.	FCM2803	PANEL RB21 FLO	1 251
100.	FI1105	RECIRC	1 434
101.	FI2230	R IN FLO	1 265
102.	FI2231	R IN FLO	1 266
103.	FI2232	R IN FLO	1 267
104.	FI2233	R TOTFLO	1 268

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
REV A	SHEET 3	



NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
105.	FI2301	RB04 FLO	1	351
106.	FI2301A	FI2301 SQRD	1	442
107.	FI2302	RB05 FLO	1	373
108.	FI2303	RB06 FLO	1	375
109.	FI2401	RB07 FLO	1	377
110.	FI2402	RB08 FLO	1	379
111.	FI2403	RB08 FLO	1	381
112.	FI2403A	FI2403 SQRD	1	441
113.	FI2501	RB10 FLO	1	383
114.	FI2502	RB11 FLO	1	385
115.	FI2503	RB12 FLO	1	389
116.	FI2601	RB13 FLO	1	387
117.	FI2602	RB14 FLO	1	167
118.	FI2603	RB15 FLO	1	394
119.	FI2701	RB-16	1	345
120.	FI2702	RB17 FLO	1	347
121.	FI2703	RB19 FLO	1	349
122.	FI2801	RB19 FLO	1	273
123.	FI2802	RB20 FLO	1	353
124.	FI2803	RB21 FLO	1	355
125.	FI35A	RS FWP	1	440
126.	FI37	R FWP FLOW	1	410
127.	FI44	RFP SEAL	1	640
128.	HC2002	R BYPASS	1	252
129.	HS1001B	R SD RST	1	584
130.	HS1010	R FT S D	1	619
131.	HS1011	SD MS D	1	618
132.	HS1012	SD DS D	1	617
133.	HS1015	AUX MS D	1	616
134.	HS1016	E MS I D	1	615
135.	HS1031	E MS SP	1	614
136.	HS1106	31 33 RFP A LO	1	745
137.	HS2004	RPH IN	1	659
138.	HS2007	RPH VENT	1	663
139.	HS2016	RPH-N2	1	742
140.	HS2019	RFT-N2	1	664
141.	HS2901	RSEPAR D	1	660
142.	HS2902	R VENT 1	1	661
143.	HS2903	R VENT 2	1	656
144.	HS2911	RFT IN	1	662
145.	HS2913	R DRAINS	1	611
146.	HS2914	RFTO RLD	1	658
147.	HS2915	RFTI RLD	1	657
148.	HS33	RFP OUT	1	654
149.	HS44A	RF PUMP	1	655
150.	HS44B	R F PUMP	1	653
151.	HS44C	RFP A-M	1	743
152.	HS6200B	R RLU	1	585
153.	II44	P917 I	1	413
154.	IIM1031	E MS STP	1	749
155.	IIM1106	RFP LO	1	744
156.	JC1001	RSD J SP	1	361
157.	JII1470	E 33KV	1	395
158.	JII44	P917 J	1	414
159.	LC74A	RSFT LL SP	1	277
160.	LCM74C	RSFT HL SP	1	280

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 4	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
161.	LE-1	RSS EQRM ILS CMO1	1 753
162.	LI2901	RSFPAR D	1 323
163.	LI2908	R FT L	1 369
164.	LIH1010	RFT DS D	1 610
165.	LIH1011	RMS SD D	1 609
166.	LIH1012	RMS DS D	1 608
167.	LIH1015	RAUX S D	1 607
168.	LIH1016	R MS DRN	1 650
169.	LIL44	RFP DA L	1 733
170.	LIL83	RFP DA L	1 737
171.	M1-1	RSS STN1 RMT MUX1	1 756
172.	M1-1V	RSS STN1 MUX1 ALM	1 342
173.	M1-2	RSS STN1 RMT MUX2	1 755
174.	M1-2V	RSS STN1 MUX1 ALM	1 399
175.	ME-1	RSS EQRM ILS MUX1	1 754
176.	NE5102A	NET KW	1 485
177.	NIP1000	TOT ENRG	1 477
178.	NIPHR8	USEABLE USE ENRG	1 478
179.	NIPTIME	100 0 USE ENRG	1 491
180.	NIPTRP	RCVR RET-RSFT	1 711
181.	PC1000	RSFT HP SP	1 272
182.	PC1001	R SD P	1 363
183.	PC1105	R PRESCTRL	1 254
184.	PC647B	RSFTDAHP SP	1 275
185.	PCM2906	RSFT LP PRES CTL	1 255
186.	PD1001A	SD TRACK	1 667
187.	PD1105A	RS FWP PRES CTL	1 558
188.	PD1105B	RS FWP VLV CTL	1 557
189.	PD1105D	FWP CTRL	1 728
190.	PD1105E	SPD CTRL	1 719
191.	PD74A	PSFT PRES CTL	1 715
192.	PD11105	RS DEL PRES	1 409
193.	PD12008	R IN OUT	1 337
194.	PD12009	RP PDIFF	1 253
195.	PD12949	2905 DP	1 487
196.	PD186A	NPSH	1 433
197.	PD186A	RFP NPSH	1 581
198.	PI1000	SD PRES	1 418
199.	PI1001	R SD	1 358
200.	PI1002	RSD DS P	1 367
201.	PI2002	R INLET	1 356
202.	PI2006	PRHT OUT RNG PRES	1 269
203.	PI2015A	RPH-N2	1 633
204.	PI2015B	RPH-N2	1 632
205.	PI2018A	RN2-HDR	1 635
206.	PI2018B	RN2-HDR	1 634
207.	PI2099	RINST 02	1 628
208.	PI2902	RDCMR PR	1 259
209.	PI2902A	RSFT IN ALRM	1 475
210.	PI2906	RS FT PRES CTL	1 20
211.	PI2906A	RSFT INTPREPV	1 401
212.	PI2906B	RSFT INTPREPV	1 400
213.	PI635E	E HTR 2	1 396
214.	PI640	VAC RATE COND VAC	1 359
215.	PID1		1 446
216.	PID2		1 489

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 5	

NO. TAG NAME DESCRIPTION CCM LOOPID

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
217.	PIH2006	RPH-PRES	1 591
218.	PIH2019	SOV2019	1 640
219.	PIH2906	RFT-PRES	1 582
220.	PIH2911	RFT PRES	1 724
221.	PIH2911A	RFT INPR	1 727
222.	PIH236C	COND P	1 555
223.	PIL1105	RFP L.O.	1 642
224.	PIL44	RFP NPSH	1 551
225.	PIT635	PRES OVR	1 476
226.	PSP1001	RSD P SP	1 362
227.	QI6001	RECEIVER R OP TRP	1 562
228.	QI6003	STM DUMP SD OPTRP	1 561
229.	QI6201	RRLU B 1	1 600
230.	QI6202	RRLU B 2	1 599
231.	QI6203	RRLU B 3	1 592
232.	QI6204	RRLU B 4	1 598
233.	QI6205	RRLU B 5	1 597
234.	QI6206	RRLU B 6	1 596
235.	QI6207	RRLU B 7	1 595
236.	QI6208	RRLU B 8	1 594
237.	QI6209	RS RLU	1 593
238.	QI6210	RS RLU	1 550
239.	QI6211	RS RLU	1 590
240.	RSPWR	RCVR LO PWR	1 716
241.	RSTST1	TST DRV1	1 209
242.	RSTST2	TST DRV2	1 435
243.	RSTST3	TST DRV3	1 436
244.	RSTST4	TST DRV4	1 437
245.	SC1105	RSFWP SPD CMD	1 412
246.	SCM1105	RFWP SPD	1 257
247.	SI1105	RSFWP FWP SPD	1 443
248.	TC1002	T SAT	1 371
249.	TC2301	PANEL RB04 SP	1 1
250.	TC2301A	PANEL T RB04 PTA	1 2
251.	TC2301B	PANEL T RB04	1 419
252.	TC2301C	RCVR PANEL SP	1 422
253.	TC2302	PANEL RB05 SP	1 15
254.	TC2302A	PANEL T RB05 PTA	1 16
255.	TC2302B	PANEL TR RB05 PTR	1 17
256.	TC2303	PANEL RB06 SP	1 29
257.	TC2303A	PANEL T RB06 PT	1 30
258.	TC2303B	PANEL TR RB06 PTR	1 31
259.	TC2401	PANEL RB07 SP	1 44
260.	TC2401A	PANEL T RB07 PT	1 45
261.	TC2401B	PANEL TR RB07 PTR	1 46
262.	TC2402	PANEL RB08 SP	1 58
263.	TC2402A	PANEL T RB08 PT	1 59
264.	TC2402B	PANEL TR RB08 PTR	1 60
265.	TC2403	PANFL RB09 SP	1 84
266.	TC2403A	PANELT RB09 PT	1 86
267.	TC2403B	PANEL TR RB09 PTR	1 88
268.	TC2501	PANEL RB10 SP	1 64
269.	TC2501A	PANELT RB10PT	1 65
270.	TC2501B	PANEL TR RB10 PTR	1 341
271.	TC2502	PANEL RB11 SP	1 89
272.	TC2502A	PANELT RB11 PT	1 90

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 6	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
273.	TC2502B	PANEL TR RB11 PTR	1 92
274.	TC2503	PANEL RB12 SP	1 114
275.	TC2503A	PANELT RB12 PT	1 115
276.	TC2503B	PANEL TR RB12 PTR	1 116
277.	TC2601	PANEL RB13 SP	1 128
278.	TC2601A	PANELT RB13 PT	1 129
279.	TC2601B	PANEL TR RB13 PTR	1 130
280.	TC2602	PANEL RB14 SP	1 141
281.	TC2602A	PANELT RB14 PT	1 142
282.	TC2602B	PANEL TR RB14 PTR	1 143
283.	TC2603	PANEL RB15 SP	1 155
284.	TC2603A	PANELT RB15 PT	1 156
285.	TC2603B	PANEL TR RB15 PTR	1 158
286.	TC2701	PANEL RB16 SP	1 157
287.	TC2701A	PANELT RB16 PT	1 159
288.	TC2701B	PANEL TR RB16 PTR	1 160
289.	TC2702	PANEL RB17 SP	1 182
290.	TC2702A	PANELT RB17 PT	1 183
291.	TC2702B	PANEL TR RB17 PTR	1 184
292.	TC2703	PANEL RB18 SP	1 190
293.	TC2703A	PANELT RB18 PT	1 192
294.	TC2703B	PANEL TR RB18 PTR	1 194
295.	TC2801	PANEL RB19 SP	1 210
296.	TC2801A	PANEL T RB19 PT	1 211
297.	TC2801B	PANEL TR RB19 PTR	1 214
298.	TC2802	PANEL RB20 SP	1 212
299.	TC2802A	PANEL T RB20 PT	1 213
300.	TC2802B	PANEL TR RB20 PTR	1 216
301.	TC2803	PANEL RB21 SP	1 238
302.	TC2803A	PANELT RB21 PT	1 239
303.	TC2803B	PANEL TR RB21 PTR	1 240
304.	TCM1002	RSD DSSP	1 365
305.	TD2301A	P4 FLTP	1 752
306.	TD2301C	BLNDTEMP	1 750
307.	TD2301G	P4 FLTP	1 751
308.	TD2301H	MTL BLND	1 548
309.	TD2302A	P5 FLTP	1 549
310.	TD2302C	BLNDTEMP	1 746
311.	TD2302G	P5 FLTP	1 747
312.	TD2302H	MTL BLND	1 547
313.	TD2303A	P6 FLTP	1 741
314.	TD2303C	BLNDTEMP	1 739
315.	TD2303G	P6 FLTP	1 740
316.	TD2303H	MTL BLND	1 545
317.	TD2401A	P7 FLTP	1 546
318.	TD2401C	BLNDTEMP	1 735
319.	TD2401G	P7 FLTP	1 736
320.	TD2401H	MTL BLND	1 544
321.	TD2402A	P8 FLTP	1 723
322.	TD2402C	BLNDTEMP	1 705
323.	TD2402G	P8 FLTP	1 722
324.	TD2402H	MTL BLND	1 542
325.	TD2403A	P9 FLTP	1 543
326.	TD2403C	BLNDTEMP	1 717
327.	TD2403G	P9 FLTP	1 718
328.	TD2403H	MTL BLND	1 541

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 7	

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
329.	TD2501A	P10 FLTP	1	732
330.	TD2501C	BLNDTEMP	1	730
331.	TD2501G	P10 FLTP	1	731
332.	TD2501H	MTL PLND	1	539
333.	TD2502A	P11 FLTP	1	725
334.	TD2502C	BLNDTEMP	1	726
335.	TD2502G	P11 FLTP	1	748
336.	TD2502H	MTL BLND	1	538
337.	TD2503A	P12 FLTP	1	714
338.	TD2503C	BLNDTEMP	1	712
339.	TD2503G	P12 FLTP	1	713
340.	TD2503H	MTL PLND	1	536
341.	TD2601A	P13 FLTP	1	537
342.	TD2601C	BLNDTEMP	1	708
343.	TD2601G	P13 FLTP	1	729
344.	TD2601H	MTL BLND	1	535
345.	TD2602A	P14 FLTP	1	704
346.	TD2602C	BLNDTEMP	1	702
347.	TD2602G	P14 FLTP	1	703
348.	TD2602H	MTL BLND	1	533
349.	TD2603A	P15 FLTP	1	534
350.	TD2603C	BLNDTEMP	1	698
351.	TD2603G	P15 FLTP	1	699
352.	TD2603H	MTL BLND	1	532
353.	TD2701A	P16 FLTP	1	695
354.	TD2701C	BLNDTEMP	1	693
355.	TD2701G	P16 FLTP	1	694
356.	TD2701H	MTL BLND	1	530
357.	TD2702A	17 FLTP	1	531
358.	TD2702C	BLNDTEMP	1	689
359.	TD2702G	P17 FLTP	1	690
360.	TD2702H	MTL BLND	1	529
361.	TD2703A	P18 FLTP	1	686
362.	TD2703C	BLNDTEMP	1	684
363.	TD2703G	P18 FLTP	1	685
364.	TD2703H	MTL BLND	1	527
365.	TD2801A	P19 FLTP	1	528
366.	TD2801C	BLNDTEMP	1	680
367.	TD2801G	P19 FLTP	1	681
368.	TD2801H	MTL BLND	1	526
369.	TD2802A	P20 FLTP	1	677
370.	TD2802C	BLNDTEMP	1	675
371.	TD2802G	P20 FLTP	1	676
372.	TD2802H	MTL PLND	1	523
373.	TD2803A	P21 FLTP	1	525
374.	TD2803C	BLNDTEMP	1	671
375.	TD2803G	P21 FLTP	1	672
376.	TD2803H	MTL PLND	1	522
377.	TD2929	TSP RAMP	1	738
378.	TD647B	RSFT TMP CTRL	1	706
379.	TEST		1	417
380.	TEST1		1	350
381.	TEST2		1	490
382.	TEST3		1	447
383.	TEST4		1	480
384.	TI1001	RSDESSTM IN TEMPV	1	403

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048188
REV	A	SHEET 8

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
385.	TI1002		1	366
386.	TI1105J		1	429
387.	TI1418		1	623
388.	TI1496	TOWRLTE	1	621
389.	TI2001		1	264
390.	TI2005		1	263
391.	TI2009		1	270
392.	TI2107		1	281
393.	TI2108		1	282
394.	TI2109		1	283
395.	TI2207		1	284
396.	TI2208		1	285
397.	TI2209		1	286
398.	TI2301		1	370
399.	TI2301A	PANEL	1	4
400.	TI2301B	PANEL	1	5
401.	TI2302		1	372
402.	TI2302A	PANEL TA	1	18
403.	TI2302B	PANEL TB	1	19
404.	TI2303		1	374
405.	TI2303A	PANEL TA	1	32
406.	TI2303B	PANEL TB	1	33
407.	TI2304	TEMP OUT	1	6
408.	TI2304A	TEMPOUTA	1	35
409.	TI2304B	TEMPOUTB	1	8
410.	TI2305	TEMP OUT	1	34
411.	TI2305A		1	21
412.	TI2305B	TEMPOUTB	1	22
413.	TI2306	TEMP OUT	1	397
414.	TI2306A	TEMPOUTA	1	7
415.	TI2306B	TEMPOUTB	1	36
416.	TI2401		1	376
417.	TI2401A	PANEL TA	1	47
418.	TI2401B	PANEL TB	1	48
419.	TI2402		1	378
420.	TI2402A	PANEL TA	1	61
421.	TI2402B	PANEL TB	1	62
422.	TI2403		1	380
423.	TI2403A	PANEL TA	1	91
424.	TI2403B	PANEL TB	1	99
425.	TI2404	TEMP OUT	1	49
426.	TI2404A	TEMPOUTA	1	50
427.	TI2404B	TEMPOUTB	1	51
428.	TI2405	TEMP OUT	1	63
429.	TI2405A	TEMPOUTA	1	66
430.	TI2405B	TEMPOUTB	1	68
431.	TI2406	TEMP OUT	1	102
432.	TI2406A	TEMPOUTA	1	104
433.	TI2406B	TEMPOUTB	1	106
434.	TI2501		1	382
435.	TI2501A	PANEL TA	1	70
436.	TI2501B	PANEL TB	1	71
437.	TI2502		1	384
438.	TI2502A	PANEL TA	1	93
439.	TI2502B	PANEL TB	1	94
440.	TI2503		1	388

MCDONNELL DOUGLAS AERONAUTICS CO. MURTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS			REV A	SHEET 9	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
441.	TI2503A	PANEL TA RB12 PTA	1 117
442.	TI2503B	PANEL TB RB12 PTB	1 118
443.	TI2504	TEMP OUT RB10 OT	1 73
444.	TI2504A	TEMPOUTA RB10 OTA	1 77
445.	TI2504B	TEMPOUTB RB10 OTB	1 78
446.	TI2505	TEMP OUT RB11 OT	1 95
447.	TI2505A	TEMPOUTA RB11 OTA	1 96
448.	TI2505B	TEMPOUTB RB11 OTB	1 97
449.	TI2506	RB12 OT	1 133
450.	TI2506A	TEMPOUTA RB12 OTA	1 120
451.	TI2506B	TEMPOUTB RB12 OTB	1 121
452.	TI2601	RB13 PT	1 386
453.	TI2601A	PANEL TA RB13 PTA	1 131
454.	TI2601B	PANEL TB RB13 PTB	1 132
455.	TI2602	RB14 PT	1 391
456.	TI2602A	PANEL RB14 PTA	1 144
457.	TI2602B	PANEL TB RB14 PTB	1 145
458.	TI2603	RB15 PT	1 393
459.	TI2603A	PANEL TA RB15 PTA	1 343
460.	TI2603B	PANEL TB RB15 PTB	1 161
461.	TI2604	TEMP OUT RB13 OT	1 119
462.	TI2604A	TEMPOUTA RB13 OTA	1 134
463.	TI2604B	TEMPOUTB RB13 OTB	1 135
464.	TI2605	TEMP OUT RB14 OT	1 146
465.	TI2605A	TEMPOUTA RB14 OTA	1 147
466.	TI2605B	TEMPOUTB RB14 OTB	1 148
467.	TI2606	TEMP OUT RB15 OT	1 163
468.	TI2606A	TEMPOUTA RB15 OTA	1 165
469.	TI2606B	TEMPOUTB RB15 OTB	1 166
470.	TI2701	RB16 PT	1 344
471.	TI2701A	PANEL TA RB16 PTA	1 162
472.	TI2701B	PANEL TB RB16 PTB	1 164
473.	TI2702	RB17 PT	1 346
474.	TI2702A	PANEL TA RB17 PTA	1 185
475.	TI2702B	PANEL TB RB17 PTB	1 186
476.	TI2703	RB18 PT	1 348
477.	TI2703A	PANEL TA RB18 PTA	1 196
478.	TI2703B	PANEL TB RB18 PTB	1 198
479.	TI2704	RB16 OT	1 392
480.	TI2704A	TEMPOUTA RB16 OTA	1 169
481.	TI2704B	TEMPOUTB RB16 OTB	1 171
482.	TI2705	RB17 OT	1 187
483.	TI2705A	TEMPOUTA RB17 OTA	1 188
484.	TI2705B	TEMPOUTB RB17 OTB	1 189
485.	TI2706	TEMP OUT RB18 OT	1 200
486.	TI2706A	TEMPOUTA RB18 OTA	1 202
487.	TI2706B	TEMPOUTB RB18 OTB	1 203
488.	TI2801	RB19 PT	1 444
489.	TI2801A	PANEL TA RB19 PTA	1 215
490.	TI2801B	PANEL TB RB19 PTB	1 217
491.	TI2802	RB20 PT	1 352
492.	TI2802A	PANEL TA RB20 PTA	1 218
493.	TI2802B	PANEL TB RB20 PTB	1 219
494.	TI2803	RB21 PT	1 354
495.	TI2803A	PANEL TA RB21 PTA	1 241
496.	TI2803B	PANEL TB RB21 PTB	1 242

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
REV A	SHEET 10	

NO.	TAG NAME	DESCRIPTION	CCM LOGPID
497.	TI2P04	TEMP OUT RB19 OT	1 220
498.	TI2P04A	TEMPOUTA RB19 OTA	1 221
499.	TI2P04B	TEMPOUTB RB19 OTB	1 223
500.	TI2P05	TEMP OUT RB20 OT	1 222
501.	TI2P05A	TEMPOUTA RB20 OTA	1 224
502.	TI2P05B	TEMPOUTB RB20 OTB	1 226
503.	TI2P06	TEMP OUT RB21 OT	1 243
504.	TI2P06A	TEMPOUTA RB21 OTA	1 244
505.	TI2P06B	TEMPOUTB RB21 OTB	1 245
506.	TI2P03	R OT TMP	1 260
507.	TI2P04	R OUT	1 338
508.	TI2P05	R SUPRHT	1 261
509.	TI2P07	R FT S T	1 368
510.	TI2P50	DCM S IN	1 276
511.	TIH1002	DS O T	1 556
512.	TIH1480	80 DEG F LVL13 HI	1 625
513.	TIH1481	80 DEG LVL14 HI	1 627
514.	TIH2911	RFT INT	1 710
515.	TIL1480	60 DEG F LVL13 LO	1 624
516.	TIL1481	60 DEG LVL14 LO	1 626
517.	TREF1-1	RSS STN1 MUX1 TMP	1 41
518.	TRFF1-2	RSS STN1 MUX2 TMP	1 398
519.	TS1105A	FP OUTBSEAL	1 613
520.	TS1105	INBDSEAL	1 639
521.	TSL2929	RCVR PAN SPLM	1 423
522.	TSP2929	PANEL TEMP SP	1 262
523.	TST		1 479
524.	TY2929A	TSP 1	1 430
525.	TY2929B	TSP 2	1 431
526.	TY2929C	TSP 3	1 432
527.	TY11002	SDS S H	1 411
528.	UC1105	VLV CTL RTCV POS	1 256
529.	UC2905A	RS TRIP LOSSSPHT	1 357
530.	UCM2905	RS DCMR	1 258
531.	UI1997	ILS POWR 584 NO 1	1 696
532.	UI1998	ILS STAT 584 NO 2	1 583
533.	UI1999	ILS TRIP 584 NO 1	1 700
534.	UI44	RF PUMP	1 643
535.	UI524	123 P901 RESET	1 691
536.	UI524A	123 P901 STOP CMD	1 682
537.	UI524B	123 P901 ISH524	1 673
538.	UI524C	123 P901 ISH524A	1 589
539.	UI525	123 P902 RESET	1 687
540.	UI525A	123 P902 STOP CMD	1 678
541.	UI525B	123 P902 ISH525	1 669
542.	UI525C	123 P902 ISH525A	1 588
543.	UY12929	RS PNL ENTHALP:	1 364
544.	WI2233	RS FLO INTG	1 67
545.	WS11000	WIND SPD WND ROOF	1 452
546.	WS11007	WIND SPD WND TWR	1 448
547.	XI1105A	P917 VIB	1 416
548.	XI1105B	P917 VIB	1 415
549.	XI1105C	P917 VIB	1 420
550.	XI1105D	P917 VIB	1 421
551.	YI2110A	P R RP222	1 287
552.	YI2110B	R RP222	1 288

MCDONNELL DOUGLAS AERONAUTICS CO.  
MURKINOTON BEACH, CALIF.

SIZE

**B**

FSCM NO.

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REV

A

SHEET

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NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
553.	YI2110C	R RP222	1	289
554.	YI2111A	R RP223	1	290
555.	YI2111B	R RP223	1	291
556.	YI2111C	R RP223	1	292
557.	YI2112A	R RP224	1	293
558.	YI2112B	R RP224	1	294
559.	YI2112C	R RP224	1	295
560.	YI2210A	R RP201	1	296
561.	YI2210B	R RP201	1	297
562.	YI2210C	R RP201	1	298
563.	YI2211A	R RP202	1	299
564.	YI2211B	P RP202	1	300
565.	YI2211C	R RP202	1	301
566.	YI2212A	R RP203	1	302
567.	YI2212B	R RP203	1	303
568.	YI2212C	R RP203	1	304
569.	YI2307	FLUX RB04	1	9
570.	YI2307A	RB04FLUX R RB204	1	10
571.	YI2307B	RB04FLUX R RB204	1	11
572.	YI2308	FLUX RB05	1	23
573.	YI2308A	RB05FLUX R RB205	1	24
574.	YI2308B	RB05FLUX R RB205	1	25
575.	YI2308C	R RB205	1	305
576.	YI2309	FLUX RB06	1	37
577.	YI2309A	RB06 FLU R RB206	1	38
578.	YI2309B	RB06FLUX R RB206	1	39
579.	YI2309C	R RB206	1	306
580.	YI2407	FLUX RB07	1	52
581.	YI2407A	RB07FLUX R RB207	1	53
582.	YI2407B	RB07FLUX R RB207	1	54
583.	YI2408	FLUX RB08	1	69
584.	YI2408A	RB08FLUX R RB208	1	72
585.	YI2408B	RB08FLUX R RB208	1	74
586.	YI2408C	R RB208	1	307
587.	YI2409	FLUX RB09	1	453
588.	YI2409A	RB09FLUX R RB209	1	109
589.	YI2409B	RB09FLUX R RB209	1	110
590.	YI2409C	R RB209	1	308
591.	YI2507	FLUX RB10	1	79
592.	YI2507A	RB10FLUX R RB210	1	81
593.	YI2507B	RB10FLUX R RB210	1	82
594.	YI2508	FLUX RB11	1	98
595.	YI2508A	RB11FLUX R RB211	1	100
596.	YI2508B	RB11FLUX R RB211	1	101
597.	YI2508C	R RB211	1	309
598.	YI2509	FLUX RB12	1	136
599.	YI2509A	RB12FLUX R RB212	1	123
600.	YI2509B	RB12FLUX R RB212	1	124
601.	YI2509C	R RB212	1	310
602.	YI2607	FLUX RB13	1	122
603.	YI2607A	RB13FLUX R RB213	1	390
604.	YI2607B	RB13FLUX R RB213	1	137
605.	YI2608	FLUX RB14	1	149
606.	YI2608A	RB14FLUX R RB214	1	150
607.	YI2608B	RB14FLUX R RB214	1	151
608.	YI2608C	R RB214	1	311

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818E
MCDONNELL DOUGLAS		REV A	SHEET 12	

NO.	TAG NAME	DESCRIPTION	CCM LOOPID
609.	YI2609	FLUX RB15	1 168
610.	YI2609A	RB15FLUX R RB215	1 170
611.	YI2609B	RB15FLUX R RB215	1 172
612.	YI2609C	RB15FLUX R RB215	1 312
613.	YI2707	FLUX RB16	1 173
614.	YI2707A	RB16FLUX R RB216	1 175
615.	YI2707B	RB16FLUX R RB216	1 177
616.	YI2708	FLUX RB17	1 191
617.	YI2708A	RB17FLUX R RB217	1 193
618.	YI2708B	RB17FLUX R RB217	1 195
619.	YI2708C	RB17FLUX R RB217	1 313
620.	YI2709	FLUX RB18	1 204
621.	YI2709A	RB18FLUX R RB218	1 205
622.	YI2709B	RB18FLUX R RB218	1 206
623.	YI2709C	RB18FLUX R RB218	1 314
624.	YI2807	FLUX RB19	1 225
625.	YI2807A	RB19FLUX R RB219	1 228
626.	YI2807B	RB19FLUX R RB219	1 229
627.	YI2808	FLUX RB20	1 227
628.	YI2808A	RB20FLUX R RB220	1 230
629.	YI2808B	RB20FLUX R RB220	1 232
630.	YI2808C	RB20FLUX R RB220	1 315
631.	YI2809	FLUX RB21	1 246
632.	YI2809A	RB21FLUX R RB221	1 247
633.	YI2809B	RB21FLUX R RB221	1 248
634.	YI2809C	RB21FLUX R RB221	1 316
635.	YYI2409	RB09FLUX KWSM	1 108
636.	ZAI2901	M SPRA D	1 553
637.	ZAI2913	RD ENABL	1 651
638.	ZCI2007	RPH VENT	1 645
639.	ZI1000	RSFT VP	1 407
640.	ZI1001	R SD VP	1 408
641.	ZI1002	RSDESCON IN VLV	1 402
642.	ZI1006	RMS DSAS	1 602
643.	ZI1007	RFT DSAS	1 601
644.	ZI1010	RFT DS D	1 606
645.	ZI1011	RMS SD D	1 605
646.	ZI1012	RMS DS D	1 604
647.	ZI1015	RAUX S D	1 620
648.	ZI1016	R MS DRN	1 630
649.	ZI1031	F MS SP	1 603
650.	ZI1105	RFP SPED	1 560
651.	ZI1418	RBCS FPP	1 622
652.	ZI2002	RFW I BY	1 340
653.	ZI2004	R P IN	1 638
654.	ZI2007	PH VENT	1 554
655.	ZI2301	R TCR204	1 317
656.	ZI2302	R TCB205	1 318
657.	ZI2303	R TCB206	1 319
658.	ZI2401	R TCB207	1 320
659.	ZI2402	R TCB208	1 321
660.	ZI2403	R TCB209	1 322
661.	ZI2501	R TCB210	1 324
662.	ZI2502	R TCB211	1 325
663.	ZI2503	R TCB212	1 326
664.	ZI2601	R TCB213	1 327

MCDONNELL DOUGLAS AERONAUTICS CO.  
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MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D4818E
REV	A	SHEET 13

NO.	TAG NAME	DESCRIPTION	CCM	LOOPID
665.	ZI2602	R TCB214	1	328
666.	ZI2603	R TCB215	1	329
667.	ZI2701	R TCB216	1	330
668.	ZI2702	P TCB217	1	331
669.	ZI2703	P TCB218	1	332
670.	ZI2801	P TCB219	1	333
671.	ZI2802	R TCB220	1	334
672.	ZI2803	R TCB221	1	335
673.	ZI2901	RSEPAR D	1	631
674.	ZI2902	R VENT 1	1	636
675.	ZI2903	R VENT 2	1	637
676.	ZI2905	R DNCMR	1	339
677.	ZI2906	R FT 5 0	1	336
678.	ZI2911	RFTINLET	1	646
679.	ZI2913	R DRAIN	1	629
680.	ZI2914	RFT O BY	1	721
681.	ZI2915	RFT I BY	1	720
682.	ZI33	RFP OUT	1	641
683.	ZI37	RFP RCIR	1	612
684.	ZI44	R F PUMP	1	644
685.	ZI647B	RSFT VP	1	406
686.	ZI74A	RSFT VP	1	404
687.	ZI74C	RSFT CON OUT VP	1	405

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MURKINSON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 14	

LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	Hwy NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	GUTO SPSEL
1	TC2301	PANEL RB04 SP	MVCU PID	A C	1 1	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
2	TC2301A	PANEL T RB04 PTA	MVCU PID	A C	5 1	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
3	A4-1	ANALOG C STA 4	MLD 8800	A C	9 3	0 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
4	TI2301A	PANEL RB04 PTA	MVCU INPT	A M	5 1	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
5	TI2301B	PANEL RB04 PTB	MVCU INPT	A M	5 1	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
6	TI2304	TEMP OUT RB04 OT	MVCU OUTP	A M	1 1	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
7	TI2306A	TEMPOUTA RB06 OTA	MVCU INPT	A M	5 2	3 R	8 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1485.00 1485.00	0.00 0.00		MVCU
8	TI2304B	TEMPOUTB RB04 OTB	MVCU INPT	A M	5 1	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
9	YI2307	FLUX RB04	MVCU OUTP	A M	5 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
10	YI2307A	RB04FLUX R RB204	MVCU INPT	A M	1 1	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
11	YI2307B	RB04FLUX R RB204	MVCU INPT	A M	1 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
12	FC2301A	PANEL 04 FLO-FLUX	MVCU NODE	A M	5 1	64 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
13	FC2301B	PANEL 04 FLO TEMP	MVCU NODE	A M	5 1	61 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
14	FCM2301	PANEL RB04 FLO	MVCU PID	A C	1 1	18 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
15	TC2302	PANEL RB05 SP	MVCU PID	A C	1 1	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
16	TC2302A	PANEL T RB05 PTA	MVCU PID	A C	5 1	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
17	TC2302B	PANEL TR RB05 PTR	MVCU PID	A C	1 1	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

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LOOP	TAG	DFSCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LC AL LL AL	CO LO CO HI	OUTD SPSEL
18	TI2302A	PANEL TA RB05 PTA	MVCU INPT	A M	5 1	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
19	TI2302B	PANEL TB RB05 PTB	MVCU INPT	A M	5 1	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
20	PI2906	RS FT PRFS CTL	MVCU OUTP	A M	8 2	2 R	1 PSIG	N N	0.0 1000.0	L P	0.00 490.00	540.00 500.00	0.00 0.00		CNSL
21	TI2305A		MVCU INPT	A M	5 1	11 R	1 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
22	TI2305B	TEMPOUTB RB05 OTB	MVCU INPT	A M	5 1	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
23	YI2308	FLUX RB05	MVCU OUTP	A M	1 1	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
24	YI2308A	RB05FLUX R RB205	MVCU INPT	A M	1 1	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
25	YI2308B	RB05FLUX R RB205	MVCU INPT	A M	1 1	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
26	FC2302A	PANEL 05 FLO-FLUX	MVCU NODE	A M	5 1	84 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
27	FC2302B	PANEL 05 FLO-TEMP	MVCU NODE	A M	5 1	81 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
28	FCM2302	PANEL RB05 FLO	MVCU PID	A C	1 1	38 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
29	TC2303	PANEL RB06 SP	MVCU PID	A C	1 2	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
30	TC2303A	PANEL T RB06 PT	MVCU PID	A C	5 2	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
31	TC2303B	PANEL TR RB06 PTR	MVCU PID	A C	1 2	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
32	TI2303A	PANEL TA RB06 PTA	MVCU INPT	A M	5 2	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
33	TI2303B	PANEL TB RB06 PTB	MVCU INPT	A M	5 2	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
34	TI2305	TEMP OUT RB05 OT	MVCU OUTP	A M	1 1	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

17

LOOP	TAG	DESCRT PTION	DEVICE SUBTY	A/ZD C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LG SP HI	HI AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSFL
35	TI2304A	TEMPOUTA RB04 OTA	MVCU INPT	A M	5 1	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
36	TI2306B	TEMPOUTH RB06 OTB	MVCU INPT	A M	5 2	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
37	YI2309	FLUX RB06	MVCU OUTP	A M	1 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
38	YI2309A	RB06 FLU R RB206	MVCU INPT	A M	1 2	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
39	YI2309B	RB06 FLUX R RB206	MVCU INPT	A M	1 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
40	FC2303A	PANEL 06 FLO-FLUX	MVCU NODE	A M	5 2	64 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
41	TREF1-1	RSS STN1 MUX1 TMP	IPAC TCPL	A M	12 1	1 S	1 DEGF	N N	0.0 100.0	L P	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
42	FC2303B	PANEL 06 FLO-TEMP	MVCU NODE	A M	5 2	61 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
43	FCM2303	PANEL RB06 FLO	MVCU PID	A C	1 2	18 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
44	TC2401	PANEL RB07 SP	MVCU PID	A C	1 2	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
45	TC2401A	PANEL T RB07 PT	MVCU PID	A C	5 2	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
46	TC2401B	PANEL TR RB07 PTR	MVCU PID	A C	1 2	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
47	TI2401A	PANEL TA RB07 PTA	MVCU INPT	A M	5 2	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
48	TI2401B	PANEL TB RB07 PTB	MVCU INPT	A M	5 2	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
49	TI2404	TEMP OUT RB07 OT	MVCU OUTP	A M	1 2	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
50	TI2404A	TEMPOUTA RB07 OTA	MVCU INPT	A M	5 2	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
51	TI2404B	TEMPOUTH RB07 OTB	MVCU INPT	A M	5 2	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D48188

REV

A

SHEET

18

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN- UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HI AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
52	YI2407	FLUX PB07	MVCU OUTP	A M	1 2	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
53	YI2407A	RR07FLUX R RB207	MVCU INPT	A M	1 2	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
54	YI2407B	RR07FLUX R RB207	MVCU INPT	A M	1 2	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
55	FC2401A	PANEL 07 FLO-FLUX	MVCU NODE	A M	1 2	84 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
56	FC2401B	PANEL 07 FLO-TEMP	MVCU NODE	A M	5 2	81 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
57	AM1105	VLV A-M VLV CTRL	MVCU A/M	A C	4 2	14 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
58	TC2402	PANEL RB08 SP	MVCU PID	A C	10 1	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
59	TC2402A	PANEL T RB08 PT	MVCU PID	A C	14 1	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
60	TC2402B	PANEL TR RB08 PTR	MVCU PID	A C	10 1	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
61	TI2402A	PANEL TA RB08 PTA	MVCU INPT	A M	14 1	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
62	TI2402B	PANEL TB RB08 PTR	MVCU INPT	A M	14 1	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
63	TI2405	TEMP OUT RB08 OT	MVCU OUTP	A M	10 1	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
64	TC2501	PANEL RB10 SP	MVCU PID	A C	2 1	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
65	TC2501A	PANELT RB10PT	MVCU PID	A C	6 1	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
66	TI2405A	TEMPOUTA RB08 OTA	MVCU INPT	A M	14 1	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
67	WI2233	RS FLO INTG	MVCU TOTI	A C	8 3	11 R	8 LBS	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
68	TI2405B	TEMPOUTB RB08 OTB	MVCU INPT	A M	14 1	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.

