CHAPTER

31

INDICATING / RECORDING SYSTEMS

CHAPTER 31
INDICATING / RECORDING SYSTEMS

CH-SC-SU	Schem	Page	Sheet	Date
31–EFFECTIVE PAGES				
		1 thru 5		May 06/2009
		6		BLANK
31–CONTENTS				
R		1		May 06/2009
R		2		May 06/2009
R		3		May 06/2009
R		4		May 06/2009
R		5		May 06/2009
O		6		BLANK
D		7		May 06/2009
D		8		BLANK
31–ALPHABETICAL INDEX				
O		1		May 06/2009
		2		BLANK
31-25-01				
R		101		May 06/2009
31-31-01				
R		101	1	May 06/2009
R			2	May 06/2009
R			3	May 06/2009
R			4	May 06/2009
R			5	May 06/2009
R			6	May 06/2009
R			7	May 06/2009
31-31-01 (cont.)		101		
R			8	May 06/2009
		101.1	1	Jan 21/2005
			2	Jan 21/2005
			3	Jan 21/2005
			4	Jan 21/2005
			5	Jan 21/2005
			6	Jan 21/2005
			7	Jan 21/2005
			8	Jan 21/2005
		101.2	1	Jan 21/2005
			2	Jan 21/2005
			3	Jan 21/2005
			4	Jan 21/2005
			5	Jan 21/2005
			6	Jan 21/2005
			7	Jan 21/2005
			8	Jan 21/2005
			9	Jan 21/2005
D		102	1	May 06/2009
D			2	May 06/2009
D			3	May 06/2009
D			4	May 06/2009
D			5	May 06/2009

A = Added, R = Revised, D = Deleted, O = Overflow

CHAPTER 31
INDICATING / RECORDING SYSTEMS

	CH-SC-SU	Schem	Page	Sheet	Date
	31-31-01 (cont.)		102		
D				6	May 06/2009
D				7	May 06/2009
D				8	May 06/2009
D				9	May 06/2009
D				10	May 06/2009
D			102.1	1	May 06/2009
D				2	May 06/2009
D				3	May 06/2009
D				4	May 06/2009
D				5	May 06/2009
D				6	May 06/2009
D				7	May 06/2009
D				8	May 06/2009
D				9	May 06/2009
D				10	May 06/2009
	31-40-01				
R			101	1	May 06/2009
R				2	May 06/2009
D			102	1	May 06/2009
D				2	May 06/2009
	31-41-01				
			101	1	Jan 21/2005
				2	Jan 21/2005
	31-41-01 (cont.)				
			101.1	1	Jan 21/2005
				2	Jan 21/2005
			102	1	Jan 21/2005
				2	Jan 21/2005
D			103	1	May 06/2009
D				2	May 06/2009
D			103.1	1	May 06/2009
D				2	May 06/2009
	31-41-02				
R			101	1	May 06/2009
R				2	May 06/2009
D			102	1	May 06/2009
D				2	May 06/2009
	31-41-03				
R			101		May 06/2009
D			102		May 06/2009
	31-41-04				
			101	1	Jan 21/2005
				2	Jan 21/2005
				3	Jan 21/2005
				4	Jan 21/2005
			101.1	1	Jan 21/2005
				2	Jan 21/2005

A = Added, R = Revised, D = Deleted, O = Overflow

CHAPTER 31
INDICATING / RECORDING SYSTEMS

	CH-SC-SU Schem	Page	Sheet	Date
	31-41-04 (cont.)	101.1		
			3	Jan 21/2005
			4	Jan 21/2005
		102	1	Jan 21/2005
			2	Jan 21/2005
			3	Jan 21/2005
			4	Jan 21/2005
		102.1	1	Jan 21/2005
			2	Jan 21/2005
			3	Jan 21/2005
			4	Jan 21/2005
D		103	1	May 06/2009
D			2	May 06/2009
D			3	May 06/2009
D			4	May 06/2009
D		103.1	1	May 06/2009
D			2	May 06/2009
D			3	May 06/2009
D			4	May 06/2009
	31-41-05			
R		101	1	May 06/2009
R			2	May 06/2009
R			3	May 06/2009
		101.1	1	Jan 21/2005

	CH-SC-SU Schem	Page	Sheet	Date
	31-41-05 (cont.)	101.1		
			2	Jan 21/2005
			3	Dec 18/2007
D		102	1	May 06/2009
D			2	May 06/2009
D			3	May 06/2009
D		102.1	1	May 06/2009
D			2	May 06/2009
D			3	May 06/2009
	31-41-06			
R		101	1	May 06/2009
R			2	May 06/2009
D		102	1	May 06/2009
D			2	May 06/2009
	31-41-07			
R		101	1	May 06/2009
R			2	May 06/2009
		101.1	1	Jan 21/2005
			2	Jan 21/2005
D		102	1	May 06/2009
D			2	May 06/2009
D		102.1	1	May 06/2009
D			2	May 06/2009

A = Added, R = Revised, D = Deleted, O = Overflow

31-EFFECTIVE PAGES

CHAPTER 31
INDICATING / RECORDING SYSTEMS

	CH-SC-SU	Schem	Page	Sheet	Date
	31-41-08				
D			101		May 06/2009
	31-41-09				
D			101		May 06/2009
R			101.1		May 06/2009
	31-51-00				
			101		Jan 21/2005
A			101.1		May 06/2009
R			102		May 06/2009
D			102.1		May 06/2009
	31-51-01				
			101	1	Jan 21/2005
R				2	May 06/2009
A			101.1	1	May 06/2009
A				2	May 06/2009
R			102	1	May 06/2009
R				2	May 06/2009
	31-51-02				
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A			101.1		May 06/2009
R			102		May 06/2009
D			102.1		May 06/2009
	31-51-03				
R			101		May 06/2009

	CH-SC-SU	Schem	Page	Sheet	Date
	31-51-03 (cont.)				
D			102		May 06/2009
	31-51-04				
R			101		May 06/2009
	31-51-05				
O			101		Jan 21/2005
R			101.1		May 06/2009
O			101.2		Jan 21/2005
A			101.3		May 06/2009
R			102		May 06/2009
D			102.1		May 06/2009
	31-51-06				
O			101		Jan 21/2005
R			101.1		May 06/2009
O			101.2		Jan 21/2005
A			101.3		May 06/2009
R			102		May 06/2009
D			102.1		May 06/2009
	31-51-07				
R			101		May 06/2009
	31-51-09				
R			101		May 06/2009
	31-51-10				
D			101		May 06/2009

A = Added, R = Revised, D = Deleted, O = Overflow

CHAPTER 31
INDICATING / RECORDING SYSTEMS

	CH-SC-SU	Schem	Page	Sheet	Date
	31-51-10 (cont.)				
R			101.1		May 06/2009
	31-51-11				
D			101		May 06/2009
	31-51-10				
A			102		May 06/2009
	31-51-11				
R			101.1		May 06/2009
A			102		May 06/2009