1048188

REV

A

SHEET

19

LOOP	TAG	DESCR PTION	DEVICF SURT Y	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
69	YI2408	FLUX RB08	MVCU OUTP	A M	10 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
70	TI2501A	PANEL TA RB10 PTA	MVCU INPT	A M	6 1	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
71	TI2501B	PANEL TR RB10 PTB	MVCU INPT	A M	6 1	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
72	YI2408A	RB08FLUX R RB20P	MVCU INPT	A M	10 1	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
73	TI2504	TEMP OUT RB10 OT	MVCU OUTP	A M	2 1	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
74	YI2408B	RB08FLUX R RB20B	MVCU INPT	A M	10 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
75	FC2402A	PANEL OR FLO-FLUX	MVCU NODE	A M	14 1	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
76	FC2402B	PANEL OR FLO TEMP	MVCU NODE	A M	14 1	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
77	TI2504A	TEMPOUTA RB10 OTA	MVCU INPT	A M	6 1	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
78	TI2504B	TEMPOUTB RB10 OTB	MVCU INPT	A M	6 1	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
79	YI2507	FLUX RB10	MVCU INFT	A M	2 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
80	FCM2402	PANEL RB08 FLO	MVCU PID	A C	10 1	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
81	YI2507A	RB10FLUX R RB210	MVCU INPT	A M	2 1	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
82	YI2507B	RB10FLUX R RB210	MVCU INPT	A M	2 1	5 P	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
83	FC2501A	PANEL 10 FLO-FLUX	MVCU NODE	A M	6 1	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
84	TC2403	PANEL RB09 SP	MVCU PID	A C	10 1	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
85	FC2501B	PANEL 10 FLO TEMP	MVCU NODE	A M	6 1	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

PSCM NO.

**18355**

DRAWING NO.

1D48186

REV

A

SHEET

20



LOOP	TAG	DESCR PTION	DEVIC SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
86	TC2403A	PANFLT RB09 PT	MVCU PID	A C	14 1	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
87	FCM2501	PANFL RB10 FLO	MVCU PID	A C	2 1	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
88	TC2403B	PANFLT RB09 PTR	MVCU PID	A C	10 1	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
89	TC2502	PANFL RB11 SP	MVCU PID	A C	2 1	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
90	TC2502A	PANFLT RB11 PT	MVCU PID	A C	6 1	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
91	TI2403A	PANFLT RB09 PTA	MVCU INPT	A M	14 1	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
92	TC2502B	PANFLT RB11 PTR	MVCU PID	A C	2 1	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
93	TI2502A	PANFLT RB11 PTA	MVCU INPT	A M	6 1	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
94	TI2502B	PANFLT RB11 PTB	MVCU INPT	A M	6 1	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
95	TI2505	TEMP OUT RB11 OT	MVCU OUTP	A M	2 1	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
96	TI2505A	TEMPOUT RB11 OTA	MVCU INPT	A M	6 1	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
97	TI2505B	TEMPOUT RB11 OTB	MVCU INPT	A M	6 1	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
98	YI2508	FLUX RB11	MVCU OUTP	A M	2 1	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
99	TI2403B	PANFLT RB09 PTB	MVCU INPT	A M	14 1	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
100	YI2508A	RB11FLUX R RB211	MVCU INPT	A M	2 1	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
101	YI2508B	RB11FLUX R RB211	MVCU INPT	A M	2 1	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
102	TI2406	TEMP OUT RB09 OT	MVCU OUTP	A M	10 1	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

21

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/Z C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HGST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LU AL LL AL	CO LO CO HI	OUTD SPSEL
103	FC2502A	PANEL 11 FLO-FLUX	MVCU NODE	A M	6 1	84 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
104	TI2406A	TEMPOUTA RB09 OTA	MVCU INPT	A M	14 1	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
105	FC2502B	PANEL 11 FLO-TEMP	MVCU NODE	A M	6 1	81 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
106	TI2406B	TEMPOUTB RB09 OTB	MVCU INPT	A M	14 1	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
107	FCM2502	PANEL RB11 FLO	MVCU PID	A C	2 1	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
108	YYI2409	RB09FLUX KWSM	MVCU OUTP	A M	14 1	5 R	4 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
109	YI2409A	RB09FLUX R RB209	MVCU INPT	A M	10 1	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
110	YI2409B	RB09FLUX R RB209	MVCU INPT	A M	10 1	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
111	FC2403A	PANEL 09 FLO-FLUX	MVCU NODE	A M	14 1	84 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
112	FC2403B	PANEL 09 FLO TEMP	MVCU NODE	A M	14 1	81 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
113	FCM2403	PANEL RB09 FLO	MVCU PID	A C	10 1	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
114	TC2503	PANEL RB12 SP	MVCU PID	A C	2 2	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
115	TC2503A	PANELT RB12 PT	MVCU PID	A C	6 2	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
116	TC2503B	PANEL TR RB12 PTR	MVCU PID	A C	2 2	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
117	TI2503A	PANEL TA RB12 PTA	MVCU INPT	A M	6 2	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
118	TI2503B	PANEL TB RB12 PTB	MVCU INPT	A M	6 2	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
119	TI2604	TEMP OUT RB13 OT	MVCU OUTP	A M	2 2	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MARTINSON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

22

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
120	TI2506A	TEMPOUTA RB12 OTA	MVCU INPT	A M	6 2	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
121	TI2506B	TEMPOUTB RB12 OTB	MVCU INPT	A M	6 2	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
122	YI2607	FLUX RB13	MVCU OUTP	A M	2 2	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
123	YI2509A	RB12FLUX R RB212	MVCU INPT	A M	2 2	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
124	YI2509B	RB12FLUX R RB212	MVCU INPT	A M	2 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
125	FC2503A	PANEL 12 FLO FLUX	MVCU NODE	A M	6 2	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
126	FC2503B	PANEL FLO TEMP	MVCU NODE	A M	6 2	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
127	FCM2503	PANEL RB12 FLO	MVCU PID	A C	2 2	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNLS
128	TC2601	PANEL RB13 SP	MVCU PID	A C	2 2	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNLS
129	TC2601A	PANELT RB13 PT	MVCU PID	A C	6 2	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNLS
130	TC2601B	PANEL TR RB13 PTR	MVCU PID	A C	2 2	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNLS
131	TI2601A	PANEL TA RB13 PTA	MVCU INPT	A M	6 2	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
132	TI2601B	PANEL TB RB13 PTB	MVCU INPT	A M	6 2	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
133	TI2506	RE12 OT OUTP	MVCU OUTP	A M	2 2	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
134	TI2604A	TEMPOUTA RB13 OTA	MVCU INPT	A M	6 2	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
135	TI2604B	TEMPOUTB RB13 OTB	MVCU INPT	A M	6 2	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
136	YI2509	FLUX RB12	MVCU OUTP	A M	2 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

23

LOOP	TAG	DESCRI PTJON	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CG LO CO HI	OUTD SPSFL
137	YI2607B	RR13FLUX R RB213	MVCU INPT	A M	2 2	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
138	FC2601A	PANEL 13 FLO FLUX	MVCU NODE	A M	6 2	R4 P	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
139	FC2601B	PANEL 13 FLO TEMP	MVCU NODE	A M	6 2	R1 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
140	FCM2601	PANEL RB13 FLO	MVCU PID	A C	2 2	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
141	TC2602	PANEL RB14 SP	MVCU PID	A C	10 2	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
142	TC2602A	PANELT RB14 PT	MVCU PID	A C	14 2	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
143	TC2602B	PANFL TR RB14 PTR	MVCU PID	A C	10 2	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
144	TI2602A	PANEL RB14 PTA	MVCU INPT	A M	14 2	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
145	TI2602B	PANEL TB RB14 PTB	MVCU INPT	A M	14 2	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
146	TI2605	TEMP OUT RB14 OT	MVCU OUTP	A M	10 2	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
147	TI2605A	TEMPOUTA RB14 OTA	MVCU INPT	A M	14 2	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
148	TI2605B	TEMPOUTB RB14 OTB	MVCU INPT	A M	14 2	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
149	YI2608	FLUX RB14	MVCU OUTP	A M	14 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
150	YI2608A	RB14FLUX R RB214	MVCU INPT	A M	10 2	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
151	YI2608B	RB14FLUX R RB214	MVCU INPT	A M	10 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
152	FC2602A	PANEL 14 FLO-FLUX	MVCU NODE	A M	14 2	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
153	FC2602B	PANEL 14 FLO-TEMP	MVCU NODE	A M	14 2	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

24

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LG AL LL AL	CO LO CO HI	OUTD SPSEL
154	FCM2602	PANEL RB14 FLO	MVCU PID	A C	10 2	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSEL
155	TC2603	PANEL RB15 SP	MVCU PID	A C	10 2	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSEL
156	TC2603A	PANELT RB15 PT	MVCU PID	A C	14 2	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSEL
157	TC2701	PANEL RB16 SP	MVCU PID	A C	3 1	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSEL
158	TC2603B	PANEL TR RB15 PTR	MVCU PID	A C	10 2	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSEL
159	TC2701A	PANELT RB16 PT	MVCU PID	A C	7 1	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSEL
160	TC2701B	PANEL TR RB16 PTR	MVCU PID	A C	3 1	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSEL
161	TI2603B	PANEL TB RB15 PTB	MVCU INPT	A M	14 2	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
162	TI2701A	PANEL TA RB16 PTA	MVCU INPT	A M	7 1	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
163	TI2606	TEMP OUT RB15 OT	MVCU OUTP	A M	10 2	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
164	TI2701B	PANEL TR RB16 PTB	MVCU INPT	A M	7 1	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
165	TI2606A	TEMPOUTA RB15 OTA	MVCU INPT	A M	14 2	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
166	TI2606B	TEMPOUTR RB15 OTB	MVCU INPT	A M	14 2	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
167	FI2602	RB14 FLO	MVCU OUTP	A M	10 2	4 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
168	YI2609	FLUX RB15	MVCU OUTP	A M	10 2	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
169	TI2704A	TEMPOUTA RB16 OTA	MVCU INPT	A M	7 1	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
170	YI2609A	RB15FLUX R RB215	MVCU INPT	A M	10 2	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
REV A	SHEET 25	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HUY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
171	TI2704B	TEMPOUTR RB16 OTB	MVCU INPT	A M	7 1	4 R	B DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
172	YI2609B	RB15FLUX R RB215	MVCU INPT	A M	10 2	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
173	YI2707	FLUX RB16	MVCU OUTP	A M	7 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
174	FC2603A	PANEL 15 FLO-FLUX	MVCU NODE	A M	14 2	84 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
175	YI2707A	RB16FLUX R RB216	MVCU INPT	A M	3 1	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
176	FC2603B	PANEL 15 FLO-TEMP	MVCU NODE	A M	14 2	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
177	YI2707B	RB16FLUX R RB216	MVCU INPT	A M	3 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
178	FCM2603	PANEL RB15 FLO	MVCU PID	A C	10 2	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
179	FC2701A	PANEL 16 FLO FLUX	MVCU NODE	A M	7 1	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
180	FC2701B	PANEL 16 FLO TEMP	MVCU NODE	A M	7 1	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
181	FCM2701	PANEL RB16 FLO	MVCU PID	A C	3 1	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
182	TC2702	PANEL RB17 SP	MVCU PID	A C	3 1	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
183	TC2702A	PANELT RB17 PT	MVCU PID	A C	7 1	25 K	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
184	TC2702B	PANEL TR RB17 PTR	MVCU PID	A C	3 1	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
185	TI2702A	PANEL TA RB17 PTA	MVCU INPT	A M	7 1	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
186	TI2702B	PANEL TR RB17 PTR	MVCU INPT	A M	7 1	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
187	TI2705	RB17 OT OUTP	MVCU OUTP	A M	3 1	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MARTINEYTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
REV A	SHEET 26	

LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DFV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSFL
188	TI2705A	TEMPOUTA RB17 OTA	MVCU INPT	A M	7 1	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
189	TI2705B	TEMPOUTB RB17 OTB	MVCU INPT	A M	7 1	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
190	TC2703	PANEL RB18 SP	MVCU PID	A C	3 2	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	0 CNSL
191	YI2708	FLUX RB17	MVCU OUTP	A M	7 1	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
192	TC2703A	PANELT RB18 PT	MVCU PID	A C	7 2	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	0 CNSL
193	YI2708A	RB17FLUX R RB217	MVCU INPT	A M	3 1	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
194	TC2703B	PANEL TR RB18 PTR	MVCU PID	A C	3 2	4 R	1 DEGF	Y N	0.0 1500.0	L P	0.00 1485.00	1245.00 1200.00	0.00 0.00	0% 99%	0 CNSL
195	YI2708B	RB17FLUX R RB217	MVCU INPT	A M	3 1	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
196	TI2703A	PANEL TA RB18 PTA	MVCU INPT	A M	7 2	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
197	FC2702A	PANEL 17 FLO FLUX	MVCU NODE	A M	7 1	84 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
198	TI2703B	PANEL TB RB18 PTB	MVCU INPT	A M	7 2	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
199	FC2702B	PANEL 17 FLO TEMP	MVCU NODE	A M	7 1	81 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
200	TI2706	TEMP OUT RB18 OT	MVCU OUTP	A M	3 2	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
201	FCM2702	PANEL RB17 FLO	MVCU PID	A C	3 1	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
202	TI2706A	TEMPOUTA RB18 OTA	MVCU INPT	A M	7 2	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
203	TI2706B	TEMPOUTB RB18 OTB	MVCU INPT	A M	7 2	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
204	YI2709	FLUX RB18	MVCU OUTP	A M	3 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.

1048188

REV

A

SHEET

27

LOOP	TAG	DESCRI PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	GUTD SPSEL
205	YI2709A	RB18FLUX R RB218	MVCU INPT	A M	3 2	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
206	YI2709B	RB18FLUX R RB218	MVCU INPT	A M	3 2	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
207	FC2703A	PANFL 18 FLO-FLUX	MVCU NODE	A M	7 2	64 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
208	FC2703B	PANFL 18 FLO-TEMP	MVCU NODE	A M	7 2	61 R	4 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
209	RSTST1	TST DRV1	IPAC INPT	A M	15 1	82 S	1 MA	N N	4.0 20.0	L N	4.00 19.84	0.00 0.00	0.00 0.00		MVCU
210	TC2801	PANEL RB19 SP	MVCU PID	A C	3 2	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
211	TC2801A	PANEL T RB19 PT	MVCU PID	A C	7 2	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
212	TC2802	PANEL RB20 SP	MVCU PID	A C	4 1	12 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
213	TC2802A	PANEL T RB20 PT	MVCU PID	A C	8 1	5 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
214	TC2801B	PANEL TR RB19 PTR	MVCU PID	A C	3 2	24 R	1 DEGF	Y N	0.0 1500.0	L P	0.00 1485.00	1245.00 1200.00	0.00 0.00	0% 99%	D CNSL
215	TI2801A	PANEL TA RB19 PTA	MVCU INPT	A M	7 2	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
216	TC2802B	PANEL TP RB20 PTR	MVCU PID	A C	4 1	4 R	1 DEGF	Y N	0.0 1500.0	L P	0.00 1485.00	1245.00 1200.00	0.00 0.00	0% 99%	D CNSL
217	TI2801B	PANEL TB RB19 PTB	MVCU INPT	A M	7 2	10 P	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
218	TI2802A	PANEL TA RB20 PTA	MVCU INPT	A M	8 1	1 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
219	TI2802B	PANEL TB RB20 PTB	MVCU INPT	A M	8 1	2 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
220	TI2804	TEMP OUT PB19 OT	MVCU OUTP	A M	3 2	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
221	TI2804A	TEMPOUTA RB19 OTA	MVCU INPT	A M	7 2	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

28



LOOP	TAG	DESCRI PTION	DFVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HT	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
222	TI2805	TEMP OUT RR20 OT	MVCU OUTP	A M	4 1	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1065.00	0.00 0.00		MVCU
223	TI2804B	TEMPOUTP RB19 OTB	MVCU INPT	A M	7 2	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
224	TI2805A	TEMPOUTA RB20 OTA	MVCU INPT	A M	8 1	3 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
225	YI2807	FLUX RB19	MVCU OUTP	A M	3 2	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
226	TI2805B	TEMPOUTB RB20 OTB	MVCU INPT	A M	8 1	4 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
227	YI2808	FLUX RB20	MVCU OUTP	A M	4 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
228	YI2807A	RB19FLUX R RB219	MVCU INPT	A M	3 2	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
229	YI2807B	RB19FLUX R RB219	MVCU INPT	A M	3 2	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
230	YI2808A	RB20FLUX R RB220	MVCU INPT	A M	4 1	6 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	4.00 4.00		MVCU
231	FC2801A	PANEL 19 FLO-FLUX	MVCU NODE	A M	7 2	84 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
232	YI2808B	RB20FLUX R RB220	MVCU INPT	A M	4 1	5 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
233	FC2801B	PANEL 19 FLO-TEMP	MVCU NODE	A M	7 2	81 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
234	FC2802A	PANEL 20 FLO FLUX	MVCU NODE	A M	8 1	64 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
235	FCM2801	PANEL RB19 FLO	MVCU PID	A C	3 2	38 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
236	FC2802B	PANEL 20 FLO TEMP	MVCU NODE	A M	8 1	61 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
237	FCM2802	PANEL RB20 FLO	MVCU PID	A C	4 1	18 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
238	TC2803	PANFL RB21 SP	MVCU PID	A C	4 1	32 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 960.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
REV A	SHEET 29	

LOOP	TAG	DESCRI PTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HCST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
239	TC2803A	PANELT RB21 PT	MVCU PID	A C	8 1	25 R	8 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
240	TC2803B	PANEL TR RB21 PTR	MVCU PID	A C	4 1	24 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
241	TI2803A	PANEL TA RB21 PTA	MVCU INPT	A M	8 1	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
242	TI2803B	PANEL TR RB21 PTR	MVCU INPT	A M	8 1	10 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
243	TI2806	TEMP OUT RB21 OT	MVCU OUTP	A M	4 1	12 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
244	TI2806A	TEMPOUTA RB21 OTA	MVCU INPT	A M	8 1	11 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
245	TI2806B	TEMPOUTH RB21 OTB	MVCU INPT	A M	8 1	12 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	99.00 99.00	0.00 0.00		MVCU
246	YI2809	FLUX RB21	MVCU OUTP	A M	4 1	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
247	YI2809A	RB21FLUX R RB221	MVCU INPT	A M	4 1	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
248	YI2809B	RB21FLUX R RB221	MVCU INPT	A M	4 1	17 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
249	FC2803A	PANEL 21 FLO FLUX	MVCU NODE	A M	8 1	84 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
250	FC2803B	PANEL 21 FLO TEMP	MVCU NODE	A M	8 1	81 R	4 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
251	FCM2803	PANEL RB21 FLO	MVCU PID	A C	4 1	38 R	1 LBH	Y N	0.0 7638.0	L N	0.00 7561.62	99.00 99.00	7.00 0.00	0% 99%	R CNSL
252	HC2002	R BYPASS	MVCU A/M	A C	4 2	1 R	1 PCT	N Y	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
253	PDI2009	RP PDIFF	MVCU NODE	A M	4 2	72 R	1 PSID	N N	0.0 1000.0	L P	0.00 990.00	240.00 200.00	10.00 0.00		MVCU
254	PC1105	R PRESCTRL	MVCU PID	A C	4 2	7 R	1 PSIG	N N	0.0 3000.0	L N	0.00 2970.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
255	PCM2906	RSFT LP PRES CTL	MVCU PID	A C	4 3	10 R	1 PSIG	N N	0.0 1000.0	L P	0.00 600.00	540.00 520.00	300.00 0.00	0% 99%	R CNSL

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
REV A	SHEET 30	

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LG AL LL AL	CG LO CO HI	OUTD SPSFL
256	UC1105	VLV CTL RTCV POS	MVCU PID	A C	4 2	6 R	1 PCT	Y N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
257	SCM1105	RFWP SPD	MVCU PID	A C	4 2	38 R	1 RPM	Y N	695.0 3475.0	L P	695.00 3447.20	3447.20 3447.20	1501.20 1501.20	0% 99%	D CNSL
258	UCM2905	RS DCMR	MVCU PID	A C	8 2	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
259	PI2902	RDCMR PR	MVCU INPT	A M	8 2	2 R	1 PSIG	N N	0.0 2000.0	L P	0.00 1980.00	1620.00 1580.00	0.00 0.00		MVCU
260	TI2903	R OT TMP	MVCU INPT	A M	8 2	3 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1035.00 1005.00	0.00 0.00		MVCU
261	TI2905	R SUPRHT	MVCU NODE	A M	8 2	67 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1485.00 1485.00	120.00 105.00		MVCU
262	TSP2929	PANEL TEMP SP	MVCU PID	A C	4 2	23 R	1 DEGF	N N	0.0 1500.0	L N	0.00 1005.00	67.00 64.00	0.00 0.00	0% 99%	D CNSL
263	TI2005	RPHTP OT	MVCU INPT	A M	4 2	23 R	1 DEGF	N N	0.0 800.0	L P	0.00 792.00	600.00 576.00	0.00 0.00		MVCU
264	TI2001	RPHTP IN	MVCU INPT	A M	8 3	4 R	1 DEGF	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
265	FI2230	R IN FLO	MVCU NODE	A M	8 3	51 R	1 KLBH	N N	0.0 69.5	L N	0.00 68.80	0.00 0.00	0.00 0.00		MVCU
266	FI2231	R IN FLO	MVCU NODE	A M	8 3	52 R	1 KLBH	N N	0.0 69.5	L N	0.00 68.80	0.00 0.00	0.00 0.00		MVCU
267	FI2232	R IN FLO	MVCU NODE	A M	8 3	53 R	1 KLBH	N N	0.0 69.5	L N	0.00 68.80	0.00 0.00	0.00 0.00		MVCU
268	FI2233	R TOTFLO	MVCU NODE	A M	4 3	56 R	1 KLBH	N N	0.0 208.5	L N	0.00 206.42	0.00 0.00	0.00 0.00		MVCU
269	PI2006	PRHT OUT RNG PRES	MVCU INPT	A M	8 2	20 R	1 PSIG	N N	0.0 3000.0	L P	0.00 2970.00	2010.00 1950.00	0.00 0.00		MVCU
270	TI2009	RIW SUBC	MVCU NODE	A M	4 2	71 R	1 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 792.00	48.00 24.00		MVCU
271	AM1000	RSFT	MVCU A/M	A C	9 1	22 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
272	PC1000	RSFT HP SP	MVCU PID	A C	9 1	19 R	1 PSIG	N N	0.0 1000.0	L P	0.00 550.00	600.00 570.00	300.00 0.00	0% 99%	D CNSL

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

31

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL 0 C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
273	FI2801	RB19 FLO	MVCU OUTP	A M	3 2	9 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
274	AM647B	RSFT	MVCU A/M	A C	9 2	4 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0X 99X	D MVCU
275	PC647B	RSFTDAHP SP	MVCU PID	A C	9 2	1 R	1 PSIA	N N	0.0 75.0	L P	15.75 45.00	45.00 35.25	15.75 14.25	0X 99X	D CNSL
276	TI2950	DCM S IN	IPAC INPT	A M	12 1	8 S	1 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
277	LC74A	RSFT LL SP	MVCU PID	A C	9 2	6 R	1 INCH	N N	0.0 90.0	L P	0.00 89.10	84.60 72.00	9.90 5.40	0X 99X	D CNSL
278	FC2301C	PANEL 04 FLO TEMP	MVCU NODE	A M	5 1	65 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
279	AM74A	RSFT	MVCU A/M	A C	9 2	9 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0X 99X	D MVCU
280	LCM74C	RSFT HL SP	MVCU PID	A C	9 2	11 R	1 INCH	N N	0.0 90.0	L P	0.00 89.10	84.60 72.00	9.90 5.40	0X 99X	D CNSL
281	TI2107	R RP222	IPAC INPT	A M	12 1	2 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 576.00	0.00 0.00		MVCU
282	TI2108	R RP223	IPAC INPT	A M	12 1	3 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 576.00	0.00 0.00		MVCU
283	TI2109	R RP224	IPAC INPT	A M	12 1	4 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 576.00	0.00 0.00		MVCU
284	TI2207	R RP201	IPAC INPT	A M	12 1	5 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 496.00	0.00 0.00		MVCU
285	TI2208	R RP202	IPAC INPT	A M	12 1	6 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 496.00	0.00 0.00		MVCU
286	TI2209	R RP203	IPAC INPT	A M	12 1	7 S	8 DEGF	N N	0.0 800.0	L P	0.00 792.00	792.00 496.00	0.00 0.00		MVCU
287	YI2110A	P R RP222	IPAC INPT	A M	12 1	33 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
288	YI2110B	R RP222	IPAC INPT	A M	12 1	34 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
289	YI2110C	R RP222	IPAC INPT	A M	12 1	35 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 32	

LOOP	TAG	DESCR PTION	DFVICE SUBTY	A/D C/M	Hwy NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
290	YI2111A	R RP223	IPAC INPT	A M	12 1	36 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
291	YI2111B	R RP223	IPAC INPT	A M	12 1	37 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
292	YI2111C	R RP223	IPAC INPT	A M	12 1	38 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
293	YI2112A	R RP224	IPAC INPT	A M	12 1	39 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
294	YI2112B	R RP224	IPAC INPT	A M	12 1	40 S	8 KWSM	N N	0.0 170.0	L N	0.00 0.00	0.00 0.00	0.00 0.00		MVCU
295	YI2112C	R RP224	IPAC INPT	A M	12 1	65 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
296	YI2210A	R RP201	IPAC INPT	A M	12 1	66 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
297	YI2210B	R RP201	IPAC INPT	A M	12 1	67 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
298	YI2210C	R RP201	IPAC INPT	A M	12 1	68 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
299	YI2211A	R RP202	IPAC INPT	A M	12 1	69 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
300	YI2211B	R RP202	IPAC INPT	A M	12 1	70 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
301	YI2211C	R RP202	IPAC INPT	A M	12 1	71 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
302	YI2212A	R RP203	IPAC INPT	A M	12 1	72 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
303	YI2212B	R RP203	IPAC INPT	A M	12 1	97 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
304	YI2212C	R RP203	IPAC INPT	A M	12 1	98 S	8 KWSM	N N	0.0 170.0	L N	0.00 168.30	0.00 0.00	0.00 0.00		MVCU
305	YI2308C	R RB205	IPAC INPT	A M	12 1	100 S	8 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
306	YI2309C	R RB206	IPAC INPT	A M	12 1	101 S	8 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

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1D48188

REV

A

SHEET

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LOOP	TAG	DESCRT PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HM AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
307	YI2408C	P RB208	IPAC INPT	A M	12 1	103 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
308	YI2409C	R RB209	IPAC INPT	A M	12 1	104 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
309	YI2508C	R RB211	IPAC INPT	A M	12 1	130 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
310	YI2509C	R RB212	IPAC INPT	A M	12 1	131 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
311	YI2608C	R RB214	IPAC INPT	A M	12 1	133 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
312	YI2609C	R RB215	IPAC INPT	A M	12 1	134 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
313	YI2708C	R RB217	IPAC INPT	A M	12 1	136 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
314	YI2709C	R RB218	IPAC INPT	A M	12 1	161 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
315	YI2808C	R RB220	IPAC INPT	A M	12 1	163 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
316	YI2809C	R RB221	IPAC INPT	A M	12 1	164 S	R KWSM	N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
317	ZI2301	R TCB204	IPAC INPT	A M	15 1	2 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
318	ZI2302	R TCB205	IPAC INPT	A M	15 1	3 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
319	ZI2303	R TCB206	IPAC INPT	A M	15 1	4 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
320	ZI2401	R TCB207	IPAC INPT	A M	15 1	5 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
321	ZI2402	R TCB208	IPAC INPT	A M	15 1	6 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
322	ZI2403	R TCB209	IPAC INPT	A M	15 1	7 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
323	LI2901	RSEPAR D	IPAC INPT	A M	15 1	8 S	1 PCT	N	0.0 100.0	L N	0.00 99.00	80.00 60.00	15.00 10.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MURKIN BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
REV A	SHEET 34	

LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LG AL LL AL	CO LO CO HI	OUTD SPSEL
324	ZI2501	R TCB210	IPAC INPT	A M	15 1	33 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
325	ZI2502	R TCB211	IPAC INPT	A M	15 1	34 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
326	ZI2503	R TCB212	IPAC INPT	A M	15 1	35 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
327	ZI2601	R TCB213	IPAC INPT	A M	15 1	36 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
328	ZI2602	R TCB214	IPAC INPT	A M	15 1	37 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
329	ZI2603	R TCB215	IPAC INPT	A M	15 1	38 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
330	ZI2701	R TCB216	IPAC INPT	A M	15 1	39 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
331	ZI2702	R TCB217	IPAC INPT	A M	15 1	40 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
332	ZI2703	R TCB218	IPAC INPT	A M	15 1	65 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
333	ZI2801	R TCB219	IPAC INPT	A M	15 1	66 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
334	ZI2802	R TCB220	IPAC INPT	A M	15 1	67 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
335	ZI2803	R TCB221	IPAC INPT	A M	15 1	68 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
336	ZI2906	R FT 5 0	IPAC INPT	A M	15 1	69 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
337	PDI2008	R IN OUT	IPAC INPT	A M	15 1	70 S	8 PSID	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
338	TI2904	R OUT	IPAC INPT	A M	15 1	71 S	8 DEGF	N N	0.0 1200.0	L P	0.00 1188.00	1188.00 996.00	600.00 0.00		MVCU
339	ZI2905	R DNCMR	IPAC INPT	A M	15 1	72 S	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
340	ZI2002	RFW I BY	IPAC INPT	A M	15 1	81 S	1 PCT	N N	0.0 100.0	L N	1.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D4818P

REV

A

SHEET

35

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CG LO CO HI	OUTD SPSEL
341	TC2501B	PANEL TR RB10 PTR	MVCU PID	A C	2 1	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
342	M1-1V	RSS STN1 MUX1 ALM	IPAC INPT	A M	12 1	168 S	8 VOC	N N	4.5 5.5	L P	4.50 5.49	5.49 5.20	4.90 4.50		MVCU
343	TI2603A	PANEL TA RB15 PTA	MVCU INPT	A M	14 2	9 R	8 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	78.00 77.00	17.00 17.00		MVCU
344	TI2701		MVCU RB16 PT OUTP	A M	3 1	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
345	FI2701		MVCU RB-16 OUTP	A M	3 1	4 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
346	TI2702		MVCU RB17 PT OUTP	A M	3 1	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
347	FI2702		MVCU RB17 FLO OUTP	A M	3 1	9 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
348	TI2703		MVCU RB18 PT OUTP	A M	3 2	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
349	FI2703		MVCU RB18 FLO OUTP	A M	3 2	4 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
350	TEST1		MVCU A/M	A C	4 3	19 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
351	FI2301		MVCU RB04 FLO OUTP	A M	1 1	4 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
352	TI2802		MVCU RB20 PT OUTP	A M	4 1	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
353	FI2802		MVCU RB20 FLO OUTP	A M	4 1	4 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
354	TI2803		MVCU RB21 PT OUTP	A M	4 1	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
355	FI2803		MVCU RB21 FLO OUTP	A M	4 1	9 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
356	PI2002	R INLET	MVCU INPT	A M	4 2	21 R	1 PSIG	N N	0.0 3000.0	L N	0.00 2970.00	64.00 63.00	0.00 0.00		MVCU
357	UC2905A	RS TRIP LOSSPHT	MVCU A/M	A C	4 2	19 R	1 MA	N N	4.0 20.0	L P	4.00 19.84	19.84 19.84	4.16 4.00	0% 99%	D MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
REV A	SHEET 36	



LOOP	TAG	DESCR I PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HM AL HT AL	LO AL LL AL	CO LO CO HI	OUTD SPSFL
358	PI1001	R SD	MVCU INPT	A M	13 1	17 R	1 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00		MVCU
359	PI640	VAC RATE COND VAC	MVCU INPT	A M	13 1	4 R	1 INHC	N N	0.0 8.0	L R	0.00 7.92	4.00 2.00	0.00 0.00		MVCU
360	AM1001	R SD	MVCU A/M	A C	9 1	10 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
361	JC1001	RSD J SP	MVCU PID	A C	9 1	12 R	1 MW	N N	0.0 18.0	L N	0.00 17.82	0.00 0.00	0.00 0.00	0% 99%	D CNSL
362	PSP1001	RSD P SP	MVCU PID	A C	9 1	1 R	1 PSIG	N N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
363	PC1001	R SD P	MVCU PID	A C	9 1	6 R	1 PSIG	Y N	0.0 1800.0	L N	0.00 1782.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
364	UY12929	RS PNL ENTHALP#	MVCU PID	A C	4 2	30 R	1 PCT	Y N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
365	TCM1002	RSD DSSP	MVCU PID	A C	9 1	15 R	1 DEGF	Y N	0.0 1000.0	L P	0.00 990.00	360.00 330.00	0.00 0.00	0% 99%	D CNSL
366	TI1002	RSD DS T	MVCU INPT	A M	13 1	6 R	4 DEGF	N N	0.0 1000.0	L N	0.00 990.00	0.00 0.00	0.00 0.00		MVCU
367	PI1002	RSD DS P	MVCU INPT	A M	13 1	7 R	4 PSIG	N N	0.0 115.0	L N	0.00 113.85	0.00 0.00	0.00 0.00		MVCU
368	TI2907	R FT S T	MVCU INPT	A M	13 2	1 R	1 DEGF	N N	0.0 800.0	L P	0.00 792.00	680.00 656.00	0.00 0.00		MVCU
369	LI2908	R FT L	MVCU INPT	A M	13 2	3 R	1 INCH	N N	0.0 90.0	L N	0.00 89.10	0.00 0.00	0.00 0.00		MVCU
370	TI2301	RB04 PT	MVCU OUTP	A M	1 1	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
371	TC1002	T SAT	MVCU A/M	A C	9 1	14 R	1 DEGF	N N	0.0 1000.0	L N	0.00 990.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
372	TI2302	RB05 PT	MVCU OUTP	A M	1 1	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
373	FI2302	RB05 FLO	MVCU OUTP	A M	1 1	9 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
374	TI2303	RB06 PT	MVCU OUTP	A M	1 2	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

104818R

REV

A

SHEET

37

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	Hwy NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
375	FI2303	RB06 FLO	MVCU OUTP	A M	1 2	4 R	1 LBH	N N	0.0 7638.0	L N	0.00 7561.62	0.00 0.00	0.00 0.00		MVCU
376	TI2401	RB07 PT	MVCU OUTP	A M	1 2	11 R	1 DEGF	N M	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
377	FI2401	RB07 FLO	MVCU OUTP	A M	1 2	9 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
378	TI2402	RB08 PT	MVCU OUTP	A M	10 1	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
379	FI2402	RB08 FLO	MVCU OUTP	A M	10 1	4 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
380	TI2403	RB09 PT	MVCU OUTP	A M	10 1	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
381	FI2403	RB08 FLO	MVCU OUTP	A M	10 1	9 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
382	TI2501	RB10 PT	MVCU OUTP	A M	2 1	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
383	FI2501	RB10 FLO	MVCU OUTP	A M	2 1	4 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
384	TI2502	RB11 PT	MVCU OUTP	A M	2 1	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
385	FI2502	RB11 FLO	MVCU OUTP	A M	2 1	9 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
386	TI2601	RB13 PT	MVCU OUTP	A M	2 2	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
387	FI2601	RB13 FLO	MVCU OUTP	A M	2 2	9 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
388	TI2503	RB12 PT	MVCU OUTP	A M	2 2	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
389	FI2503	RB12 FLO	MVCU OUTP	A M	2 2	8 R	1 LBH	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
390	YI2607A	RB13FLUX R RB213	MVCU INPT	A M	2 2	18 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	99.00 61.00	1.00 1.00		MVCU
391	TI2602	RB14 PT	MVCU OUTP	A M	10 2	6 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

38

LOOP	TAG	DESCR PTION	DEVICE SURT	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
392	TI2704	RR16 OT	MVCU OUTP	A M	3 1	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
393	TI2603	RB15 PT	MVCU OUTP	A M	10 2	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
394	FI2603	RB15 FLO	MVCU OUTP	A M	10 2	9 R	1 LBH.	N N	0.0 11457.0	L N	0.00 11342.43	0.00 0.00	0.00 0.00		MVCU
395	JII470	E 33KV	MVCU INPT	A M	13 1	5 R	4 KW	N N	0.0 18417.0	L N	0.00 18232.83	61.00 56.00	0.00 0.00		MVCU
396	PI635E	E HTR 2	MVCU INPT	A M	13 2	4 R	4 PSIG	N N	0.0 190.0	L N	0.00 188.10	0.00 0.00	0.00 0.00		MVCU
397	TI2306	TEMP OUT RB06 OT	MVCU OUTP	A M	1 2	7 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1050.00 1005.00	0.00 0.00		MVCU
398	TREF1-2	RSS STN1 MUX2 TMP	IPAC TCPL	A M	15 1	1 S	1 DEGF	N N	0.0 100.0	L P	0.00 99.00	90.00 90.00	40.00 40.00		MVCU
399	M1-2V	RSS STN1 MUX1 ALM	IPAC INPT	A M	15 1	88 S	8 VDC	N N	4.5 5.5	L P	4.50 5.49	5.49 5.20	4.90 4.50		MVCU
400	PI2906B	RSFT INTPREPV	MVCU INPT	A M	8 3	6 R	1 PSIG	N N	0.0 1000.0	L N	0.00 990.00	0.00 0.00	0.00 0.00		MVCU
401	PI2906A	RSFT INTPREPV	MVCU INPT	A M	8 3	5 R	1 PSIG	N N	0.0 1000.0	L N	0.00 990.00	62.00 58.00	0.00 0.00		MVCU
402	ZI1002	RSDESCON IN VLV	MVCU INPT	A M	13 1	11 R	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
403	TI1001	RSDESSTM IN TEMPV	MVCU INPT	A M	13 1	8 R	8 DEGF	N N	0.0 1100.0	L N	0.00 1089.00	0.00 0.00	0.00 0.00		MVCU
404	ZI74A	RSFT VP	MVCU INPT	A M	13 2	8 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
405	ZI74C	RSFT CON OUT VP	MVCU INPT	A M	13 2	9 R	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
406	ZI647B	RSFT VP	MVCU INPT	A M	13 2	7 R	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
407	ZI1000	RSFT VP	MVCU INPT	A M	13 1	10 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
408	ZI1001	R SD VP	MVCU INPT	A M	13 1	9 R	8 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

PSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

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LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/O C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
409	POI1105	RS DEL PRES	MVCU NODE	A M	4 2	62 R	1 PSIA	N N	0.0 3000.0	L P	30.00 660.00	0.00 240.00	30.00 0.00		MVCU
410	FI37	R FWP FLOW	MVCU INPT	A M	9 2	11 R	1 GPM	N N	0.0 345.0	L N	0.00 341.55	0.00 0.00	0.00 0.00		MVCU
411	TYI1002	SDS S H	MVCU NODE	A M	13 1	67 R	1 DEGF	N N	0.0 1000.0	L N	0.00 50.00	5.00 3.00	0.00 0.00		MVCU
412	SC1105	RSFWP SPD CMD	MVCU PID	A C	4 2	9 R	1 NONE	Y N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
413	II44	P917 I	MVCU INPT	A M	9 2	13 R	1 AMPS	N N	0.0 150.0	L N	0.00 148.50	0.00 0.00	0.00 0.00		MVCU
414	JI44	P917 J	MVCU INPT	A M	9 2	14 R	1 KW	N N	0.0 1050.0	L N	0.00 1039.50	0.00 0.00	0.00 0.00		MVCU
415	XI1105B	P917 VJB	MVCU INPT	A M	9 2	15 R	8 MILS	N N	0.0 10.0	L P	0.00 9.90	8.00 4.00	0.00 0.00		MVCU
416	XI1105A	P917 VIB	MVCU INPT	A M	9 2	16 R	8 MILS	N N	0.0 10.0	L P	0.00 9.90	8.00 4.00	0.00 0.00		MVCU
417	TEST		MVCU INPT	A M	4 3	10 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
418	PI1000	SD PRES	MVCU INPT	A M	9 1	1 R	1 PSIG	N N	0.0 600.0	L N	0.00 594.00	0.00 0.00	0.00 0.00		MVCU
419	TC2301B	PANEL T RR04	MVCU PID	A C	1 1	4 R	1 DEGF	Y N	0.0 1500.0	L N	0.00 1485.00	83.00 80.00	0.00 0.00	0% 99%	D CNSL
420	XI1105C	P917 VIB	MVCU INPT	A M	9 2	18 R	8 MILS	N N	0.0 10.0	L P	0.00 9.90	8.00 4.00	0.00 0.00		MVCU
421	XI1105D	P917 VIB	MVCU INPT	A M	9 2	19 R	8 MILS	N N	0.0 10.0	L P	0.00 9.90	8.00 4.00	0.00 0.00		MVCU
422	TC2301C	RCVR PANEL SP	MVCU INPT	A M	1 1	8 R	1 NONE	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
423	TSL2929	RCVR PAN SFLM	MVCU OUTP	A M	4 2	5 R	1 NONE	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00		MVCU
424	AM1105A	RFP SPD	MVCU A/M	A C	4 2	35 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
425	AM1105B	RFP SPD	MVCU A/M	A C	4 2	36 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

40

LOOP	TAG	DESCRI PTION	DEVICF SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL D C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
426	AM1105C	RFP SPD	MVCU A/M	A C	4 2	37 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
427	FCM2703	PANEL RB18 FLO	MVCU PID	A C	3 2	18 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNLS
429	TI1105J	P917 MOT	MVCU INPT	A M	9 2	17 R	1 DEGF	N N	20.0 248.0	L P	20.00 245.72	238.88 238.88	20.00 20.00		MVCU
430	TY2929A	TSP 1	MVCU OUTP	A C	8 2	5 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
431	TY2929B	TSP 2	MVCU A/M	A C	8 2	33 R	1 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
432	TY2929C	TSP 3	MVCU A/M	A C	8 2	34 R	1 DEGF	N N	0.0 1500.0	L N	0.00 1485.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
433	PDI86A	NPSH	MVCU INPT	A M	9 2	10 R	1 INCH	N N	0.0 400.0	L P	0.00 396.00	396.00 396.00	148.00 104.00		MVCU
434	FI1105	RECIRC	MVCU NODE	A M	9 2	62 R	1 GPM	N N	0.0 345.0	L N	0.00 341.55	99.00 99.00	0.00 0.00		MVCU
435	RSTST2	TST DRV2	IPAC INPT	A M	15 1	83 S	1 MA	N N	4.0 20.0	L N	4.00 19.84	0.00 0.00	0.00 0.00		MVCU
436	RSTST3	TST DRV3	IPAC INPT	A M	15 1	84 S	1 MA	N N	4.0 20.0	L N	4.00 19.84	0.00 0.00	0.00 0.00		MVCU
437	RSTST4	TST DRV4	IPAC INPT	A M	15 1	85 S	1 MA	N N	4.0 20.0	L N	4.00 19.84	0.00 0.00	0.00 0.00		MVCU
440	FI35A	RS FWP	MVCU NODE	A M	9 2	61 R	1 GPM	N N	0.0 345.0	L N	0.00 341.55	99.00 99.00	5.00 5.00		MVCU
441	FI2403A	FI2403 SGRD	MVCU INPT	A M	10 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
442	FI2301A	FI2301 SGRD	MVCU INPT	A M	1 1	14 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 41	

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HT AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
443	SI1105	RSFWP FWP SPD	MVCU INPT	A M	4 2	25 R	1 RPM	N N	695.0 3475.0	L N	695.00 3447.20	0.00 0.00	0.00 0.00		MVCU
444	TI2801	RB19 PT	MVCU OUTP	A M	3 2	11 R	1 DEGF	N N	0.0 1500.0	L P	0.00 1485.00	1170.00 1095.00	0.00 0.00		MVCU
445	FCM2401	PANEL RB07 FLO	MVCU PID	A C	1 2	38 R	1 LBH	Y N	0.0 11457.0	L N	0.00 11342.43	99.00 99.00	4.00 0.00	0% 99%	R CNSL
446	PI01		MVCU PID	A C	9 1	39 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
447	TEST3		MVCU NODE	A M	2 2	56 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
448	WSI1007	WIND SPD WNO TWR	IPAC INPT	A M	12 1	167 S	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
452	WSI1000	WIND SPD WNO ROOF	IPAC INPT	A M	15 1	87 S	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
453	YI2409	FLUX RB09	MVCU OUTP	A M	14 1	10 R	1 KWSM	N N	0.0 490.0	L N	0.00 485.10	0.00 0.00	0.00 0.00		MVCU
454	FBI2301	4 FLOSQ	MVCU INPT	A M	1 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
455	FBI2302	5 FLOSQ	MVCU INPT	A M	1 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
456	FBI2303	6 FLOSQ	MVCU INPT	A M	1 2	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
457	FBI2401	7 FLOSQ	MVCU INPT	A M	1 2	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
458	FBI2402	8 FLOSQ	MVCU INPT	A M	10 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
459	FBI2403	9 FLOSQ	MVCU INPT	A M	10 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

42

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HOST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
460	FBI2501	10 FLOSQ	MVCU INPT	A M	2 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
461	FBI2502	11 FLOSQ	MVCU INPT	A M	2 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
462	FBI2503	12 FLOSQ	MVCU INPT	A M	2 2	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
463	FBI2601	13	MVCU INPT	A M	2 2	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
464	FBI2602	14 FLOSQ	MVCU INPT	A M	10 2	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
465	FBI2603	15 FLOSQ	MVCU INPT	A M	10 2	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
466	FBI2701	16 FLOSQ	MVCU INPT	A M	3 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
467	FBI2702	17 FLOSQ	MVCU INPT	A M	3 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
468	FBI2703	18 FLOSQ	MVCU INPT	A M	3 2	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
469	FBI2801	19 FLOSQ	MVCU INPT	A M	3 2	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
470	FBI2802	20 FLOSQ	MVCU INPT	A M	4 1	14 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
471	FBI2803	21 FLOSQ	MVCU INPT	A M	4 1	15 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
472	FBI2230	PH FLOBS	MVCU INPT	A M	8 3	1 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
473	FBI2231	PH FLOBS	MVCU INPT	A M	8 3	2 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
474	FBI2232	PH FLOBS	MVCU INPT	A M	8 3	3 R	1 PCT	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
475	PI2902A	RSFT IN ALRM	MVCU INPT	A M	8 2	2 R	1 PSI	N N	0.0 2000.0	L P	0.00 1980.00	620.00 560.00	0.00 0.00		MVCU
476	PIT635	PRES OVR	MVCU NODE	A M	9 2	57 R	1 PSIG	N N	0.0 190.0	L N	0.00 188.10	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818P
MCDONNELL DOUGLAS		REV A	SHEET 43	

LOOP	TAG	DESCRI PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN UNITS	CASC HCST	CAL O C 100	PV SC AL TY	SP LO SP HI	HH AL HI AL	LO AL LL AL	CO LO CO HI	OUTD SPSEL
477	NIP1000	TOT ENRG	MVCU TOTI	A C	4 3	13 R	1 KWSM	N N	0.0 1.4	L N	0.00 1.38	72.00 72.00	-72.00 -72.00		MVCU
478	NIPHPS	USEABLF USE ENRG	MVCU TOTI	A C	4 3	16 R	1 KWSM	N N	0.0 1.4	L N	0.00 1.38	0.00 0.00	0.00 0.00		MVCU
479	TST		MVCU A/M	A C	4 2	34 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
480	TEST4		MVCU NODE	A M	6 1	62 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
483	AMT1001	RSTRIP	MVCU A/M	A C	9 1	11 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D MVCU
485	NES102A	NET KW	MVCU TOTI	A C	9 1	24 R	1 KW	N N	0.0 18417.0	L N	0.00 18232.83	0.00 0.00	0.00 0.00		MVCU
487	PDI2949	2905 DP	MVCU INPT	A M	4 3	9 R	1 PSID	N N	0.0 500.0	L N	0.00 495.00	0.00 0.00	0.00 0.00		MVCU
489	PID2		MVCU PID	A C	9 1	40 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00	0% 99%	D CNSL
490	TEST2		MVCU OUTP	A M	2 1	1 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU
491	NIPTIME	100 0 USE ENRG	MVCU TOTI	A C	4 3	22 R	1 NONE	N N	0.0 100.0	L N	0.00 99.00	0.00 0.00	0.00 0.00		MVCU

MCDONNELL DOUGLAS AERONAUTICS CO.  
MURKINSON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1D4818A

REV

A

SHEET

44



LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO REV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL GN	AL PP INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
522	T02803H	MTL BLND	MVCU NODE	D M	8 1	114 R	1 N	BLNDED METAL	N N	2 N	G G	
523	T02802H	MTL BLND	MVCU NODE	D M	8 1	113 R	1 N	BLNDED METAL	N N	2 N	G G	
525	T02803A	P21 FLTP	MVCU NODE	D C	8 1	66 R	1 N	FLOW TEMP	N N	2 N	G G	
526	T02801H	MTL BLND	MVCU NODE	D M	7 2	114 R	1 N	BLNDED METAL	N N	2 N	G G	
527	T02703H	MTL BLND	MVCU NODE	D M	7 2	113 R	1 N	BLNDED METAL	N N	2 N	G G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48180

REV

A

SHEET

46

LOOP	TAG	DESCR PTION	DEVIC SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
528	TD2801A	P19 FLTP	MVCU NODE	D C	7 2	66 R	1 N	FLOW TEMP	N N	2 N	G G	
529	TD2702H	MTL BLND	MVCU NODE	D M	7 1	114 R	1 N	BLNDED METAL	N N	2 N	G G	
530	TD2701H	MTL BLND	MVCU NODE	D M	7 1	113 R	1 N	BLNDED METAL	N N	2 N	G G	
531	TD2702A	17 FLTP	MVCU NODE	D C	7 1	66 R	1 N	FLOW TEMP	N N	2 N	G G	
532	TD2603H	MTL BLND	MVCU NODE	D M	14 2	114 R	1 N	BLNDED METAL	N N	2 N	G G	
533	TD2602H	MTL BLND	MVCU NODE	D M	14 2	113 R	1 N	BLNDED METAL	N N	2 N	G G	
534	TD2603A	P15 FLTP	MVCU NODE	D C	14 2	66 R	1 N	FLOW TEMP	N N	2 N	G G	
535	TD2601H	MTL BLND	MVCU NODE	D M	6 2	114 R	1 N	BLNDED METAL	N N	2 N	G G	
536	TD2503H	MTL BLND	MVCU NODE	D M	6 2	113 R	1 N	BLNDED METAL	N N	2 N	G G	
537	TD2601A	P13 FLTP	MVCU NODE	D C	6 2	66 R	1 N	FLOW TEMP	N N	2 N	G G	
538	TD2502H	MTL BLND	MVCU NODE	D M	6 1	114 R	1 N	BLNDED METAL	N N	2 N	G G	
539	TD2501H	MTL BLND	MVCU NODE	D M	6 1	113 R	1 N	BLNDED METAL	N N	2 N	G G	
541	TD2403H	MTL BLND	MVCU NODE	D M	14 1	114 R	1 N	BLNDED METAL	N N	2 N	G G	
542	TD2402H	MTL BLND	MVCU NODE	D M	14 1	113 R	1 N	BLNDED METAL	N N	2 N	G G	
543	TD2403A	P9 FLTP	MVCU NODE	D C	14 1	66 R	1 N	FLOW TEMP	N N	2 N	G G	
544	TD2401H	MTL BLND	MVCU NODE	D M	5 2	114 R	1 N	BLNDED METAL	N N	2 N	G G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
WUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

47

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	ON CLR OF CLR	HY1 CLF HYP CLR
545	TD2303H	MTL BLND	MVCU NODE	D M	5 2	113 R	1 N	BLNDED METAL	N N	2 N	G G	
546	TD2401A	P7 FLTP	MVCU NODE	D C	5 2	66 R	1 N	FLOW TEMP	N N	2 N	G G	
547	TD2302H	MTL BLND	MVCU NODE	D M	5 1	114 R	1 N	BLNDED METAL	N N	2 N	G G	
548	TD2301H	MTL BLND	MVCU NODE	D M	5 1	113 R	1 N	BLNDED METAL	N N	2 N	G G	
549	TD2302A	P5 FLTP	MVCU NODE	D C	5 1	66 R	1 N	FLOW TEMP	N N	2 N	G G	
550	QI6210	RS RLU	IPAC INPT	D M	11 1	93 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
551	PIL44	RFP NPSH	IPAC INPT	D M	11 1	105 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
553	ZA12901	M SPRA D	IPAC INPT	D M	11 1	108 S	1 N	DISABL ENABLE	Y Y	1 Y	R G	
554	ZI2007	PH VENT	IPAC MILP	D M	15 1	153 S	8 N	OPEN CLOSED	N N	2 N	R G	
555	PIH636C	COND P	IPAC INPT	D M	11 1	78 S	1 N	HIPRES NORMAL	Y Y	1 Y	R G	
556	TIH1002	DS O T	IPAC INPT	D M	11 1	77 S	1 N	HITEMP NORMAL	Y Y	1 Y	R G	
557	PD1105B	RS FWP VLV CTL	MVCU NODE	D C	4 2	79 R	1 N	ON OFF	N N	2 N	G G	
558	PD1105A	RS FWP PRES CTL	MVCU NODE	D C	4 2	80 R	1 N	ON OFF	N N	2 N	G G	
559	C1-11	RSS STN1 RMTCTL11	MLD MVCU		4 3		8 N					G G
560	ZI1105	RFP SPED	IPAC INPT	D M	11 1	60 S	1 N	HI MIN	Y Y	1 Y	R G	
561	QI6003	STM DUMP SD OPTFP	IPAC INPT	D M	11 1	110 S	1 N	SOSTRP NORMAL	Y Y	1 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO. MOUNTAIN VIEW, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS			REV A	SHEET 48	

LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
562	QI6001	RECFIVER R OP TRP	IPAC INPT	D M	11 1	109 S	1 N	RS TRP NORMAL	Y Y	1 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818F
MCDONNELL DOUGLAS		REV A	SHEET 49	

LOOP	TAG	DESCRIPTI PTION	DEVICE SUPTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
581	PD1LR6A	RFP NPSH	IPAC INPT	D M	11 1	100 S	1 N	LONPSH NORMAL	Y Y	1 Y	R G	
582	PIH2906	RFT-PRES	MCON OUTP	D C	16 1	25 S	4 N	HI-540 NORMAL	Y Y	1 N	R G	
583	UI1998	ILS STAT 584 NO 2	MCON OUTP	D C	16 1	59 S	8 N	NORMAL TRIP	Y N	1 N	G R	
584	HS1001B	R SD RST	MCON OUTP	D C	16 1	27 S	4 N	RESET OFF	N N	2 N	R G	
585	HS6200R	R RLU	MCON OUTP	D C	16 1	23 S	4 N	RESET NORMAL	N N	2 N	R G	
588	UI525C	123 P902 ISH525A	IPAC INPT	D M	11 1	128 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
589	UI524C	123 P901 ISH524A	IPAC INPT	D M	11 1	125 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
590	QI6211	RS RLU	IPAC INPT	D M	11 1	94 S	1 N	TROUBL READY	Y Y	1 N	R G	
591	PIH2006	RPH-PRES	MCON OUTP	D C	16 1	24 S	4 N	HI NORMAL	Y Y	1 N	R G	
592	QI6203	RRLU B 3	IPAC INPT	D M	11 1	86 S	1 N	1 0	N Y	1 Y	R G	
593	QI6209	RS RLU	IPAC INPT	D M	11 1	92 S	1 N	ALARM NORMAL	N Y	2 Y	Y G	
594	QI6208	RRLU B 8	IPAC INPT	D M	11 1	91 S	1 N	1 0	N Y	1 Y	R G	
595	QI6207	RRLU B 7	IPAC INPT	D M	11 1	90 S	1 N	1 0	N Y	1 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
MURKINSTEIN BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
REV A	SHEET 50	

LOOP	TAG	DESCRIP TION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	GN CLR OF CLP	HY1 CLR HY2 CLP
596	QI6206	RRLU B 6	IPAC INPT	D M	11 1	89 S	1 N	1 0	N Y	1 Y	R G	
597	QI6205	RPLU B 5	IPAC INPT	D M	11 1	88 S	1 N	1 0	N Y	1 Y	R G	
598	QI6204	RRLU B 4	IPAC INPT	D M	11 1	87 S	1 N	1 0	N Y	1 Y	R G	
599	QI6202	RRLU B 2	IPAC INPT	D M	11 1	85 S	1 N	1 0	N Y	1 Y	R G	
600	QI6201	RRLU B 1	IPAC INPT	D M	11 1	84 S	1 N	1 0	N Y	1 Y	R G	
601	ZI1007	RFT DSAS	IPAC MILP	D M	11 1	75 S	1 N	OPEN CLOSED	N N	2 Y	R G	
602	ZI1006	RMS DSAS	IPAC MILP	D M	11 1	73 S	1 N	OPEN CLOSED	N N	2 Y	R G	
603	ZI1031	E MS SP	IPAC MILP	D M	11 1	71 S	1 N	OPEN CLOSED	N N	2 Y	R G	
604	ZI1012	RMS DS D	IPAC MILP	D M	11 1	69 S	1 N	OPEN CLOSED	N N	2 Y	R G	
605	ZI1011	RMS SD D	IPAC MILP	D M	11 1	67 S	1 N	OPEN CLOSED	N N	2 Y	R G	
606	ZI1010	RFT DS D	IPAC MILP	D M	11 1	65 S	1 N	OPEN CLOSED	N N	2 Y	R G	
607	LIH1015	RAUX S D	IPAC INPT	D M	11 1	64 S	1 N	HI LEV NORMAL	N Y	1 Y	R G	
608	LIH1012	RMS DS D	IPAC INPT	D M	11 1	63 S	1 N	HI LEV NORMAL	N Y	1 Y	R G	
609	LIH1011	RMS SD D	IPAC INPT	D M	11 1	62 S	1 N	HI LEV NORMAL	Y Y	1 Y	R G	
610	LIH1010	RFT DS D	IPAC INPT	D M	11 1	61 S	1 N	HI LEV NORMAL	Y Y	1 Y	R G	
611	HS2913	R DRAINS	MCON OUTP	D C	16 1	22 S	4 N	OPEN CLOSE	Y Y	1 N	R G	
612	ZI37	RFP RCTR	IPAC MILP	D M	11 1	101 S	1 N	OPEN CLOSED	N N	2 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

51

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLP	HY1 CLR HY2 CLR
613	TS1105A	FP OUTRSEAL	IPAC INFT	D M	11 1	80 S	1 N	HITEMP NORMAL	Y Y	1 Y	R G	
614	HS1031	E MS SP	MCON OUTP	D C	16 1	20 S	4 N	OPEN CLOSE	N N	2 N	R G	
615	HS1016	E MS I D	MCON OUTP	D C	16 1	19 S	4 N	OPEN CLOSE	N N	2 N	R G	
616	HS1015	AUX MS D	MCON OUTP	D C	16 1	18 S	4 N	OPEN CLOSE	N N	2 N	R G	
617	HS1012	SD DS D	MCON OUTP	D C	16 1	17 S	4 N	OPEN CLOSE	N N	2 N	R G	
618	HS1011	SD MS D	MCON OUTP	D C	16 1	16 S	4 N	OPEN CLOSE	N N	2 N	R G	
619	HS1010	R FT S D	MCON OUTP	D C	16 1	15 S	4 N	OPEN CLOSE	N N	2 N	R G	
620	ZI1015	RAUX S D	IPAC MILP	D M	11 1	103 S	1 N	OPEN CLOSED	N N	2 Y	R G	
621	TI1496	TOWRLTE CONT PWR	IPAC INPT	D M	15 1	192 S	8 N	FAIL NORMAL	Y Y	1 N	R G	
622	ZI1418	RBCS FPP	IPAC INPT	D M	15 1	191 S	8 N	RUN STOPPD	N N	2 N	R G	
623	TI1418	RBCS CST	IPAC INPT	D M	15 1	190 S	8 N	HI NORMAL	Y Y	1 N	R G	
624	TIL1480	60 DEG F LVL13 LO	IPAC INPT	D M	15 1	189 S	8 N	60 DEG TMP OK	Y Y	1 N	R G	
625	TIH1480	80 DEG F LVL13 HI	IPAC INPT	D M	15 1	188 S	8 N	80 DEG TMP OK	Y Y	1 N	R G	
626	TIL1481	60 DEG LVL14 LO	IPAC INPT	D M	15 1	187 S	8 N	60 DEG TMP OK	Y Y	1 N	R G	
627	TIH1481	80 DEG LVL14 HI	IPAC INPT	D M	15 1	186 S	8 N	80 DEG TMP OK	Y Y	1 N	R G	
628	FJ2099	RINST 02	IPAC INPT	D M	15 1	185 S	8 N	LO NORMAL	Y Y	1 N	R G	
629	ZI2913	R DRAIN	IPAC MILP	D M	15 1	183 S	8 N	OPEN CLOSED	Y Y	1 N	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

52

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR GF CLR	HY1 CLR HY2 CLR
630	ZI1016	R MS DRN	IPAC MILP	D M	11 1	97 S	1 N	OPEN CLOSED	N N	2 Y	R G	
631	ZI2901	RSEPAR D	IPAC MILP	D M	15 1	159 S	8 N	OPEN CLOSED	N N	2 N	R G	
632	PI2015B	RPH-N2	IPAC INPT	D M	15 1	158 S	8 N	HIPRES NORMAL	Y Y	1 N	R G	
633	PI2015A	RPH-N2	IPAC INPT	D M	15 1	157 S	8 N	LOPRES NORMAL	Y Y	1 N	R G	
634	PI2018B	RN2-HDR	IPAC INPT	D M	15 1	156 S	8 N	HI NORMAL	Y Y	1 N	R G	
635	PI2018A	RN2-HDR	IPAC INPT	D M	15 1	155 S	8 N	LO NORMAL	Y Y	1 N	R G	
636	ZI2902	R VENT 1	IPAC MILP	D M	15 1	151 S	8 N	OPEN CLOSED	N N	2 N	R G	
637	ZI2903	R VENT 2	IPAC MILP	D M	15 1	149 S	8 N	OPEN CLOSED	N N	2 N	R G	
638	ZI2004	R P IN	IPAC MILP	D M	11 1	81 S	8 N	OPEN CLOSED	N N	2 Y	R G	
639	TSI1105	INBDSEAL	IPAC INPT	D M	11 1	79 S	1 N	HITEMP NORMAL	Y Y	1 Y	R G	
640	FI44	RFP SEAL	IPAC INPT	D M	11 1	59 S	1 N	TROUBL NORMAL	Y Y	1 Y	R G	
641	ZI33	RFP OUT	IPAC MILP	D M	11 1	57 S	1 N	OPEN CLOSED	N N	2 Y	R G	
642	PIL1105	RFP L.O.	IPAC INPT	D M	11 1	56 S	1 N	LO NORMAL	Y Y	1 Y	R G	
643	UI44	RF PUMP	IPAC INPT	D M	11 1	55 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
644	ZI44	R F PUMP	IPAC MILP	D M	11 1	53 S	1 N	RUNING STOPPD	N N	2 Y	R G	
645	ZCI2007	RPH VENT	IPAC INPT	D M	11 1	52 S	1 N	OPEN CLOSED	Y Y	1 Y	R G	
646	ZI2911	RFTINLET	IPAC MILP	D M	11 1	49 S	1 N	OPEN CLOSED	N N	2 Y	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