CH-SC-SU	Schem	Page	Sheet	Date

A = Added, R = Revised, D = Deleted, O = Overflow

CHAPTER 31
INDICATING / RECORDING SYSTEMS

CHAPTER 31
INDICATING / RECORDING SYSTEMS

CHAPTER 31
INDICATING / RECORDING SYSTEMS

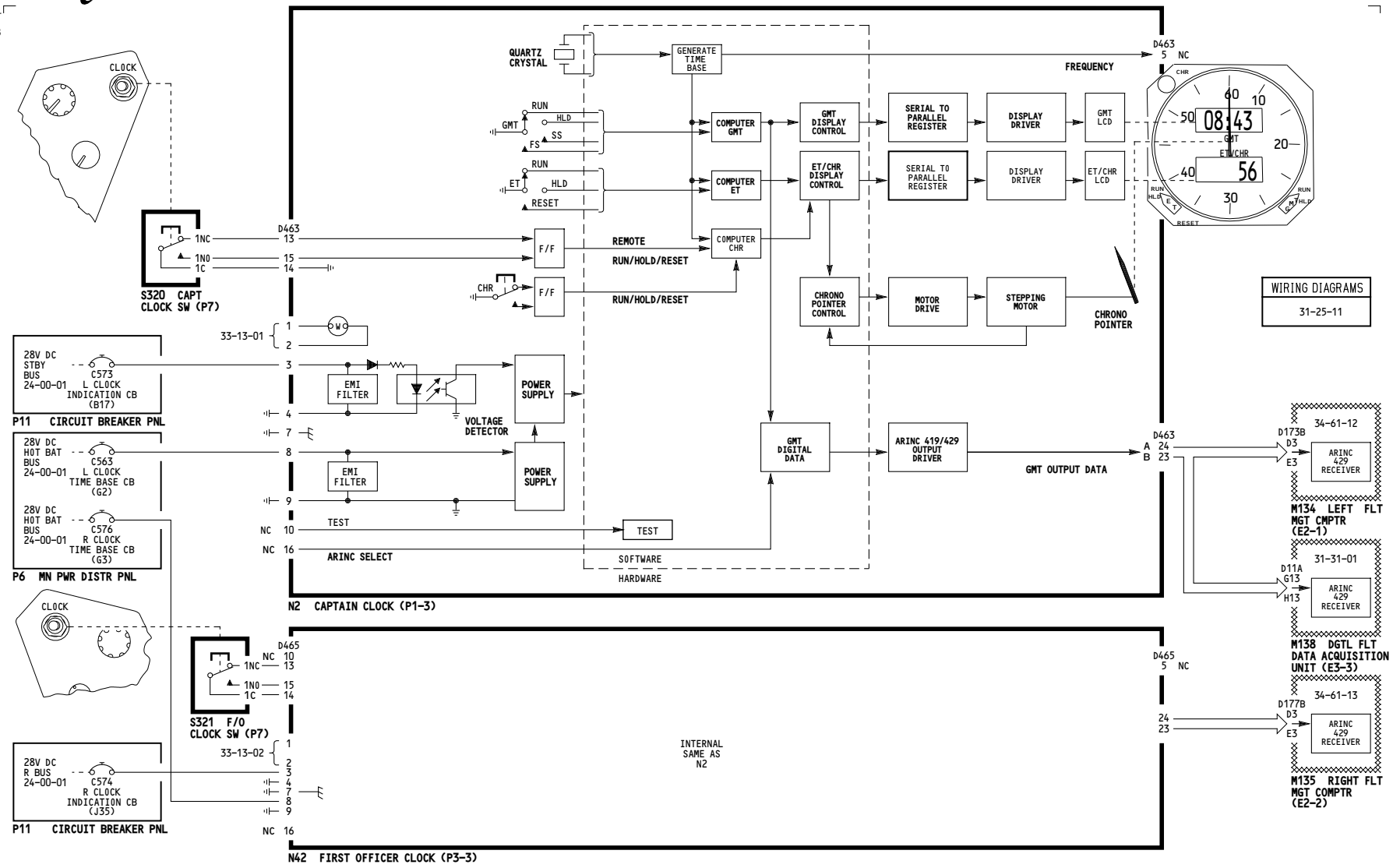
CHAPTER 31
INDICATING / RECORDING SYSTEMS

CHAPTER 31
INDICATING / RECORDING SYSTEMS

CHAPTER 31
INDICATING / RECORDING SYSTEMS

31-ALPHABETICAL INDEX

5028

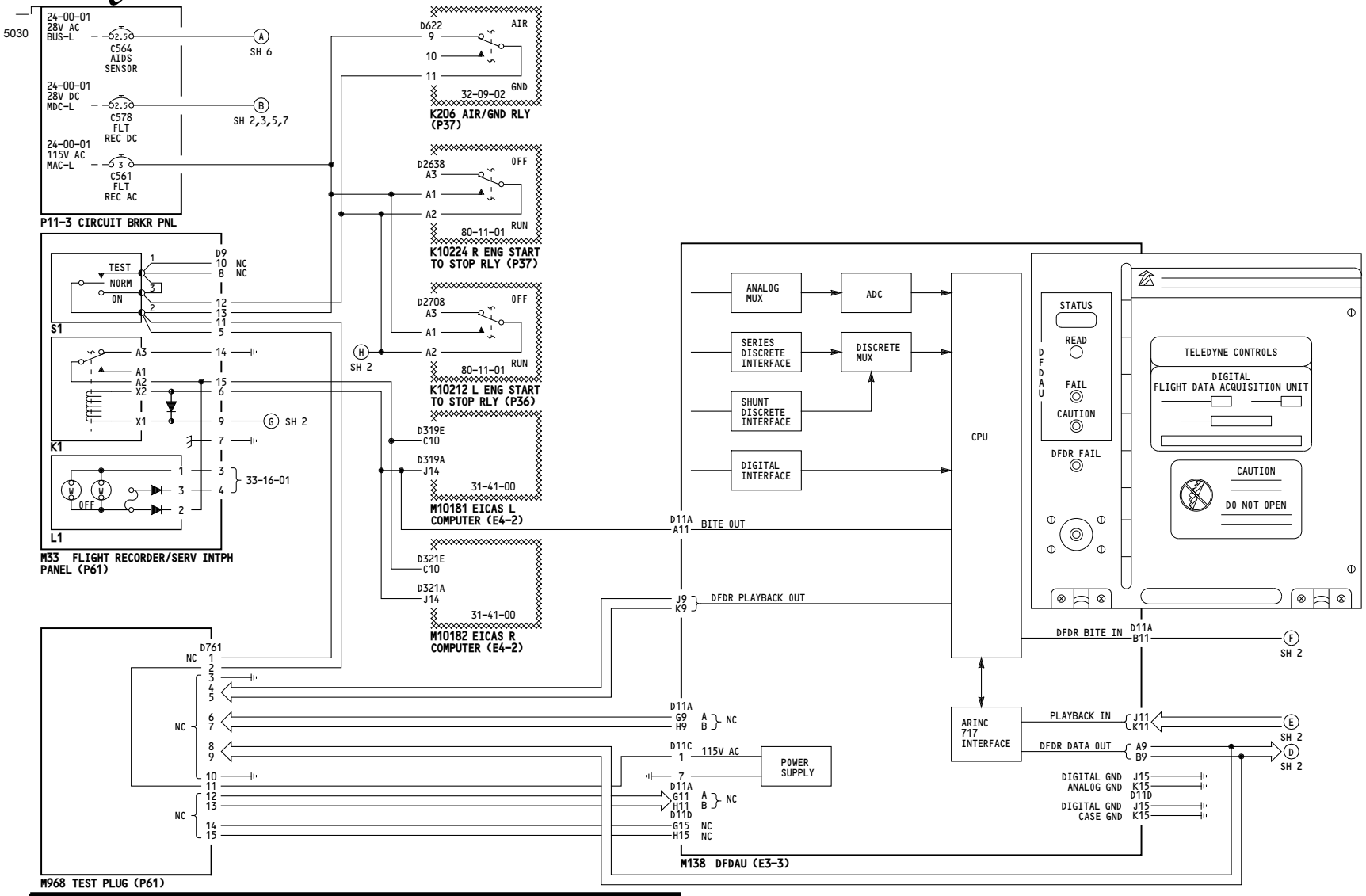


ALL

ELECTRONIC CLOCKS

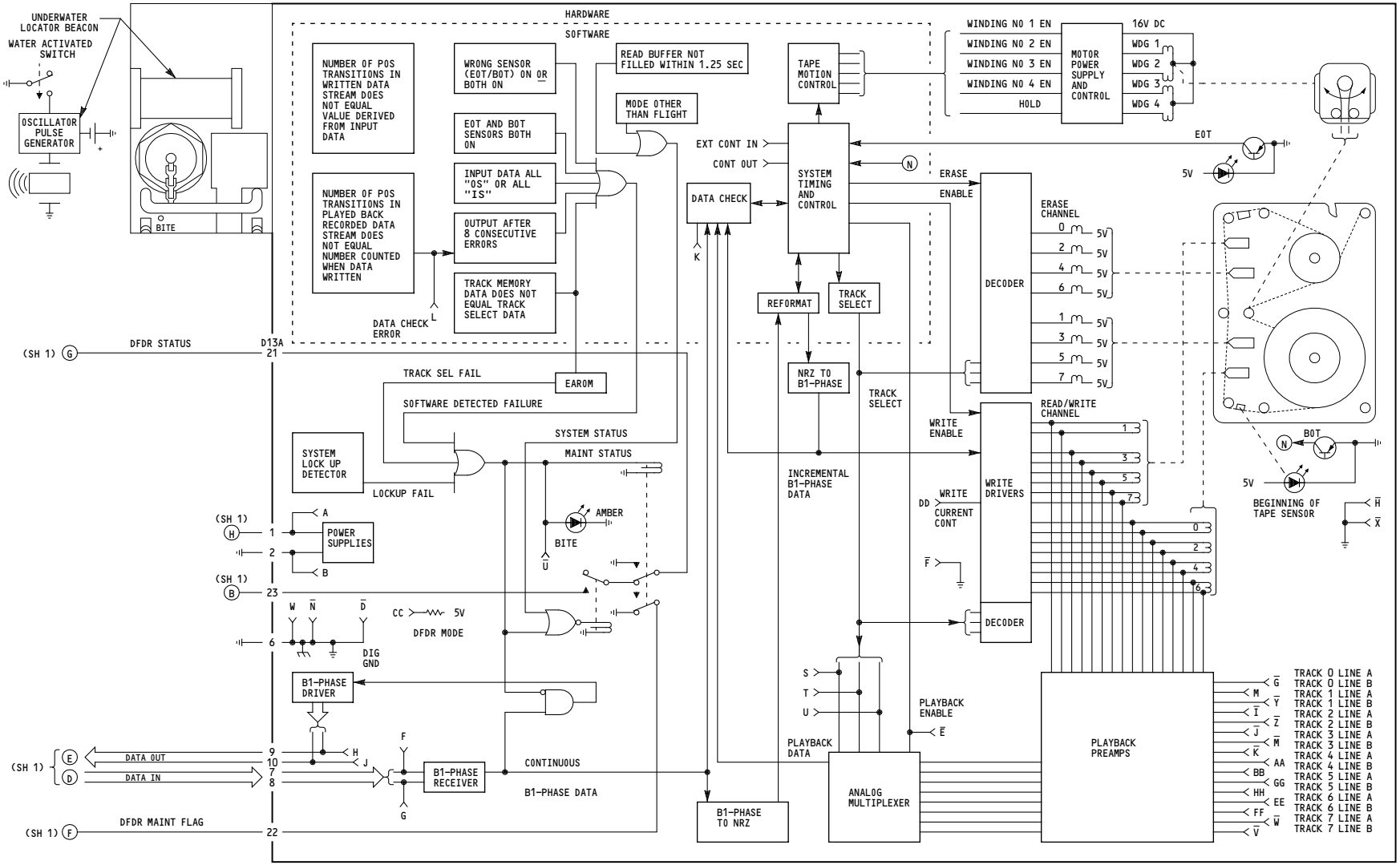
D280N032S

31-25-01



ALL	**DIGITAL FLIGHT RECORDER SYSTEM**
	D280N032S

-A
5025



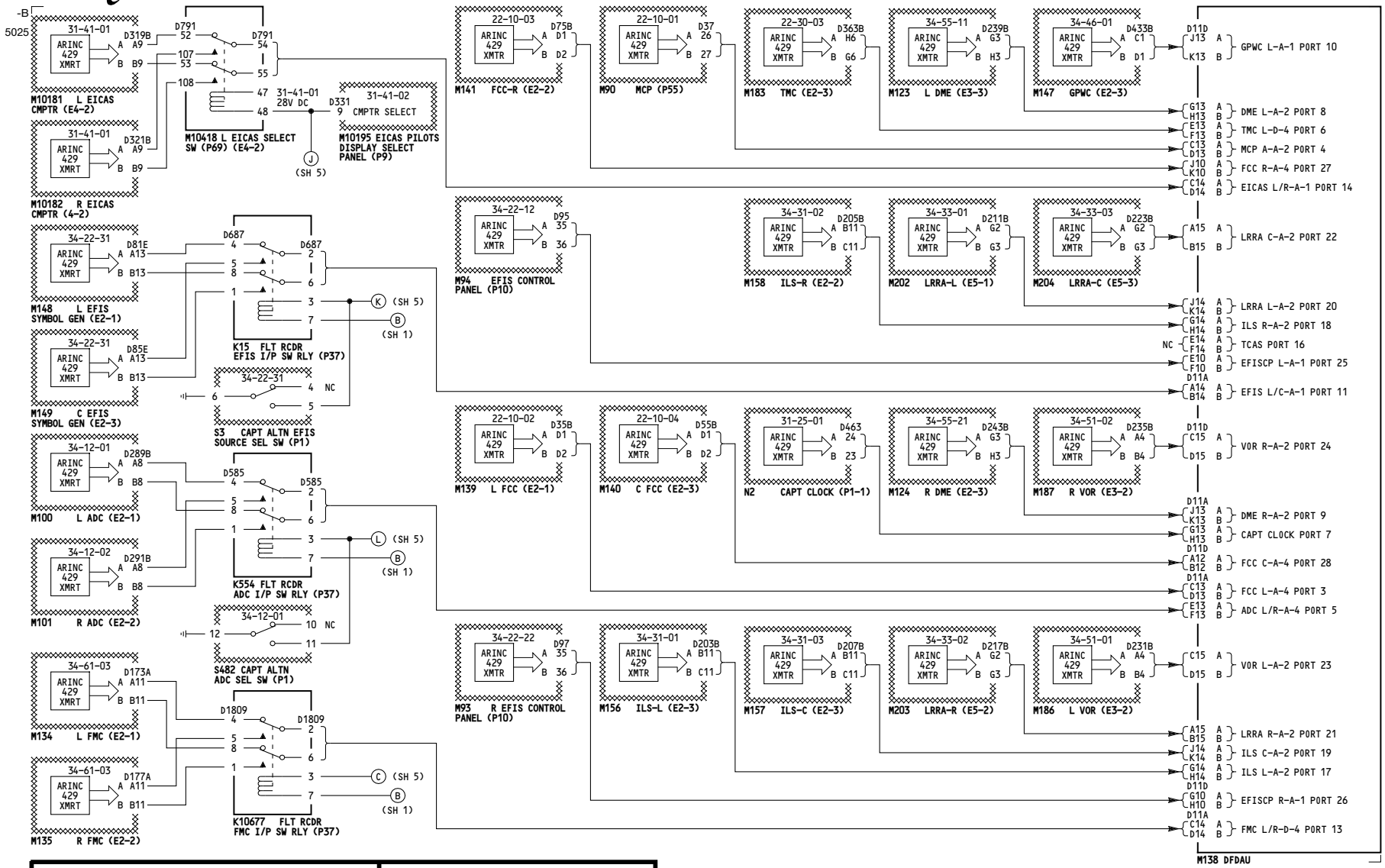
M200 DIGITAL FLIGHT DATA RECORDER

ALL

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

31-31-01



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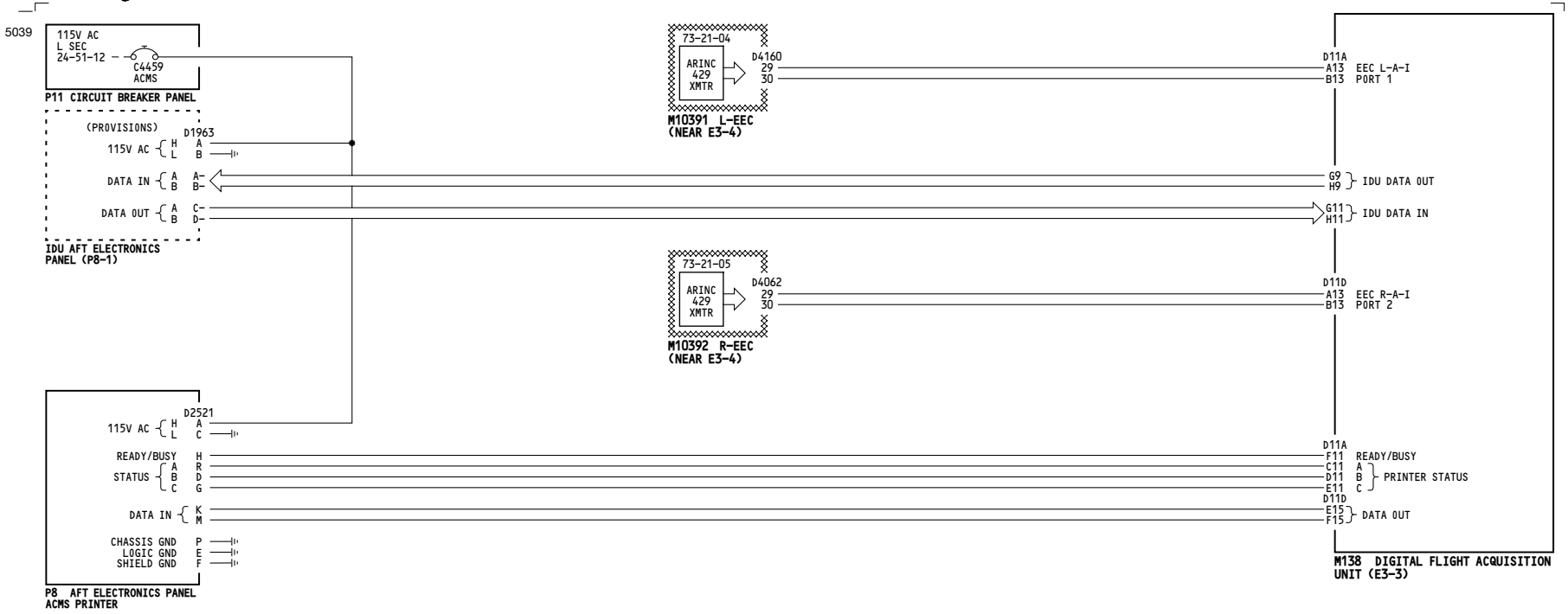
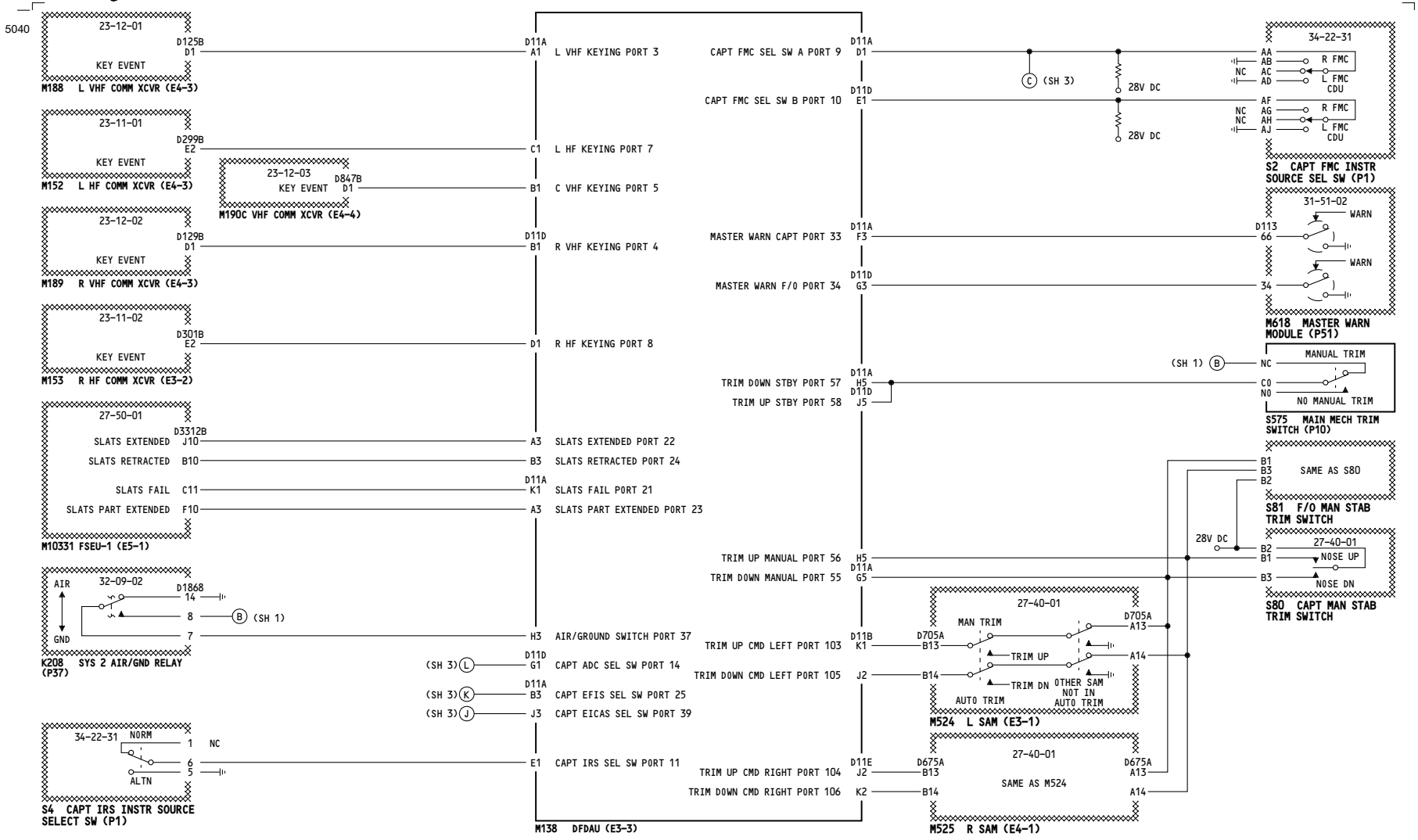
DIGITAL FLIGHT RECORDER SYSTEM

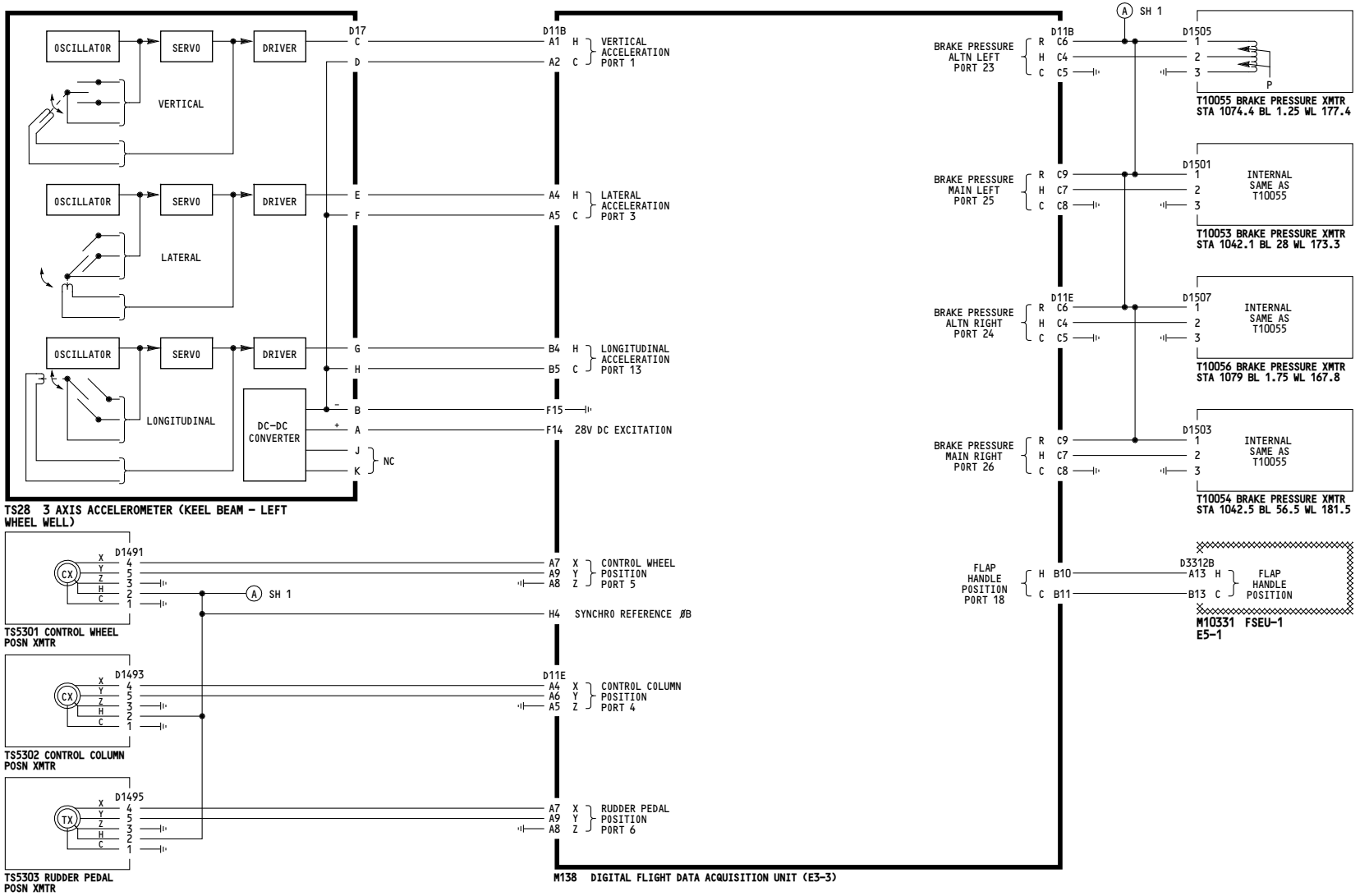
D280N032S





ALL	DIGITAL FLIGHT RECORDER SYSTEM
	D280N032S

5033



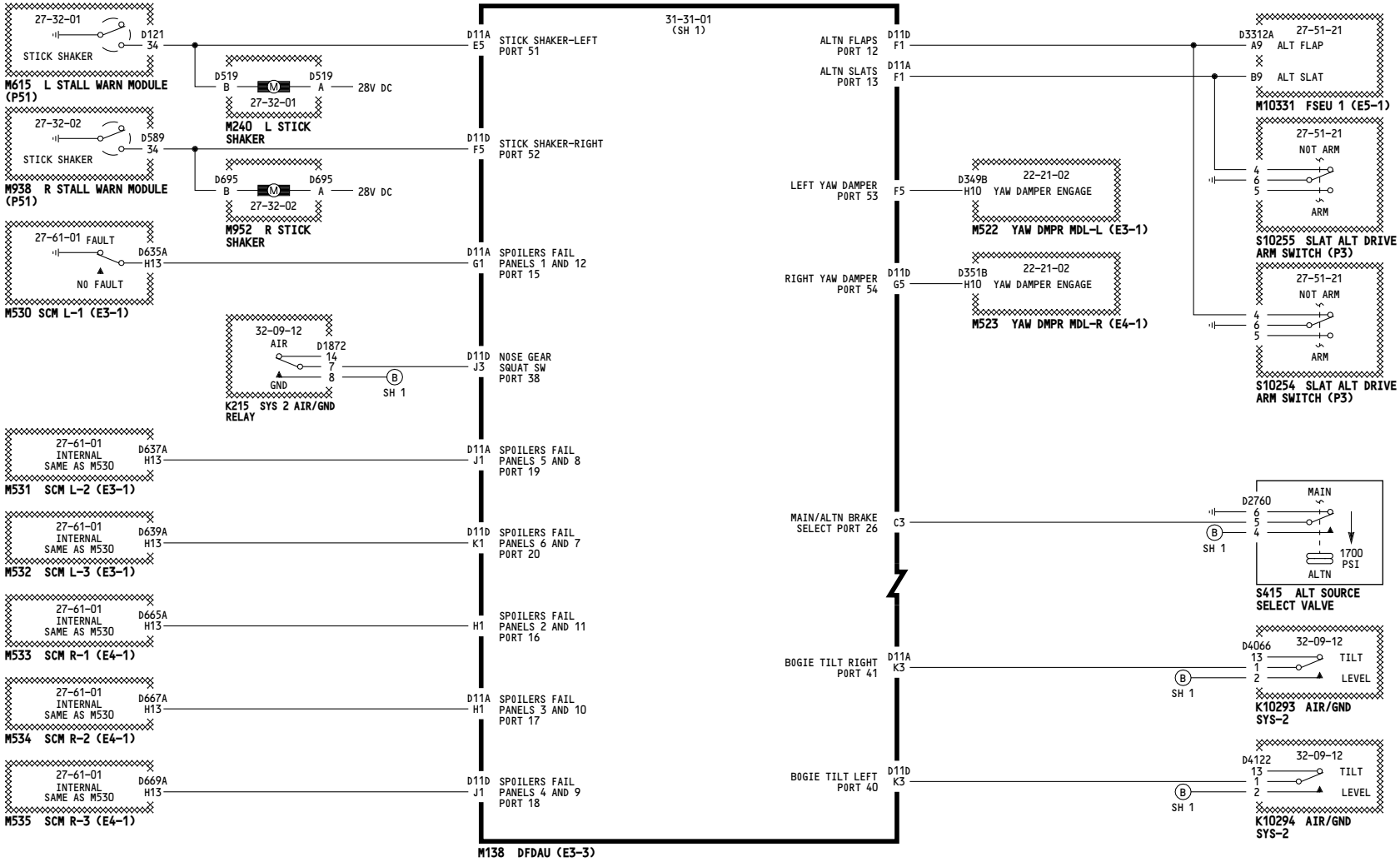
ALL

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

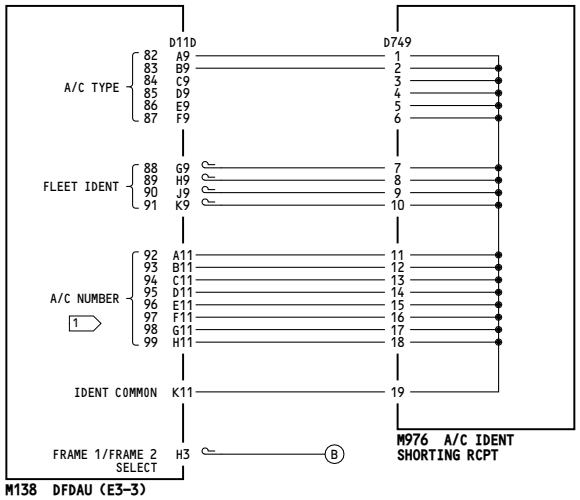
31-31-01

Page 101
Sheet 6
May 06/2009



ALL	DIGITAL FLIGHT RECORDER SYSTEM
	D280N032S

5020

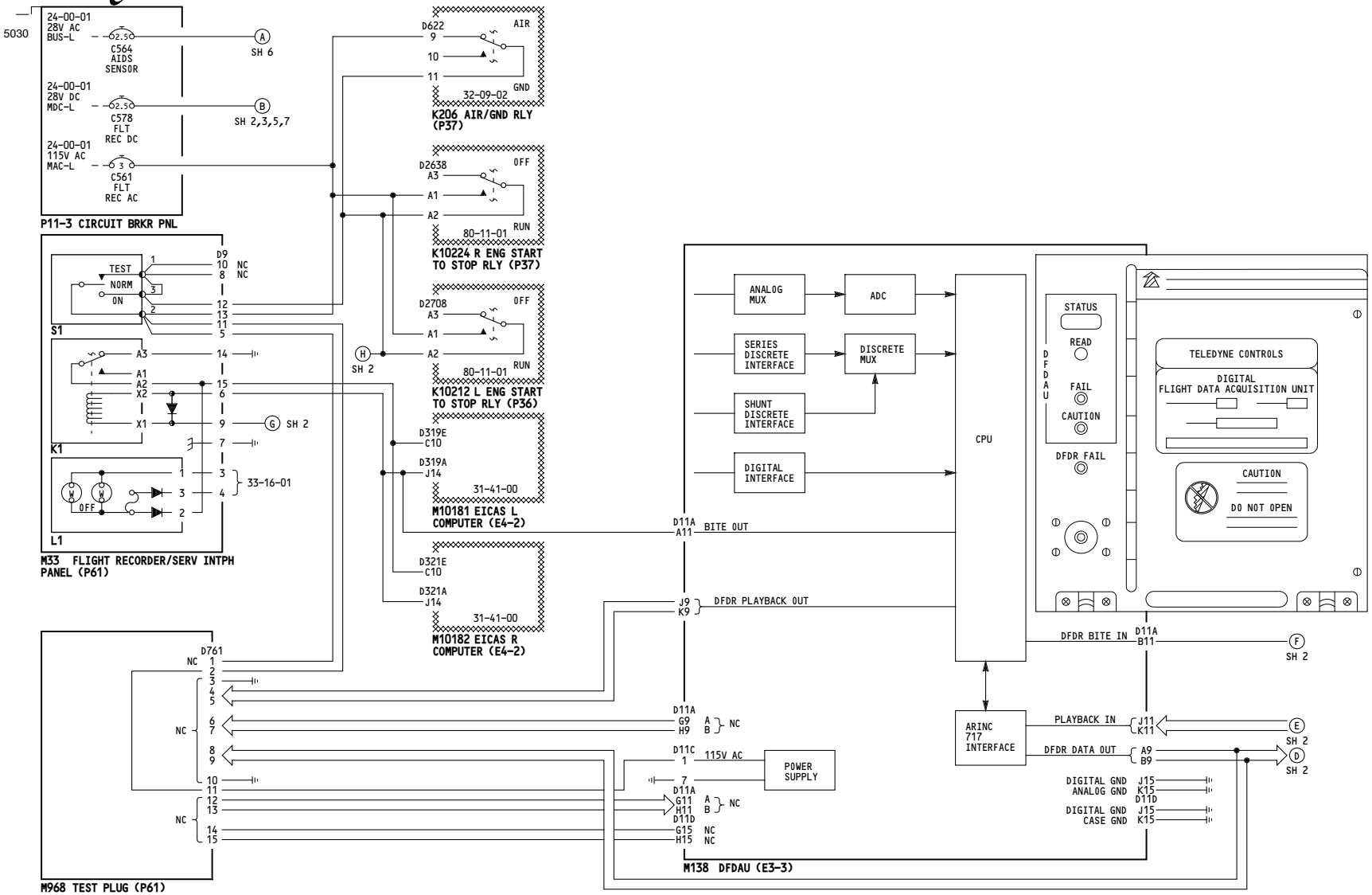


A/C EFF	A/C NUMBER 1							
	99	98	97	96	95	94	93	92
NB321	0	0	0	0	0	0	0	1
NB322	0	0	0	0	0	0	1	0

1= CONNECT TO D749
0= CAP & STOW

NOTES:
1 A/C NUMBERS

ALL	**DIGITAL FLIGHT RECORDER SYSTEM**
	D280N032S

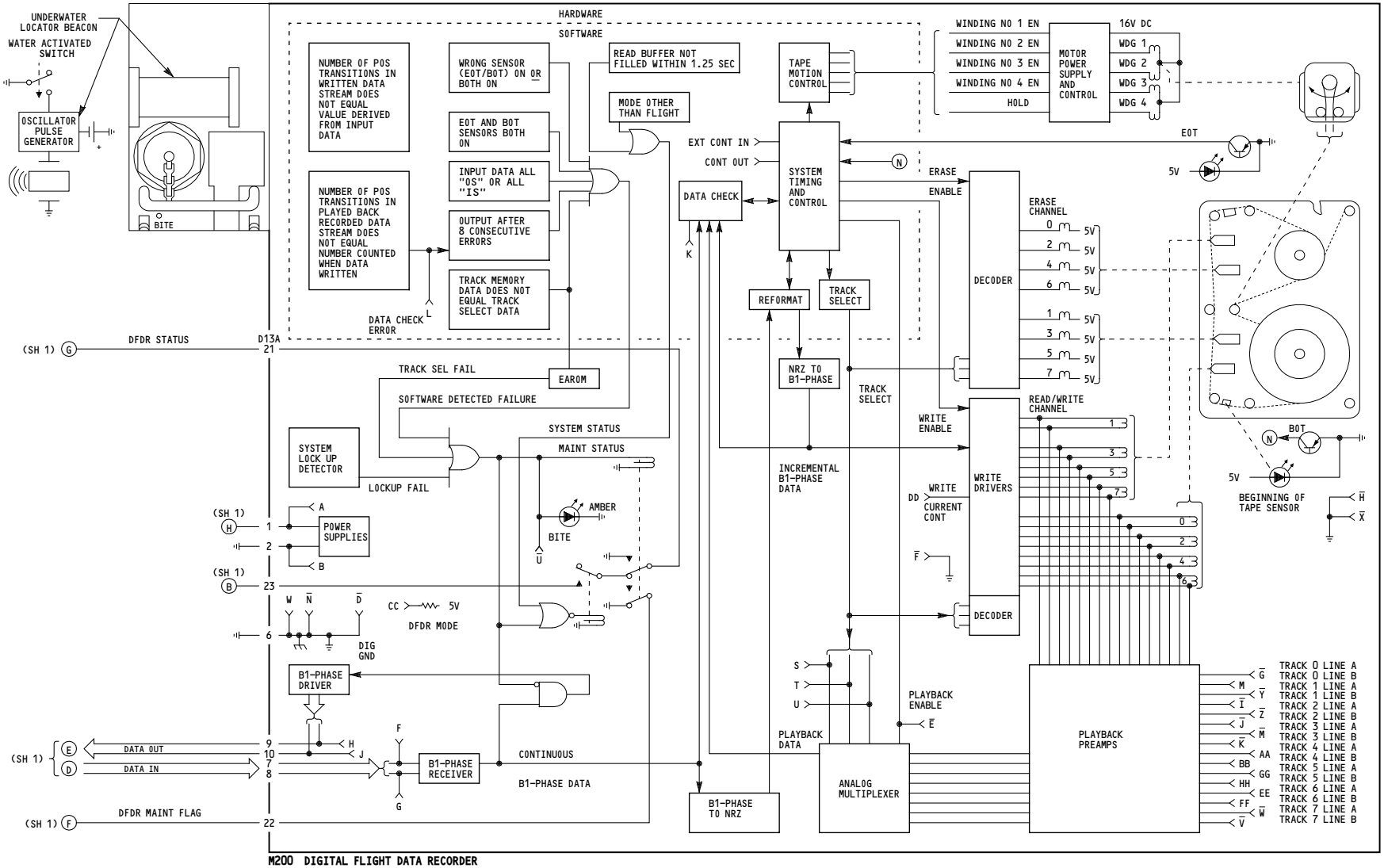


001-009	**DIGITAL FLIGHT RECORDER SYSTEM**
	D280N032S

31-31-01

Page 101.1