53



LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
649	PIH2019	SOV2019	TPAC INPT	D M	11 1	46 S	1 N	RFT NO N2VENT	N N	2 Y	R G	
650	LIH1016	R MS DRN	TPAC INPT	D M	11 1	95 S	1 N	HI LEV NORMAL	N Y	1 Y	R G	
651	ZAI2913	RD ENABL	TPAC MILP	D M	11 1	7 S	1 N	ENABLD DISABL	Y Y	1 Y	R G	
653	HS44B	R F PUMP	TPAC MILP	D M	11 1	3 S	1 N	START STOP	N N	2 Y	R G	
654	HS33	RFP OUT	MCON OUTP	D C	16 1	14 S	4 N	OPEN CLOSE	N N	2 N	R G	
655	HS44A	RF PUMP	MCON OUTP	D C	16 1	13 S	4 N	START STOP	N N	2 N	R G	
656	HS2903	R VENT 2	MCON OUTP	D C	16 1	12 S	4 N	OPEN CLOSE	N N	2 N	R G	
657	HS2915	RFTI BLD	MCON OUTP	D C	16 1	11 S	4 N	OPEN CLOSE	N N	2 N	R G	
658	HS2914	RFTO BLD	MCON OUTP	D C	16 1	10 S	4 N	OPEN CLOSE	N N	2 N	R G	
659	HS2004	RPH IN	MCON OUTP	D C	16 1	7 S	4 N	OPEN CLOSE	N N	2 N	R G	
660	HS2901	RSEPAR D	MCON OUTP	D C	16 1	6 S	4 N	OPEN CLOSE	N N	2 N	R G	
661	HS2902	R VENT 1	MCON OUTP	D C	16 1	5 S	4 N	OPEN CLOSE	N N	2 N	R G	
662	HS2911	RFT IN	MCON OUTP	D C	16 1	4 S	4 N	OPEN CLOSE	N N	2 N	R G	
663	HS2007	RPH VENT	MCON OUTP	D C	16 1	3 S	4 N	OPEN CLOSE	N N	2 N	R G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
MONTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048186

REV

A

SHEET

54

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PP INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
664	HS2019	RFT-N2	MCON OUTP	D C	16 1	2 S	4 N	OPEN CLOSE	N N	2 N	R G	
667	PD1001A	SD TRACK	MVCU NODE	D C	13 1	65 R	1 N	ENARLF DISABL	N N	2 N	Y G	
669	UI525B	123 P902 ISH525	IPAC INPT	D M	11 1	127 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
671	TD2803C	BLNDTEMP	MVCU NODE	D C	8 1	98 R	8 N	METAL BLNDED	N N	2 N	G G	
672	TD2803G	P21 FLTP	MVCU NODE	D M	8 1	112 R	1 N	FLOW TEMP	N N	2 N	G G	
673	UI524B	123 P901 ISH524	IPAC INPT	D M	11 1	124 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
675	TD2802C	BLNDTEMP	MVCU NODE	D C	8 1	78 R	8 N	METAL BLNDED	N N	2 N	G G	
676	TD2802G	P20 FLTP	MVCU NODE	D M	8 1	111 R	1 N	FLOW TEMP	N N	2 N	G G	
677	TD2802A	P20 FLTP	MVCU NODE	D C	8 1	65 R	1 N	FLOW TEMP	N N	2 N	G G	
678	UI525A	123 P902 STOP CMD	IPAC INPT	D M	11 1	126 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
680	TD2801C	BLNDTEMP	MVCU NODE	D C	7 2	98 R	8 N	METAL BLNDED	N N	2 N	G G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
WINTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048188
REV	A	SHEET 55

LOOP	TAG	DESCRI PTION	DEVICE SUPTY	A/D C/A	HWY NO DEV AD	INT AD HWY TY	SCAM HOST	GN DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
681	TD28016	P19 FLTP	MVCU NODE	D M	7 2	112 R	1 N	FLOW TEMP	N N	2 N	G G	
682	UI524A	123 P901 STOP CMD	IPAC INPT	D M	11 1	123 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
684	TD2703C	BLNDTEMP	MVCU NODE	D C	7 2	78 R	8 N	METAL BLNDED	N N	2 N	G G	
685	TD2703G	P18 FLTP	MVCU NODE	D M	7 2	111 R	1 N	FLOW TEMP	N N	2 N	G G	
686	TD2703A	P18 FLTP	MVCU NODE	D C	7 2	65 R	1 N	FLOW TEMP	N N	2 N	G G	
687	UI525	123 P902 RESET	MCON OUTP	D C	16 1	121 S	1 N	RESET NORMAL	N N	2 N	Y G	
689	TD2702C	BLNDTEMP	MVCU NODE	D C	7 1	98 R	8 N	METAL BLNDED	N N	2 N	G G	
690	TD2702G	P17 FLTP	MVCU NODE	D M	7 1	112 R	1 N	FLOW TEMP	N N	2 N	G G	
691	UI524	123 P901 RESET	MCON OUTP	D C	16 1	120 S	1 N	RESET NORMAL	N N	2 N	Y G	
693	TD2701C	BLNDTEMP	MVCU NODE	D C	7 1	78 R	8 N	METAL BLNDED	N N	2 N	G G	
694	TD2701G	P16 FLTP	MVCU NODE	D M	7 1	111 R	1 N	FLOW TEMP	N N	2 N	G G	
695	TD2701A	P16 FLTP	MVCU NODE	D C	7 1	65 R	1 N	FLOW TEMP	N N	2 N	G G	
696	UI1997	ILS POWR 584 NO 1	IPAC INPT	D M	11 1	83 S	1 N	NORMAL FAIL	Y N	1 Y	G R	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

56

LOOP	TAG	DESCRIPTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
698	TD2603C	BLNDTEMP	MVCU NODE	D C	14 2	98 R	8 N	METAL BLNDED	N N	2 N	G G	
699	TD2603G	P15 FLTP	MVCU NODE	D M	14 2	112 R	1 N	FLOW TEMP	N N	2 N	G G	
700	UI1999	ILS TRIP 584 NO 1	MCON OUTP	D C	16 1	60 S	1 N	TRIP NORMAL	Y Y	1 N	R G	
702	TD2602C	BLNDTEMP	MVCU NODE	D C	14 2	78 R	8 N	METAL BLNDED	N N	2 N	G G	
703	TD2602G	P14 FLTP	MVCU NODE	D M	14 2	111 R	1 N	FLOW TEMP	N N	2 N	G G	
704	TD2602A	P14 FLTP	MVCU NODE	D C	14 2	65 R	1 N	FLOW TEMP	N N	2 N	G G	
705	TD2402C	BLNDTEMP	MVCU NODE	D C	14 1	78 R	8 N	METAL BLNDED	N N	2 N	G G	
706	TD647B	RSFT TMP CTRL	MVCU NODE	D M	9 2	66 R	1 N	TEMP PRESS	N N	2 N	G G	
708	TD2601C	BLNDTEMP	MVCU NODE	D C	6 2	98 R	8 N	METAL BLNDED	N N	2 N	G G	
710	TIH2911	RFT INT	MCON OUTP	D C	16 1	35 S	1 N	HINTMP NORMAL	Y Y	1 N	R G	
711	NIPTRP	RCVR RET-RSFT	MVCU NODE	D M	4 3	84 R	1 N	RSTART NORMAL	Y Y	2 N	G G	
712	TD2503C	BLNDTEMP	MVCU NODE	D C	6 2	78 R	8 N	METAL BLNDED	N N	2 N	G G	
713	TD2503G	P12 FLTP	MVCU NODE	D M	6 2	111 R	1 N	FLOW TEMP	N N	2 N	G G	
714	TD2503A	P12 FLTP	MVCU NODE	D C	6 2	65 R	1 N	FLOW TEMP	N N	2 N	G G	

MC DONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MC DONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

57

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN POST	ON DESC OFF DES	DI AL AL GN	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
715	PD74A	RSFT PRES CTL	MVCU NODE	D M	9 2	68 R	1 N	PRES LEVEL	N N	2 N	G G	
716	RSPWR	RCVR LO PWR	MVCU NODE	D M	4 3	83 R	1 N	NONIPS NORMAL	Y Y	2 N	G G	
717	TD2403C	BLNDTEMP	MVCU NODE	D C	14 1	98 R	8 N	METAL BLNDED	N N	2 N	G G	
718	TD2403G	P9 FLTP	MVCU NODE	D M	14 1	112 R	1 N	FLOW TEMP	N N	2 N	G G	
719	PD1105E	SPD CTRL	MVCU NODE	D M	4 2	91 R	1 N	SPEED NORMAL	N N	2 N	G G	
720	ZI2915	RFT I BY	IPAC MILP	D M	15 1	177 S	8 N	OPEN CLOSED	N N	2 N	R G	
721	ZI2914	RFT O BY	IPAC MILP	D M	15 1	181 S	8 N	OPEN CLOSED	N N	2 N	R G	
722	TD2402G	P8 FLTP	MVCU NODE	D M	14 1	111 R	1 N	FLOW TEMP	N N	2 N	G G	
723	TD2402A	P8 FLTP	MVCU NODE	D C	14 1	65 R	1 N	FLOW TEMP	N N	2 N	G G	
724	PIH2911	RFT PRES	MCON OUTP	D C	16 1	33 S	4 N	HIPRES NORMAL	Y Y	1 N	R G	
725	TD2502A	P11 FLTP	MVCU NODE	D C	6 1	66 R	1 N	FLOW TEMP	N N	2 N	G G	
726	TD2502C	BLNDTEMP	MVCU NODE	D C	6 1	98 R	8 N	METAL BLNDED	N N	2 N	G G	
727	PIH2911A	RFT INPR	MCON OUTP	D C	16 1	34 S	1 N	HINPRS NORMAL	Y Y	1 N	R G	
728	PD1105D	FWP CTRL	MVCU NODE	D M	4 2	89 R	1 N	PRESS VALVE	N N	2 N	G G	
729	TD2601G	P13 FLTP	MVCU NODE	D M	6 2	112 R	1 N	FLOW TEMP	N N	2 N	G G	
730	TD2501C	BLNDTEMP	MVCU NODE	D C	6 1	78 R	8 N	METAL BLNDED	N N	2 N	G G	
731	TD2501G	P10 FLTP	MVCU NODE	D M	6 1	111 R	1 N	FLOW TEMP	N N	2 N	G G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

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FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

58

LOOP	TAG	DESCR PTION	DEVICE SURTY	A/D C/M	Hwy NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
732	TD2501A	P10 FLTP	MVCU NODE	D C	6 1	65 R	1 N	FLOW TEMP	N N	2 N	G G	
733	LIL44	RFP DA L	IPAC INPT	D M	11 1	112 S	1 N	TRIP NORMAL	Y Y	1 Y	R G	
735	TD2401C	BLNDTEMP	MVCU NODE	D C	5 ?	98 R	8 N	METAL BLNDED	N N	2 N	G G	
736	TD2401G	P7 FLTP	MVCU NODE	D M	5 2	112 R	1 N	FLOW TEMP	N N	2 N	G G	
737	LIL83	RFP DA L	IPAC INPT	D M	11 1	111 S	1 N	LO NORMAL	Y Y	1 Y	R G	
738	TD2929	TSP RAMP	MVCU NODE	D C	8 2	65 R	8 N	RAMP OFF	N N	2 N	G G	
739	TD2303C	BLNDTEMP	MVCU NODE	D C	5 2	78 R	8 N	METAL BLNDED	N N	2 N	G G	
740	TD2303G	P6 FLTP	MVCU NODE	D M	5 2	111 R	1 N	FLOW TEMP	N N	2 N	G G	
741	TD2303A	P6 FLTP	MVCU NODE	D C	5 2	65 R	1 N	FLOW TEMP	N N	2 N	G G	
742	HS2016	RPH-N2	MCON OUTP	D C	16 1	1 S	4 N	OPEN CLOSE	N N	2 N	R G	
743	HS44C	RFP A-M	IPAC MILP	D M	11 1	1 S	1 N	AUTO MANUAL	N N	2 Y	Y W	
744	IIH1106	RFP LO	IPAC INPT	D M	11 1	107 S	1 N	OVRLOD NORMAL	Y Y	1 Y	R G	
745	HS1106	31 33 RFP A LO	MCON OUTP	D C	16 1	8 S	1 N	START STOP	N N	2 N	R G	
746	TD2302C	BLNDTEMP	MVCU NODE	D C	5 1	98 R	1 N	METAL BLNDED	N N	2 N	G G	
747	TD2302G	P5 FLTP	MVCU NODE	D M	5 1	112 R	1 N	FLOW TEMP	N N	2 N	G G	
748	TD2502G	P11 FLTP	MVCU NODE	D M	6 1	112 R	1 N	FLOW TEMP	N N	2 N	G G	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

59

LOOP	TAG	DESCR PTION	DEVICE SUBTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PF INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
749	IIH1031	E MS STP	IPAC INPT	D M	11 1	106 S	1 N	OVRLOD NORMAL	Y Y	1 Y	R G	
750	TD2301C	BLNDTEMP	MVCU NODE	D C	5 1	78 R	1 N	METAL BLNDED	N N	2 N	G G	
751	TD2301G	P4 FLTP	MVCU NODE	D M	5 1	111 R	1 N	FLOW TEMP	N N	2 N	G G	
752	TD2301A	P4 FLTP	MVCU NODE	D C	5 1	65 R	8 N	FLOW TEMP	N N	2 N	G G	
753	LE-1	RSS EQRM ILS CMD1	MLD MCOM		16 1		8 N					G G
754	ME-1	RSS EQRM ILS MUX1	MLD IPAC		11 1		8 N					G G
755	M1-2	RSS STN1 RMT MUX2	MLD IPAC		15 1		1 N					G G
756	M1-1	RSS STN1 RMT MUX1	MLD IPAC		12 1		1 N					G G
757	C4-4	RSS STN4 RMTCTLR4	MLD MVCU		9 2		1 N					G G
758	C2-5	RSS STN2 RMTCTLR5	MLD MVCU		9 1		1 N					G G
759	C1-10	RSS STN1 RMTCTL10	MLD MVCU		4 2		1 N					G G
760	C1-9	RSS STN1 RMTCTLR9	MLD MVCU		4 1		1 N					G G
761	C1-8	RSS STN1 RMTCTLR8	MLD MVCU		3 2		1 N					G G
762	C1-7	RSS STN1 RMTCTLR7	MLD MVCU		3 1		1 N					G G
763	C1-6	RSS STN1 RMTCTLR6	MLD MVCU		10 2		1 N					G G
764	C1-5	RSS STN1 RMTCTLR5	MLD MVCU		2 2		1 N					G G
765	C1-4	RSS STN1 RMTCTLR4	MLD MVCU		2 1		1 N					G G

MC DONNELL DOUGLAS ASTRONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MC DONNELL DOUGLAS

SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818E
REV A	SHEET 60	

LOOP	TAG	DESCRIPTION	DEVICE SURTY	A/D C/M	HWY NO DEV AD	INT AD HWY TY	SCAN HOST	ON DESC OFF DES	DI AL AL ON	AL PR INV D	ON CLR OF CLR	HY1 CLR HY2 CLR
766	C1-3	RSS STN1 RMTCTLR3	MLD MVCU		10 1	T	1 N					G G
767	C1-2	RSS STN1 RMTCTLR2	MLD MVCU		1 2	T	1 N					G G
768	C1-1	RSS STN1 RMTCTLR1	MLD MVCU		1 1	T	1 N					G G

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE  
**B**

FSCM NO.  
**18355**

DRAWING NO.  
1048188

REV A

SHEET 61



LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1									
1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00		
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N D	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00		
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 99.88 OUT RMP RA 0.00 SP RMP RAT 0.00	
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.096 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 62.66 OUT RMP RA 0.00 SP RMP RAT 0.00	
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N D	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00		
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.709 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N D	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00 99.88 0.00		
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N D 4	Y0 9.99 Y2 99.88 Y4 0.00 X1 4.54 X3 0.00 X5 0.00 Y1 9.99 Y3 99.88 Y5 0.00 X2 45.49 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00		
9	04 AUTO MANUAL	OUT 68 INI 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N D	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 62	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-1										HIGHWAY NO.	1	DEVICE	1
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 13.58 X1 4.54 Y1 19.00 X2 22.69	Y2 40.78 X3 91.09 Y3 81.59 X4 0.00	Y4 84.98 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00					
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y CON/NORM N	RATE ENAB Y SP LIMITG Y OUT LIMIT N PV TRACKG N RESET ENABLD Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 99.88 OUT RMP RA 0.00 SP RMP RAT 0.00						
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12	OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00							
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00							
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00							
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.797 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM 0.00 IN HI ALARM 99.88 OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00							
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13	OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00							
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.602 198.397 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV D RATE ON PV/E E OUT LIMIT N GAIN ENABLED Y RESET ENABLD Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.88 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 99.88 OUT RMP RA 14.90 SP RMP RAT 0.00						

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104R18E
MCDONNELL DOUGLAS		REV A	SHEET 63	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-1										HIGHWAY NO.	1	DEVICE	1
20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 0.00 X1 19.98 Y1 31.48 X2 59.98	Y2 69.99 X3 69.99 Y3 79.98 X4 79.98	Y4 88.50 X5 89.99 Y5 96.00 Y6 99.98	OUT RAMP RATE	0.00					
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00					
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00					
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 49.88	OUT LO AL 0.00 OUT HI AL 99.88 OUT RMP RA 0.00 SP RMP RAT 0.00					
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00					
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.221 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00 99.88 0.00					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 64	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-1										HIGHWAY NO.	1	DEVICE	1
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 4.54 Y1 9.99 X2 45.49	Y2 99.88 X3 0.00 Y3 99.88 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00				OUT RAMP RATE	0.00		
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0				IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 13.58 X1 4.54 Y1 19.00 X2 22.69	Y2 40.78 X3 91.09 Y3 81.59 X4 0.00	Y4 84.98 X5 0.00 Y5 0.00 Y6 0.00				OUT RAMP RATE	0.00		
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU K3 RM TU CASCADE Y CON/NORM N	A Y N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D P Y N	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y Y N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.88	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.88 0.00 0.00
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32				OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00		
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING	A N				OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0				OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00		
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.797 0.017 0.000		AUTO/MANUAL OUTPUT LIMITING	A N				IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00 99.88 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 65	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-1										HIGHWAY NO.	1	DEVICE	1
37	07 ADD / SUBTRACT	OUT 85	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00						
		IN1 81	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.88						
		IN2 84	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00						
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	33								
		IN4 0	K5(BIAS)	0.000										
38	01 PID NORMAL	OUT 86	K1(GAIN)	0.488	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00			
		IN1 41	K2(RESET)	188.397	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.88			
		IN2 85	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E F	OUT LIMIT N	SP HI ALARM	99.88	OUT RMP RA	19.90			
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00			
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.88					
39	11 LOW SELECTOR	OUT 35	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 66			OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 86						OUT RAMP RATE	0.00					
		IN3 0												
		IN4 0												
40	13 FUNCTION GENERATOR	OUT 34	AUTO/MANUAL	A	Y0 0.00	Y2 0.00	Y4 0.00	OUT RAMP RATE	0.00					
		IN1 86	BACK CALCULATION	N	X1 0.00	X3 0.00	X5 0.00							
			BACK CALC POINTER	0	Y1 99.98	Y3 0.00	Y5 0.00							
			NO. OF POINTS	2	X2 0.00	X4 0.00	Y6 0.00							

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE	FSCM NO.	DRAWING NO.
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			REV	A	SHEET 66

LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A		
3	02 OR LOGICAL	OUTPUT 73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73		OUT1 INV N OUT2 INV Y		
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65		OUT1 INV N OUT2 INV Y		
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A		

MCDONNELL DOUGLAS AERONAUTICS CO.  
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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

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10	09 TIMER	OUTPUT	80	INPUT1	86	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	120	AUTO/MAN A			IN3 INV	N
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
15	12 ANALOG FNCT ALARM	ANALOG CONF LINE	5	OUTPUT1	0	OUTPUT5 0	AUTO/MAN A			
				OUTPUT2	0	OUTPUT6 85				
				OUTPUT3	0	OUTPUT7 0				
				OUTPUT4	0					
16	02 OR LOGICAL	OUTPUT	86	INPUT1	79	AUTO/MAN A	OUT INV	N	IN1 INV	N
				INPUT2	85				IN2 INV	N
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. MARTINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICF 1

22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 23	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 92 OUTPUT7 0	AUTO/MAN A			
23	02 OR LOGICAL	OUTPUT 93	INPUT1 66 INPUT2 92 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y		
24	11 DUAL PULSE	OUTPUT1 94 OUTPUT2 0	INPUT1 93			OUT1 INV N OUT2 INV Y		
25	06 OR MODE XFR	MODE XFR TABLE 17	INPUT1 94 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y		
26	11 DUAL PULSE	OUTPUT1 96 OUTPUT2 0	INPUT1 66			OUT1 INV N OUT2 INV Y		
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1 96 INPUT2 126 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 69	



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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE 24	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 104	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 99 OUTPUT7 0	AUTO/MAN A	
30	09 TIMER	OUTPUT 100	INPUT1 99 INPUT2 0 INPUT3 99	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2 0	INPUT1 100		OUT1 INV N OUT2 INV Y	
32	06 OR MODE XFR	MODE XFR TABLE 15	INPUT1 98 INPUT2 101 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2 0	INPUT1 98		OUT1 INV N OUT2 INV N	
34	06 OR MODE XFR	MODE XFR TABLE 16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE                                    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-1                    HIGHWAY NO.    1    DEVICE    1

55	12 ANALOG FNCT ALARM	ANALOG CONF LINE    25	OUTPUT1    0 OUTPUT2    0 OUTPUT3 125 OUTPUT4 127	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN    A		
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2    0	INPUT1    125			OUT1 INV    N OUT2 INV    Y	
57	06 OR MODE XFR	MODE XFR TABLE    13	INPUT1    126 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    Y IN3 INV    Y IN4 INV    Y IN5 INV    Y	
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2    0	INPUT1    127			OUT1 INV    N OUT2 INV    Y	
59	06 OR MODE XFR	MODE XFR TABLE    14	INPUT1    128 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    Y IN3 INV    Y IN4 INV    Y IN5 INV    Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
<small>MCDONNELL DOUGLAS</small>		REV    A	SHEET    73	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
<b>1</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
<b>2</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS			REV A	SHEET 84	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 85	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
7 1	06 ANALOG (AUTO XFR)	0.000	17
9 1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	17

MCDONNELL DOUGLAS AERONAUTICS CO. WINTHROP BEACH, CALIF.		
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REV A	SHEET 86	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	79.976	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS ASTRONAUTICS CO. WINTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 87	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	38
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048188
<small>MCDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 88	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-1 HIGHWAY NO. 1 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 89	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-2										HIGHWAY NO.	1	DEVICE	2
1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00						
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00						
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00						
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00						
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.709 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 Y2 99.98 Y4 0.00 X1 4.54 X3 0.00 X5 0.00 Y1 9.99 Y3 99.98 Y5 0.00 X2 45.49 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00						
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 96	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-2										HIGHWAY NO.	1	DEVICE ?
10	13 FUNCTION GENERATOR	OUT 58 INI 76	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 13.58 X1 4.54 Y1 19.00 X2 22.69	Y2 40.76 X3 91.09 Y3 81.59 X4 0.00	Y4 84.98 X5 0.00 Y5 0.00 X6 0.00	OUT RAMP RATE	0.00				
12	19 PID REMOTE TUNING	OUT 60 INI 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	DIRCT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00				
13	08 MULTIPLIER	OUT 61 INI 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
14	10 HIGH SELECTOR	OUT 37 INI 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
15	09 DIVIDER	OUT 63 INI 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
16	14 LAG	OUT 64 INI 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	1.000 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
17	07 ADD / SUBTRACT	OUT 65 INI 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00					
18	01 PID NORMAL	OUT 66 INI 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.398 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRCT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00				

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
B	18355	1D48188
REV	A	SHEET 97

LINE	ANALOG CONFIGURATION TABLE				CCM#1	MVCU C1-2	HIGHWAY NO.			1	DEVICE	2		
20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 0.00 X1 19.98 Y1 22.98 X2 59.98	Y2 66.50 X3 69.99 Y3 74.99 X4 79.98	Y4 83.49 X5 89.99 Y5 89.99 Y6 99.98			OUT RAMP RATE	0.00			
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING	A N			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00			
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000		AUTO/MANUAL OUTPUT LIMITING	A N			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00			
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	A N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N R E N N	RATE FNAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 73.28 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	A N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N R F N N	RATE FNAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 23.30 26.69 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 79.98 0.00 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.416 0.000 0.000		AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00			

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 98	

LINE	ANALOG CONFIGURATION TABLE				CCH#1	MVCU	C1-2	HIGHWAY NO.	1	DEVICE	2	
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 X1 Y1 X2	9.99 3.03 9.99 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00	
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 0.00 0.00	
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 X1 Y1 X2	13.58 3.03 19.00 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00		OUT RAMP RATE	0.00	
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.379 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	A Y N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLED	N D P Y Y	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000			AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.750 0.017 0.000			AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	PSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

37	07 ADD / SUBTRACT	OUT 85 IN1 81 IN2 84 IN3 78 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 33	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
38	01 PID NORMAL	OUT 86 IN1 41 IN2 85 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.500 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00
39	11 LOW SELECTOR	OUT 35 IN1 66 IN2 86 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
40	13 FUNCTION GENERATOR	OUT 34 IN1 86	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO.  
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DIGITAL CONFIGURATION TABLE CCM#1 MVCU CI-2 HIGHWAY NO. 3 DEVICE 2

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2	12 ANALOG FNCT ALARM	ANALOG CONF LTNE 3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A		
3	02 OR LOGICAL	OUTPUT 73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73		OUT1 INV N OUT2 INV Y		
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65		OUT1 INV N OUT2 INV Y		
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A		

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-2	HIGHWAY NO.	1	DEVICE	2	
10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER		OUT INV	N	IN1 INV	N
				INPUT2	0	SET	120			IN2 INV	N
				INPUT3	79	AUTO/MAN	A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80			OUT1 INV	N		
		OUTPUT2	0					OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR		INPUT1	81	AUTO/MAN	A			IN1 INV	N
		TABLE	5	INPUT2	78					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78			OUT1 INV	N		
		OUTPUT2	0					OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR		INPUT1	83	AUTO/MAN	A			IN1 INV	N
		TABLE	6	INPUT2	120					IN2 INV	N
				INPUT3	84					IN3 INV	N
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV A	SHEET 102	

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LINE                                  DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-2                                  HIGHWAY NO.    1    DEVICE    2

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22	12 ANALOG FNCT ALARM	ANALOG CONF LINE    23	OUTPUT1	0	OUTPUT5	0	AUTO/MAN A		
			OUTPUT2	0	OUTPUT6	92			
			OUTPUT3	0	OUTPUT7	0			
			OUTPUT4	0					
23	02 OR LOGICAL	OUTPUT    93	INPUT1	66	AUTO/MAN A		OUT INV N	IN1 INV Y	
			INPUT2	92				IN2 INV N	
			INPUT3	0				IN3 INV Y	
			INPUT4	0				IN4 INV Y	
			INPUT5	0				IN5 INV Y	
24	11 DUAL PULSE	OUTPUT1 94 OUTPUT2 0	INPUT1	93			OUT1 INV N OUT2 INV Y		
25	06 OR MODE XFR	MODE XFR TABLE    17	INPUT1	94	AUTO/MAN A			IN1 INV N	
			INPUT2	0				IN2 INV Y	
			INPUT3	0				IN3 INV Y	
			INPUT4	0				IN4 INV Y	
			INPUT5	0				IN5 INV Y	
26	11 DUAL PULSE	OUTPUT1 96 OUTPUT2 0	INPUT1	66			OUT1 INV N OUT2 INV Y		
27	06 OR MODE XFR	MODE XFR TABLE    10	INPUT1	96	AUTO/MAN A			IN1 INV N	
			INPUT2	126				IN2 INV N	
			INPUT3	0				IN3 INV Y	
			INPUT4	0				IN4 INV Y	
			INPUT5	0				IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE 24	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 104	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 0 OUTPUT3 6 OUTPUT4 0	OUTPUT5 0 OUTPUT6 99 OUTPUT7 0	AUTO/MAN A		
30	09 TIMER	OUTPUT 100	INPUT1 99 INPUT2 0 INPUT3 99	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2 0	INPUT1 100		OUT1 INV N OUT2 INV Y		
32	06 OR MODE XFR	MODE XFR TABLE 15	INPUT1 98 INPUT2 101 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2 0	INPUT1 98		OUT1 INV N OUT2 INV N		
34	06 OR MODE XFR	MODE XFR TABLE 16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>  MCDONNELL DOUGLAS	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
REV	A	SHEET 104	

LINE	DIGITAL CONFIGURATION TABLE							CCM#1	MVCU C1-2	HIGHWAY NO.	1	DEVICE	2
41	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 0 111			AUTO/MAN	A			
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE 37	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 0 112			AUTO/MAN	A			
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 0 113			AUTO/MAN	A			
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE 29	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 0 114			AUTO/MAN	A			

<b>MCDONNELL DOUGLAS ASTRONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
<small>MCDONNELL DOUGLAS</small>		REV A	SHEET 105	

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LINE                                  DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-2                                  HIGHWAY NO.    1    DEVICE    2

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE     5	OUTPUT1   0 OUTPUT2   0 OUTPUT3 120 OUTPUT4 122	OUTPUT5   0 OUTPUT6   0 OUTPUT7   0	AUTO/MAN A		
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2   0	INPUT1   120			OUT1 INV N OUT2 INV Y	
52	06 OR MODE XFR	MODE XFR TABLE   11	INPUT1   121 INPUT2   0 INPUT3   0 INPUT4   0 INPUT5   0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2   0	INPUT1   122			OUT1 INV N OUT2 INV Y	
54	06 OR MODE XFR	MODE XFR TABLE   12	INPUT1   123 INPUT2   0 INPUT3   0 INPUT4   0 INPUT5   0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

<small>MCDONNELL DOUGLAS AERONAUTICS CO. MARTINSON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048188
<small>MCDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 106	

LINE                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-2                      HIGHWAY NO.    1    DEVICE    2

55	12 ANALOG FNCT ALARM	ANALOG CONF LTNE    25	OUTPUT1 0 OUTPUT2 0 OUTPUT3 125 OUTPUT4 127	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2 0	INPUT1 125		OUT1 INV N OUT2 INV Y	
57	06 OR MODE XFR	MODE XFR TABLE    13	INPUT1 126 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2 0	INPUT1 127		OUT1 INV N OUT2 INV Y	
59	06 OR MODE XFR	MODE XFR TABLE    14	INPUT1 128 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

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LINE    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-2                          HIGHWAY NO.    1    DEVICE    2

148	09 TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
				INPUT2	0	SFT			2	IN2 INV	Y
				INPUT3	0	AUTO/MAN			A	IN3 INV	Y
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
				INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN	A			IN1 INV	Y
				INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO.  
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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-2

HIGHWAY NO. 1 DEVICE 2

TABLE ENTRY DESCRIPTION VALUE LINE

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
2			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818A
MCDONNELL DOUGLAS		REV A	SHEET 118	

MODE TRANSFER CONFIGURATIONS, CCM#1 MVCU C1-2

HIGHWAY NO. 1 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 119	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
7 1	06 ANALOG (AUTO XFR)	0.000	17
9 1	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	17

<small>MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>  <small>MCDONNELL DOUGLAS</small>		SIZE	FSCM NO.	DRAWING NO.
		<b>B</b>	<b>18355</b>	1048180
REV	A	SHEET	120	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 121	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	38
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 122	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-2 HIGHWAY NO. 1 DEVICE 2

TABLF	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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MODE TRANSFER CONFIGURATIONS COM#1 MFCU C1-3

HIGHWAY NO. 10 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
<b>1</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17
3	06 ANALOG (AUTO XFR)	0.000	9
4	06 ANALOG (AUTO XFR)	0.000	5
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
9	06 ANALOG (AUTO XFR)	0.000	29
10	06 ANALOG (AUTO XFR)	0.000	25
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
<b>2</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17
3	06 ANALOG (AUTO XFR)	0.000	9
4	06 ANALOG (AUTO XFR)	0.000	5
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
9	06 ANALOG (AUTO XFR)	0.000	29
10	06 ANALOG (AUTO XFR)	0.000	25
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.00 0.00
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R SP LIMITG N RATE ON/PV/E F GAIN ENABLED N RESET ENABLD N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV P SP LIMITG N RATE ON/PV/E E GAIN ENABLED Y RESET ENABLD N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.221 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 Y2 99.98 Y4 0.00 X1 3.03 X3 0.00 X5 0.00 Y1 9.99 Y3 99.98 Y5 0.00 X2 30.31 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00

MCDONNELL DOUGLAS AERONAUTICS CO. WINTERTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 130	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-3										HIGHWAY NO. 10		DEVICE 1	
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 90.99	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00					
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.920 0.196 0.104 0.000	AUTO/MAN K2 RM TU K3 RM TU CASCADE CON/NORM	A Y N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D P Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y Y N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12						OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N						OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.664 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0						OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.668 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N						IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13						OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.437 188.397 0.000 0.000 0.000	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	M N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D E Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

19	07 ADD / SUBTRACT	OUT 67 IN1 85 IN2 7 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00	
20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 7	Y0 0.00 Y2 59.98 Y4 79.98 X1 19.98 X3 69.99 X5 89.99 Y1 19.98 Y3 69.99 Y5 89.99 X2 59.98 X4 79.98 Y6 99.98		OUT RAMP RATE 0.00	
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N		OUT LO ALARM 0.00 OUT HI ALARM 59.32 OUT RAMP RATE 0.00	
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) -50.012	AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N		OUT LO ALARM 0.00 OUT HI ALARM 39.98 OUT RAMP RATE 0.00	
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) 0.055 K2(RESET) 0.000 K3(RATE) 47.233 K4(FILTER) 0.000 K5 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R RATE ON PV/E F GAIN ENABLED N RESET ENABLED N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) 1.000 K2(RESET) 0.000 K3(RATE) 0.000 K4(FILTER) 0.000 K5 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLED N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 70.98 OUT RMP RA 0.00 SP RMP RAT 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) 1.000 K2(PV BIAS) -1.514 K3(THRESHD) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSTEIN BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818A
MCDONNELL DOUGLAS		REV A	SHEET 132	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.73 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A DIRECT/REV D RATE ON PV/E P CASCADE Y CON/NORM N	PV INVERTED N SP LIMITG Y OUT LIMIT N GAIN ENABLED Y RESET ENABLED Y	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.680 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

37	07 ADD / SUBTRACT	OUT 85 IN1 81 IN2 84 IN3 78 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 33	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
38	01 PID NORMAL	OUT 86 IN1 41 IN2 67 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.398 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLED Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00
39	11 LOW SELECTOR	OUT 35 IN1 66 IN2 86 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
40	13 FUNCTION GENERATOR	OUT 34 IN1 86	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A		
3	02 OR LOGICAL	OUTPUT 73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73		OUT1 INV N OUT2 INV Y		
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65		OUT1 INV N OUT2 INV Y		
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A		

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

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DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-3    HIGHWAY NO. 10    DEVICE 1

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10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