Sheet 1
Jan 21/2005

-A
5025



M200 DIGITAL FLIGHT DATA RECORDER

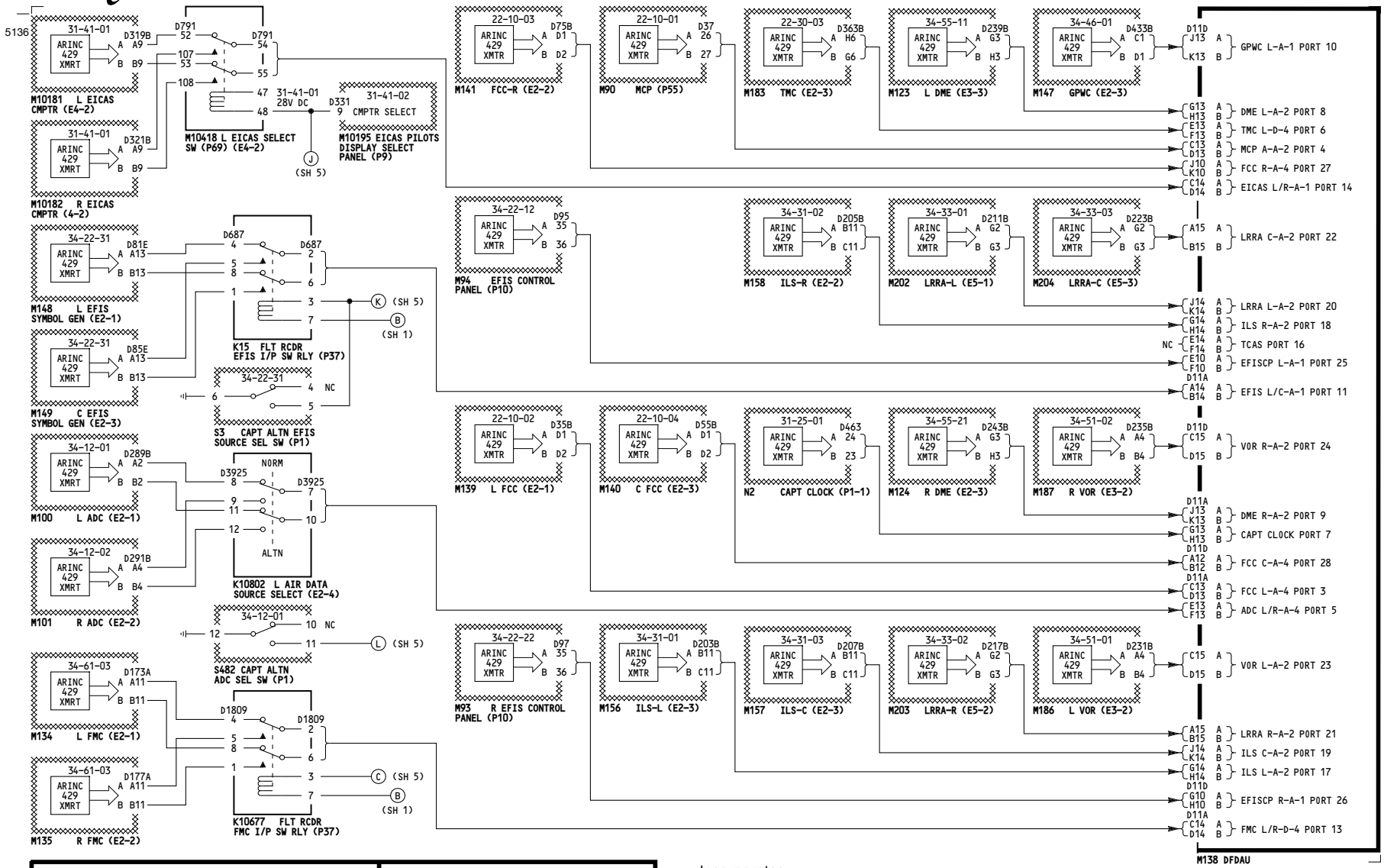
001-009

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

31-31-01

Page 101.1
Sheet 2
Jan 21/2005



001-009

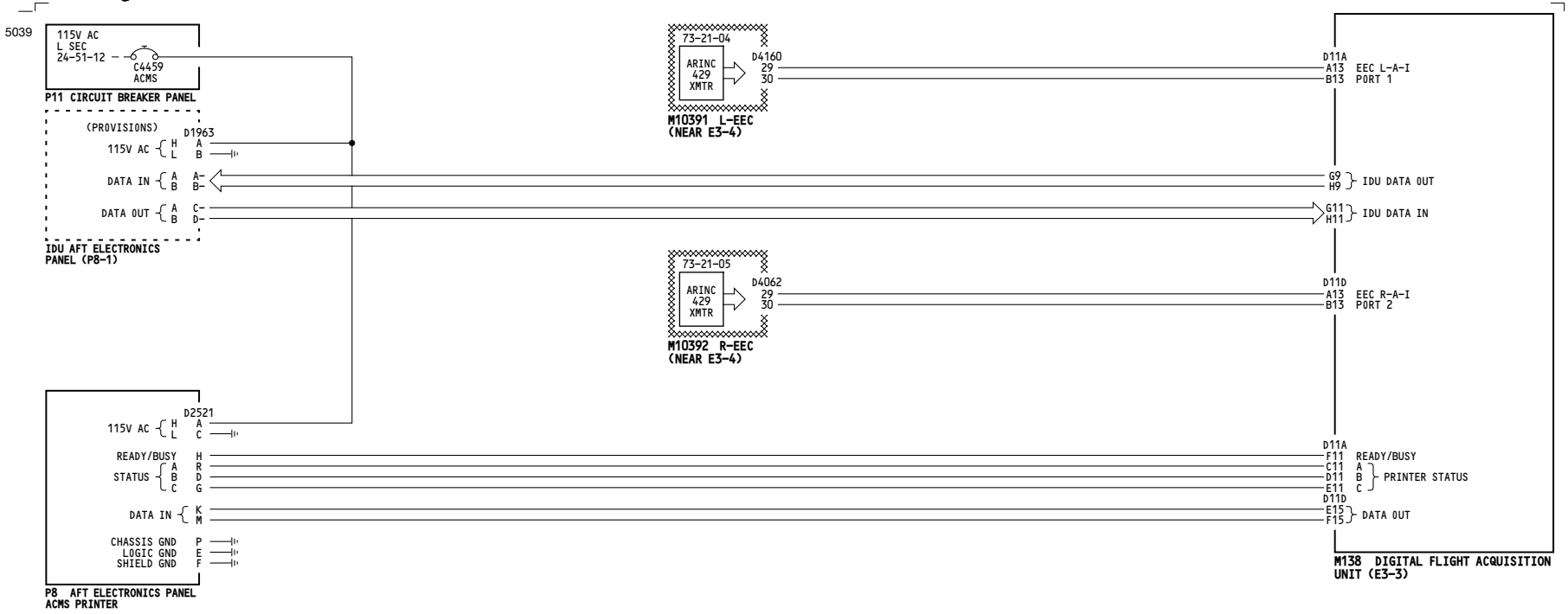
DIGITAL FLIGHT RECORDER SYSTEM

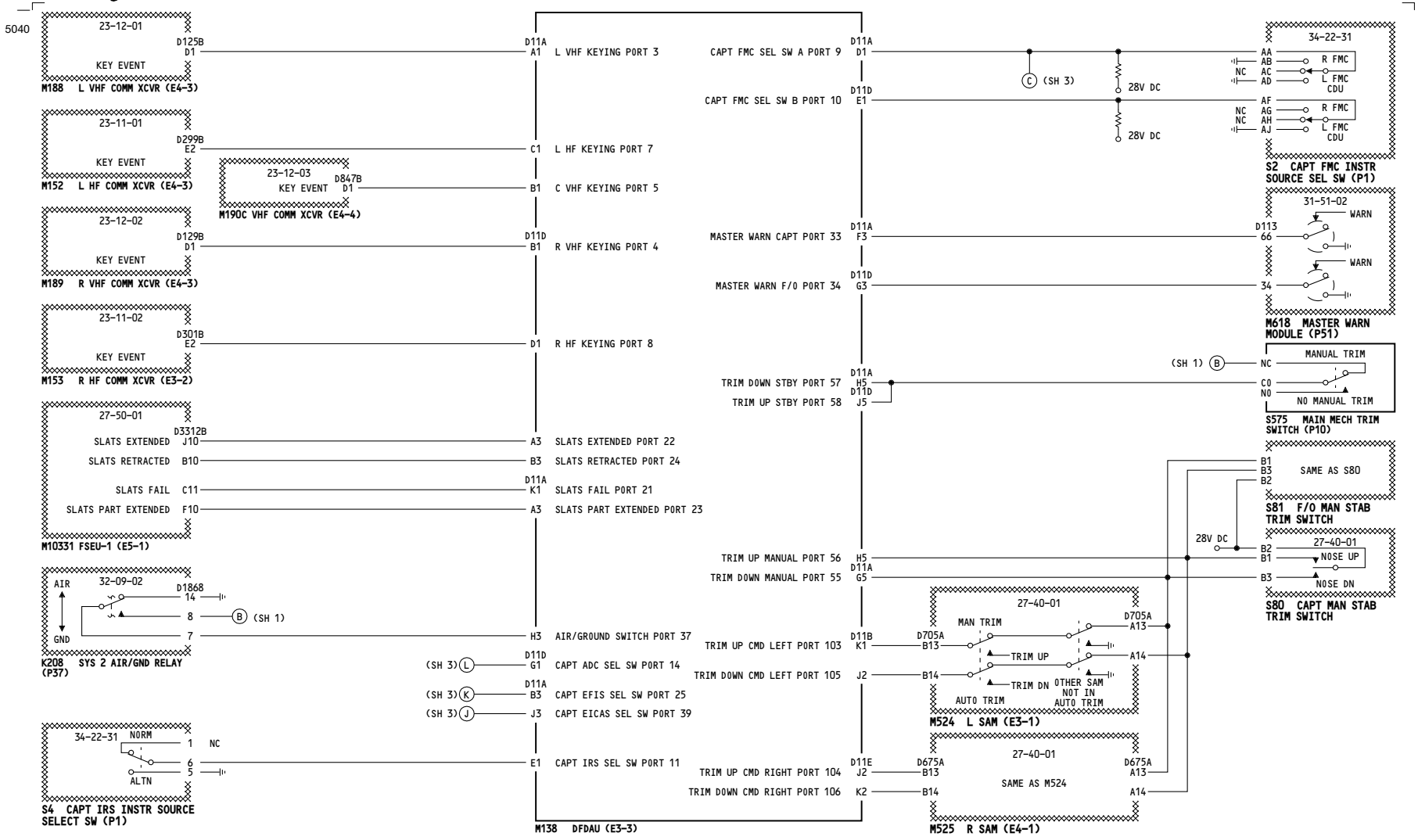
Incorporates
34A0222

D280N032S

31-31-01

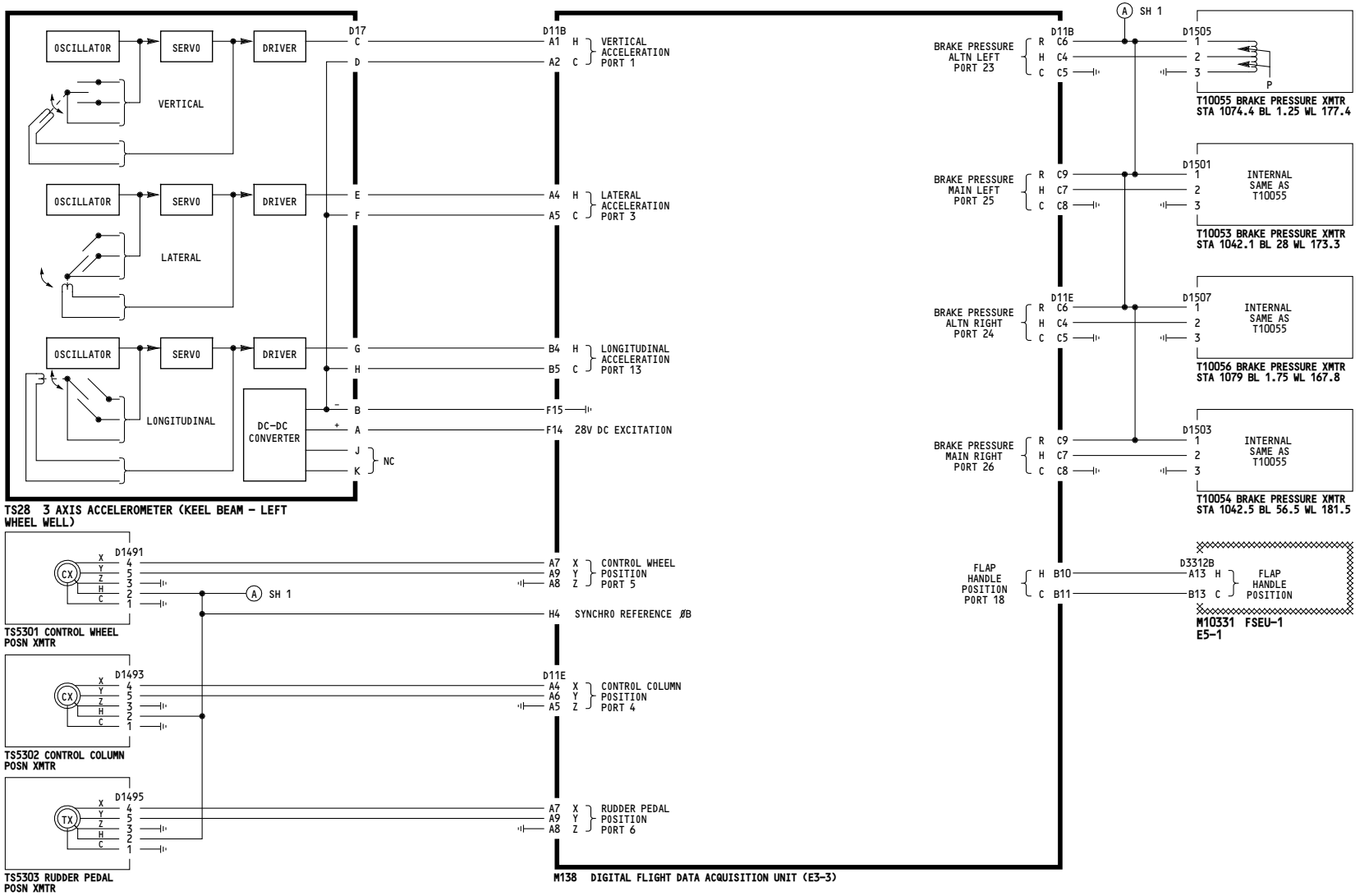
Page 101.1
Sheet 3
Jan 21/2005





001-009	DIGITAL FLIGHT RECORDER SYSTEM	
		D280N032S

5033



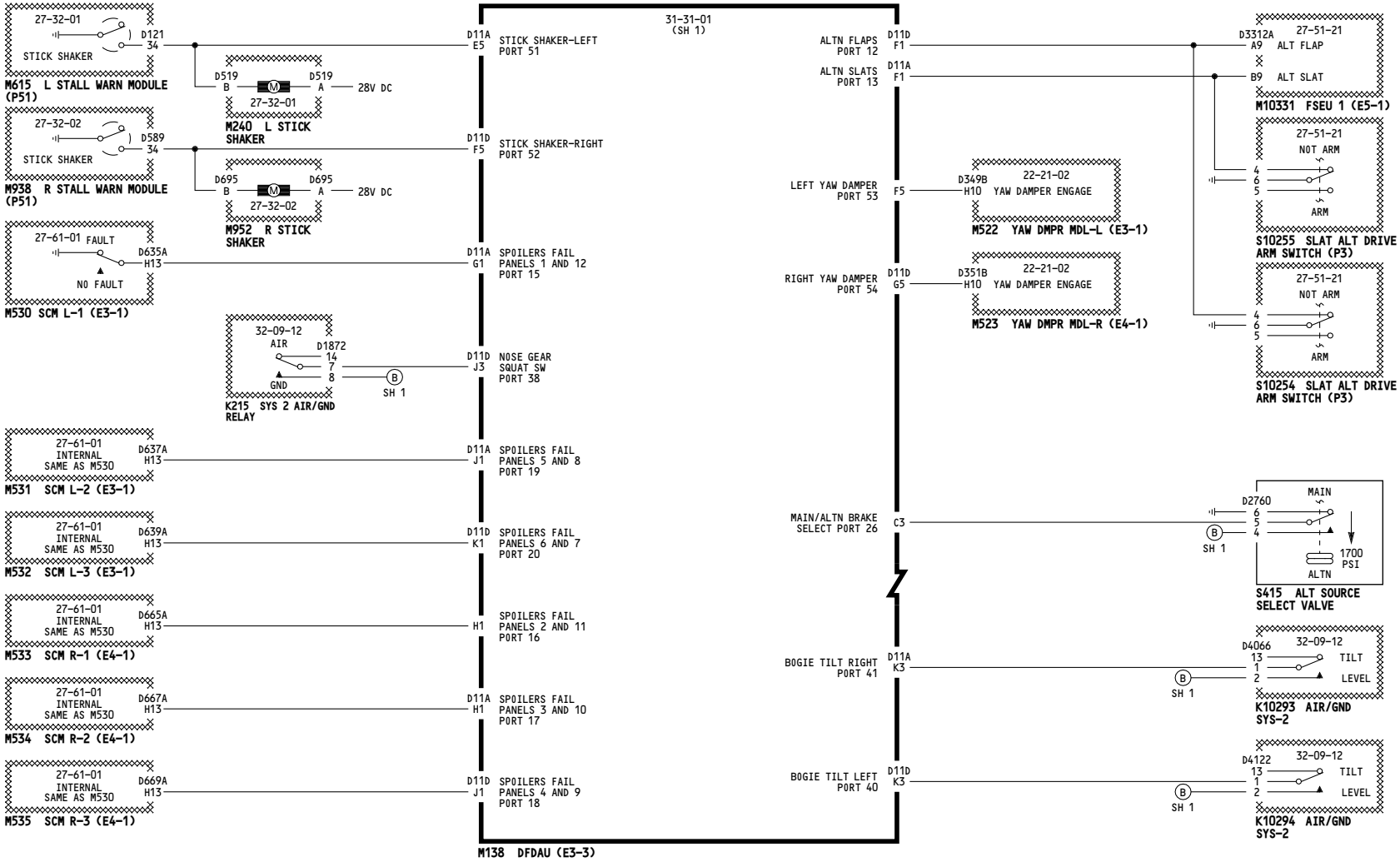
001-009

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

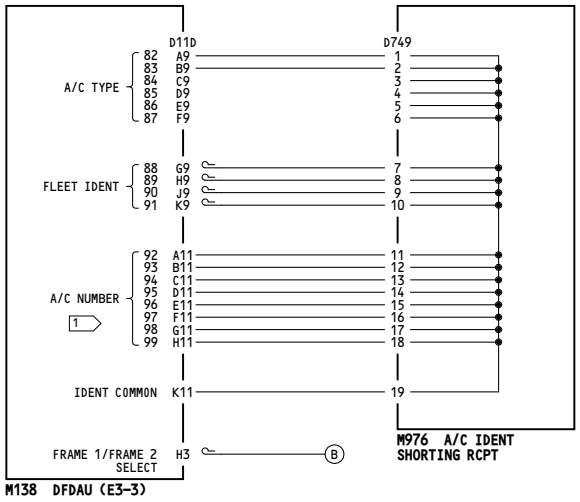
31-31-01

Page 101.1
Sheet 6
Jan 21/2005