28	12 ANALOG FNCT ALARM	ANALOG CONF LINE 24	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 104	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 99 OUTPUT7 0	AUTO/MAN A		
30	09 TIMER	OUTPUT 100	INPUT1 99 INPUT2 0 INPUT3 99	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2 0	INPUT1 100		OUT1 INV N OUT2 INV Y		
32	06 OR MODE XFR	MODE XFR TABLE 15	INPUT1 98 INPUT2 101 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2 0	INPUT1 98		OUT1 INV N OUT2 INV N		
34	06 OR MODE XFR	MODE XFR TABLE 16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV A	SHEET 138

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 16 DEVICE 1

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE 37	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE 29	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 114	AUTO/MAN A

MCDONNELL DOUGLAS ASTRONAUTICS CO. WINTERTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
<i>MCDONNELL DOUGLAS</i>		<b>B</b>	<b>18355</b>	1D4818E
		REV	A	SHEET 139

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE 5	OUTPUT1 0 OUTPUT2 0 OUTPUT3 120 OUTPUT4 122	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2 0	INPUT1 120		OUT1 INV N OUT2 INV Y	
52	06 OR MODE XFR	MODE XFR TABLE 11	INPUT1 121 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2 0	INPUT1 122		OUT1 INV N OUT2 INV Y	
54	06 OR MODE XFR	MODE XFR TABLE 12	INPUT1 123 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		<b>B</b>	<b>18355</b>	1048188
		REV	A	SHEET 140

LINE	DIGITAL CONFIGURATION TABLE		CCM#1 MVCU C1-3	HIGHWAY NO. 10	DEVICE 1
55	12 ANALOG FNCT ALARM	ANALOG CONF LINE 25	OUTPUT1 0 OUTPUT2 0 OUTPUT3 125 OUTPUT4 127	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2 0	INPUT1 125		OUT1 INV N OUT2 INV Y
57	06 OR MODE XFR	MODE XFR TABLE 13	INPUT1 126 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2 0	INPUT1 127		OUT1 INV N OUT2 INV Y
59	06 OR MODE XFR	MODE XFR TABLE 14	INPUT1 128 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>			<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048188
<small>MCDONNELL DOUGLAS</small>			<small>REV</small> A	<small>SHEET</small> 141	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-3

HIGHWAY NO. 10 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
	REV A	SHEET 153	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-3 HIGHWAY NO. 10 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 154	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-3

HIGHWAY NO. 10 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	64.982	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
MCDONNELL DOUGLAS		REV A	SHEET 155	

MODE TRANSFER CONFIGURATIONS, CCM#1 MVCU C1-3

HIGHWAY NO. 10 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	30
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 156	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-3

HIGHWAY NO. 10 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MARTINSON, BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 157	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-4										HIGHWAY NO.	2	DEVICE	1
1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00						
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00						
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R RATE ON PV/E E PV TRACKG N RESET ENABLD N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00						
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV R RATE ON PV/E E PV TRACKG N RESET ENABLD N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00						
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.612 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 Y2 99.98 Y4 0.00 X1 3.03 X3 0.00 X5 0.00 Y1 9.99 Y3 99.98 Y5 0.00 X2 30.31 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00						
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 164	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-4										HIGHWAY NO.	2	DEVICE	1
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00					
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N RATE ENAB Y DIRECT/REV D SP LIMITG Y RATE ON PV/E P RESET ENABLD Y CON/NORM N	PV INVERTED N RATE ENAB Y DIRECT/REV D SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00					
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
14	07 ADD / SUBTRACT	OUT 62 IN1 65 IN2 7 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 0.00 0.00						
15	09 DIVIDER	OUT 63 IN1 5 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.797 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						
17	07 ADD / SURTRACT	OUT 65 IN1 61 IN2 58 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
18	01 PID NORMAL	OUT 66 IN1 36 IN2 62 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.383 188.397 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 15.90 0.00					

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D481E8

REV

A

SHEET

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LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-4										HIGHWAY NO.	2	DEVICE	1		
19	07 ADD / SUBTRACT	OUT 67	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00								
		IN1 85	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	0.00								
		IN2 7	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00								
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0										
		IN4 0	K5(BIAS)	0.000												
20	13 FUNCTION GENERATOR	OUT 33	AUTO/MANUAL	A	Y0 0.00	Y2 72.99	Y4 90.50	OUT RAMP RATE	0.00							
		IN1 66	BACK CALCULATION	N	X1 19.98	X3 69.99	X5 89.99									
			BACK CALC POINTER	0	Y1 33.99	Y3 82.49	Y5 98.00									
			NO. OF POINTS	7	X2 59.98	X4 79.98	Y6 99.98									
21	10 HIGH SELECTOR	OUT 44	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00								
		IN1 11			OUTPUT LIMITING	N	OUT HI ALARM	59.98								
		IN2 12						OUT RAMP RATE	0.00							
		IN3 0														
		IN4 0														
22	07 ADD / SUBTRACT	OUT 70	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00								
		IN1 44	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98								
		IN2 72	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00								
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0										
		IN4 0	K5(BIAS)	-50.012												
23	10 HIGH SELECTOR	OUT 43	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00								
		IN1 9			OUTPUT LIMITING	N	OUT HI ALARM	39.98								
		IN2 10						OUT RAMP RATE	0.00							
		IN3 0														
		IN4 0														
24	01 PID NORMAL	OUT 72	K1(GAIN)	0.055	AUTO/MAN A	PV INVERTED N	RATE ENAB Y	BAK CALC PT	0	OUT LO AL	0.00					
		IN1 0	K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98					
		IN2 43	K3(RATE)	47.233	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	73.28	OUT RMP RA	0.00					
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED N	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00					
		IN4 0	K5	49.988	CON/NORM N	RESET ENABLD N	BACK CALC N	PV HI ALARM	99.98							
25	01 PID NORMAL	OUT 73	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00					
		IN1 0	K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	23.30	OUT HI AL	79.98					
		IN2 43	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	26.69	OUT RMP RA	0.00					
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00					
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD N	BACK CALC N	PV HI ALARM	99.98							
26	07 ADD / SUBTRACT	OUT 74	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00								
		IN1 88	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98								
		IN2 70	K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00								
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0										
		IN4 0	K5(BIAS)	0.000												
27	12 SQUARE ROOT	OUT 41	K1(GAIN)	1.000	AUTO/MANUAL	A	IN LO ALARM	0.00								
		IN1 15	K2(PV BIAS)	-2.808	OUTPUT LIMITING	N	IN HI ALARM	99.98								
			K3(THRESHD)	0.000	BACK CALCULATION	N	OUT LO ALARM	0.00								
			K5(BIAS)	0.000	BACK CALC POINTER	0	OUT HI ALARM	99.98								
							OUT RAMP RATE	0.00								

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 166	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-4										HIGHWAY NO.	2	DEVICE	1
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00				OUT RAMP RATE	0.00		
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0					IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00				OUT RAMP RATE	0.00		
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	A Y N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLED	N D P Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y Y N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0					OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.898 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N					IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 167	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-4										HIGHWAY NO.	2	DEVICE	1
37	07 ADD / SUBTRACT	OUT 85	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00						
		IN1 81	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 84	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00						
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	33								
		IN4 0	K5(BIAS)	0.000										
38	01 PID NORMAL	OUT 86	K1(GAIN)	0.383	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00			
		IN1 41	K2(RESET)	188.397	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98			
		IN2 67	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	19.90			
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00			
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98					
39	11 LOW SELECTOR	OUT 35	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
		IN1 66			OUTPUT LIMITING	N	OUT HI ALARM	99.98						
		IN2 86					OUT RAMP RATE	0.00						
		IN3 0												
		IN4 0												
40	13 FUNCTION GENERATOR	OUT 34	AUTO/MANUAL	A	Y0	0.00	Y2	0.00	Y4	0.00	OUT RAMP RATE	0.00		
		IN1 86	BACK CALCULATION	N	X1	0.00	X3	0.00	X5	0.00				
			BACK CALC POINTER	0	Y1	99.98	Y3	0.00	Y5	0.00				
			NO. OF POINTS	2	X2	0.00	X4	0.00	Y6	0.00				

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A		
3	02 OR LOGICAL	OUTPUT 73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73		OUT1 INV N OUT2 INV Y		
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65		OUT1 INV N OUT2 INV Y		
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A		

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

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10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

<p style="font-size: small; margin: 0;">MCDONNELL DOUGLAS AERONAUTICS CO. WINTHROP BEACH, CALIF.</p> <p style="text-align: center; margin: 5px 0;"><i>MCDONNELL DOUGLAS</i></p>	<p style="font-size: x-small; margin: 0;">SIZE</p> <p style="font-size: large; font-weight: bold; margin: 0;">B</p>	<p style="font-size: x-small; margin: 0;">FSCM NO.</p> <p style="font-size: large; font-weight: bold; margin: 0;">18355</p>	<p style="font-size: x-small; margin: 0;">DRAWING NO.</p> <p style="margin: 0;">1048188</p>
	<p style="font-size: x-small; margin: 0;">REV</p> <p style="margin: 0;">A</p>	<p style="font-size: x-small; margin: 0;">SHEET 170</p>	



LINE	DIGITAL CONFIGURATION TABLE		CCMP1	MVCU C1-4	HIGHWAY NO.	2	DEVICE	1
22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 23	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 92 0	AUTO/MAN	A
23	02 OR LOGICAL	OUTPUT 93	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	66 92 0 0 0	AUTO/MAN	A	OUT INV	N IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
24	11 DUAL PULSE	OUTPUT1 OUTPUT2	94 0	INPUT1	93		OUT1 INV OUT2 INV	N Y
25	06 OR MODE XFR	MODE XFR TABLE 36	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	94 0 0 0 0	AUTO/MAN	A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
26	11 DUAL PULSE	OUTPUT1 OUTPUT2	96 0	INPUT1	66		OUT1 INV OUT2 INV	N Y
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	96 126 0 0 0	AUTO/MAN	A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>  <b>MCDONNELL DOUGLAS</b>	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1D48188
REV	A	SHEET	171

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE 24	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 104	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 99 OUTPUT7 0	AUTO/MAN A		
30	09 TIMER	OUTPUT 100	INPUT1 99 INPUT2 0 INPUT3 99	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2 0	INPUT1 100		OUT1 INV N OUT2 INV Y		
32	06 OR MODE XFR	MODE XFR TABLE 15	INPUT1 98 INPUT2 101 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2 0	INPUT1 98		OUT1 INV N OUT2 INV N		
34	06 OR MODE XFR	MODE XFR TABLE 16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y	

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D48188
<small>MCDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 172	

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DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-4    HIGHWAY NO.    ?    DEVICE    1

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE    17	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE    37	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE    9	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE    29	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 114	AUTO/MAN A

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV    A	SHEET    173	

LINE    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-4                          HIGHWAY NO.    2    DEVICE    1

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE    5	OUTPUT1    0 OUTPUT2    0 OUTPUT3 120 OUTPUT4 122	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN    A		
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2    0	INPUT1    120			OUT1 INV    N OUT2 INV    Y	
52	06 OR MODE XFR	MODE XFR TABLE    11	INPUT1    121 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    Y IN3 INV    Y IN4 INV    Y IN5 INV    Y	
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2    0	INPUT1    122			OUT1 INV    N OUT2 INV    Y	
54	06 OR MODE XFR	MODE XFR TABLE    12	INPUT1    123 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    Y IN3 INV    Y IN4 INV    Y IN5 INV    Y	

<b>McDONNELL DOUGLAS AERONAUTICS CO.</b> <small>WINTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
<b>McDONNELL DOUGLAS</b>		REV    A	SHEET    174	



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 LINF                                    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-4                    HIGHWAY NO.    2    DEVICE    1  
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55	12 ANALOG FNCT ALARM	ANALOG CONF LINE    25	OUTPUT1   0 OUTPUT2   0 OUTPUT3 125 OUTPUT4 127	OUTPUT5   0 OUTPUT6   0 OUTPUT7   0	AUTO/MAN A	
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2   0	INPUT1    125		OUT1 INV N OUT2 INV Y	
57	06 OR MODE XFR	MODE XFR TABLE    13	INPUT1    126 INPUT2     0 INPUT3     0 INPUT4     0 INPUT5     0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2   0	INPUT1    127		OUT1 INV N OUT2 INV Y	
59	06 OR MODE XFR	MODE XFR TABLE    14	INPUT1    128 INPUT2     0 INPUT3     0 INPUT4     0 INPUT5     0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE                                    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-4                    HIGHWAY NO.    2    DEVICE    1

148	09 TIMFR	OUTPUT	190	INPUT1	189	TIMER		OUT INV	N	IN1 INV	Y
				INPUT2	0	SET	2			IN2 INV	Y
				INPUT3	0	AUTO/MAN	A			IN3 INV	Y
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
				INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y
150	06 OR MODE XFR	MODE XFR		INPUT1	191	AUTO/MAN	A			IN1 INV	Y
		TABLE	2	INPUT2	0					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y

<small>MCDONNELL DOUGLAS AERONAUTICS CO. WUNTINGTON BEACH, CALIF.</small> 	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048188
REV	A	SHEET	185

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4

HIGHWAY NO. 2 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SFL)	0.000	22
2			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
	REV A	SHEET 186	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	17

<small>MC DONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048188
<small>MC DONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 188	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4

HIGHWAY NO. 2 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	79.976	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
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MCDONNELL DOUGLAS	REV	A	SHEET 189

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
13	1 05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	38
14	1 06 ANALOG (AUTO XFR)	0.000	38
15	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3 06 ANALOG (AUTO XFR)	0.000	22

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 190	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU CI-4

HIGHWAY NO. 2 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-4 HIGHWAY NO. 2 DEVICE 1

TABLE ENTRY DESCRIPTION VALUE LINE

36 1 06 ANALOG (AUTO XFR) 0.000 37

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00	
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00	
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 0.00 OUT RMP RA 0.00 SP RMP FAT 0.00
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP FAT 0.00
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
7	12 SQUARE ROOT	OUT 40 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.123 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
8	13 FUNCTION GENERATOR	OUT 56 IN1 40	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 2.98 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. MONTGOMERY BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

10	13 FUNCTION GENERATOR	OUT 58 IN1 40	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 40	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N DIRECT/REV D RATE ON PV/E P CASCADE Y CON/NORM N	RATE ENAB Y SP LIMITG Y OUT LIMIT N PV TRACKG N RESET ENABLD Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00	
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00		
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 6 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00		
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00		
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.770 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00		
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00		
18	01 PID NORMAL	OUT 66 IN1 40 IN2 67 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.398 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y BACK CALC N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N PV LO ALARM 0.00 PV HI ALARM 99.98	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00

MCDONNELL DOUGLAS AERONAUTICS CO.  
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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

19	07 ADD / SUBTRACT	OUT 67 IN1 65 IN2 7 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00	
20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 7	Y0 0.00 Y2 64.49 Y4 83.49 X1 19.98 X3 69.99 X5 89.99 Y1 32.48 Y3 73.99 Y5 92.48 X2 59.98 X4 79.98 Y6 99.98		OUT RAMP RATE 0.00	
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N		OUT LO ALARM 0.00 OUT HI ALARM 59.98 OUT RAMP RATE 0.00	
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) -50.012	AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N		OUT LO ALARM 0.00 OUT HI ALARM 39.98 OUT RAMP RATE 0.00	
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) 0.055 K2(RESET) 0.000 K3(RATE) 47.233 K4(FILTER) 0.000 K5 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.29 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) 1.000 K2(RESET) 0.000 K3(RATE) 0.000 K4(FILTER) 0.000 K5 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) 1.000 K2(GAIN) 1.000 K3(GAIN) 0.000 K4(GAIN) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00	
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) 1.000 K2(PV BIAS) -1.709 K3(THRESHD) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 200	



LINE	ANALOG CONFIGURATION TABLE				CCH#1	MVCU C1-5	HIGHWAY NO.	2	DEVICE	2
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.33	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.73 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00		OUT RAMP RATE	0.00
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.672 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N			IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 201	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

37	07 ADD / SUBTRACT	OUT 85 IN1 81 IN2 84 IN3 78 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 33	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
38	01 PID NORMAL	OUT 86 IN1 41 IN2 85 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.398 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLED Y	RATE ENAB N SP LIMITS N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00
39	11 LOW SELECTOR	OUT 35 IN1 66 IN2 86 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
40	13 FUNCTION GENERATOR	OUT 34 IN1 86	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

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1D48188

REV

A

SHEET

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LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-5	HIGHWAY NO.	2	DEVICE	2
2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A				
3	02 OR LOGICAL	OUTPUT 73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y			
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73			OUT1 INV N OUT2 INV Y				
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A			IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y			
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65			OUT1 INV N OUT2 INV Y				
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A			IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y			
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A				
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A				

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 203	

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

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10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		B	18355	DRAWING NO. 1048188
REV	A			SHEET 204

LINE	DIGITAL CONFIGURATION TABLE				CCMR1	MVCU C1-5	HIGHWAY NO.	2	DEVICE	2
22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 23	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0		OUTPUT5 OUTPUT6 OUTPUT7	0 92 0	AUTO/MAN	A	
23	02 OR LOGICAL	OUTPUT 93	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	66 92 0 0 0		AUTO/MAN	A	OUT INV	N	IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
24	11 DUAL PULSE	OUTPUT1 94 OUTPUT2 0	INPUT1	93				OUT1 INV OUT2 INV	N Y	
25	06 OR MODE XFR	MODE XFR TABLE 17	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	94 0 0 0 0		AUTO/MAN	A			IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
26	11 DUAL PULSE	OUTPUT1 96 OUTPUT2 0	INPUT1	66				OUT1 INV OUT2 INV	N Y	
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	96 126 0 0 0		AUTO/MAN	A			IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS			REV A	SHEET 205	



LINE    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-5                          HIGHWAY NO.    ?    DEVICE    ?

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE    17	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE    37	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE    9	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE    29	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 114	AUTO/MAN A

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small> <small>MCDONNELL DOUGLAS</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
		REV    A	SHEET    207	

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE 5	OUTPUT1 0 OUTPUT2 0 OUTPUT3 120 OUTPUT4 122	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2 0	INPUT1 120		OUT1 INV N OUT2 INV Y	
52	06 OR MODE XFR	MODE XFR TABLE 11	INPUT1 121 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2 0	INPUT1 122		OUT1 INV N OUT2 INV Y	
54	06 OR MODE XFR	MODE XFR TABLE 12	INPUT1 123 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		B	18355	1D48188
REV	A	SHEET	208	



LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-5	HIGHWAY NO.	?	DEVICE	?
55	12 ANALOG FNCT ALARM	ANALOG CONF LINE 25	OUTPUT1 0 OUTPUT2 0 OUTPUT3 125 OUTPUT4 127			OUTPUT5 0 OUTPUT6 0 OUTPUT7 0		AUTO/MAN	A	
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2 0	INPUT1 125					OUT1 INV	N	OUT2 INV Y
57	06 OR MODE XFR	MODE XFR TABLE 13	INPUT1 126 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0		AUTO/MAN	A		IN1 INV	N	IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2 0	INPUT1 127					OUT1 INV	N	OUT2 INV Y
59	06 OR MODE XFR	MODE XFR TABLE 14	INPUT1 128 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0		AUTO/MAN	A		IN1 INV	N	IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
MCDONNELL DOUGLAS		REV A	SHEET 209	

LINE	DIGITAL CONFIGURATION TABLE					CCM#1	MVCU C1-5	HIGHWAY NO.	2	DEVICE	2	
148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER		OUT INV	N	IN1 INV	Y
					INPUT2	0	SET	2			IN2 INV	Y
					INPUT3	0	AUTO/MAN	A			IN3 INV	Y
149	04	OR	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
		TRIG LOG			INPUT2	0					IN2 INV	Y
					INPUT3	0					IN3 INV	Y
					INPUT4	0					IN4 INV	Y
					INPUT5	0					IN5 INV	Y
150	06	OR	MODE XFR		INPUT1	191	AUTO/MAN	A			IN1 INV	Y
		MODE XFR	TABLE	2	INPUT2	0					IN2 INV	Y
					INPUT3	0					IN3 INV	Y
					INPUT4	0					IN4 INV	Y
					INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818F
MCDONNELL DOUGLAS		REV A	SHEET 219	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5

HIGHWAY NO. 2 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
2			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17
3	06 ANALOG (AUTO XFR)	0.000	9
7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
9	06 ANALOG (AUTO XFR)	0.000	29
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818E
MCDONNELL DOUGLAS		REV A	SHEET 220	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5


HIGHWAY NO. 2 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 221	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048188
MCDONNELL DOUGLAS 	REV	A	SHEET 222

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 223	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
13	1 05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	38
14	1 06 ANALOG (AUTO XFR)	0.000	38
15	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3 06 ANALOG (AUTO XFR)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 224	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-5 HIGHWAY NO. 2 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
16	1 06 ANALOG (AUTO XFR)	0.000	29
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1 06 ANALOG (AUTO XFR)	0.000	37

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF. MCDONNELL DOUGLAS	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
	REV A	SHEET 225	



LINE ANALOG CONFIGURATION TABLE CCMH1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00	
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -2.418 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.33	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1D48188
REV	A	SHEET	232

LINE	ANALOG CONFIGURATION TABLE CCH#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2											
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00			
12	19 PID RFMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	A DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	PV INVERTED N SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00	
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00			
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00			
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00			
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.773 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.88 0.00 99.88 0.00			
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.383 188.397 0.000 0.000 0.000	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	M DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	PV INVERTED N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. MURKIN BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 233	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 0.00 X1 19.98 Y1 19.98 X2 59.98	Y2 66.50 X3 69.99 Y3 74.99 X4 79.98	Y4 83.49 X5 89.99 Y5 93.99 Y6 99.98	OUT RAMP RATE	0.00			
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	A N N N N	PV INVERTED DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	Y N E N N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	A N N N N	PV INVERTED DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	N N N N N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 79.98 0.00 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00			
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.123 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00			

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 234	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-6										HIGHWAY NO.	10	DEVICE	2
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00				OUT RAMP RATE	0.00		
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL	A		IN LO ALARM IN HI ALARM BACK CALCULATION BACK CALC POINTER	0 99.98 N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.73 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00				OUT RAMP RATE	0.00		
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	A Y Y N N	PV INVERTED DIRECT/REV RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	N D P Y Y	RATE ENAB Y SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00	
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL	A	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL	A	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00						
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.797 0.017 0.000	AUTO/MANUAL	A	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00						

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 235	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

37	07 ADD / SUBTRACT	OUT 85 IN1 81 IN2 84 IN3 78 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 33	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
38	01 PID NORMAL	OUT 86 IN1 41 IN2 85 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.383 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE FNAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00
39	11 LOW SELECTOR	OUT 35 IN1 66 IN2 86 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
40	13 FUNCTION GENERATOR	OUT 34 IN1 86	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV: A	SHEET 236	

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DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-6    HIGHWAY NO. 10    DEVICE 2

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2	12 ANALOG FNCT ALARM	ANALOG CONF LINE    3	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    72 OUTPUT7    0	AUTO/MAN A	
3	02 OR LOGICAL	OUTPUT    73	INPUT1    72 INPUT2    65 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
4	11 DUAL PULSE	OUTPUT1    74 OUTPUT2    0	INPUT1    73		OUT1 INV N OUT2 INV Y	
5	06 OR MODE XFR	MODE XFR TABLE    7	INPUT1    74 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
6	11 DUAL PULSE	OUTPUT1    76 OUTPUT2    0	INPUT1    65		OUT1 INV N OUT2 INV Y	
7	06 OR MODE XFR	MODE XFR TABLE    9	INPUT1    76 INPUT2    121 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE    4	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    84	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN A	
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE    1	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    79 OUTPUT7    0	AUTO/MAN A	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		B	18355	1048188
		REV	A	SHEET    237

LINE	DIGITAL CONFIGURATION TABLE				CCMH1	MVCU C1-6	HIGHWAY NO.	10	DEVICE	2
10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	PSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 238	

LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 23	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 92 OUTPUT7 0	AUTO/MAN A		
23	02 OR LOGICAL	OUTPUT 93	INPUT1 66 INPUT2 92 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
24	11 DUAL PULSE	OUTPUT1 94 OUTPUT2 0	INPUT1 93		OUT1 INV N OUT2 INV Y		
25	06 OR MODE XFR	MODE XFR TABLE 17	INPUT1 94 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
26	11 DUAL PULSE	OUTPUT1 96 OUTPUT2 0	INPUT1 66		OUT1 INV N OUT2 INV Y		
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1 96 INPUT2 126 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 239	



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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE 24	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 104	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 99 OUTPUT7 0	AUTO/MAN A	
30	09 TIMFR	OUTPUT 100	INPUT1 99 INPUT2 0 INPUT3 99	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2 0	INPUT1 100		OUT1 INV N OUT2 INV Y	
32	06 OR MODE XFR	MODE XFR TABLE 15	INPUT1 98 INPUT2 101 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2 0	INPUT1 98		OUT1 INV N OUT2 INV N	
34	06 OR MODE XFR	MODE XFR TABLE 16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	PSCN NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 240	

LINE    DIGITAL CONFIGURATION TABLE    CCM#1   MVCU C1-6                          HIGHWAY NO. 10    DEVICE 2

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE 37	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE 29	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 114	AUTO/MAN A

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF. MCDONNELL DOUGLAS	SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818E
	REV     A	SHEET     241	

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LINE	DIGITAL CONFIGURATION TABLE	CCM#1	MVCU C1-6	HIGHWAY NO.	10	DEVICE	2
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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE 5	OUTPUT1 0 OUTPUT2 0 OUTPUT3 120 OUTPUT4 122	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2 0	INPUT1 120		OUT1 INV N OUT2 INV Y		
52	06 OR MODE XFR	MODE XFR TABLE 11	INPUT1 121 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2 0	INPUT1 122		OUT1 INV N OUT2 INV Y		
54	06 OR MODE XFR	MODE XFR TABLE 12	INPUT1 123 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 242	

LINE                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-6                      HIGHWAY NO. 10    DEVICE 2

55	12 ANALOG FNCT ALARM	ANALOG CONF LINE 25	OUTPUT1 0 OUTPUT2 0 OUTPUT3 125 OUTPUT4 127	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2 0	INPUT1 125		OUT1 INV N OUT2 INV Y	
57	06 OR MODE XFR	MODE XFR TABLE 13	INPUT1 126 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2 0	INPUT1 127		OUT1 INV N OUT2 INV Y	
59	06 OR MODE XFR	MODE XFR TABLE 14	INPUT1 128 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

104818A

REV

A

SHEET

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LINE                                  DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-6                          HIGHWAY NO.    10    DEVICE    2

148	09 TIMFR	OUTPUT    190	INPUT1   189	TIMER	OUT INV   N	IN1 INV   Y
			INPUT2    0	SET        2		IN2 INV   Y
			INPUT3    0	AUTO/MAN  A		IN3 INV   Y
149	04 OR TRIG LOG	OUTPUT    191	INPUT1   190	AUTO/MAN  A	OUT INV   N	IN1 INV   N
			INPUT2    0			IN2 INV   Y
			INPUT3    0			IN3 INV   Y
			INPUT4    0			IN4 INV   Y
			INPUT5    0			IN5 INV   Y
150	06 OR MODE XFR	MODE XFR TABLE     2	INPUT1   191	AUTO/MAN  A		IN1 INV   Y
			INPUT2    0			IN2 INV   Y
			INPUT3    0			IN3 INV   Y
			INPUT4    0			IN4 INV   Y
			INPUT5    0			IN5 INV   Y

MCDONNELL DOUGLAS AERONAUTICS CO. <small>HUNTINGTON BEACH, CALIF.</small>			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV        A	SHEET     253	

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
<b>1</b>				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	4	06 ANALOG (AUTO XFR)	0.000	5
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	10	06 ANALOG (AUTO XFR)	0.000	25
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
<b>2</b>				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	4	06 ANALOG (AUTO XFR)	0.000	5
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	10	06 ANALOG (AUTO XFR)	0.000	25
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 254	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		
SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
REV A	SHEET 255	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

TABLF	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.968	17

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 256	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-6 HIGHWAY NO. 10 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	84.982	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 257	

MODE TRANSFER CONFIGURATIONS CCM1 MVCU C1-6

HIGHWAY NO. 10 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	38
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 258	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-6

HIGHWAY NO. 16 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
16			
1	06 ANALOG (AUTO XFR)	0.000	29
3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17			
1	06 ANALOG (AUTO XFR)	0.000	37

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

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**18355**

DRAWING NO.

1048188

REV

A

SHEET

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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICF 1

1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00	
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00	
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -0.122 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 Y2 99.98 Y4 0.00 X1 3.03 X3 0.00 X5 0.00 Y1 9.99 Y3 99.98 Y5 0.00 X2 30.31 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00	
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
MCDONNELL DOUGLAS		REV A	SHEET 266	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-7										HIGHWAY NO.	3	DEVICE	1
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00					
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N DIRECT/REV D RATE ON PV/E P CASCADE Y CON/NORM N	RESET ENABLD Y	RATE ENAB Y SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00					
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.750 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 12		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00						
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.398 188.397 0.000 0.000 0.000	AUTO/MAN M PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E F GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00					

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 267	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	GUT RAMP RATE	0.00
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 79.98 OUT RMP RA 0.00 SP RMP RAT 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.807 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00

MCDONNELL DOUGLAS AERONAUTICS CO. MURKIN BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 268	

LINE	ANALOG CONFIGURATION TABLE										CCM#1	MVCU	C1-7	HIGHWAY NO.	3	DEVICE	1	
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00									
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00									
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.65 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00									
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N DIRECT/REV D RATE ON PV/E P CASCADE Y CON/NORM N	RESEY ENABD Y ENABD Y ENABD Y ENABD Y	SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00							
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00									
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00									
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00									
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TJMCONS) K5(BIAS)	0.875 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00									

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1B4818A
MCDONNELL DOUGLAS		REV A	SHEET 269	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-7										HIGHWAY NO.	3	DEVICE	1		
37	07 ADD / SUBTRACT	OUT 85	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00								
		IN1 81	K2(GAIN)	1.000	OUTPUT LIMITING	N	CUT HI ALARM	99.98								
		IN2 84	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00								
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	33										
		IN4 0	K5(BIAS)	0.000												
38	01 PID NORMAL	OUT 86	K1(GAIN)	0.430	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00					
		IN1 41	K2(RESET)	188.397	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98					
		IN2 85	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	19.90					
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00					
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98							
39	11 LOW SELECTOR	OUT 35	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00								
		IN1 66			OUTPUT LIMITING	N	OUT HI ALARM	99.98								
		IN2 0					OUT RAMP RATE	0.00								
		IN3 0														
		IN4 0														
40	13 FUNCTION GENERATOR	OUT 34	AUTO/MANUAL	A	Y0 0.00	Y2 68.50	Y4 89.50	OUT RAMP RATE	0.00							
		IN1 86	BACK CALCULATION	N	X1 19.98	X3 69.99	X5 89.99									
			BACK CALC POINTER	0	Y1 19.98	Y3 80.49	Y5 98.00									
			NO. OF POINTS	7	X2 59.98	X4 79.98	Y6 99.98									

MCDONNELL DOUGLAS ASTRONAUTICS CO. MARTINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
MCDONNELL DOUGLAS		REV A	SHEET 270	



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LINE                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-7                      HIGHWAY NO.    3    DEVICE    1

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2	12 ANALOG FNCT ALARM	ANALOG CONF LINE    3	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 72 OUTPUT7 0	AUTO/MAN A		
3	02 OR LOGICAL	OUTPUT    73	INPUT1 72 INPUT2 65 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	11 DUAL PULSE	OUTPUT1 74 OUTPUT2 0	INPUT1 73		OUT1 INV N OUT2 INV Y		
5	06 OR MODE XFR	MODE XFR TABLE    7	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 0	INPUT1 65		OUT1 INV N OUT2 INV Y		
7	06 OR MODE XFR	MODE XFR TABLE    9	INPUT1 76 INPUT2 121 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE    4	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 84	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE    1	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 79 OUTPUT7 0	AUTO/MAN A		

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		B	18355	1048188
REV	A	SHEET		71

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

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10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

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MCDONNELL DOUGLAS AERONAUTICS CO.  
MURTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048188
REV	A	SHEET 272

LINE                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-7                      HIGHWAY NO.    3    DEVICE    1

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22	12 ANALOG FNCT ALARM	ANALOG CONF LINE    23	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    92 OUTPUT7    0	AUTO/MAN    A		
23	02 OR LOGICAL	OUTPUT    93	INPUT1    66 INPUT2    92 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A	OUT INV    N	IN1 INV    Y IN2 INV    N IN3 INV    Y IN4 INV    Y IN5 INV    Y	
24	11 DUAL PULSE	OUTPUT1    94 OUTPUT2    0	INPUT1    93		OUT1 INV    N OUT2 INV    Y		
25	06 OR MODE XFR	MODE XFR TABLE    17	INPUT1    94 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    Y IN3 INV    Y IN4 INV    Y IN5 INV    Y	
26	11 DUAL PULSE	OUTPUT1    96 OUTPUT2    0	INPUT1    66		OUT1 INV    N OUT2 INV    Y		
27	06 OR MODE XFR	MODE XFR TABLE    10	INPUT1    96 INPUT2    126 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    N IN3 INV    Y IN4 INV    Y IN5 INV    Y	

<small>MCDONNELL DOUGLAS AERONAUTICS CO. WINTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 104818A
<small>MCDONNELL DOUGLAS</small>			<small>REV</small> A	<small>SHEET</small> 273

LINE                                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-7                      HIGHWAY NO.    3    DEVICE    1

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE    24	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4 104	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN A		
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE    21	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6 99 OUTPUT7    0	AUTO/MAN A		
30	09 TIMER	OUTPUT 100	INPUT1    99 INPUT2    0 INPUT3    99	TIMER SFT    120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2    0	INPUT1    100		OUT1 INV N OUT2 INV Y		
32	06 OR MODE XFR	MODE XFR TABLE    15	INPUT1    98 INPUT2 101 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2    0	INPUT1    98		OUT1 INV N OUT2 INV N		
34	06 OR MODE XFR	MODE XFR TABLE    16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>			SIZE	FSCM NO.	DRAWING NO.
			<b>B</b>	<b>18355</b>	1048188
<small>MCDONNELL DOUGLAS</small>			REV	A	SHEET    274

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DIGITAL CONFIGURATION TABLE CCM81 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE 37	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE 29	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 114	AUTO/MAN A

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
<b>MCDONNELL DOUGLAS</b>		REV A	SHEET 275	