001-009	**DIGITAL FLIGHT RECORDER SYSTEM**
	D280N032S

5020

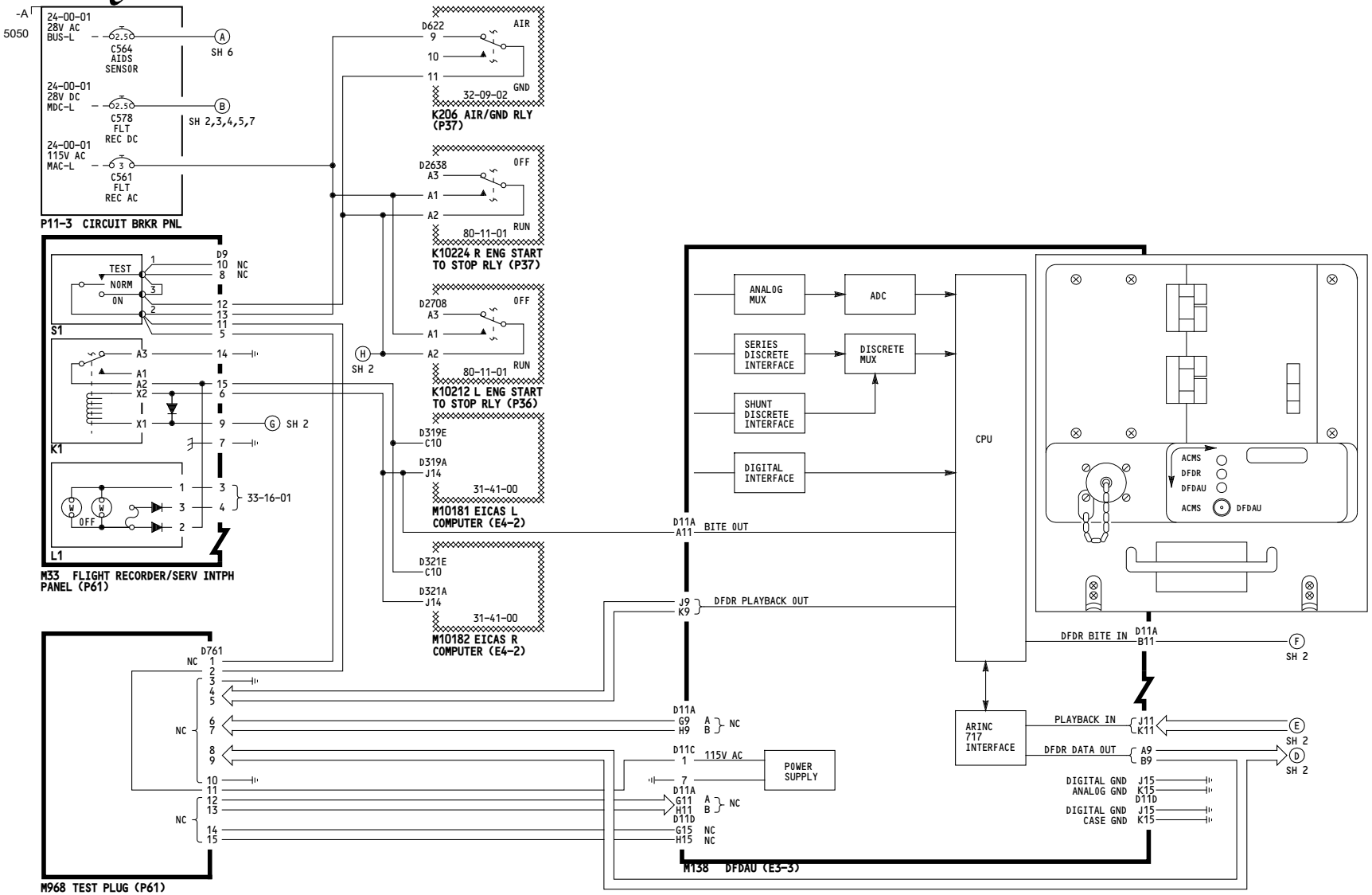


A/C EFF	A/C NUMBER 1							
	99	98	97	96	95	94	93	92
NB321	0	0	0	0	0	0	0	1
NB322	0	0	0	0	0	0	1	0

1= CONNECT TO D749
0= CAP & STOW

NOTES:
1 A/C NUMBERS

001-009	DIGITAL FLIGHT RECORDER SYSTEM
	D280N032S



010-011

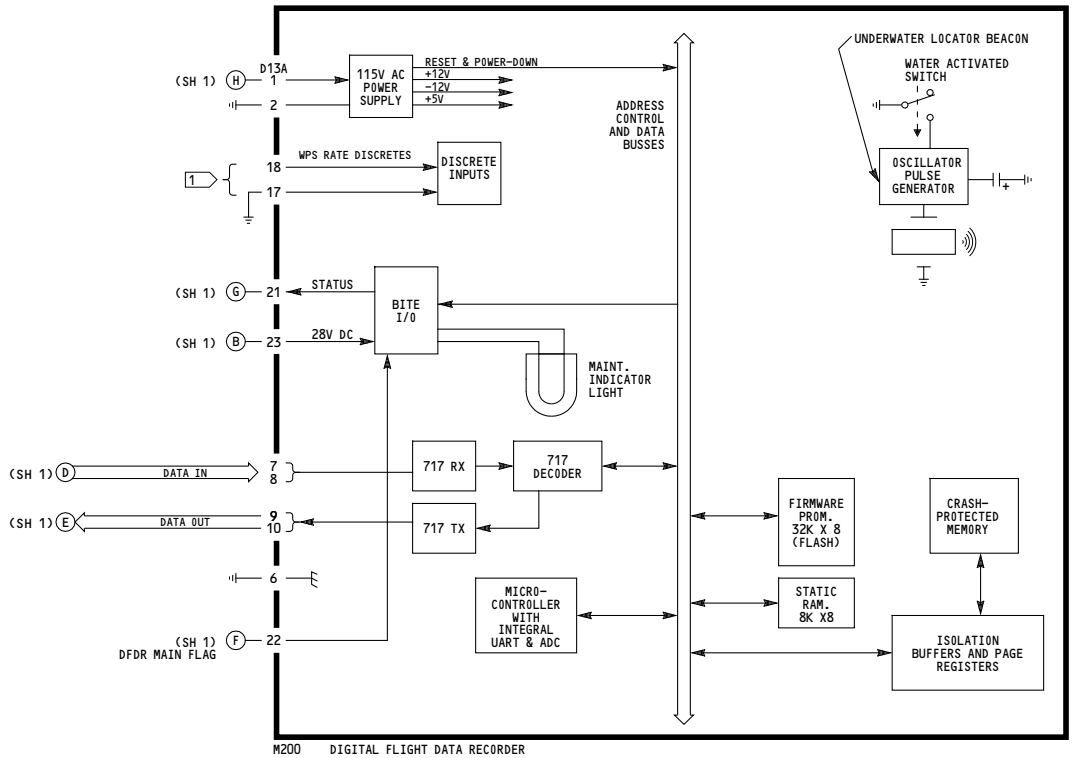
DIGITAL FLIGHT RECORDER SYSTEM

Incorporates
31-0094

D280N032S

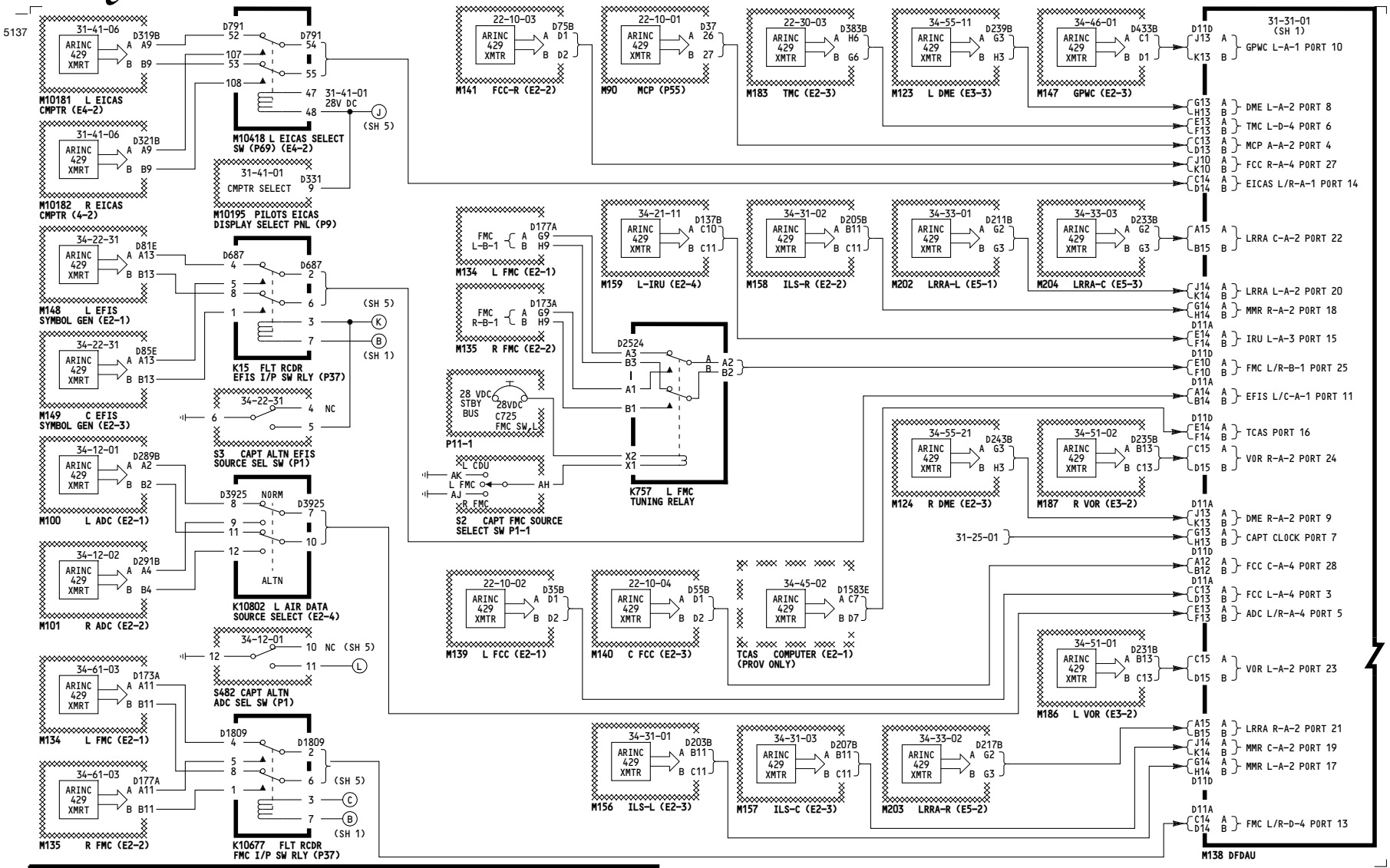
31-31-01

Page 101.2
Sheet 1
Jan 21/2005



1

RECORDING SPEED	PIN 17	PIN 18
64 WPS	OPN	OPN
128 WPS	OPN	GND
256 WPS	GND	OPN
512 WPS	GND	GND



010-011

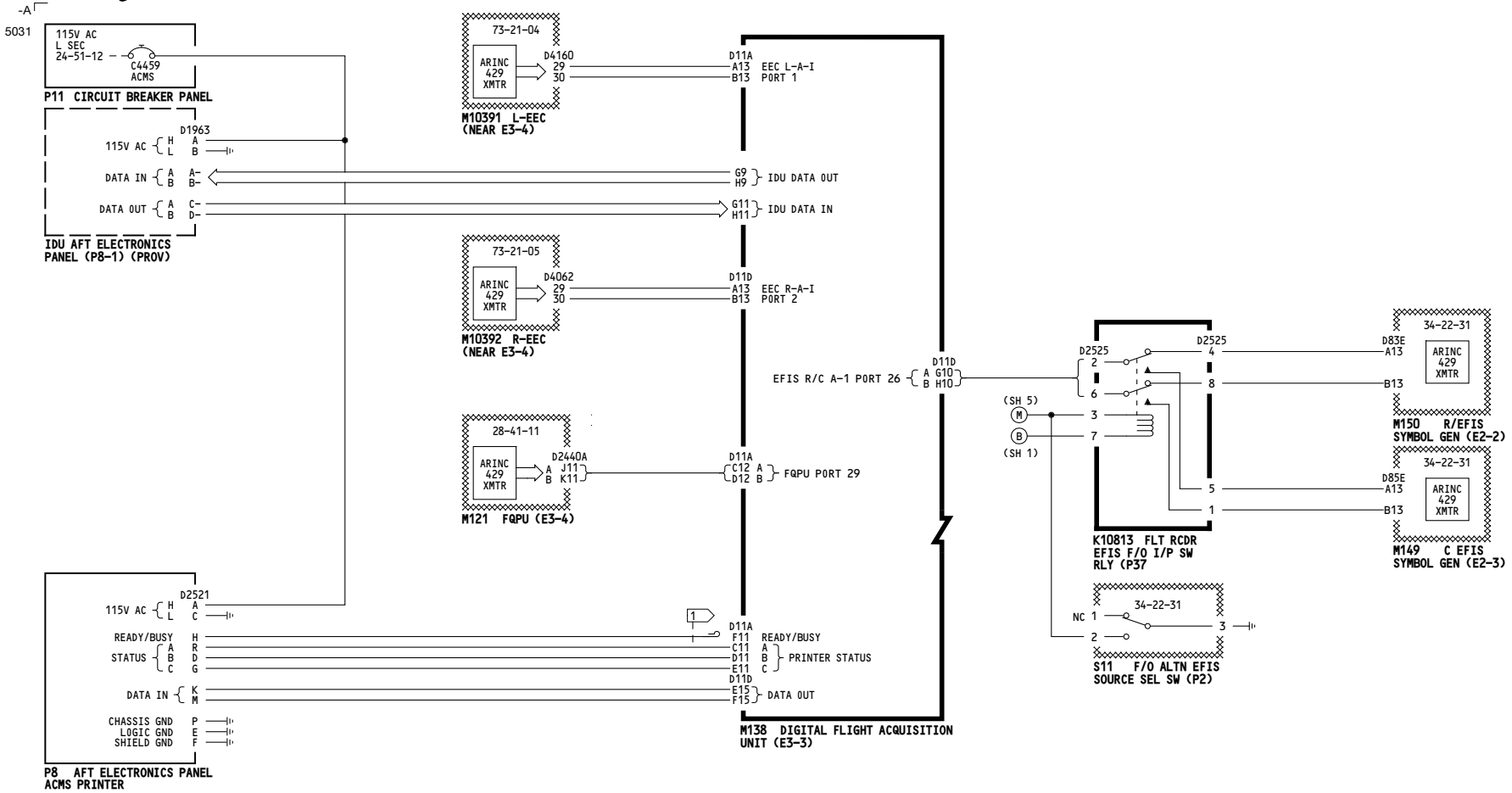
DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

Incorporates
31-0094
34A0222

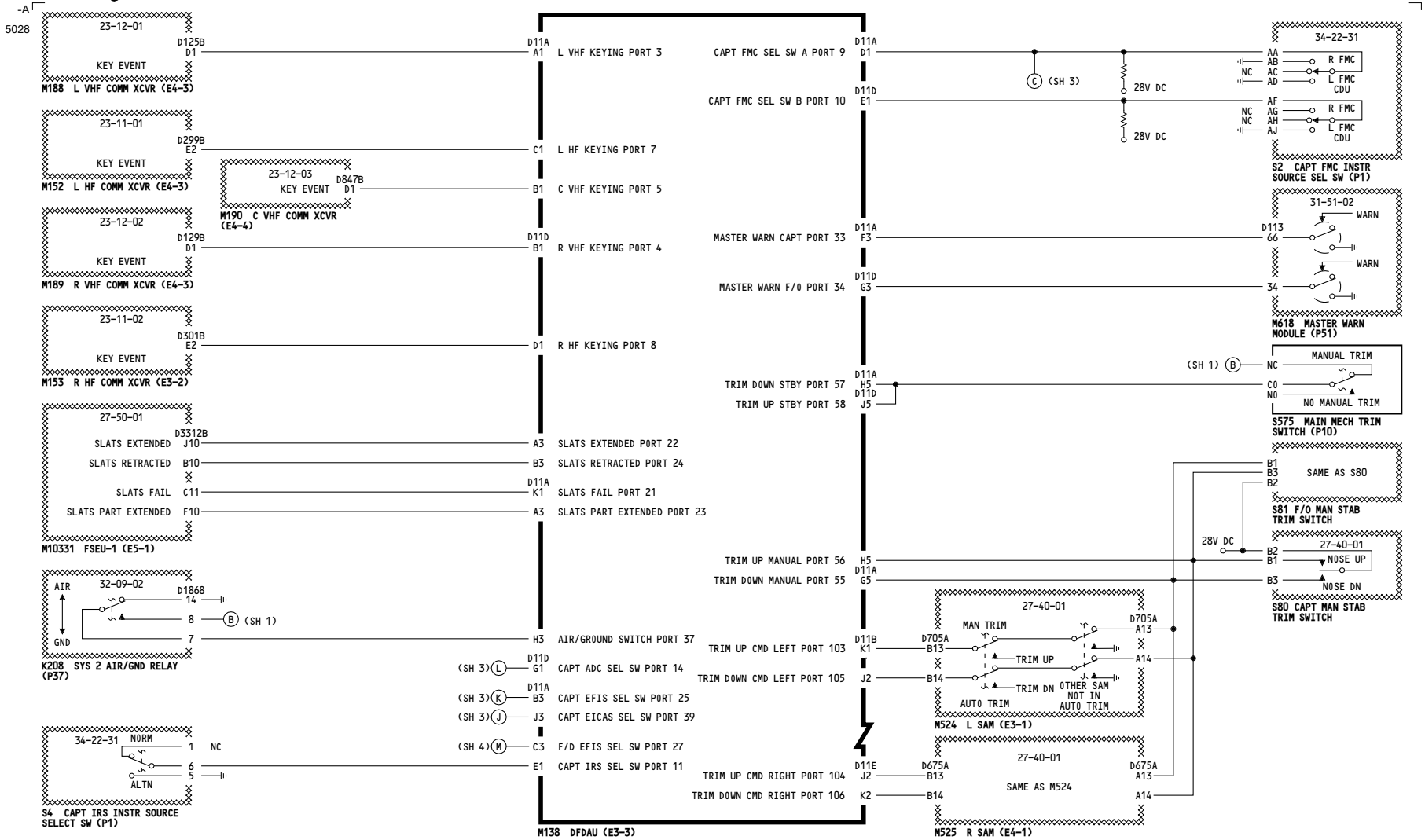
31-31-01

Page 101.2
Sheet 3
Jan 21/2005



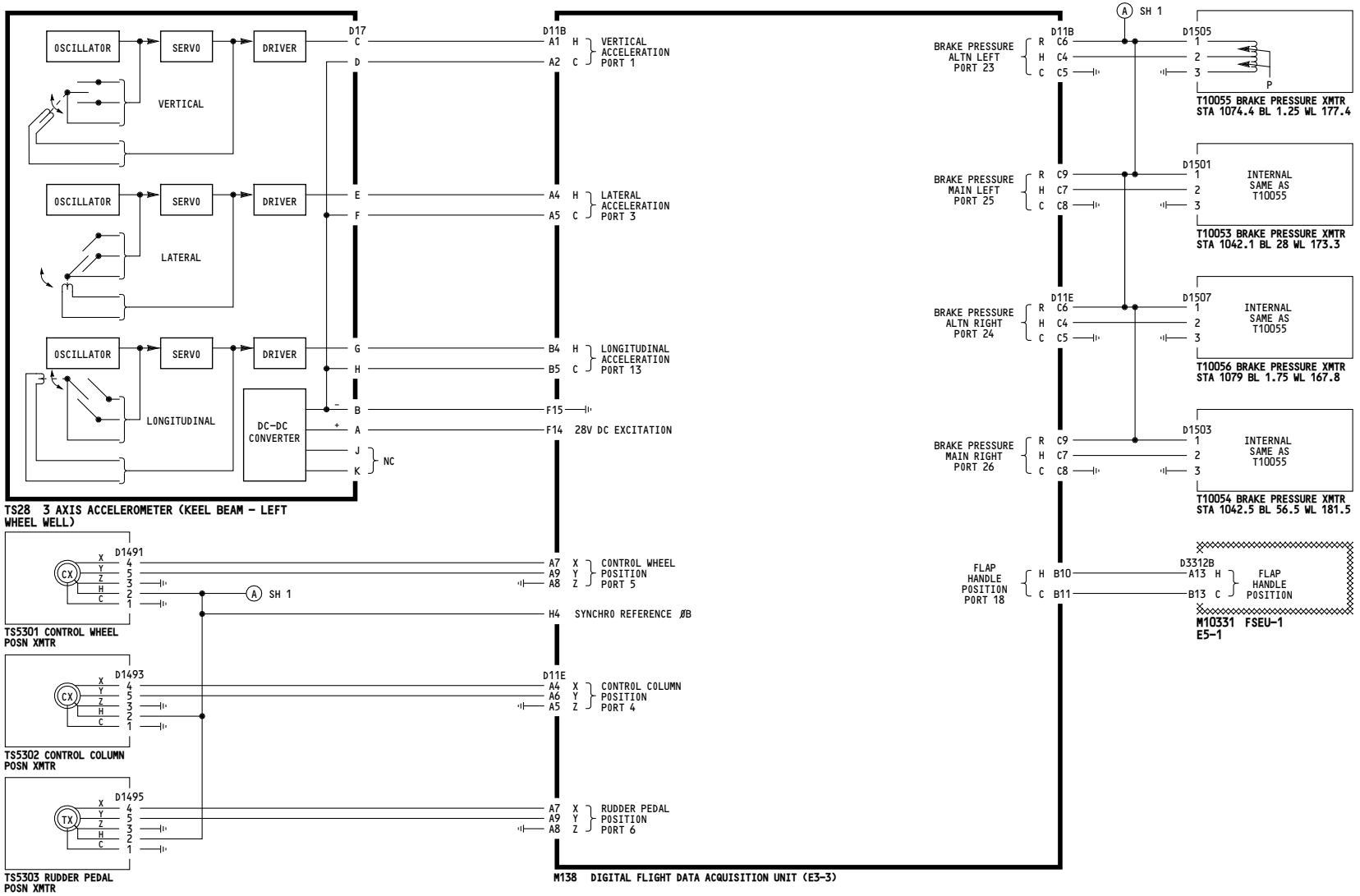
1 TAPE AND STOW NEAR D11A

010-011	**DIGITAL FLIGHT RECORDER SYSTEM**	Incorporates 31-0094
	D280N032S	

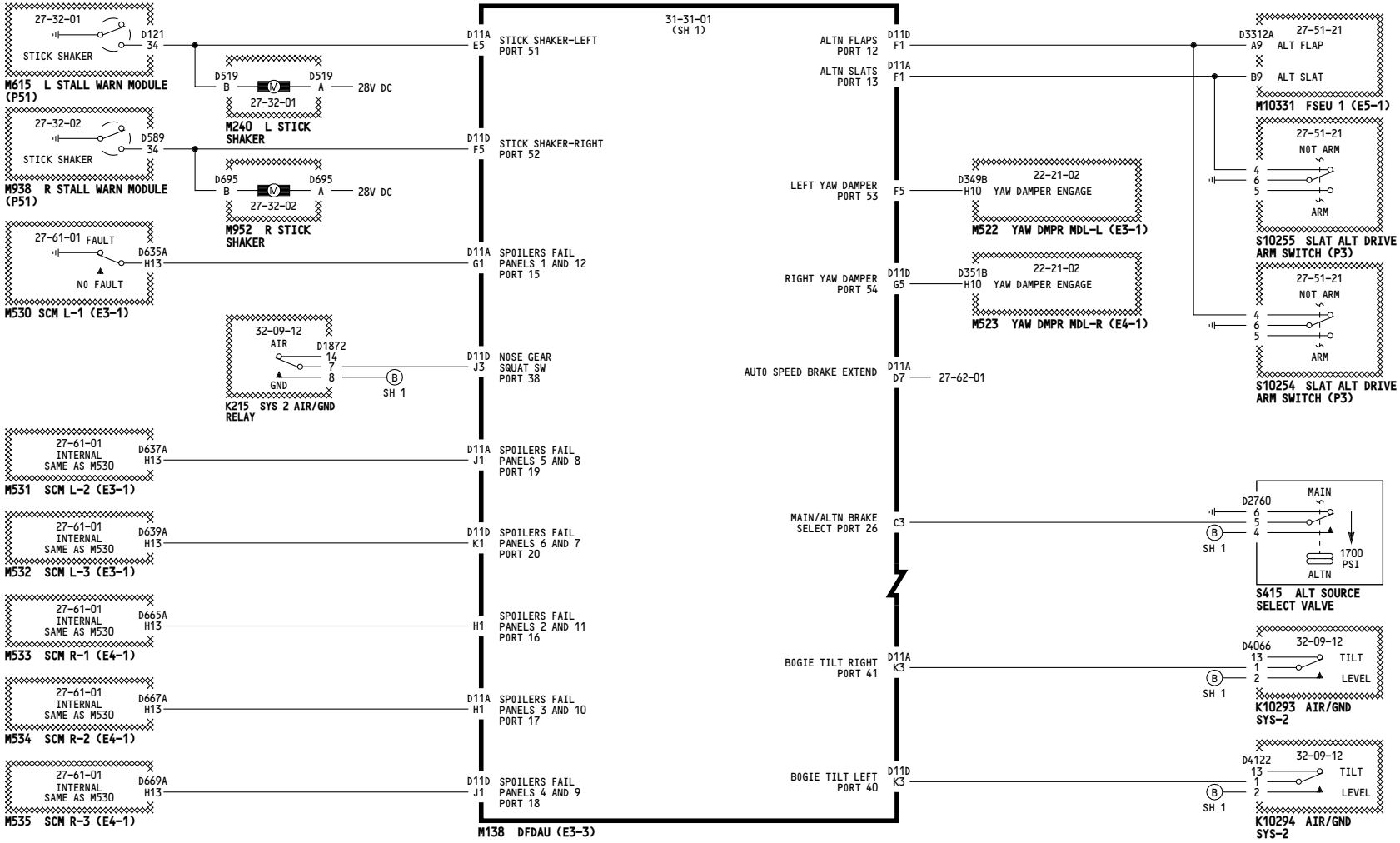


010-011	DIGITAL FLIGHT RECORDER SYSTEM	Incorporates 31-0094
	D280N032S	

5033

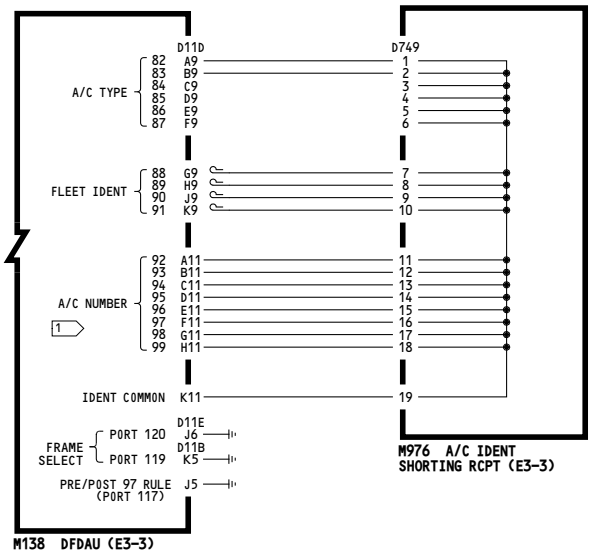


010-011	**DIGITAL FLIGHT RECORDER SYSTEM**
	D280N032S



010-011	DIGITAL FLIGHT RECORDER SYSTEM	Incorporates 31-0094
	D280N032S	

5098



A/C EFF	A/C NUMBER 1							
	99	98	97	96	95	94	93	92
NB330	0	0	0	0	1	0	1	0