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DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-7    HIGHWAY NO. 3    DEVICE 1

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE    5	OUTPUT1 0 OUTPUT2 0 OUTPUT3 120 OUTPUT4 122	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2 0	INPUT1 120		OUT1 INV N OUT2 INV Y	
52	06 OR MODE XFR	MODE XFR TABLE 11	INPUT1 121 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2 0	INPUT1 122		OUT1 INV N OUT2 INV Y	
54	06 OR MODE XFR	MODE XFR TABLE 12	INPUT1 123 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
<i>MCDONNELL DOUGLAS</i>		<b>B</b>	<b>18355</b>	1048188
		REV	A	SHEET 276

LINE	DIGITAL CONFIGURATION TABLE				CCMH1	MVCU C1-7	HIGHWAY NO.	3	DEVICE	1
55	12 ANALOG FNCT ALARM	ANALOG CONF LINE 25	OUTPUT1 0 OUTPUT2 0 OUTPUT3 125 OUTPUT4 127			OUTPUT5 0 OUTPUT6 0 OUTPUT7 0		AUTO/MAN	A	
56	11 DUAL PULSE	OUTPUT1 126 OUTPUT2 0	INPUT1 125					OUT1 INV	N	OUT2 INV Y
57	06 OR MODE XFR	MODE XFR TABLE 13	INPUT1 126 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0		AUTO/MAN	A		IN1 INV	N	IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
58	11 DUAL PULSE	OUTPUT1 128 OUTPUT2 0	INPUT1 127					OUT1 INV	N	OUT2 INV Y
59	06 OR MODE XFR	MODE XFR TABLE 14	INPUT1 128 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0		AUTO/MAN	A		IN1 INV	N	IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 277	

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

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148	09 TIMER	OUTPUT 190	INPUT1 189	TIMER	OUT INV N	IN1 INV Y
			INPUT2 0	SET 2		IN2 INV Y
			INPUT3 0	AUTO/MAN A		IN3 INV Y
149	04 OR TRIG LOG	OUTPUT 191	INPUT1 190	AUTO/MAN A	OUT INV N	IN1 INV N
			INPUT2 0			IN2 INV Y
			INPUT3 0			IN3 INV Y
			INPUT4 0			IN4 INV Y
			INPUT5 0			IN5 INV Y
150	06 OR MODE XFR	MODE XFR TABLE 2	INPUT1 151	AUTO/MAN A		IN1 INV Y
			INPUT2 0			IN2 INV Y
			INPUT3 0			IN3 INV Y
			INPUT4 0			IN4 INV Y
			INPUT5 0			IN5 INV Y

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D48188
<small>MCDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 287	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7

HIGHWAY NO. 3 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
-----				
1				
	1	05 ANALOG (MAN XFR + OUTPUT SFL)	13.089	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
2				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 288	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 289	

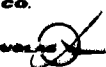
MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	13.089	17

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 290	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7 HIGHWAY NO. 5 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048186
MCDONNELL DOUGLAS 	REV	A	SHEET 291

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
13	1 05 ANALOG (MAN XFR + OUTPUT SEL)	79.976	38
14	1 06 ANALOG (AUTO XFR)	0.000	38
15	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3 06 ANALOG (AUTO XFR)	0.000	22

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 292	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-7 HIGHWAY NO. 3 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 293	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-R										HIGHWAY NO.	3	DEVICE	2				
1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	OUTPUT LIMITING	N	OUT HI ALARM	59.98	OUT RAMP RATE	0.00				
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL	M	OUT LO ALARM	0.00	OUTPUT LIMITING	N	OUT HI ALARM	99.98	OUT RAMP RATE	0.00				
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	OUTPUT LIMITING	N	OUT HI ALARM	39.98	OUT RAMP RATE	0.00				
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL	0.00	OUT HI AL	99.98	OUT RMP RA	0.00	SP RMP RAT	0.00		
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL	0.00	OUT HI AL	79.98	OUT RMP RA	0.00	SP RMP PAT	0.00		
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	OUTPUT LIMITING	N	OUT HI ALARM	99.98	OUT RAMP RATE	0.00				
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.319 0.000 0.000	AUTO/MANUAL	A	IN LO ALARM	0.00	OUTPUT LIMITING	N	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 3.03 Y1 9.99 X2 30.31	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00									
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00	OUTPUT LIMITING	N	IN HI ALARM	99.98	OUT LO ALARM	0.00	OUT HI ALARM	99.98	OUT RAMP RATE	0.00

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 300	

LINE	ANALOG CONFIGURATION TABLE CCMH1 MVCU C1-8										HIGHWAY NO.	3	DEVICE	2
10	13 FUNCTION GENERATOR	OUT 58 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 6	Y0 13.58 X1 3.03 Y1 19.00 X2 15.12	Y2 40.78 X3 60.71 Y3 81.59 X4 91.09	Y4 99.98 X5 0.00 Y5 99.98 Y6 0.00	OUT RAMP RATE	0.00					
12	19 PID REMOTE TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.387 0.916 0.196 0.104 0.000	AUTO/MAN A K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB Y SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00			
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
14	10 HIGH SELECTOR	OUT 37 IN1 6 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.875 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00					
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00					
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.500 188.397 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 19.90 0.00			

MCDONNELL DOUGLAS AERONAUTICS CO. HURTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 301	



LINE	ANALOG CONFIGURATION TABLE - CCM#1 MVCU C1-8										HIGHWAY NO.	3	DEVICE	2	
20	13 FUNCTION GENERATOR	OUT 33	AUTO/MANUAL	A	Y0	0.00	Y2	0.00	Y4	0.00	OUT FAMP RATE	0.00			
		IN1 66	BACK CALCULATION	N	X1	0.00	X3	0.00	X5	0.00					
			BACK CALC POINTER	0	Y1	99.98	Y3	0.00	Y5	0.00					
			NO. OF POINTS	2	X2	0.00	X4	0.00	Y6	0.00					
21	10 HIGH SELECTOR	OUT 44	K5(BIAS)	0.000	AUTO/MANUAL	A					OUT LO ALARM	0.00			
		IN1 11	OUTPUT LIMITING	N							OUT HI ALARM	59.98			
		IN2 12									OUT RAMP RATE	0.00			
		IN3 0													
		IN4 0													
22	07 ADD / SUBTRACT	OUT 70	K1(GAIN)	1.000	AUTO/MANUAL	M					OUT LO ALARM	0.00			
		IN1 44	K2(GAIN)	1.000	OUTPUT LIMITING	N					OUT HI ALARM	99.98			
		IN2 72	K3(GAIN)	0.000	BACK CALCULATION	N					OUT RAMP RATE	0.00			
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0									
		IN4 0	K5(BIAS)	-50.012											
23	10 HIGH SELECTOR	OUT 43	K5(BIAS)	0.000	AUTO/MANUAL	A					OUT LO ALARM	0.00			
		IN1 9	OUTPUT LIMITING	N							OUT HI ALARM	39.98			
		IN2 10									OUT RAMP RATE	0.00			
		IN3 0													
		IN4 0													
24	01 PID NORMAL	OUT 72	K1(GAIN)	0.055	AUTO/MAN A	PV INVERTED	N	RATE ENAB	Y	BAK CALC PT	0	OUT LO AL	0.00		
		IN1 0	K2(RESET)	0.000	HI DY LM N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	0.00	OUT HI AL	99.98		
		IN2 43	K3(RATE)	47.233	LO DY LM N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	73.28	OUT RMP RA	0.00		
		IN3 0	K4(FILTER)	0.000	CASCADE	Y	GAIN ENABLED	N	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.00	
		IN4 0	K5	49.988	CON/NORM	N	RESET ENABLED	N	BACK CALC	N	PV HI ALARM	99.98			
25	01 PID NORMAL	OUT 73	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED	N	RATE ENAB	N	BAK CALC PT	0	OUT LO AL	0.00		
		IN1 0	K2(RESET)	0.000	HI DY LM N	DIRECT/REV	R	SP LIMITG	N	SP LO ALARM	23.30	OUT HI AL	79.98		
		IN2 43	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E	E	OUT LIMIT	N	SP HI ALARM	26.69	OUT RMP RA	0.00		
		IN3 0	K4(FILTER)	0.000	CASCADE	Y	GAIN ENABLED	Y	PV TRACKG	N	PV LO ALARM	0.00	SP RMP RAT	0.00	
		IN4 0	K5	0.000	CON/NORM	N	RESET ENABLED	N	BACK CALC	N	PV HI ALARM	99.98			
26	07 ADD / SUBTRACT	OUT 74	K1(GAIN)	1.000	AUTO/MANUAL	A					OUT LO ALARM	0.00			
		IN1 88	K2(GAIN)	1.000	OUTPUT LIMITING	N					OUT HI ALARM	99.98			
		IN2 70	K3(GAIN)	0.000	BACK CALCULATION	N					OUT RAMP RATE	0.00			
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0									
		IN4 0	K5(BIAS)	0.000											
27	12 SQUARE ROOT	OUT 41	K1(GAIN)	1.000	AUTO/MANUAL	A					IN LO ALARM	0.00			
		IN1 15	K2(PV BIAS)	-1.514	OUTPUT LIMITING	N					IN HI ALARM	99.98			
			K3(THRESHD)	0.000	BACK CALCULATION	N					OUT LO ALARM	0.00			
			K5(BIAS)	0.000	BACK CALC POINTER	0					OUT HI ALARM	99.98			
											OUT RAMP RATE	0.00			

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818P
MCDONNELL DOUGLAS		REV A	SHEET 302	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-8										HIGHWAY NO.	3	DEVICE	2
28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 X1 Y1 X2	9.99 4.54 9.99 45.49	Y2 X3 Y3 X4	99.98 0.00 99.98 0.00	Y4 X5 Y5 Y6	0.00 0.00 0.00 0.00	OUT RAMP RATE	0.00		
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 X1 Y1 X2	13.58 4.54 19.00 22.69	Y2 X3 Y3 X4	40.78 91.09 81.59 0.00	Y4 X5 Y5 Y6	84.98 0.00 0.00 0.00	OUT RAMP RATE	0.00		
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	A Y N Y N	PV INVERTED DIRECT/REV RATE ON PV/E CASCADE CON/NORM	N D P Y N	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y Y N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 63.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00	
33	08 MULTPLIFR	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000			AUTO/MANUAL OUTPUT LIMITING	A N			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000			AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0			OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	1.109 0.017 0.000			AUTO/MANUAL OUTPUT LIMITING	A N			IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 303	

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LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-8										HIGHWAY NO.	3	DEVICE	2	
37	07 ADD / SUBTRACT	OUT 85	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00							
		IN1 81	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 84	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00							
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	33									
		IN4 0	K5(BIAS)	0.000											
38	01 PID NORMAL	OUT 86	K1(GAIN)	0.398	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00				
		IN1 41	K2(RESET)	188.397	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98				
		IN2 85	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	19.90				
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00				
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98						
39	11 LOW SELECTOR	OUT 35	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00							
		IN1 66			OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 86					OUT RAMP RATE	0.00							
		IN3 0													
		IN4 0													
40	13 FUNCTION GENERATOR	OUT 34	AUTO/MANUAL	A	Y0 0.00	Y2 72.48	Y4 88.50	OUT RAMP RATE	0.00						
		IN1 86	BACK CALCULATION	N	X1 19.98	X3 69.99	X5 89.99								
			BACK CALC POINTER	0	Y1 36.00	Y3 79.98	Y5 96.00								
			NO. OF POINTS	7	X2 59.98	X4 79.98	Y6 99.98								

MCDONNELL DOUGLAS AERONAUTICS CO. MURTINGON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 304	

LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-8	HIGHWAY NO.	3	DEVICE	2
2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0		OUTPUT5 OUTPUT6 OUTPUT7	0 72 0	AUTO/MAN	A	
3	02 OR LOGICAL	OUTPUT 73	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	72 65 0 0 0	AUTO/MAN	A		OUT INV	N	IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
4	11 DUAL PULSE	OUTPUT1 OUTPUT2	74 0	INPUT1	73			OUT1 INV OUT2 INV	N Y	
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	74 0 0 0 0	AUTO/MAN	A				IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
6	11 DUAL PULSE	OUTPUT1 OUTPUT2	76 0	INPUT1	65			OUT1 INV OUT2 INV	N Y	
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	76 121 0 0 0	AUTO/MAN	A				IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 84		OUTPUT5 OUTPUT6 OUTPUT7	0 0 0	AUTO/MAN	A	
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0		OUTPUT5 OUTPUT6 OUTPUT7	0 79 0	AUTO/MAN	A	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818A
MCDONNELL DOUGLAS			REV A	SHEET 305	

LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-R	HIGHWAY NO.	3	DEVICE	2	
10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER		OUT INV	N	IN1 INV	N
				INPUT2	0	SFT	120			IN2 INV	N
				INPUT3	79	AUTO/MAN	A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80			OUT1 INV	N		
		OUTPUT2	0					OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR		INPUT1	81	AUTO/MAN	A			IN1 INV	N
		TABLE	5	INPUT2	78					IN2 INV	Y
				INPUT3	0					IN3 INV	Y
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78			OUT1 INV	N		
		OUTPUT2	0					OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR		INPUT1	83	AUTO/MAN	A			IN1 INV	N
		TABLE	6	INPUT2	120					IN2 INV	N
				INPUT3	84					IN3 INV	N
				INPUT4	0					IN4 INV	Y
				INPUT5	0					IN5 INV	Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 306	

LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU C1-8	HIGHWAY NO.	3	DEVICE	2
22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 23	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0		OUTPUT5 OUTPUT6 OUTPUT7	0 92 0	AUTO/MAN	A	
23	02 OR LOGICAL	OUTPUT 93	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	66 92 0 0 0	AUTO/MAN	A		OUT INV	N	IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
24	11 DUAL PULSE	OUTPUT1 OUTPUT2	94 0	INPUT1	93			OUT1 INV OUT2 INV	N Y	
25	06 OR MODE XFR	MODE XFR TABLE 17	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	94 0 0 0 0	AUTO/MAN	A				IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
26	11 DUAL PULSE	OUTPUT1 OUTPUT2	96 0	INPUT1	66			OUT1 INV OUT2 INV	N Y	
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	96 126 0 0 0	AUTO/MAN	A				IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 307	

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DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-8    HIGHWAY NO.    3    DEVICE    2

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28	12 ANALOG FNCT ALARM	ANALOG CONF LINE    24	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    104	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN    A	
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE    21	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    99 OUTPUT7    0	AUTO/MAN    A	
30	09 TIMER	OUTPUT    100	INPUT1    99 INPUT2    0 INPUT3    99	TIMER SET        120 AUTO/MAN    A	OUT INV    N	IN1 INV    N IN2 INV    N IN3 INV    Y
31	11 DUAL PULSE	OUTPUT1    101 OUTPUT2    0	INPUT1    100		OUT1 INV    N OUT2 INV    Y	
32	06 OR MODE XFR	MODE XFR TABLE    15	INPUT1    98 INPUT2    101 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    Y IN2 INV    N IN3 INV    Y IN4 INV    Y IN5 INV    Y
33	11 DUAL PULSE	OUTPUT1    103 OUTPUT2    0	INPUT1    98		OUT1 INV    N OUT2 INV    N	
34	06 OR MODE XFR	MODE XFR TABLE    16	INPUT1    103 INPUT2    125 INPUT3    104 INPUT4    0 INPUT5    0	AUTO/MAN    A		IN1 INV    N IN2 INV    N IN3 INV    N IN4 INV    Y IN5 INV    Y

MCDONNELL DOUGLAS AERONAUTICS CO. WRESTLING BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
<i>MCDONNELL DOUGLAS</i>		<b>B</b>	<b>18355</b>	1D48188
		REV	A	SHEET    308

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LINE    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-8    HIGHWAY NO.    3    DEVICE    2

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE    17	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE    37	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE    9	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE    29	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    0 OUTPUT7 114	AUTO/MAN A

<b>MCDONNELL DOUGLAS ASTRONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	PSCM NO. <b>18355</b>	DRAWING NO. 1048188
<b>MCDONNELL DOUGLAS</b>		REV    A	SHEET    309	



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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-8 HIGHWAY NO. 3 DEVICE 2

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50	12 ANALOG FNCT ALARM	ANALOG CONF LINE 5	OUTPUT1 0 OUTPUT2 0 OUTPUT3 120 OUTPUT4 122	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
51	11 DUAL PULSE	OUTPUT1 121 OUTPUT2 0	INPUT1 120		OUT1 INV N OUT2 INV Y	
52	06 OR MODE XFR	MODE XFR TABLE 11	INPUT1 121 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
53	11 DUAL PULSE	OUTPUT1 123 OUTPUT2 0	INPUT1 122		OUT1 INV N OUT2 INV Y	
54	06 OR MODE XFR	MODE XFR TABLE 12	INPUT1 123 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

<small>MCDONNELL BOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1048188
<small>MCDONNELL BOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 310	





MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-P HIGHWAY NO. 3 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
<b>1</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17
3	06 ANALOG (AUTO XFR)	0.000	9
4	06 ANALOG (AUTO XFR)	0.000	5
7	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	37
9	06 ANALOG (AUTO XFR)	0.000	29
10	06 ANALOG (AUTO XFR)	0.000	25
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
<b>2</b>			
1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17
3	06 ANALOG (AUTO XFR)	0.000	9
4	06 ANALOG (AUTO XFR)	0.000	5
7	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	37
9	06 ANALOG (AUTO XFR)	0.000	29
10	06 ANALOG (AUTO XFR)	0.000	25
13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 322	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-8 HIGHWAY NO. 3 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
5	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3 06 ANALOG (AUTO XFR)	0.000	2
6	1 06 ANALOG (AUTO XFR)	0.000	9
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE <b>B</b>	PSCM NO. <b>18355</b>	DRAWING NO. 1D48188
	REV A	SHEET 323	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-8 HIGHWAY NO. 3 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	12.210	17

MCDONNELL BOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818F
MCDONNELL BOUGLAS		REV A	SHEET 324	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-8

HIGHWAY NO. 3 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
10	1	05 ANALOG (MAN XFR + OUTPUT SEL)	16.996	37
11	1	05 ANALOG (MAN XFR + OUTPUT SEL)	89.988	18
12	1	06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS AERONAUTICS CO.  
WINTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

325

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-8 HIGHWAY NO. 3 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	79.976	38
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
MCDONNELL DOUGLAS		REV A	SHEET 326	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-R HIGHWAY NO. 3 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 327	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

1	10 HIGH SELECTOR	OUT 39 IN1 3 IN2 4 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00		
2	07 ADD / SUBTRACT	OUT 50 IN1 39 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
3	10 HIGH SELECTOR	OUT 38 IN1 1 IN2 2 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00		
4	01 PID NORMAL	OUT 52 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB Y DIRECT/REV R RATE ON PV/E E GAIN ENABLED N RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 73.28 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 59.98 0.00 0.00
5	01 PID NORMAL	OUT 53 IN1 0 IN2 38 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A PV INVERTED N HI DY LM N LO DY LM N CASCADE Y CON/NORM N	RATE ENAB N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	BAK CALC PT 0 SP LO ALARM 23.30 SP HI ALARM 26.69 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 79.98 0.00 0.00
6	07 ADD / SUBTRACT	OUT 54 IN1 68 IN2 50 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
7	12 SQUARE ROOT	OUT 36 IN1 14	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.514 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
8	13 FUNCTION GENERATOR	OUT 56 IN1 36	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 Y2 99.98 Y4 0.00 X1 4.54 X3 0.00 X5 0.00 Y1 9.99 Y3 99.98 Y5 0.00 X2 45.49 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00	
9	04 AUTO MANUAL	OUT 68 IN1 53	K5(BIAS) 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 334	

LINE	ANALOG CONFIGURATION TABLE										CCM#1	MVCU	C1-9	HIGHWAY NO.	4	DEVICE	1	
10	13 FUNCTION GENERATOR	OUT 58 IN1 36		AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 13.58 X1 4.54 Y1 19.00 X2 22.69	Y2 40.78 X3 91.09 Y3 81.59 X4 0.00	Y4 84.98 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00							
12	19 PID REMOTF TUNING	OUT 60 IN1 54 IN2 8 IN3 56 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	AUTO/MAN K2 RM TU Y K3 RM TU N CASCADE Y CON/NORM N	A DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	PV INVERTED N SP LIMITG Y OUT LIMIT N PV TRACKG N BACK CALC N	RATE ENAB Y SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	HAK CALC PT 0	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00								
13	08 MULTIPLIER	OUT 61 IN1 60 IN2 58 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 12				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00								
14	10 HIGH SELECTOR	OUT 37 IN1 5 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00								
15	09 DIVIDER	OUT 63 IN1 37 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00								
16	14 LAG	OUT 64 IN1 63	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.840 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N				IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00								
17	07 ADD / SUBTRACT	OUT 65 IN1 61 IN2 64 IN3 58 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 -0.500 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N Y 13				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00								
18	01 PID NORMAL	OUT 66 IN1 36 IN2 65 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.488 188.397 0.000 0.000 0.000	AUTO/MAN HI DY LM N LO DY LM N CASCADE Y CON/NORM N	M DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	PV INVERTED N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	RATE ENAB N SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	BAK CALC PT 0	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00								

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 335	

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

20	13 FUNCTION GENERATOR	OUT 33 IN1 66	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 2	Y0 0.00 X1 0.00 Y1 99.98 X2 0.00	Y2 0.00 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00		
21	10 HIGH SELECTOR	OUT 44 IN1 11 IN2 12 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 59.98 0.00		
22	07 ADD / SUBTRACT	OUT 70 IN1 44 IN2 72 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N D		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
23	10 HIGH SELECTOR	OUT 43 IN1 9 IN2 10 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 39.98 0.00		
24	01 PID NORMAL	OUT 72 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.055 0.000 47.233 0.000 49.988	AUTO/HAN HI DY LM LO DY LM CASCADE Y CON/NORM N	A N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD BACK CALC N	RATE ENAB Y SP LIMITG N OUT LIMIT N PV TRACKG N PV HI ALARM	0 0.00 73.28 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
25	01 PID NORMAL	OUT 73 IN1 0 IN2 43 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/HAN HI DY LM LO DY LM CASCADE Y CON/NORM N	A N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD BACK CALC N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N PV HI ALARM	0 23.30 26.69 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 79.98 0.00 0.00
26	07 ADD / SUBTRACT	OUT 74 IN1 88 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N D		OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00		
27	12 SQUARE ROOT	OUT 41 IN1 15	K1(GAIN) K2(PV BIAS) K3(THRESHD) K5(BIAS)	1.000 -1.319 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N D		IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00		

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1048188
REV	A	SHEET 336

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

28	13 FUNCTION GENERATOR	OUT 76 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 9.99 X1 4.54 Y1 9.99 X2 45.49	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00
29	04 AUTO MANUAL	OUT 88 IN1 73	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
30	13 FUNCTION GENERATOR	OUT 78 IN1 41	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 5	Y0 13.58 X1 4.54 Y1 19.00 X2 22.69	Y2 40.78 X3 91.09 Y3 81.59 X4 0.00	Y4 84.98 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00
32	19 PID REMOTE TUNING	OUT 80 IN1 74 IN2 8 IN3 76 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.500 0.916 0.196 0.104 0.000	AUTO/MAN A PV INVERTED N RATE ENAB Y DIRECT/REV D SP LIMITG Y RATE ON PV/E P GAIN ENABLED Y CON/NORM N	RESET ENABLD Y BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 63.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00	
33	08 MULTIPLIER	OUT 81 IN1 80 IN2 78 IN3 0 IN4 0	K1(GAIN) K5(BIAS)	1.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 32	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
34	10 HIGH SELECTOR	OUT 42 IN1 17 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING	A N	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
35	09 DIVIDER	OUT 83 IN1 42 IN2 16	K1(GAIN) K2(NUMBIAS) K3(DENBIAS) K5(BIAS)	0.660 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00	
36	14 LAG	OUT 84 IN1 83	K1(GAIN) K2(TIMCONS) K5(BIAS)	0.699 0.017 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. WINTERTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 337	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-9										HIGHWAY NO.	4	DEVICE	1	
37	07 ADD / SUBTRACT	OUT 85	K1(GAIN)	1.000	AUTO/MANUAL	M	OUT LO ALARM	0.00							
		IN1 81	K2(GAIN)	1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 84	K3(GAIN)	-0.500	BACK CALCULATION	Y	OUT RAMP RATE	0.00							
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	33									
		IN4 0	K5(BIAS)	0.000											
38	01 PID NORMAL	OUT 86	K1(GAIN)	0.605	AUTO/MAN M	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00				
		IN1 41	K2(RESET)	188.397	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98				
		IN2 85	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	19.90				
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00				
		IN4 0	K5	0.000	CON/NORM N	RFSET ENABLD Y	BACK CALC N	PV HI ALARM	99.98						
39	11 LOW SELECTOR	OUT 35	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00							
		IN1 66			OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 86					OUT RAMP RATE	0.00							
		IN3 0													
IN4 0															
40	13 FUNCTION GENERATOR	OUT 34	AUTO/MANUAL	A	Y0 0.00	Y2 75.58	Y4 92.99	OUT RAMP RATE	0.00						
		IN1 86	BACK CALCULATION	N	X1 19.98	X3 69.99	X5 89.99								
			BACK CALC POINTER	0	Y1 36.00	Y3 86.50	Y5 96.00								
			NO. OF POINTS	7	X2 59.98	X4 79.98	Y6 99.98								

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		<b>B</b>	<b>18355</b>	1048188
		REV	A	SHEET 338

LINE	DIGITAL CONFIGURATION TABLE				CCM#1	MVCU	C1-9	HIGHWAY NO.	4	DEVICE	1
2	12 ANALOG FNCT ALARM	ANALOG CONF LINE 3	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 72 0	AUTO/MAN	A			
3	02 OR LOGICAL	OUTPUT 73	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	72 65 0 0 0	AUTO/MAN	A	OUT INV	N	IN1 INV IN2 INV IN3 INV IN4 INV IN5 INV	N Y Y Y Y	
4	11 DUAL PULSE	OUTPUT1 OUTPUT2	74 0	INPUT1	73		OUT1 INV OUT2 INV	N Y			
5	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	74 0 0 0 0	AUTO/MAN	A			IN1 INV IN2 INV IN3 INV IN4 INV IN5 INV	N Y Y Y Y	
6	11 DUAL PULSE	OUTPUT1 OUTPUT2	76 0	INPUT1	65		OUT1 INV OUT2 INV	N Y			
7	06 OR MODE XFR	MODE XFR TABLE 9	INPUT1 INPUT2 INPUT3 INPUT4 INPUT5	76 121 0 0 0	AUTO/MAN	A			IN1 INV IN2 INV IN3 INV IN4 INV IN5 INV	N N Y Y Y	
8	12 ANALOG FNCT ALARM	ANALOG CONF LINE 4	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 84	OUTPUT5 OUTPUT6 OUTPUT7	0 0 0	AUTO/MAN	A			
9	12 ANALOG FNCT ALARM	ANALOG CONF LINE 1	OUTPUT1 OUTPUT2 OUTPUT3 OUTPUT4	0 0 0 0	OUTPUT5 OUTPUT6 OUTPUT7	0 79 0	AUTO/MAN	A			

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 39	

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

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10	09 TIMER	OUTPUT	80	INPUT1	79	TIMER	OUT INV	N	IN1 INV	N
				INPUT2	0	SET 120			IN2 INV	N
				INPUT3	79	AUTO/MAN A			IN3 INV	Y
11	11 DUAL PULSE	OUTPUT1	81	INPUT1	80		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
12	06 OR MODE XFR	MODE XFR TABLE	5	INPUT1	81	AUTO/MAN A			IN1 INV	N
				INPUT2	78				IN2 INV	Y
				INPUT3	0				IN3 INV	Y
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y
13	11 DUAL PULSE	OUTPUT1	83	INPUT1	78		OUT1 INV	N		
		OUTPUT2	0				OUT2 INV	Y		
14	06 OR MODE XFR	MODE XFR TABLE	6	INPUT1	83	AUTO/MAN A			IN1 INV	N
				INPUT2	120				IN2 INV	N
				INPUT3	84				IN3 INV	N
				INPUT4	0				IN4 INV	Y
				INPUT5	0				IN5 INV	Y

<p style="font-size: small; margin: 0;">MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</p> <p style="text-align: center; font-size: small; margin: 0;">MCDONNELL DOUGLAS</p>	<p style="font-size: x-small; margin: 0;">SIZE</p> <p style="font-size: large; font-weight: bold; margin: 0;">B</p>	<p style="font-size: x-small; margin: 0;">FSCM NO.</p> <p style="font-size: large; font-weight: bold; margin: 0;">18355</p>	<p style="font-size: x-small; margin: 0;">DRAWING NO.</p> <p style="margin: 0;">1048188</p>
	<p style="font-size: x-small; margin: 0;">REV</p> <p style="margin: 0;">A</p>	<p style="font-size: x-small; margin: 0;">SHEET 340</p>	



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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

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22	12 ANALOG FNCT ALARM	ANALOG COMF LINE 23	OUTPUT1	0	OUTPUT5	0	AUTO/MAN A		
			OUTPUT2	0	OUTPUT6	92			
			OUTPUT3	0	OUTPUT7	0			
			OUTPUT4	0					
23	02 OR LOGICAL	OUTPUT 93	INPUT1	66	AUTO/MAN	A	OUT INV	N	IN1 INV Y
			INPUT2	92					IN2 INV N
			INPUT3	0					IN3 INV Y
			INPUT4	0					IN4 INV Y
			INPUT5	0					IN5 INV Y
24	11 DUAL PULSE	OUTPUT1 94 OUTPUT2 0	INPUT1	93			OUT1 INV	N	
							OUT2 INV	Y	
25	06 OR MODE XFR	MODE XFR TABLE 17	INPUT1	94	AUTO/MAN	A			IN1 INV N
			INPUT2	0					IN2 INV Y
			INPUT3	0					IN3 INV Y
			INPUT4	0					IN4 INV Y
			INPUT5	0					IN5 INV Y
26	11 DUAL PULSE	OUTPUT1 96 OUTPUT2 0	INPUT1	66			OUT1 INV	N	
							OUT2 INV	Y	
27	06 OR MODE XFR	MODE XFR TABLE 10	INPUT1	96	AUTO/MAN	A			IN1 INV N
			INPUT2	126					IN2 INV N
			INPUT3	0					IN3 INV Y
			INPUT4	0					IN4 INV Y
			INPUT5	0					IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818P
MCDONNELL DOUGLAS		REV A	SHEET 341	

LINE                                  DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-9                                  HIGHWAY NO.    4    DEVICE    1

28	12 ANALOG FNCT ALARM	ANALOG CONF LINE    24	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4 104	OUTPUT5    0 OUTPUT6    0 OUTPUT7    0	AUTO/MAN A		
29	12 ANALOG FNCT ALARM	ANALOG CONF LINE    21	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6 99 OUTPUT7    0	AUTO/MAN A		
30	09 TIMER	OUTPUT 100	INPUT1    99 INPUT2    0 INPUT3    99	TIMER SFT    120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
31	11 DUAL PULSE	OUTPUT1 101 OUTPUT2    0	INPUT1    100		OUT1 INV N OUT2 INV Y		
32	06 OR MODE XFR	MODE XFR TABLE    15	INPUT1    98 INPUT2 101 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV Y IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
33	11 DUAL PULSE	OUTPUT1 103 OUTPUT2    0	INPUT1    98		OUT1 INV N OUT2 INV N		
34	06 OR MODE XFR	MODE XFR TABLE    16	INPUT1 103 INPUT2 125 INPUT3 104 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV N IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET    342	

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DIGITAL CONFIGURATION TABLE CCM#1 MYCU C1-9 HIGHWAY NO. 4 DEVICE 1

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41	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 111	AUTO/MAN A
42	12 ANALOG FNCT ALARM	ANALOG CONF LINE 37	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 112	AUTO/MAN A
43	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 113	AUTO/MAN A
44	12 ANALOG FNCT ALARM	ANALOG CONF LINE 29	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 114	AUTO/MAN A

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE	FSCM NO.	DRAWING NO.
MCDONNELL DOUGLAS		B	18355	1D4818C
		REV	A	SHEET 343





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LINE	DIGITAL CONFIGURATION TABLE	CCM#1	MVCU C1-9	HIGHWAY NO.	4	DEVICE	1
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148	09 TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
				INPUT2	0	SET			IN2 INV	Y	
				INPUT3	0	AUTO/MAN			IN3 INV	Y	
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
				INPUT2	0				IN2 INV	Y	
				INPUT3	0				IN3 INV	Y	
				INPUT4	0				IN4 INV	Y	
				INPUT5	0				IN5 INV	Y	
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN	A			IN1 INV	Y
				INPUT2	0				IN2 INV	Y	
				INPUT3	0				IN3 INV	Y	
				INPUT4	0				IN4 INV	Y	
				INPUT5	0				IN5 INV	Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048168
MCDONNELL DOUGLAS		REV A	SHEET 355	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9

HIGHWAY NO. 4 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
<b>1</b>				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	4	06 ANALOG (AUTO XFR)	0.000	5
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	10	06 ANALOG (AUTO XFR)	0.000	25
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
<b>2</b>				
	1	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	17
	3	06 ANALOG (AUTO XFR)	0.000	9
	4	06 ANALOG (AUTO XFR)	0.000	5
	7	05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	37
	9	06 ANALOG (AUTO XFR)	0.000	29
	10	06 ANALOG (AUTO XFR)	0.000	25
	13	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
	14	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV A	SHEET 356	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	06 ANALOG (AUTO XFR)	0.000	2
6	1	06 ANALOG (AUTO XFR)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048186
MCDONNELL DOUGLAS		REV A	SHEET 357	



MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9

HIGHWAY NO. 4 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
7	1	06 ANALOG (AUTO XFR)	0.000	17
9	1	05 ANALOG (MAN XFR + OUTPUT SEL)	15.702	17

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 358	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
10	1 05 ANALOG (MAN XFR + OUTPUT SEL)	12.430	37
11	1 05 ANALOG (MAN XFR + OUTPUT SEL)	85.988	18
12	1 06 ANALOG (AUTO XFR)	0.000	18

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		
SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818E
REV A	SHEET 359	

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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9 HIGHWAY NO. 4 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
13	1	05 ANALOG (MAN XFR + OUTPUT SEL)	79.976	38
14	1	06 ANALOG (AUTO XFR)	0.000	38
15	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	29
	3	06 ANALOG (AUTO XFR)	0.000	22

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 360	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-9

HIGHWAY NO. 4 DEVICE 1

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
16	1	06 ANALOG (AUTO XFR)	0.000	29
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
17	1	06 ANALOG (AUTO XFR)	0.000	37

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> MUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	104818R
<b>MCDONNELL DOUGLAS</b>	REV	A	SHEET 361

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

1	04 AUTO MANUAL	OUT 33 IN1 0	K5(BIAS)	0.000	AUTO/MANUAL	M	IN LO ALARM	0.00						
					OUTPUT LIMITING	N	IN HI ALARM	99.98						
					BACK CALCULATION	N	OUT LO ALARM	0.00						
					BACK CALC POINTER	0	OUT HI ALARM	99.98						
							OUT RAMP RATE	19.90						
2	11 LOW SELECTOR	OUT 52 IN1 6 IN2 7 IN3 8 IN4 9	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
					OUTPUT LIMITING	N	OUT HI ALARM	99.98						
							OUT RAMP RATE	0.00						
3	11 LOW SELECTOR	OUT 53 IN1 10 IN2 11 IN3 12 IN4 13	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
					OUTPUT LIMITING	N	OUT HI ALARM	99.98						
							OUT RAMP RATE	0.00						
4	04 AUTO MANUAL	OUT 43 IN1 21	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00						
					OUTPUT LIMITING	N	IN HI ALARM	99.98						
					BACK CALCULATION	N	OUT LO ALARM	0.10						
					BACK CALC POINTER	0	OUT HI ALARM	0.00						
							OUT RAMP RATE	0.00						
5	11 LOW SELECTOR	OUT 55 IN1 52 IN2 53 IN3 14 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00						
					OUTPUT LIMITING	N	OUT HI ALARM	99.98						
							OUT RAMP RATE	0.00						
6	01 PID NORMAL	OUT 56 IN1 55 IN2 63 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.500 0.000 0.000 0.000 49.988	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	A N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D E Y N	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.00
7	01 PID NORMAL	OUT 57 IN1 21 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	10.000 0.000 0.000 0.000 0.000	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	A N N N C	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D E Y N	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N Y N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 63.30	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 0.00 0.98
8	07 ADD / SUBTRACT	OUT 58 IN1 57 IN2 64 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 -50.012	AUTO/MANUAL	A	OUT LO ALARM	0.00						
					OUTPUT LIMITING	N	OUT HI ALARM	99.98						
					BACK CALCULATION	Y	OUT RAMP RATE	0.00						
					BACK CALC POINTER	7								
9	01 PID NORMAL	OUT 59 IN1 87 IN2 58 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.074 29.997 0.110 0.000 0.000	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	M N N Y N	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLD	N D E Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	Y N N N Y	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	8 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	30.79 99.98 0.00 0.00

MCDONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE	FSCM NO.	DRAWING NO.
<b>B</b>	<b>18355</b>	1D48188
REV	A	SHEET 368

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

10	14 LAG	OUT 60 IN1 20	K1(GAIN) K2(TIMCONS) K5(BIAS)	1.000 0.050 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
11	14 LAG	OUT 61 IN1 2	K1(GAIN) K2(TIMCONS) K5(BIAS)	1.000 0.050 0.000	AUTO/MANUAL OUTPUT LIMITING	A N	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 19.98 0.00 99.98 0.00	
12	07 ADD / SUBTRACT	OUT 62 IN1 60 IN2 61 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -0.668 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0	OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 12.48 0.00	
13	13 FUNCTION GENERATOR	OUT 63 IN1 62	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4	Y0 74.99 Y2 14.99 Y4 0.00 X1 1.66 X3 0.00 X5 0.00 Y1 74.99 Y3 14.99 Y5 0.00 X2 5.67 X4 0.00 Y6 0.00		OUT RAMP RATE	0.00	
14	04 AUTO MANUAL	OUT 64 IN1 56	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	M N N 0	IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 0.00	
15	01 PID NORMAL	OUT 34 IN1 0 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.390 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLED N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 19.90 SP RMP RAT 0.00
16	13 FUNCTION GENERATOR	OUT 66 IN1 2	AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 7	Y0 14.19 Y2 25.45 Y4 33.50 X1 3.03 X3 19.24 X5 61.73 Y1 20.49 Y3 29.60 Y5 38.14 X2 9.23 X4 34.24 Y6 42.44		OUT RAMP RATE	0.00	
17	01 PID NORMAL	OUT 67 IN1 3 IN2 66 IN3 0 IN4 0	K1(GAIN) K2(PESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLED N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 98.97	OUT LO AL 3.32 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00

MCDONNELL DOUGLAS AERONAUTICS CO.  
MONTGOMERY BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1048188

REV

A

SHEET

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LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

19	04 AUTO MANUAL	OUT 44 IN1 0	K5(BIAS)	0.000	AUTO/MANUAL	M	IN LO ALARM	0.00	
					OUTPUT LIMITING	N	IN HI ALARM	99.98	
					BACK CALCULATION	N	OUT LO ALARM	0.00	
					BACK CALC POINTER	0	OUT HI ALARM	99.98	
							OUT RAMP RATE	0.00	
20	13 FUNCTION GENERATOR	OUT 70 IN1 20	AUTO/MANUAL	A	Y0 38.44	Y2 50.11	Y4 68.03	OUT RAMP RATE	0.00
			BACK CALCULATION	N	X1 2.49	X3 16.63	X5 56.63		
			BACK CALC POINTER	0	Y1 38.44	Y3 58.36	Y5 76.63		
			NO. OF POINTS	7	X2 8.33	X4 33.31	Y6 86.89		
21	07 ADD / SUBTRACT	OUT 71 IN1 70 IN2 23 IN3 0 IN4 0	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	3.30	
			K2(GAIN)	-1.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
			K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
			K4(GAIN)	0.000	BACK CALC POINTER	0			
			K5(BIAS)	0.000					
22	07 ADD / SUBTRACT	OUT 72 IN1 20 IN2 21 IN3 0 IN4 0	K1(GAIN)	-3.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	
			K2(GAIN)	3.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
			K3(GAIN)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
			K4(GAIN)	0.000	BACK CALC POINTER	0			
			K5(BIAS)	0.000					
23	01 PID NORMAL	OUT 73 IN1 0 IN2 0 IN3 0 IN4 0	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL 0.00
			K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG Y	SP LO ALARM 9.99	OUT HI AL 99.98
			K3(RATE)	0.000	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM 66.64	OUT RMP RA 0.98
			K4(FILTER)	0.390	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT 0.98
			K5	0.000	CON/NORM C	RESET ENABLD N	BACK CALC N	PV HI ALARM 99.98	
24	20 RATE LIMITER	OUT 37 IN1 73	K1(RISRATE)	2.000	AUTO/MANUAL	A	IN LO ALARM	0.00	
			K2(DECRATE)	2.000	OUTPUT LIMITING	N	IN HI ALARM	99.98	
			K5(BIAS)	0.000	BACK CALCULATION	N	OUT LO ALARM	0.00	
					BACK CALC POINTER	0	OUT HI ALARM	99.98	
							OUT RAMP RATE	0.00	
25	13 FUNCTION GENERATOR	OUT 75 IN1 37	AUTO/MANUAL	A	Y0 36.09	Y2 69.43	Y4 77.97	OUT RAMP RATE	0.00
			BACK CALCULATION	N	X1 3.32	X3 49.33	X5 69.99		
			BACK CALC POINTER	0	Y1 36.09	Y3 73.31	Y5 84.42		
			NO. OF POINTS	7	X2 43.98	X4 57.31	Y6 99.17		
26	13 FUNCTION GENERATOR	OUT 76 IN1 23	AUTO/MANUAL	A	Y0 0.00	Y2 44.76	Y4 0.00	OUT RAMP RATE	0.00
			BACK CALCULATION	N	X1 5.27	X3 0.00	X5 0.00		
			BACK CALC POINTER	0	Y1 0.00	Y3 0.00	Y5 0.00		
			NO. OF POINTS	3	X2 0.00	X4 0.00	Y6 0.00		
27	09 DIVIDER	OUT 77 IN1 0 IN2 37	K1(GAIN)	0.328	AUTO/MANUAL	A	OUT LO ALARM	0.00	
			K2(NUMBIAS)	74.994	OUTPUT LIMITING	N	OUT HI ALARM	99.98	
			K3(DENBIAS)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00	
			K5(BIAS)	0.000	BACK CALC POINTER	0			

MCDONNELL DOUGLAS ASTRONAVICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 370	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-10										HIGHWAY NO.	4	DEVICE	2	
28	09 DIVIDER	OUT 78	K1(GAIN)	0.328	AUTO/MANUAL	A	OUT LO ALARM	0.00							
		IN1 2	K2(NUMBIAS)	0.000	OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 37	K3(BENBIAS)	0.000	BACK CALCULATION	N	OUT RAMP RATE	0.00							
			K5(BIAS)	0.000	BACK CALC POINTER	0									
29	07 ADD / SUBTRACT	OUT 79	K1(GAIN)	1.000	AUTO/MANUAL	A	OUT LO ALARM	0.00							
		IN1 75	K2(GAIN)	0.070	OUTPUT LIMITING	N	OUT HI ALARM	99.98							
		IN2 77	K3(GAIN)	-0.070	BACK CALCULATION	N	OUT RAMP RATE	0.00							
		IN3 78	K4(GAIN)	0.000	BACK CALC POINTER	0									
		IN4 0	K5(BIAS)	0.000											
30	01 PID NORMAL	OUT 40	K1(GAIN)	1.000	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00				
		IN1 76	K2(RESET)	0.000	HI DY LM N	DIRECT/REV R	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98				
		IN2 79	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E F	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	0.00				
		IN3 0	K4(FILTER)	0.000	CASCADE Y	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00				
		IN4 0	K5	0.000	CON/NORM N	RESET ENABLD N	BACK CALC N	PV HI ALARM	99.98						
31	04 AUTO MANUAL	OUT 41	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 40			OUTPUT LIMITING	N	IN HI ALARM	99.98							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	99.98							
							OUT RAMP RATE	0.00							
32	04 AUTO MANUAL	OUT 42	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 40			OUTPUT LIMITING	N	IN HI ALARM	99.98							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	99.98							
							OUT RAMP RATE	0.00							
33	04 AUTO MANUAL	OUT 38	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 37			OUTPUT LIMITING	N	IN HI ALARM	99.98							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	99.98							
							OUT RAMP RATE	0.00							
34	04 AUTO MANUAL	OUT 39	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 37			OUTPUT LIMITING	N	IN HI ALARM	99.98							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	99.98							
							OUT RAMP RATE	0.00							
35	04 AUTO MANUAL	OUT 45	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 0			OUTPUT LIMITING	N	IN HI ALARM	0.00							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	0.00							
							OUT RAMP RATE	0.00							
36	04 AUTO MANUAL	OUT 46	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00							
		IN1 0			OUTPUT LIMITING	N	IN HI ALARM	0.00							
					BACK CALCULATION	N	OUT LO ALARM	0.00							
					BACK CALC POINTER	0	OUT HI ALARM	0.00							
							OUT RAMP RATE	0.00							

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
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ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

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37	04 AUTO MANUAL	OUT 47 INI 0	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00				
					OUTPUT LIMITING	N	IN HI ALARM	0.00				
					BACK CALCULATION	N	OUT LO ALARM	0.00				
					BACK CALC POINTER	0	OUT HI ALARM	0.00				
							OUT RAMP RATE	9.00				
38	01 PID NORMAL	OUT 36 INI 25 IN2 59 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.348 7.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00			
39	04 AUTO MANUAL	OUT 87 INI 0	K5(BIAS)	49.988	AUTO/MANUAL	A	IN LO ALARM	0.00				
					OUTPUT LIMITING	N	IN HI ALARM	99.98				
					BACK CALCULATION	N	OUT LO ALARM	0.00				
					BACK CALC POINTER	0	OUT HI ALARM	99.98				
							OUT RAMP RATE	0.00				
40	04 AUTO MANUAL	OUT 35 INI 25	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00				
					OUTPUT LIMITING	N	IN HI ALARM	99.98				
					BACK CALCULATION	N	OUT LO ALARM	0.00				
					BACK CALC POINTER	0	OUT HI ALARM	99.98				
							OUT RAMP RATE	0.00				

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 372	



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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

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10	06 OR MODE XFR	MODE XFR TABLE 5	INPUT1 78 INPUT2 80 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
12	12 ANALOG FNCT ALARM	ANALOG CONF LINE 17	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 82 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A	
13	11 DUAL PULSE	OUTPUT1 83 OUTPUT2 84	INPUT1 82		OUT1 INV N OUT2 INV N	
14	06 OR MODE XFR	MODE XFR TABLE 6	INPUT1 83 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
15	06 OR MODE XFR	MODE XFR TABLE 7	INPUT1 84 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 374	

LINE DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

19	12 ANALOG FNCT ALARM	ANALOG CONF LINE 14	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 89	AUTO/MAN A		
20	12 ANALOG FNCT ALARM	ANALOG CONF LINE 12	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 90 OUTPUT7 0	AUTO/MAN A		
21	12 ANALOG FNCT ALARM	ANALOG CONF LINE 9	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 91	AUTO/MAN A		
22	12 ANALOG FNCT ALARM	ANALOG CONF LINE 11	OUTPUT1 0 OUTPUT2 92 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
23	01 AND LOGICAL	OUTPUT 93	INPUT1 90 INPUT2 92 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO.  
MIRTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	14
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	15
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	7
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	1
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	14
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	15
	7 05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	7

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>			<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D48188
<small>MCDONNELL DOUGLAS</small>			<small>REV</small> A	<small>SHEET</small> 390	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
4	1	05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	7
	2	06 ANALOG (AUTO XFR)	0.000	14
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	49.988	14
	2	06 ANALOG (AUTO XFR)	0.000	7
6	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	15
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	19

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
MCDONNELL DOUGLAS		REV A	SHEET 391	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-10 HIGHWAY NO. 4 DEVICE 2

TABLE ENTRY	DESCRIPTION	VALUE	LINE
7 2	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	19

MCDONNELL DOUGLAS AERONAUTICS CO. MUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1048188
MCDONNELL DOUGLAS	REV	A	SHEET 392



LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-11 HIGHWAY NO. 4 DEVICE 3

1	12 SQUARE ROOT	OUT 51 IN1 1	K1(GAIN) 1.000 K2(PV BIAS) -1.514 K3(THRESHD) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
2	12 SQUARE ROOT	OUT 52 IN1 2	K1(GAIN) 1.000 K2(PV BIAS) -1.514 K3(THRESHD) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
3	12 SQUARE ROOT	OUT 53 IN1 3	K1(GAIN) 1.000 K2(PV BIAS) -1.465 K3(THRESHD) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
4	07 ADD / SUBTRACT	OUT 54 IN1 51 IN2 52 IN3 53 IN4 0	K1(GAIN) 0.332 K2(GAIN) 0.332 K3(GAIN) 0.332 K4(GAIN) 0.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
5	13 FUNCTION GENERATOR	OUT 55 IN1 4	AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 7	Y0 52.14 Y2 51.94 Y4 49.99 X1 6.40 X3 39.98 X5 79.98 Y1 52.14 Y3 51.16 Y5 48.42 X2 19.98 X4 59.98 Y6 46.32	OUT RAMP RATE 0.00
6	08 MULTIPLIER	OUT 56 IN1 54 IN2 55 IN3 0 IN4 0	K1(GAIN) 2.000 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	OUT LO ALARM 4.98 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
7	10 HIGH SELECTOR	OUT 34 IN1 5 IN2 6 IN3 0 IN4 0	K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N	OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
8	13 FUNCTION GENERATOR	OUT 58 IN1 56	AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 7	Y0 0.00 Y2 19.98 Y4 39.98 X1 14.46 X3 39.49 X5 57.92 Y1 9.99 Y3 29.99 Y5 49.99 X2 28.08 X4 47.84 Y6 99.98	OUT RAMP RATE 9.89
9	14 LAG	OUT 59 IN1 58	K1(GAIN) 1.000 K2(TIMCONS) 0.251 K5(BIAS) 0.000	AUTO/MANUAL A OUTPUT LIMITING N	IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00

<small>McDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D48188
<small>McDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 402	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-11 HIGHWAY NO. 4 DEVICE 3									
10	01 PID NORMAL	OUT 33 IN1 34 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.500 5.997 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 99.98 SP HI ALARM 49.99 PV LO ALARM 0.00 PV HI ALARM 99.98	0	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 10.90 SP RMP PAT 0.00
11	06 INTEGRATOR TOTALIZER	IN1 56	K1(CNTRATE) K2 K3 K4 K5	73.234 0.000 0.000 0.000 0.000					99.976 AUTO/MANUAL	PV LO ALARM 0.00 PV HI ALARM 0.00
12	04 AUTO MANUAL	OUT 35 IN1 7	K5(BIAS)	0.000					AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 0.00 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
13	06 INTEGRATOR TOTALIZER	IN1 8	K1(CNTRATE) K2 K3 K4 K5	4.828 0.000 0.000 0.000 0.000					99.976 AUTO/MANUAL	PV LO ALARM 9.99 PV HI ALARM 0.00
14	04 AUTO MANUAL	OUT 64 IN1 8	K5(BIAS)	0.000					AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 0.00 OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00
15	14 LAG	OUT 65 IN1 8	K1(GAIN) K2(TIMCONS) K5(BIAS)	1.000 2.207 0.000					AUTO/MANUAL A OUTPUT LIMITING N	IN LO ALARM 0.00 IN HI ALARM 0.00 OUT LO ALARM 0.00 OUT HI ALARM 36.00 OUT RAMP RATE 0.00
16	06 INTEGRATOR TOTALIZER	IN1 64	K1(CNTRATE) K2 K3 K4 K5	4.820 0.000 0.000 0.000 0.000					0.000 AUTO/MANUAL	PV LO ALARM 0.00 PV HI ALARM 0.00
17	04 AUTO MANUAL	OUT 88 IN1 0	K5(BIAS)	0.000					AUTO/MANUAL M OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0	IN LO ALARM 0.00 IN HI ALARM 0.00 OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 403	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C1-11				HIGHWAY NO.	4	DEVICE	3
19	04 AUTO MANUAL	OUT 69 IN1 10	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00
					OUTPUT LIMITING	N	IN HI ALARM	99.98
					BACK CALCULATION	N	OUT LO ALARM	4.98
					BACK CALC POINTER	0	OUT HI ALARM	99.98
							OUT RAMP RATE	0.00
21	04 AUTO MANUAL	OUT 71 IN1 8	K5(BIAS)	0.000	AUTO/MANUAL	M	IN LO ALARM	0.00
					OUTPUT LIMITING	N	IN HI ALARM	32.26
					BACK CALCULATION	N	OUT LO ALARM	0.00
					BACK CALC POINTER	0	OUT HI ALARM	99.98
							OUT RAMP RATE	0.00
22	06 INTFGRATOR TOTALIZER	IN1 71	K1(CNTRATE)	0.352			PV LO ALARM	0.00
			K2	0.000	0.000		FV HI ALARM	0.00
			K3	0.000	AUTO/MANUAL			
			K4					
			K5	0.000				

MCDONNELL DOUGLAS AERONAUTICS CO. MARTINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 404	

LINE                                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-11                      HIGHWAY NO.    4    DEVICE    3

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1	12 ANALOG FNCT ALARM	ANALOG CONF LINE    15	OUTPUT1    0 OUTPUT2    0 OUTPUT3    0 OUTPUT4    0	OUTPUT5    0 OUTPUT6    71 OUTPUT7    0	AUTO/MAN A		
2	09 TIMER	OUTPUT    72	INPUT1    71 INPUT2    0 INPUT3    71	TIMER SET    1200 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y	
3	06 OR MODE XFR	MODE XFR TABLE    3	INPUT1    72 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
4	06 OR MODE XFR	MODE XFR TABLE    4	INPUT1    71 INPUT2    0 INPUT3    0 INPUT4    0 INPUT5    0	AUTO/MAN A		IN1 INV Y IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C1-11 HIGHWAY NO. 4 DEVICE 3

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10	12 ANALOG FNCT ALARM	ANALOG CONF LINE 6	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	0 0 0 0	OUTPUT5 80 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
11	12 ANALOG FNCT ALARM	ANALOG CONF LINE 13	OUTPUT1 81 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	0 0 0 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
12	12 ANALOG FNCT ALARM	ANALOG CONF LINE 19	OUTPUT1 0 OUTPUT2 0 OUTPUT3 0 OUTPUT4 0	0 0 0 0	OUTPUT5 82 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
13	01 AND LOGICAL	OUTPUT 83	INPUT1 80 INPUT2 81 INPUT3 82 INPUT4 0 INPUT5 0	80 81 82 0 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y	
14	09 TIMFR	OUTPUT 84	INPUT1 83 INPUT2 0 INPUT3 83	83 0 83	TIMER SET 120 AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV Y IN3 INV Y	
16	12 ANALOG FNCT ALARM	ANALOG CONF LINE 21	OUTPUT1 0 OUTPUT2 86 OUTPUT3 0 OUTPUT4 0	0 86 0 0	OUTPUT5 0 OUTPUT6 0 OUTPUT7 0	AUTO/MAN A		
17	06 OR MODE XFR	MODE XFR TABLE 5	INPUT1 86 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	86 0 0 0 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	
18	06 OR MODE XFR	MODE XFR TABLE 6	INPUT1 86 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	86 0 0 0 0	AUTO/MAN A		IN1 INV Y IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 408	

LINE    DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C1-11                          HIGHWAY NO.    4    DEVICE    3

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
148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
					INPUT2	0	SET			IN2 INV	Y	
					INPUT3	0	AUTO/MAN	A		IN3 INV	Y	
149	04	OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
					INPUT2	0				IN2 INV	Y	
					INPUT3	0				IN3 INV	Y	
					INPUT4	0				IN4 INV	Y	
					INPUT5	0				IN5 INV	Y	
150	06	OR MODE XFR	MODE XFR TABLE	?	INPUT1	191	AUTO/MAN	A		IN1 INV	Y	
					INPUT2	0				IN2 INV	Y	
					INPUT3	0				IN3 INV	Y	
					INPUT4	0				IN4 INV	Y	
					INPUT5	0				IN5 INV	Y	

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>			<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D4818F
<small>MCDONNELL DOUGLAS</small>			<small>REV</small> A	<small>SHEET</small> 423	

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MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-11 HIGHWAY NO. 4 DEVICE 3

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
1	1	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	10
2	1	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	10
3	1	06 ANALOG (AUTO XFR)	0.000	14

MCDONNELL DOUGLAS AERONAUTICS CO. <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS 		REV A	SHEET 424	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C1-11 HIGHWAY NO. 4 DEVICE 3

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
4	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	14
5	1	05 ANALOG (MAN XFR + OUTPUT SEL)	99.976	21
6	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	21

MCDONNELL DOUGLAS AERONAUTICS CO. WASHINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818E
MCDONNELL DOUGLAS		REV A	SHEET 425	



LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C2-5 HIGHWAY NO. 9 DEVICE 1

1	01 PID NORMAL	OUT 49 IN1 0 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	1.000 0.000 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E E GAIN ENABLED Y RESET ENABLD N	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 0.00 SP RMP RAT 0.00
2	04 AUTO MANUAL	OUT 50 IN1 49	K5(BIAS)	0.000	AUTO/MANUAL A	OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		IN LO ALARM 0.00 IN HI ALARM 99.88 OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00	
3	04 AUTO MANUAL	OUT 51 IN1 17	K5(BIAS)	4.151	AUTO/MANUAL M	OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		IN LO ALARM 0.00 IN HI ALARM 99.88 OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00	
4	07 ADD / SUBTRACT	OUT 52 IN1 50 IN2 51 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 1.000 0.000 0.000 0.000	AUTO/MANUAL A	OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 99.88 OUT RAMP RATE 0.00	
5	20 RATE LIMITER	OUT 53 IN1 52	K1(RISRATE) K2(DECRATE) K5(BIAS)	6.669 33.302 0.000	AUTO/MANUAL A	OUTPUT LIMITING Y BACK CALCULATION N BACK CALC POINTER 0		IN LO ALARM 0.00 IN HI ALARM 99.88 OUT LO ALARM 0.00 OUT HI ALARM 83.32 OUT RAMP RATE 3.91	
6	01 PID NORMAL	OUT 54 IN1 17 IN2 53 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.250 17.999 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 0.00 SP HI ALARM 99.88 PV LO ALARM 0.00 PV HI ALARM 99.88	OUT LO AL 0.00 OUT HI AL 99.88 OUT RMP RA 0.00 SP RMP RAT 0.00
7	10 HIGH SELECTOR	OUT 55 IN1 54 IN2 0 IN3 0 IN4 0	K5(BIAS)	0.000	AUTO/MANUAL A	OUTPUT LIMITING N		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	
8	13 FUNCTION GENERATOR	OUT 56 IN1 4	AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4		Y0 0.00 X1 68.99 Y1 0.00 X2 80.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00	
9	07 ADD / SUBTRACT	OUT 57 IN1 55 IN2 56 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A	OUTPUT LIMITING N BACK CALCULATION N BACK CALC POINTER 0		OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00	

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 436	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C2-5										HIGHWAY NO.	9	DEVICE	1								
10	04 AUTO MANUAL	OUT 58 IN1 57	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00	OUTPUT LIMITING	N	IN HI ALARM	99.98	BACK CALCULATION	N	OUT LO ALARM	0.00	BACK CALC POINTER	0	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
11	04 AUTO MANUAL	OUT 0 IN1 12	K5(BIAS)	0.000	AUTO/MANUAL	A	IN LO ALARM	0.00	OUTPUT LIMITING	N	IN HI ALARM	56.00	BACK CALCULATION	N	OUT LO ALARM	0.00	BACK CALC POINTER	0	OUT HI ALARM	56.00	OUT RAMP RATE	0.00
12	01 PID NORMAL	OUT 60 IN1 5 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	0.043 17.999 0.000 0.000 0.000	AUTO/MAN M HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLED Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0	OUT LO AL 0.00	OUT HI AL 99.88	OUT RMP RA 0.00	SP RMP RAT 0.00	PV LO ALARM 0.00	PV HI ALARM 99.88	OUT RAMP RATE	0.00	Y0 21.20 X1 8.91 Y1 23.98 X2 18.02	Y2 25.98 X3 29.99 Y3 27.99 X4 45.47	Y4 29.99 X5 65.15 Y5 31.99 Y6 34.73	OUT RAMP RATE	0.00	
13	13 FUNCTION GENERATOR	OUT 63 IN1 7	AUTO/MANUAL	A	Y0 21.20 X1 8.91 Y1 23.98 X2 18.02	Y2 25.98 X3 29.99 Y3 27.99 X4 45.47	Y4 29.99 X5 65.15 Y5 31.99 Y6 34.73	OUT RAMP RATE	0.00													
14	04 AUTO MANUAL	OUT 64 IN1 63	K5(BIAS)	1.978	AUTO/MANUAL	A	IN LO ALARM	0.00	OUTPUT LIMITING	N	IN HI ALARM	99.98	BACK CALCULATION	N	OUT LO ALARM	0.00	BACK CALC POINTER	0	OUT HI ALARM	99.98	OUT RAMP RATE	0.00
15	01 PID NORMAL	OUT 35 IN1 6 IN2 64 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	2.000 0.998 0.000 0.390 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE Y CON/NORM N	PV INVERTED N DIRECT/REV D RATE ON PV/E E GAIN ENABLED Y RESET ENABLED Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0	OUT LO AL 0.00	OUT HI AL 99.98	OUT RMP RA 0.00	SP RMP RAT 0.00	PV LO ALARM 0.00	PV HI ALARM 99.98	OUT RAMP RATE	0.00	Y0 0.00 X1 19.98 Y1 9.99 X2 0.00	Y2 99.98 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00	
17	07 ADD / SUBTRACT	OUT 67 IN1 6 IN2 63 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL	A	OUT LO ALARM	0.00	OUTPUT LIMITING	N	OUT HI ALARM	99.98	BACK CALCULATION	N	OUT RAMP RATE	0.00	BACK CALC POINTER	0				
18	13 FUNCTION GENERATOR	OUT 34 IN1 58	AUTO/MANUAL	A	Y0 0.00 X1 19.98 Y1 9.99 X2 0.00	Y2 99.98 X3 0.00 Y3 0.00 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE	0.00													

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 437	

LINE	ANALOG CONFIGURATION TABLE CCM#1 MVCU C2-5										HIGHWAY NO.	9	DEVICE	1
19	01 PID NORMAL	OUT 69 IN1 16 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.000 3.996 0.000 0.000 0.000	AUTO/MAN HI DY LM LO DY LM CASCADE CON/NORM	A N N N C	PV INVERTED DIRECT/REV RATE ON PV/E GAIN ENABLED RESET ENABLED	N D P Y Y	RATE ENAB SP LIMITG OUT LIMIT PV TRACKG BACK CALC	N N N N N	BAK CALC PT SP LO ALARM SP HI ALARM PV LO ALARM PV HI ALARM	0 0.00 99.98 0.00 99.98	OUT LO AL OUT HI AL OUT RMP RA SP RMP RAT	0.00 99.98 9.89 9.89
20	13 FUNCTION GENERATOR	OUT 70 IN1 4			AUTO/MANUAL BACK CALCULATION BACK CALC POINTER NO. OF POINTS	A N 0 4		Y0 0.00 X1 68.99 Y1 0.00 X2 80.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00		OUT RAMP RATE	0.00	
21	07 ADD / SUBTRACT	OUT 71 IN1 69 IN2 70 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 19						OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 0.00 0.00	
22	04 AUTO MANUAL	OUT 33 IN1 71	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N Y 21						IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 99.98 0.00 99.98 9.89	
24	06 INTFGPATOR TOTALIZER	IN1 5	K1(CNTRATE) K2 K3 K4 K5	65.492 0.000 0.000 0.000 0.000	AUTO/MANUAL		99.976					PV LO ALARM PV HI ALARM	0.00 0.00	
25	04 AUTO MANUAL	OUT 36 IN1 17	K5(BIAS)	0.000	AUTO/MANUAL OUTPUT LIMITING BACK CALCULATION BACK CALC POINTER	A N N 0						IN LO ALARM IN HI ALARM OUT LO ALARM OUT HI ALARM OUT RAMP RATE	0.00 0.00 0.00 0.00 0.00	

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
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<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
<b>MCDONNELL DOUGLAS</b>		REV A		SHEET 439

LINE

ANALOG CONFIGURATION TABLE CCM#1 MVCU C2-5

HIGHWAY NO. 9 DEVICE 1

39	01 PID	OUT 37	K1(GAIN)	1.500	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT	0	OUT LO AL	0.00
	NORMAL	INI 13	K2(RESET)	0.916	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2 0	K3(RATE)	0.196	LO DY LM N	RATE ON PV/E P	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4 0	K5	49.988	CON/NORM N	RESET ENABLD N	BACK CALC N	PV HI ALARM	99.98		
40	01 PID	OUT 38	K1(GAIN)	0.598	AUTO/MAN A	PV INVERTED N	RATE ENAB Y	BAK CALC PT	0	OUT LO AL	0.00
	NORMAL	INI 13	K2(RESET)	1.799	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM	0.00	OUT HI AL	99.98
		IN2 0	K3(RATE)	0.110	LO DY LM N	RATE ON PV/E E	OUT LIMIT N	SP HI ALARM	99.98	OUT RMP RA	0.00
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM	0.00	SP RMP RAT	0.00
		IN4 0	K5	49.988	CON/NORM N	RESET ENABLD Y	BACK CALC N	PV HI ALARM	99.98		

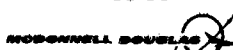
MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.			SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS			REV A	SHEET 440	

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DIGITAL CONFIGURATION TABLE CCM#1 MVCU C2-5 HIGHWAY NO. 9 DEVICE 1

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1	12 ANALOG FNCT ALARM	ANALOG CONF LINE 11	OUTPUT1 0 OUTPUT2 71 OUTPUT3 0 OUTPUT4 0	OUTPUT5 0 OUTPUT6 71 OUTPUT7 0	AUTO/MAN A	
2	11 DUAL PULSE	OUTPUT1 72 OUTPUT2 73	INPUT1 71		OUT1 INV N OUT2 INV N	
3	06 OR MODE XFR	MODE XFR TABLE 3	INPUT1 72 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
4	02 OR LOGICAL	OUTPUT 74	INPUT1 73 INPUT2 77 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A	OUT INV N	IN1 INV N IN2 INV N IN3 INV Y IN4 INV Y IN5 INV Y
5	06 OR MODE XFR	MODE XFR TABLE 4	INPUT1 74 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y
6	11 DUAL PULSE	OUTPUT1 76 OUTPUT2 77	INPUT1 65		OUT1 INV N OUT2 INV N	
7	06 OR MODE XFR	MODE XFR TABLE 5	INPUT1 76 INPUT2 0 INPUT3 0 INPUT4 0 INPUT5 0	AUTO/MAN A		IN1 INV N IN2 INV Y IN3 INV Y IN4 INV Y IN5 INV Y

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small> 		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D4818R
REV A		SHEET 441		

LINE	DIGITAL CONFIGURATION TABLE				CCMH1	MVCU C2-5	HIGHWAY NO.	DEVICE	1			
148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
					INPUT2	0	SET				IN2 INV	Y
					INPUT3	0	AUTO/MAN	A			IN3 INV	Y
149	04 OR TRIG LOG	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N	
				INPUT2	0					IN2 INV	Y	
				INPUT3	0					IN3 INV	Y	
				INPUT4	0					IN4 INV	Y	
				INPUT5	0					IN5 INV	Y	
150	06 OR MODE XFR	MODE XFR TABLE	2	INPUT1	191	AUTO/MAN	A			IN1 INV	Y	
				INPUT2	0					IN2 INV	Y	
				INPUT3	0					IN3 INV	Y	
				INPUT4	0					IN4 INV	Y	
				INPUT5	0					IN5 INV	Y	

MCDONNELL DOUGLAS AERONAUTICS CO. MURKINSON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 457	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C2-5 HIGHWAY NO. 9 DEVICE 1

TABLE ENTRY DESCRIPTION VALUE LINE

TABLE ENTRY	DESCRIPTION	VALUE	LINE
1	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	10
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
2	1 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	10
	2 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
	3 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	22
	5 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	12
3	1 05 ANALOG (MAN XFR + OUTPUT SEL)	27.766	5
	2 07 ANALOG (AUTO XFR + SET PT SEL)	27.766	1
	3 06 ANALOG (AUTO XFR)	0.000	2
	4 05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3

<small>MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.</small>		<small>SIZE</small> <b>B</b>	<small>FSCM NO.</small> <b>18355</b>	<small>DRAWING NO.</small> 1D48188
<small>MCDONNELL DOUGLAS</small>		<small>REV</small> A	<small>SHEET</small> 458	



MODE TRANSFER CONFIGURATIONS CCMR1 MVCU C2-5

HIGHWAY NO. 2 DEVICE 1

TABLE ENTRY	DESCRIPTION	VALUE	LINE
4			
1	06 ANALOG (AUTO XFR)	0.000	5
2	06 ANALOG (AUTO XFR)	0.000	1
3	06 ANALOG (AUTO XFR)	0.000	2
4	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	3
5			
1	06 ANALOG (AUTO XFR)	0.000	5
2	06 ANALOG (AUTO XFR)	0.000	3
3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	2
4	06 ANALOG (AUTO XFR)	0.000	1

MC DONNELL DOUGLAS AERONAUTICS CO.  
MUNTINGTON BEACH, CALIF.

MC DONNELL DOUGLAS

SIZE

**B**

FSCM NO.

**18355**

DRAWING NO.

1048188

REV

A

SHEET

459

LINE ANALOG CONFIGURATION TABLE CCM#1 MVCU C4-4 HIGHWAY NO. 9 DEVICE 2

1	01 PID NORMAL	OUT 51 IN1 2 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	3.000 29.997 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV R RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 23.32 SP HI ALARM 66.67 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89
2	13 FUNCTION GENERATOR	OUT 52 IN1 1			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 0.00 X1 82.49 Y1 0.00 X2 84.98	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00
3	07 ADD / SUBTRACT	OUT 53 IN1 51 IN2 52 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 1				OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 0.00
4	04 AUTO MANUAL	OUT 33 IN1 53	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 3				IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 9.89
6	01 PID NORMAL	OUT 56 IN1 3 IN2 0 IN3 0 IN4 0	K1(GAIN) K2(RESET) K3(RATE) K4(FILTER) K5	5.250 1.698 0.000 0.000 0.000	AUTO/MAN A HI DY LM N LO DY LM N CASCADE N CON/NORM C	PV INVERTED N DIRECT/REV D RATE ON PV/E P GAIN ENABLED Y RESET ENABLD Y	RATE ENAB N SP LIMITG N OUT LIMIT N PV TRACKG N BACK CALC N	BAK CALC PT 0 SP LO ALARM 39.98 SP HI ALARM 79.98 PV LO ALARM 0.00 PV HI ALARM 99.98	OUT LO AL 0.00 OUT HI AL 99.98 OUT RMP RA 9.89 SP RMP RAT 9.89
7	13 FUNCTION GENERATOR	OUT 57 IN1 4			AUTO/MANUAL A BACK CALCULATION N BACK CALC POINTER 0 NO. OF POINTS 4	Y0 0.00 X1 60.51 Y1 0.00 X2 65.79	Y2 99.98 X3 0.00 Y3 99.98 X4 0.00	Y4 0.00 X5 0.00 Y5 0.00 Y6 0.00	OUT RAMP RATE 0.00
8	07 ADD / SUBTRACT	OUT 58 IN1 56 IN2 57 IN3 0 IN4 0	K1(GAIN) K2(GAIN) K3(GAIN) K4(GAIN) K5(BIAS)	1.000 -1.000 0.000 0.000 0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 6				OUT LO ALARM 0.00 OUT HI ALARM 0.00 OUT RAMP RATE 0.00
9	04 AUTO MANUAL	OUT 35 IN1 58	K5(BIAS)	0.000	AUTO/MANUAL A OUTPUT LIMITING N BACK CALCULATION Y BACK CALC POINTER 8				IN LO ALARM 0.00 IN HI ALARM 99.98 OUT LO ALARM 0.00 OUT HI ALARM 99.98 OUT RAMP RATE 9.89

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1048188
MCDONNELL DOUGLAS		REV A	SHEET 470	

LINE

ANALOG CONFIGURATION TABLE CCM#1 MVCU C4-4

HIGHWAY NO. 9 DEVICE 2

11	01 PID NORMAL	OUT 34	K1(GAIN)	5.250	AUTO/MAN A	PV INVERTED N	RATE ENAB N	BAK CALC PT 0	OUT LO AL	0.00
		IN1 3	K2(RESET)	0.856	HI DY LM N	DIRECT/REV D	SP LIMITG N	SP LO ALARM 39.98	OUT HI AL	99.98
		IN2 0	K3(RATE)	0.000	LO DY LM N	RATE ON PV/E P	OUT LIMIT N	SP HI ALARM 79.98	OUT RMP RA	9.89
		IN3 0	K4(FILTER)	0.000	CASCADE N	GAIN ENABLED Y	PV TRACKG N	PV LO ALARM 0.00	SP RMP RAT	9.89
		IN4 0	K5	0.000	CON/NORM C	RESET ENABLD Y	BACK CALC N	PV HI ALARM 99.98		
12	12 SQUARE ROOT	OUT 61	K1(GAIN)	1.000	AUTO/MANUAL	A		IN LO ALARM	0.00	
		IN1 20	K2(PV BIAS)	0.000	OUTPUT LIMITING	N		IN HI ALARM	99.98	
			K3(THRESHD)	0.000	BACK CALCULATION	N		OUT LO ALARM	0.00	
			K5(BIAS)	0.000	BACK CALC POINTER	0		OUT HI ALARM	99.98	
								OUT RAMP RATE	0.00	
13	07 ADD / SUBTRACT	OUT 62	K1(GAIN)	1.000	AUTO/MANUAL	A		OUT LO ALARM	0.00	
		IN1 11	K2(GAIN)	-1.000	OUTPUT LIMITING	N		OUT HI ALARM	0.00	
		IN2 61	K3(GAIN)	0.000	BACK CALCULATION	N		OUT RAMP RATE	0.00	
		IN3 0	K4(GAIN)	0.000	BACK CALC POINTER	0				
		IN4 0	K5(BIAS)	0.000						

MCDONNELL DOUGLAS AERONAUTICS CO.  
MARTINSON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

104818A

REV

A

SHEET

471

LINE                      DIGITAL CONFIGURATION TABLE    CCM#1    MVCU C4-4                      HIGHWAY NO.    5    DEVICE    2

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148	09	TIMER	OUTPUT	190	INPUT1	189	TIMER	OUT INV	N	IN1 INV	Y	
					INPUT2	0	SET			IN2 INV	Y	
					INPUT3	0	AUTO/MAN	A		IN3 INV	Y	
149	04	OR	OUTPUT	191	INPUT1	190	AUTO/MAN	A	OUT INV	N	IN1 INV	N
		TRIG LOG			INPUT2	0				IN2 INV	Y	
					INPUT3	0				IN3 INV	Y	
					INPUT4	0				IN4 INV	Y	
					INPUT5	0				IN5 INV	Y	
150	06	OR	MODE XFR		INPUT1	191	AUTO/MAN	A		IN1 INV	Y	
		MODE XFR	TABLE	2	INPUT2	0				IN2 INV	Y	
					INPUT3	0				IN3 INV	Y	
					INPUT4	0				IN4 INV	Y	
					INPUT5	0				IN5 INV	Y	

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 104818R
MCDONNELL DOUGLAS		REV A	SHEET 491	

MODE TRANSFER CONFIGURATIONS CCM#1 MVCU C4-4

HIGHWAY NO. # DEVICE 2

TABLE	ENTRY	DESCRIPTION	VALUE	LINE
1	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	11
2	1	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	4
	2	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	9
	3	05 ANALOG (MAN XFR + OUTPUT SEL)	0.000	11

<b>MCDONNELL DOUGLAS AERONAUTICS CO.</b> <small>MURKINSON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV A	SHEET 492	

### MVCU SUMMARY

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MVCU	REMARK	HIWAY	DEVICE	ANALOG			DIGITAL			MODE XFR			TOTAL NONCOMPARE
				USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	USED	REMAIN	NONCMP	
C1-1		1	1	39	1	0	59	111	0	14	22	0	0
C1-2		1	2	39	1	0	39	111	0	14	22	0	0
C1-3		10	1	39	1	0	39	111	0	14	22	0	0
C1-4		2	1	39	1	0	39	111	0	14	22	0	0
C1-5		2	2	39	1	0	39	111	0	14	22	0	0
C1-6		10	2	39	1	0	39	111	0	14	22	0	0
C1-7		3	1	39	1	0	39	111	0	14	22	0	0
C1-8		3	2	39	1	0	39	111	0	14	22	0	0
C1-9		4	1	39	1	0	39	111	0	14	22	0	0
C1-10		4	2	38	2	0	25	127	0	10	26	0	0
C1-11		4	3	11	29	0	3	147	0	2	34	0	0
C2-5		9	1	20	20	0	29	121	0	10	26	0	0
C4-4		9	2	13	27	0	7	143	0	2	34	0	0

### ANOMALY SUMMARY

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I/O PROCESSING = 0 MLD DATA INPUT = 192 ADDED/MISSING MLD = 0 NONCOMPARE = 0

### ANOMALY CODE

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E0000001 = BLANK INBEDDED IN TAG NAME	*NRT*	= LOOP NOT RESPONDING
E0000010 = EIGHT CHARACTER TAG NAME	MISSING	= LOOP MISSING IN CCM
E0000100 = 100% CAL VALUE LESS THAN 0% CAL VALUE	ADDED	= LOOP NOT IN COMPARISON FILE
E0001000 = HIGH SET POINT LESS THAN LOW SET POINT	CHNGD-IS	= LOOP DIFFERENT THAN COMPARISON
E0010000 = HIGH CONTROL POINT LESS THAN LOW	FILENAME	= BASELINE LOOP FOR COMPARISON
E0100000 = INCONSISTENT ALARM SETTING	MNR	= 112 41 DELTGS 24242524 21
E1000000 = INCONSISTENT ALARM SETTING		
E0000000 = OUT OF RANGE DATA DETECTED		

MCDONNELL DOUGLAS SYSTEMS INC. TAG OR DESCRIPTION FROM MCDONNELL DOUGLAS SYSTEMS  
MUNTINGTON BEACH, CALIF. BAD CHARACTER **B** 18355 DRAWING NO. 1D48188

REV **A**SHEET **493**

OSP STATION A  
IPAC TAG: M1-1

IPAC ADDRESS 01 HIGHWAY 12

81 DEC 23 18:18

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3-	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
1	COMPENSATION		
2	LINEAR	-.0030	.0149
3	LINEAR	-.0030	.0149
4	LINEAR	-.0030	.0149
5	LINEAR	-.0030	.0149
6	LINEAR	-.0030	.0149
7	LINEAR	-.0030	.0149
8	LINEAR	1.000	5.005

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
33	LINEAR	.0000	.0235
34	LINEAR	.0000	.0235
35	LINEAR	.0000	.0258
36	LINEAR	.0000	.0250
37	LINEAR	.0000	.0240
38	LINEAR	.0000	.0266
39	LINEAR	.0000	.0233
40	LINEAR	.0000	.0236

MCDONNELL DOUGLAS AERONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV	SHEET <b>A</b>	494

OSP STATION A  
IPAC TAG: M1-1

IPAC ADDRESS 01 HIGHWAY 12

81 DEC 23 18:18

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 5 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
65	LINEAR	.0000	.0240
66	LINEAR	.0000	.0243
67	LINEAR	.0000	.0239
68	LINEAR	.0000	.0200
69	LINEAR	.0000	.0235
70	LINEAR	.0000	.0233
71	LINEAR	.0000	.0240
72	LINEAR	.0000	.0250

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 7 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
97	LINEAR	.0000	.0250
98	LINEAR	.0000	.0116
99	UNDEFINED		
100	LINEAR	.0000	.0310
101	LINEAR	.0000	.0240
102	UNDEFINED		
103	LINEAR	.0000	.0277
104	LINEAR	.0000	.0284

MCDONNELL DOUGLAS AERONAUTICS CO.  
HUNTINGTON BEACH, CALIF.

MCDONNELL DOUGLAS

SIZE

B

FSCM NO.

18355

DRAWING NO.

1D48188

REV

SHEET A

495



OSP STATION A  
IPAC TAG: M1-1

IPAC ADDRESS 01 HIGHWAY 12

81 DEC 23 18:19

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9-	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	UNUSED IN IPAC	17 TO ?
3	ANALOG INPUT	33 TO 40
4	UNUSED IN IPAC	49 TO ?
5	ANALOG INPUT	65 TO 72
6	UNUSED IN IPAC	81 TO ?
7	ANALOG INPUT	97 TO 104
8	UNUSED IN IPAC	113 TO ?
9	ANALOG INPUT	129 TO 136
10	UNUSED IN IPAC	145 TO ?
11-	ANALOG INPUT	161 TO 168
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 9 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
129	UNDEFINED		
130	LINEAR	.0000	.0253
131	LINEAR	.0000	.0241
132	UNDEFINED		
133	LINEAR	.0000	.0248
134	LINEAR	.0000	.0230
135	UNDEFINED		
136	LINEAR	.0000	.0308

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 11 CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
161	LINEAR	.0000	.0280
162	UNDEFINED		
163	LINEAR	.0000	.0290
164	LINEAR	.0000	.0233
165	LINEAR	1.000	5.011
166	UNDEFINED		
167	LINEAR	.0000	10.04
168	LINEAR	4.500	5.500

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV.	SHEET <b>A</b>	496

OSP STATION A  
IPAC TAG: H1-2

IPAC ADDRESS 01 HIGHWAY 15

81 DEC 23 18:29

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1-	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 1 CONVERSION		100% VOLTAGE
	TYPE	OX VOLTAGE	
1	LINEAR	1.000	5.011
2	LINEAR	1.000	5.011
3	LINEAR	1.000	5.011
4	LINEAR	1.000	5.011
5	LINEAR	1.000	5.011
6	LINEAR	1.000	5.011
7	LINEAR	1.000	5.011
8	LINEAR	1.000	3.651

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 2 CONVERSION		100% VOLTAGE
	TYPE	OX VOLTAGE	
17	UNDEFINED		
18	UNDEFINED		
19	UNDEFINED		
20	UNDEFINED		
21	UNDEFINED		
22	UNDEFINED		
23	UNDEFINED		
24	UNDEFINED		

MODONNELL DOUGLAS ASTRONAUTICS CO. <small>HUNTINGTON BEACH, CALIF.</small>		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MODONNELL DOUGLAS		REV	SHEET <b>A</b>	497

OSP STATION A  
IPAC TAG: M1-2

IPAC ADDRESS 01 HIGHWAY 15

81 DEC 23 18:29

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2-	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3-	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 2	
	CONVERSION TYPE	100% VOLTAGE
17	UNDEFINED	
18	UNDEFINED	
19	UNDEFINED	
20	UNDEFINED	
21	UNDEFINED	
22	UNDEFINED	

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 3	
	CONVERSION TYPE	100% VOLTAGE
33	LINEAR	5.005
34	LINEAR	5.005
35	LINEAR	5.005
36	LINEAR	5.005
37	LINEAR	5.005
38	LINEAR	5.005
39	LINEAR	5.005
40	LINEAR	5.005

MCDONNELL DOUGLAS AERONAUTICS CO. MURFREESBORO, TENN.		SIZE <b>B</b>	FSCM NO. <b>18355</b>	DRAWING NO. 1D48188
MCDONNELL DOUGLAS		REV	SHEET <b>A</b>	498

OSP STATION A  
IPAC TAG: N1-2

IPAC ADDRESS 01 HIGHWAY 15

81 DEC 23 18:29

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6-	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 140
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

SLOT & POINT NO.	CONVERSION TYPE	0% VOLTAGE	100% VOLTAGE
81	LINEAR	1.000	5.011
82	LINEAR	1.000	5.011
83	LINEAR	1.000	5.011
84	LINEAR	1.000	5.011
85	LINEAR	1.000	5.011
86	LINEAR	.0000	10.04
87	LINEAR	.0000	10.04
88	LINEAR	4.500	5.500

MCDONNELL DOUGLAS AERONAUTICS CO. MURKIN BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	<b>B</b>	<b>18355</b>	1D48188
MCDONNELL DOUGLAS	REV	SHEET	A 500

OSP STATION A  
IPAC TAG: M1-2

IPAC ADDRESS 01 HIGHWAY 15

81 DEC 23 18:29

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

IPAC SLOT DESIGNATIONS

SLOT NO.	CARD TYPE	INTERNAL POINT NO.
1	ANALOG INPUT	1 TO 8
2	ANALOG INPUT	17 TO 24
3	ANALOG INPUT	33 TO 40
4	ANALOG INPUT	49 TO 56
5	ANALOG INPUT	65 TO 72
6	ANALOG INPUT	81 TO 88
7	UNUSED IN IPAC	97 TO ?
8	UNUSED IN IPAC	113 TO ?
9	UNUSED IN IPAC	129 TO ?
10	DIGITAL INPUT	145 TO 160
11	UNUSED IN IPAC	161 TO ?
12	DIGITAL INPUT	177 TO 192

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 4 CONVERSION	
	TYPE	0% VOLTAGE
49	UNDEFINED	100% VOLTAGE
50	UNDEFINED	100% VOLTAGE
51	UNDEFINED	100% VOLTAGE
52	UNDEFINED	100% VOLTAGE
53	UNDEFINED	100% VOLTAGE
54	UNDEFINED	100% VOLTAGE
55	UNDEFINED	100% VOLTAGE
56	UNDEFINED	100% VOLTAGE

ANALOG INPUT POINT CONVERSIONS

POINT NO.	SLOT 5 CONVERSION	
	TYPE	0% VOLTAGE
65	LINEAR	1.000 5.005
66	LINEAR	1.000 5.005
67	LINEAR	1.000 5.005
68	LINEAR	1.000 5.005
69	LINEAR	1.000 5.005
70	LINEAR	1.000 5.005
71	LINEAR	1.000 5.005
72	LINEAR	1.000 5.005

MCDONNELL DOUGLAS ASTRONAUTICS CO. HUNTINGTON BEACH, CALIF.	SIZE	FSCM NO.	DRAWING NO.
	B	18355	1D48188
MCDONNELL DOUGLAS	REV	SHEET	A 499



STMP0 255

Department of Energy  
San Francisco Operations Office  
1333 Broadway  
Oakland, California 94612

Reply To: DOE Solar One Project Office  
P.O. Box 366  
Daggett, CA 92327

**OCT 12 1984**

Mr. Robert L. Gervais  
Solar One Project Office  
McDonnell Douglas Astronautics Corp.  
P.O. Box 366  
Daggett, CA 92327

Subject: Contractor Clearance of Contract DE-AC03-79SF10499  
Solar One Reports for DOE/TIC Inclusion.

Dear Bob:

Enclosed are copies of covers and title pages of nine reports prepared by McDonnell Douglas Astronautics Corporation for the Solar One Project under the above referenced contract. In preparation for delivery of these documents to DOE/TIC, I have prepared a SAN form 70 "Request for Patent Clearance" and a DOE form RA-426 "Recommendations for Announcement and Distribution of Documents" for each document.

Please have the appropriate MDAC personnel complete and sign these forms. As agreed, SAN form 70 should be forwarded to SAN/OPC by your office with copies of the completed SAN form 70 and the transmittal letter being sent to me. The completed DOE form RA-426 should be sent directly back to me.

The documents covered by this letter are:

<u>Primary Document No.</u>	<u>Secondary No.</u>	<u>Brief Title</u>
DOE/SF/10499-T159	STMP0 249	MCS As-Built Drawings Vol I, Sec I
DOE/SF/10499-T160	STMP0 250	MCS As-Built Drawings Vol I, Sec II, Part I
DOE/SF/10499-T161	STMP0 251	MCS As-Built Drawings Vol I, Sec II, Part II
DOE/SF/10499-T162	STMP0 252	MCS As-Built Drawings Vol 2
DOE/SF/10499-T163	STMP0 253	MCS As-Built Drawings Vol 3

DOE/SF/10499-T164	STMPO 254	MCS As-Built Drawings Vol 4, Sec I
DOE/SF/10499-T165	STMPO 255	MCS As-Built Drawings Vol 4, Sec II
DOE/SF/10499-T166	STMPO 256	MCS As-Built Drawings Vol 4, Sec III
DOE/SF/10499-T167	STMPO 257	MCS As-Built Drawings Vol 5

If you should have any questions or concerns please do not hesitate to contact me by telephone at, (619) 254-2672.

Sincerely,



S.D. Elliott, Jr., Director  
DOE Solar One Project Office

SDE/aks  
Project File: CCC013.RNO(SA3:)

Encl: Nine Document Covers W/forms 70 and RA-426

cc: Roger Gaither, SAN/OPC  
W.D. Matheny, DOE/TIC  
Mike Lopez, DOE/SAN (FGS)  
Mary Soderstrum, B&McD



**DEPARTMENT OF ENERGY  
SAN FRANCISCO OPERATIONS OFFICE**

**CONTRACTOR REQUEST FOR PATENT CLEARANCE  
FOR RELEASE OF UNCLASSIFIED DOCUMENT**

Prime Contract No. DE-AC03-79SF10499
Subcontract No. (N/A)
Report No. (STMP0 255) DOE/SF/10499-T165
Date of Report September 1982
Name & Phone No. of DOE Technical Representative S.D. Elliott, Jr. (619) 254-2672

**TO:** Roger S. Gaither, Asst. Chief for Prosecution  
Office of Patent Counsel/Livermore Office  
P.O. Box 808, L-376  
Livermore, California 94550

**FROM:** McDonnell Douglas Corporation  
3855 Lakewood Blvd.  
Long Beach, CA 90846

- Document Title: MCS As-Built Drawings, Vol 4, System Distributed Process Control Sys, Sec II, Configuration Control Module Data Bases
- Type of Document:  Technical Report,  Conference Paper,  Journal Article,  Abstract or Summary,  Copy of Oral Presentation,  Other (please specify): \_\_\_\_\_  
(Routine)
- In order to meet a publication schedule or submission deadline, patent clearance by \_\_\_\_\_ would be desired.

**SENDER IS TO CHECK BOX #4 OR #5 BELOW.**

4. I have reviewed (or have had reviewed by technically knowledgeable personnel) this document for possible inventive subject matter (Subject Inventions) and that no inventions or discoveries (Subject Inventions) are deemed to be disclosed in this document except as stated below:
- Attention should be directed to pages \_\_\_\_\_ of this document.
  - This document describes matter relating to an invention:
    - Contractor Invention Docket No. \_\_\_\_\_
    - A disclosure of the invention was submitted to DOE on \_\_\_\_\_ (date)
    - A disclosure of the invention will be submitted shortly \_\_\_\_\_ (approximate date)
    - A waiver of DOE's patent rights to the contractor:
 

has been granted,  has been applied for; or  will be applied for \_\_\_\_\_ (date)
5. This document is being submitted, but no review has been made of this document for possible inventive subject matter.  
Provide copy of clearance to: Solar One Project Office  
P.O. Box 366, Daggett, CA 92327
6. Remarks:

Reviewing/Submitting Official: Name (Print/Type) \_\_\_\_\_  
Title \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**TO:** INITIATOR OF REQUEST

**FROM:** ASSISTANT CHIEF FOR PROSECUTION  
Office of Patent Counsel/Livermore Office

- No patent objection to above-identified release.
- Please defer release until advised by this office.

Signed \_\_\_\_\_ Date Mailed \_\_\_\_\_



U.S. DEPARTMENT OF ENERGY

DOE AND MAJOR CONTRACTOR RECOMMENDATIONS FOR  
ANNOUNCEMENT AND DISTRIBUTION OF DOCUMENTS

See Instructions on Reverse Side

1. DOE Report No. <u>DOE/SF/10499-T165 (SIMPO 255)</u>	2. Contract No. <u>DE-AC03-79SF10499</u>	3. Subject Category No. <u>UC-62, 62c, 62d</u>
4. Title <u>MCS As-Built Drawings, Vol 4, System Distributed Process Control System (SDPC), Section II, Configuration Control Module (CCM) Data Bases.</u>		
5. Type of Document ("x" one) <input checked="" type="checkbox"/> a. Scientific and technical report <input type="checkbox"/> b. Conference paper: Title of conference _____  Date of conference _____ Exact location of conference _____ Sponsoring organization _____ <input type="checkbox"/> c. Other (specify planning, educational, impact, market, social, economic, thesis, translations, journal article manuscript, etc.) _____		
6. Copies Transmitted ("x" one or more) <input type="checkbox"/> a. Copies being transmitted for standard distribution by DOE-TIC. <input type="checkbox"/> b. Copies being transmitted for special distribution per attached complete address list. <input checked="" type="checkbox"/> c. Two completely legible, reproducible copies being transmitted to DOE-TIC. (Classified documents, see instructions) <input type="checkbox"/> d. Twenty-seven copies being transmitted to DOE-TIC for TIC processing and NTIS sales.		
7. Recommended Distribution ("x" one) <input type="checkbox"/> a. Normal handling (after patent clearance): no restraints on distribution except as may be required by the security classification. Make available only <input type="checkbox"/> b. To U.S. Government agencies and their contractors. <input type="checkbox"/> c. within DOE and to DOE contractors. <input type="checkbox"/> d. within DOE. <input type="checkbox"/> e. to those listed in item 13 below. <input checked="" type="checkbox"/> f. Other (Specify) <u>Archive/Issue on request</u>		
8. Recommended Announcement ("x" one) <input checked="" type="checkbox"/> a. Normal procedure may be followed. <input type="checkbox"/> b. Recommend the following announcement limitations:		
9. Reason for Restrictions Recommended in 7 or 8 above. <input type="checkbox"/> a. Preliminary information. <input type="checkbox"/> b. Prepared primarily for internal use. <input type="checkbox"/> c. Other (Explain)		
10. Patent, Copyright and Proprietary Information Does this information product disclose any new equipment, process or material? <input type="checkbox"/> No <input type="checkbox"/> Yes If so, identify page nos. _____ Has an invention disclosure been submitted to DOE covering any aspect of this information product? <input type="checkbox"/> No <input type="checkbox"/> Yes If so, identify the DOE (or other) disclosure number and to whom the disclosure was submitted. Are there any patent-related objections to the release of this information product? <input type="checkbox"/> No <input type="checkbox"/> Yes If so, state these objections. Does this information product contain copyrighted material? <input type="checkbox"/> No <input type="checkbox"/> Yes If so, identify the page number _____ and attach the license or other authority for the government to reproduce. Does this information product contain proprietary information? <input type="checkbox"/> No <input type="checkbox"/> Yes If so, identify the page numbers _____ ("x" one <input type="checkbox"/> a. DOE patent clearance has been granted by responsible DOE patent group. <input type="checkbox"/> b. Document has been sent to responsible DOE patent group for clearance.		
11. National Security Information (For classified document only; "x" one) Document <input type="checkbox"/> a. does <input type="checkbox"/> b. does not contain national security information		
12. Copy Reproduction and Distribution Total number of copies reproduced _____ Number of copies distributed outside originating organization _____		
13. Additional Information or Remarks (Continue on separate sheet, if necessary)  <u>S.D. Elliott, Jr., Director, DOE Solar One Project Office</u>		
14. Submitted by (Name and Position) (Please print or type) <u>P.O. Box 366, Daggett, CA 92327</u> <u>(619) 254-2672</u> Organization _____ Signature _____ Date _____		

DAVID/0499-00  
MDC H0130

# DOE FILE COPY

DOE/SF/10499-T165  
STPMO 255

10 MWe Solar Thermal  
Central Receiver Pilot Plant

DEPARTMENT OF ENERGY  
FIELD OFFICE  
SOLAR 10 MWE PILOT PLANT  
P.O. BOX 866  
DARGENT, CA 92327

SOLAR FACILITIES DESIGN INTEGRATION

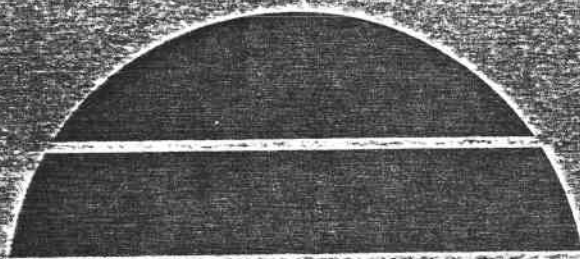
MASTER CONTROL SYSTEM  
AS-BUILT DRAWINGS (RADL ITEM 6-5)

VOLUME 4 — SDPC  
SECTION 2 — CCM DATA BASES

September 1982

WORK PERFORMED UNDER CONTRACT  
DE-AC03-79SF10499

MCDONNELL DOUGLAS ASTRONAUTICS COMPANY  
5301 BOLSA AVENUE  
HUNTINGTON BEACH, CA 92647



## U.S. Department of Energy



Solar Energy

**10 MWe Solar Thermal  
Central Receiver Pilot Plant  
Solar Facilities Design Integration**

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**MASTER CONTROL SYSTEM  
AS-BUILT DRAWINGS (RADL ITEM 6-5)  
VOLUME 4 — SDPC  
SECTION 2 — CCM DATA BASES**

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**September 1982**

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**MCDONNELL DOUGLAS ASTRONAUTICS COMPANY  
5301 BOLSA AVENUE  
HUNTINGTON BEACH, CA 92647**

**PREPARED FOR THE  
U.S. DEPARTMENT OF ENERGY  
SOLAR ENERGY  
UNDER CONTRACT DE-AC03-79SF10499**

DOE AND MAJOR CONTRACTOR RECOMMENDATIONS FOR  
ANNOUNCEMENT AND DISTRIBUTION OF DOCUMENTS

See Instructions on Reverse Side

1. DOE Report No. DOE/SF/10499-T165 (STMPO 255)	2. Contract No. DE-AC03-79SF10499	3. Subject Category No. UC-62, 62c, 62d
4. Title MCS As-Built Drawings, Vol 4, System Distributed Process Control System (SDPC), Section II, Configuration Control Module (CCM) Data Bases.		

5. Type of Document ("x" one)

a. Scientific and technical report

b. Conference paper: Title of conference \_\_\_\_\_

\_\_\_\_\_ Date of conference \_\_\_\_\_

Exact location of conference \_\_\_\_\_ Sponsoring organization \_\_\_\_\_

c. Other (specify planning, educational, impact, market, social, economic, thesis, translations, journal article manuscript, etc.)

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d. Twenty-seven copies being transmitted to DOE-TIC for TIC processing and NTIS sales.

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a. Normal handling (after patent clearance): no restraints on distribution except as may be required by the security classification.

Make available only  b. To U.S. Government agencies and their contractors.  c. within DOE and to DOE contractors.

d. within DOE.  e. to those listed in item 13 below.

f. Other (Specify) Archive/Issue on request

8. Recommended Announcement ("x" one)

a. Normal procedure may be followed.  b. Recommend the following announcement limitations:

9. Reason for Restrictions Recommended in 7 or 8 above.

a. Preliminary information.  b. Prepared primarily for internal use.  c. Other (Explain)

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Does this information product disclose any new equipment, process or material?  No  Yes If so, identify page nos. \_\_\_\_\_

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If so, identify the DOE (or other) disclosure number and to whom the disclosure was submitted.

Are there any patent-related objections to the release of this information product?  No  Yes If so, state these objections.

Does this information product contain copyrighted material?  No  Yes

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b. Document has been sent to responsible DOE patent group for clearance.

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13. Additional Information or Remarks (Continue on separate sheet, if necessary)

S.D. Elliott, Jr., Director, DOE Solar One Project Office

14. Submitted by (Name and Position) (Please print or type)

P.O. Box 366, Daggett, CA 92327 (619) 254-2672

Organization \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



DEPARTMENT OF ENERGY  
SAN FRANCISCO OPERATIONS OFFICE

CONTRACTOR REQUEST FOR PATENT CLEARANCE  
FOR RELEASE OF UNCLASSIFIED DOCUMENT

Prime Contract No. DE-AC03-79SF10499
Subcontract No. (N/A)
Report No. (STMP0 235) DOE/SF/10499-T155
Date of Report September 1982
Name & Phone No. of DOE Technical Representative S.D. Elliott, Jr. (619) 254-2572

TO: Roger S. Gaither, Asst. Chief for Prosecution  
Office of Patent Counsel/Livermore Office  
P.O. Box 808, L-376  
Livermore, California 94550

FROM: McDonnell Douglas Corporation  
3855 Lakewood Blvd.  
Long Beach, CA 90846

1. Document Title: MCS As-Built Drawings, Vol 4, System Distributed Process  
Control Sys, Sec II, Configuration Control Module Data Bases

2. Type of Document:  Technical Report,  Conference Paper,  Journal Article,  Abstract or Summary,  
 Copy of Oral Presentation,  Other (please specify): \_\_\_\_\_  
(Routine)

3. In order to meet a publication schedule or submission deadline, patent clearance by \_\_\_\_\_  
would be desired.

**SENDER IS TO CHECK BOX #4 OR #5 BELOW.**

4. I have reviewed (or have had reviewed by technically knowledgeable personnel) this document for possible inventive subject  
matter (Subject Inventions) and that no inventions or discoveries (Subject Inventions) are deemed to be disclosed in this  
document except as stated below:

a. Attention should be directed to pages \_\_\_\_\_ of this document.

b. This document describes matter relating to an invention:

- i. Contractor Invention Docket No. \_\_\_\_\_.
- ii. A disclosure of the invention was submitted to DOE on \_\_\_\_\_ (date)
- iii. A disclosure of the invention will be submitted shortly \_\_\_\_\_ (approximate date)
- iv. A waiver of DOE's patent rights to the contractor:  
 has been granted,  has been applied for; or  will be applied for \_\_\_\_\_ (date)

5. This document is being submitted, but no review has been made of this document for possible inventive subject matter.  
Provide copy of clearance to: Solar One Project Office

6. Remarks: P.O. Box 366, Daggett, CA 92327

Reviewing/Submitting Official: Name (Print/Type) John P. Scholl  
Title Asst. Chief Patent Counsel, MDC (MS 122-23)  
Signature [Signature] Date 11 Dec 84

TO: INITIATOR OF REQUEST

FROM: ASSISTANT CHIEF FOR PROSECUTION  
Office of Patent Counsel/Livermore Office

- No patent objection to above-identified release.
- Please defer release until advised by this office.

Signed \_\_\_\_\_ Date Mailed \_\_\_\_\_