NB331	0	0	0	0	1	0	1	1

1= CONNECT TO D749
0= CAP & STOW

	PORT	
	120	119
757-3	0	0
757-1 OR -4	0	1
757-5	1	0
757-2 OR -4	1	1

0 = GROUND
1 = NO CONNECTION

NOTES:
1 A/C NUMBERS

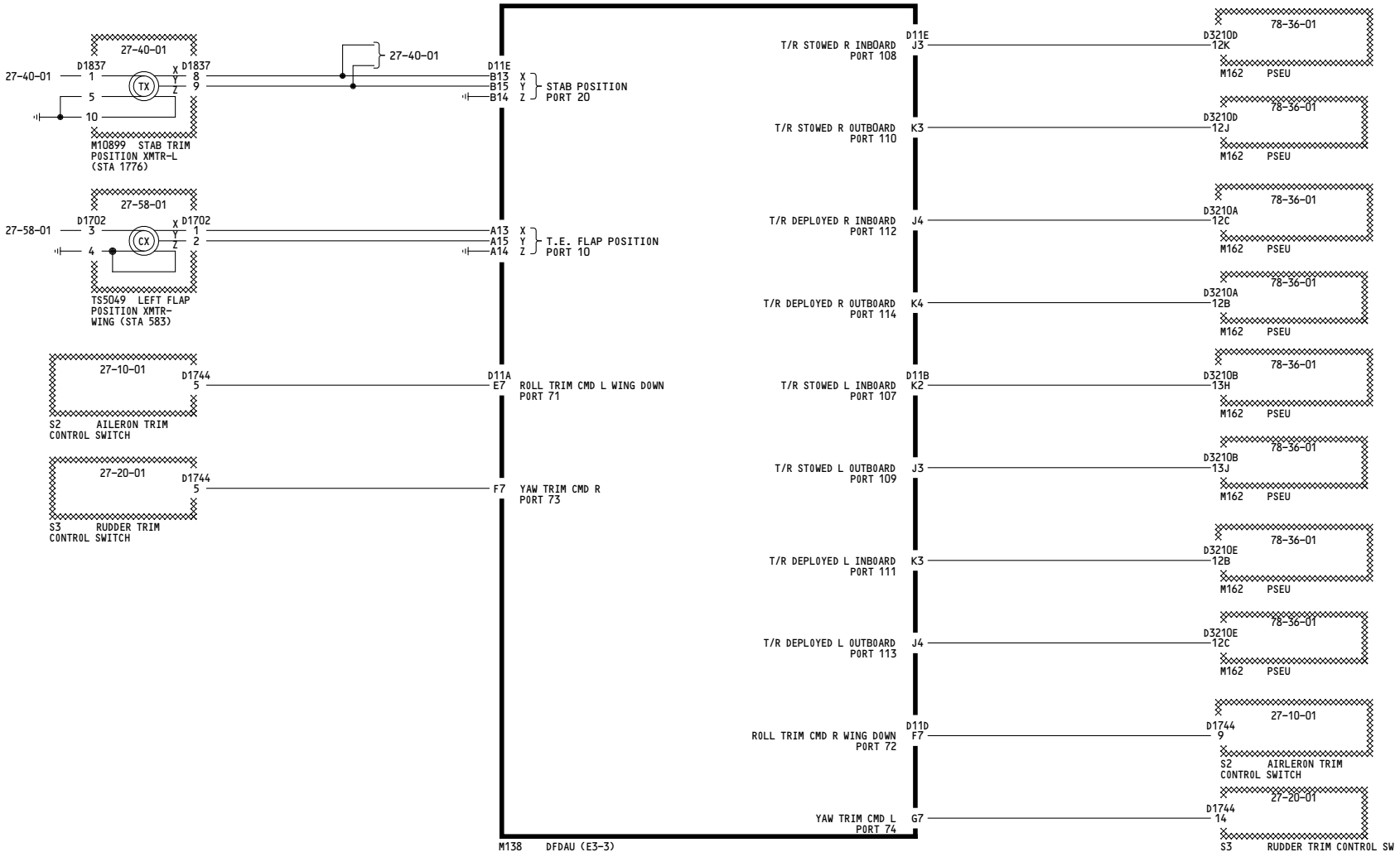
010-011

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

Incorporates
31-0094

-A
5031



010-011

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

Incorporates
31-0094

31-31-01

Page 101.2
Sheet 9
Jan 21/2005

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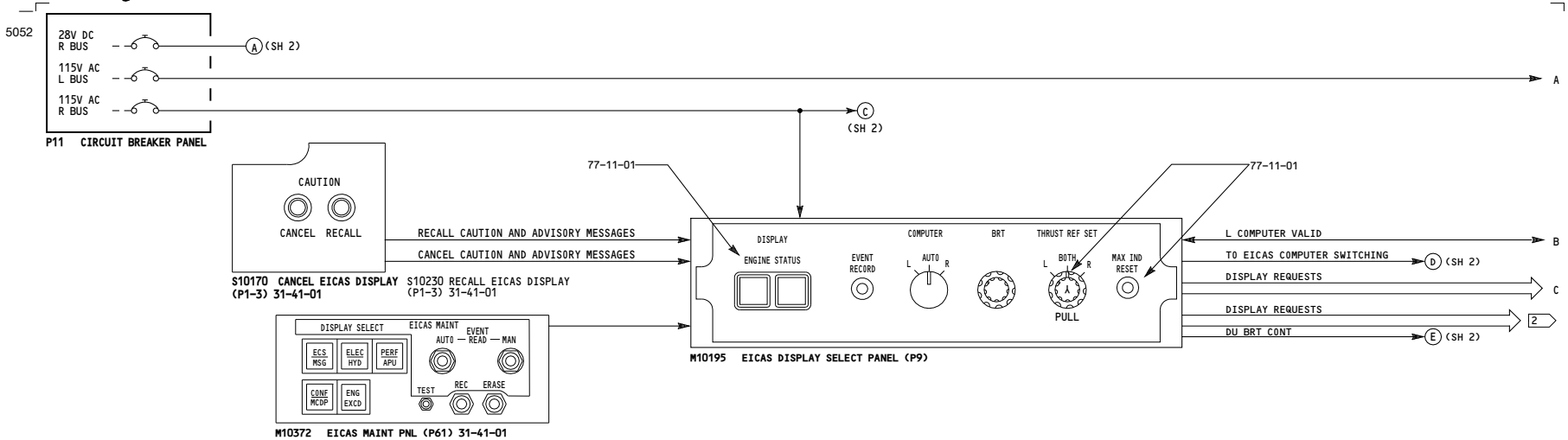
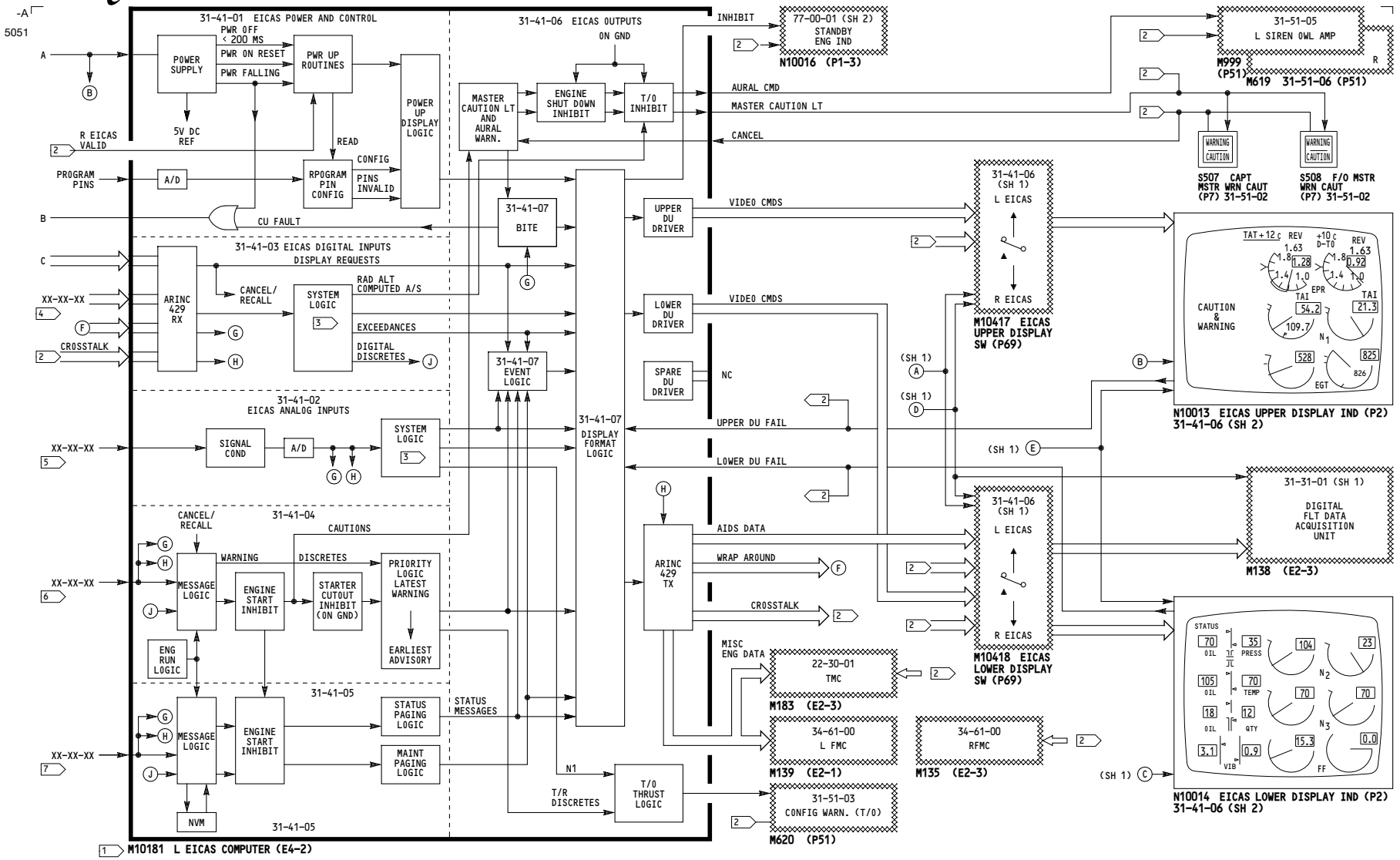


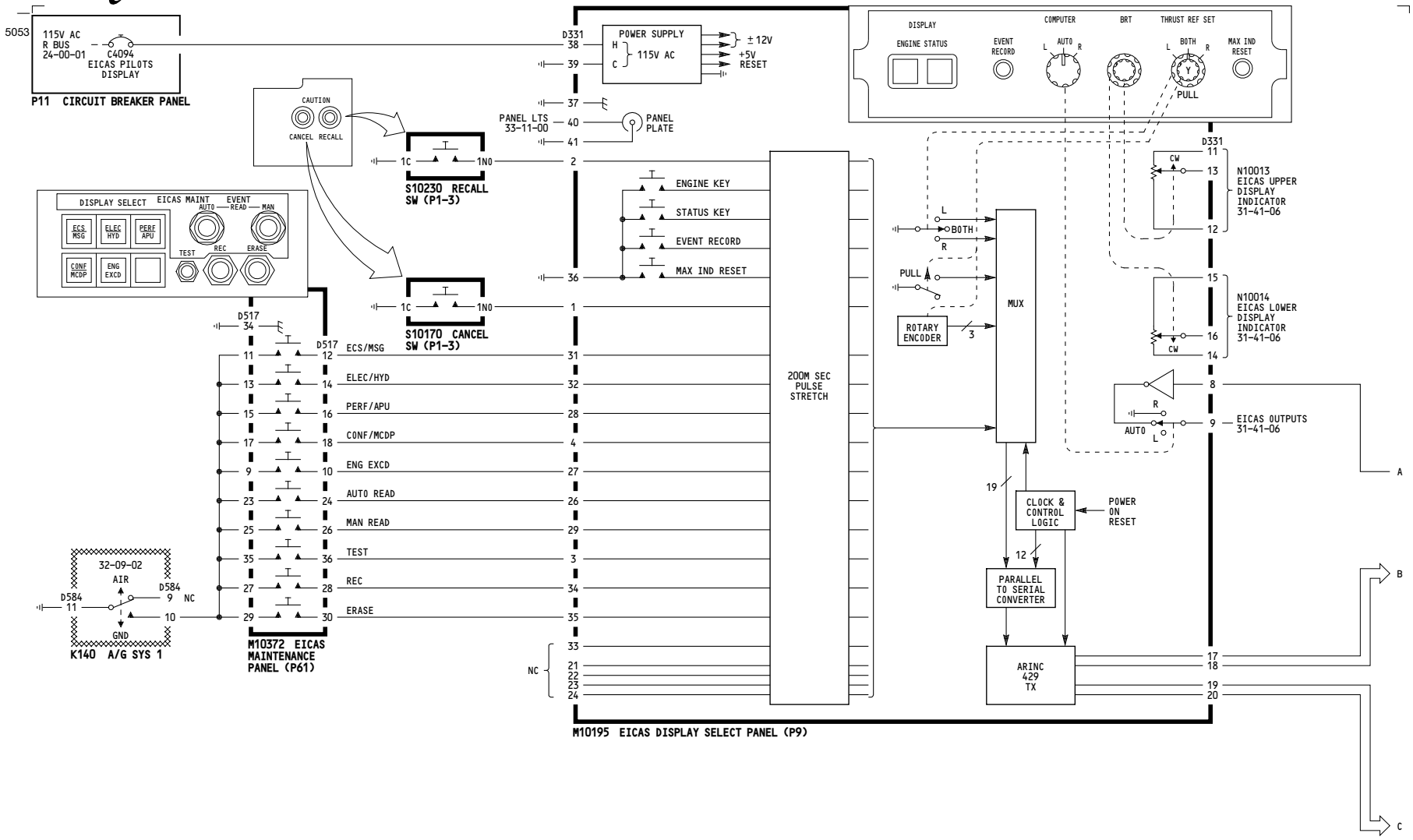
NOTES:

1. LEFT SHOWN, RIGHT SIMILAR
2. TO/FROM RIGHT SYSTEM
3. FOR DETAILS OF LOGIC SEE APPROPRIATE SYSTEM
4. FOR REFERENCES OF INPUTS SEE 31-41-03
5. FOR REFERENCES OF INPUTS SEE 31-41-02
6. FOR REFERENCES OF INPUTS SEE 31-41-04
7. FOR REFERENCES OF INPUTS SEE 31-41-05

ALL	EICAS COMPUTER
	D280N032S



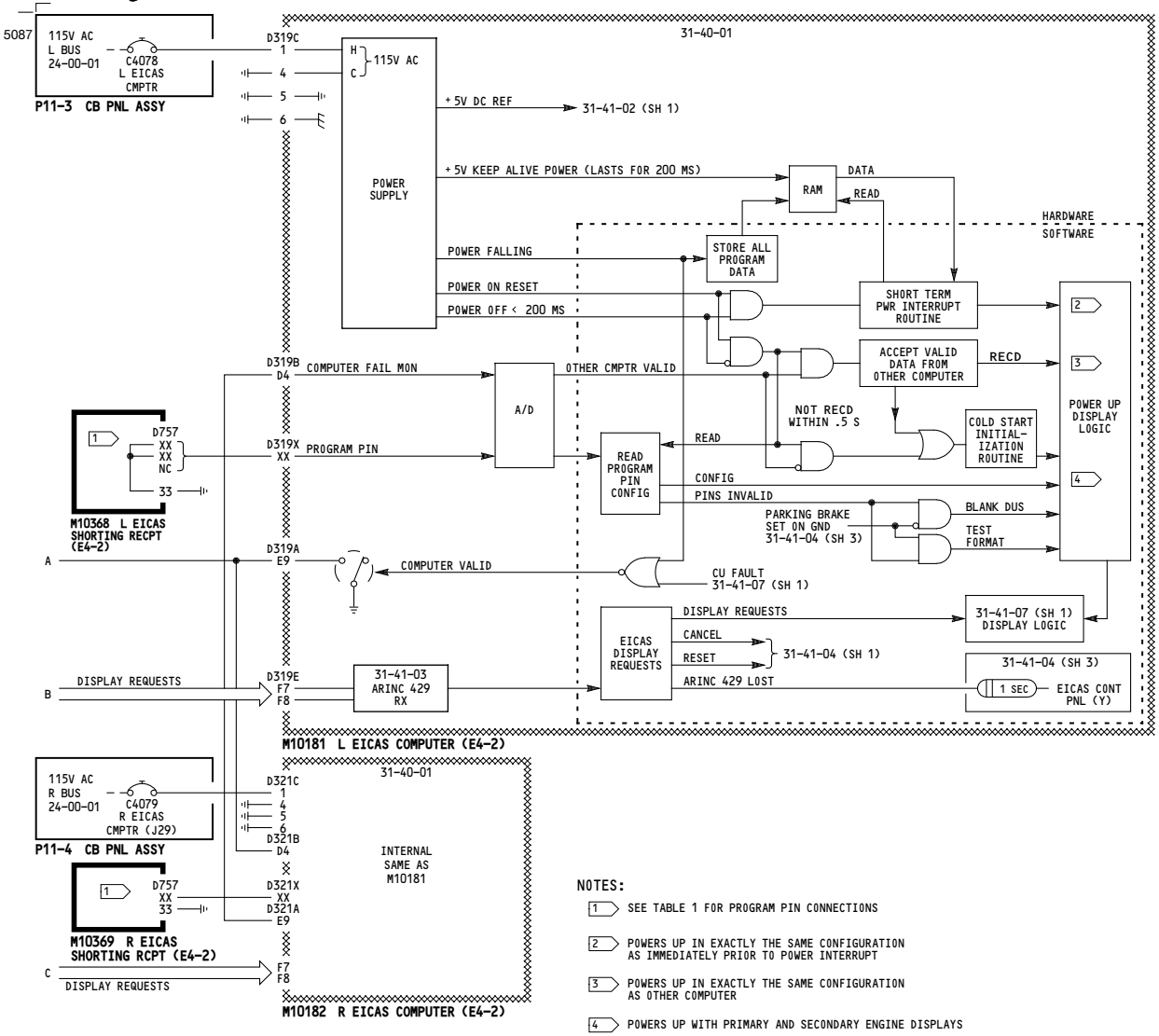
ALL	**EICAS COMPUTER**
	D280N032S



001-008, 010-099	**EICAS POWER AND CONTROL**
	D280N032S

31-41-01

Page 101
Sheet 1
Jan 21/2005



NOTES:

1. SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
2. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
3. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
4. POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

TABLE 1 EICAS PROGRAM PINS

PROG PIN NO.	PROGRAM WHEN GROUNDED	D319 D321 PIN	L EICAS WIRED TO D755 PIN NO.	R EICAS WIRED TO D757 PIN NO.	INPUT NO.
1	L ENG -535E4B	DE10	1	1	183
2		DE4	NC	NC	407
3		DE6	3	3	438
4		DE11	NC	NC	182
5	L INSTLN	DE3	5	NC	406
6	R ENG -535E4B	BF11	6	6	264
7		BF7	NC	NC	201
8		BF2	8	8	41
9		BF10	NC	NC	265
10	FUEL FLOW FULL TIME	BF6	10	10	237
11	767 INSTLN	FB7	NC	NC	473
12	AVM FILTER	FD8	12	12	504
13	METRIC UNITS	BC9	13	13	208
14	ECS IN US UNITS	BC6	NC	NC	48
15	PRECOOL OUTLET TEMP	BD3	15	15	272
16	CERT AGENCY FAA	BD11	NC	NC	432
17		BB6	17	17	176
18	MID CABIN ZONE	BE13	NC	NC	400
19	APU OIL QTY	EG1	NC	NC	28
20	NEW COOLING SYSTEM	DD8	20	20	252
21	ECS TEMP	AK1	21	21	130
22	BULK CARGO TEMP	AK9	NC	NC	354
23	HYD GEN	BK9	23	23	56
24	APU RPM STATUS	BK6	24	24	280
25	BRAKE TEMP	DK12	NC	NC	178
26	RAM OUTLET DOOR	DJ12	NC	NC	402
27	HYD PRESS. STATUS	EK1	27	27	39
28	3 CREW INSTLN	EJ8	NC	NC	263
29	FUEL PRESS.	FJ5	NC	NC	102
30	RR ENG	FH5	30	30	326
31		EJ4	NC	NC	213
32	PARITY (ODD)	EJ1	32	NC	53

L EICAS PROGRAM PIN CODE: 29133025

R EICAS PROGRAM PIN CODE: 21133024

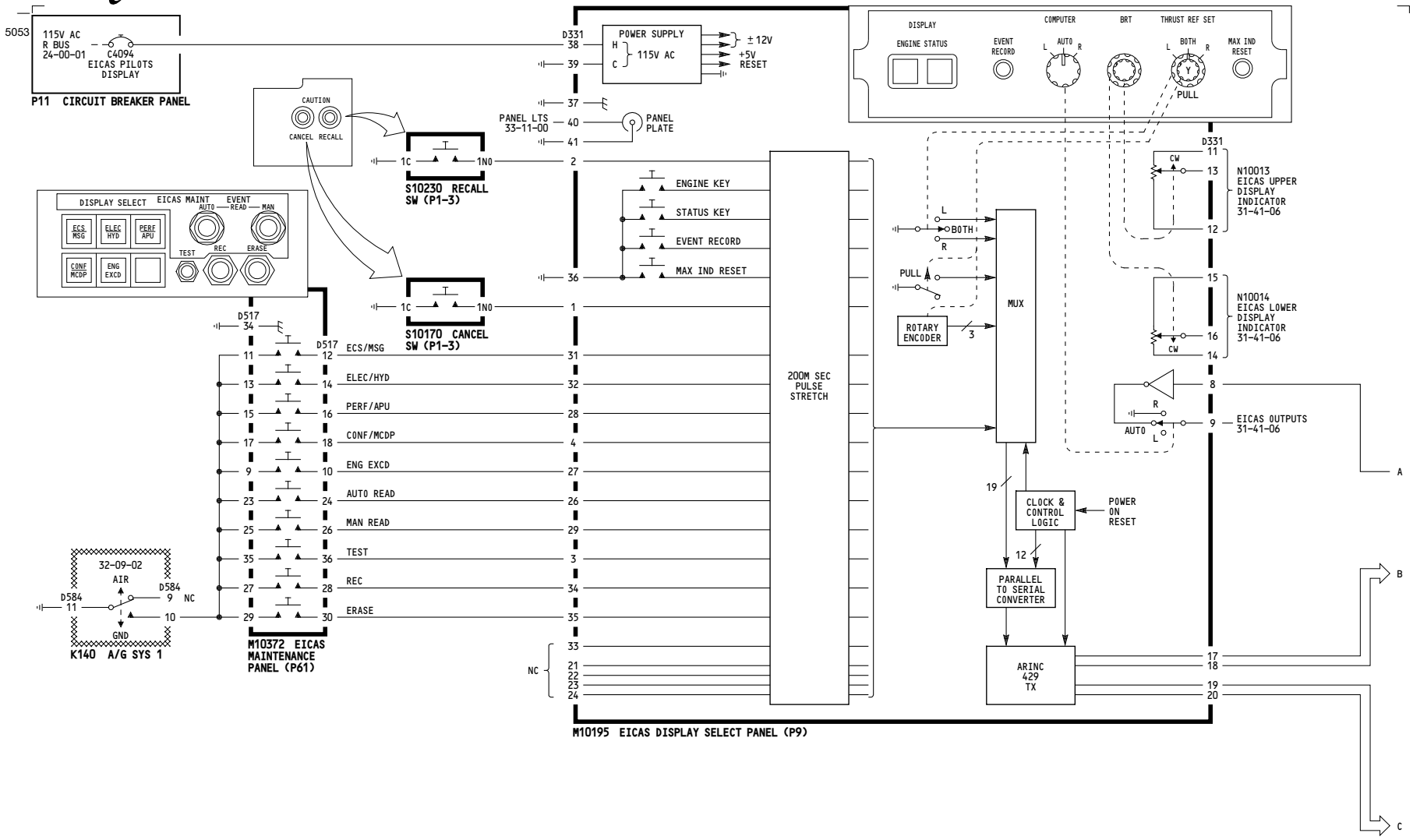
TABLE 2 EICAS SUPPLEMENTAL PROGRAM PINS

PROG PIN NO.	PROGRAM WHEN GROUNDED	D319 D321 PIN	L EICAS WIRED TO D755 PIN NO.	R EICAS WIRED TO D757 PIN NO.	INPUT NO.
1	NEW EGT CORRECTION	DB4	34	34	329
2	SPARE				
3	SPARE				
4	SPARE				
5	SPARE				
6	TCAS	AJ13	NC	NC	282
7	SPARE				
8	SPARE				
9	SPARE				
10	SPARE				
11	SPARE				
12	SPARE				
13	SPARE				
14	SPARE				
15	SPARE				
16	SPARE				

L AND R EICAS SUPPLEMENTAL PROGRAM PIN CODE: 8000

WIRING DIAGRAMS

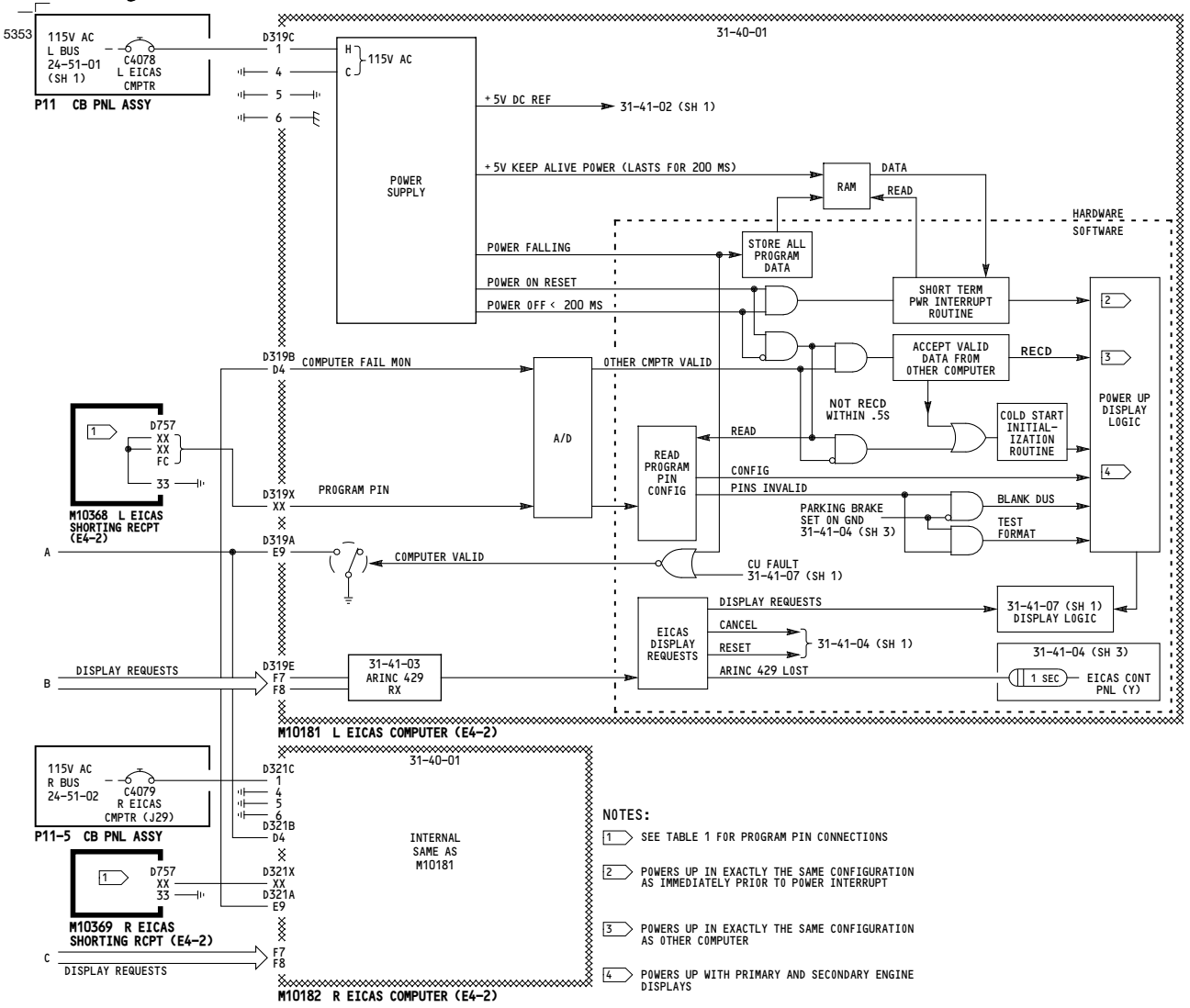
31-41-11
31-41-12
31-41-14
31-41-19
31-41-24



001-011	**EICAS POWER AND CONTROL**
	D280N032S

31-41-01

Page 101.1
Sheet 1
Jan 21/2005



NOTES:

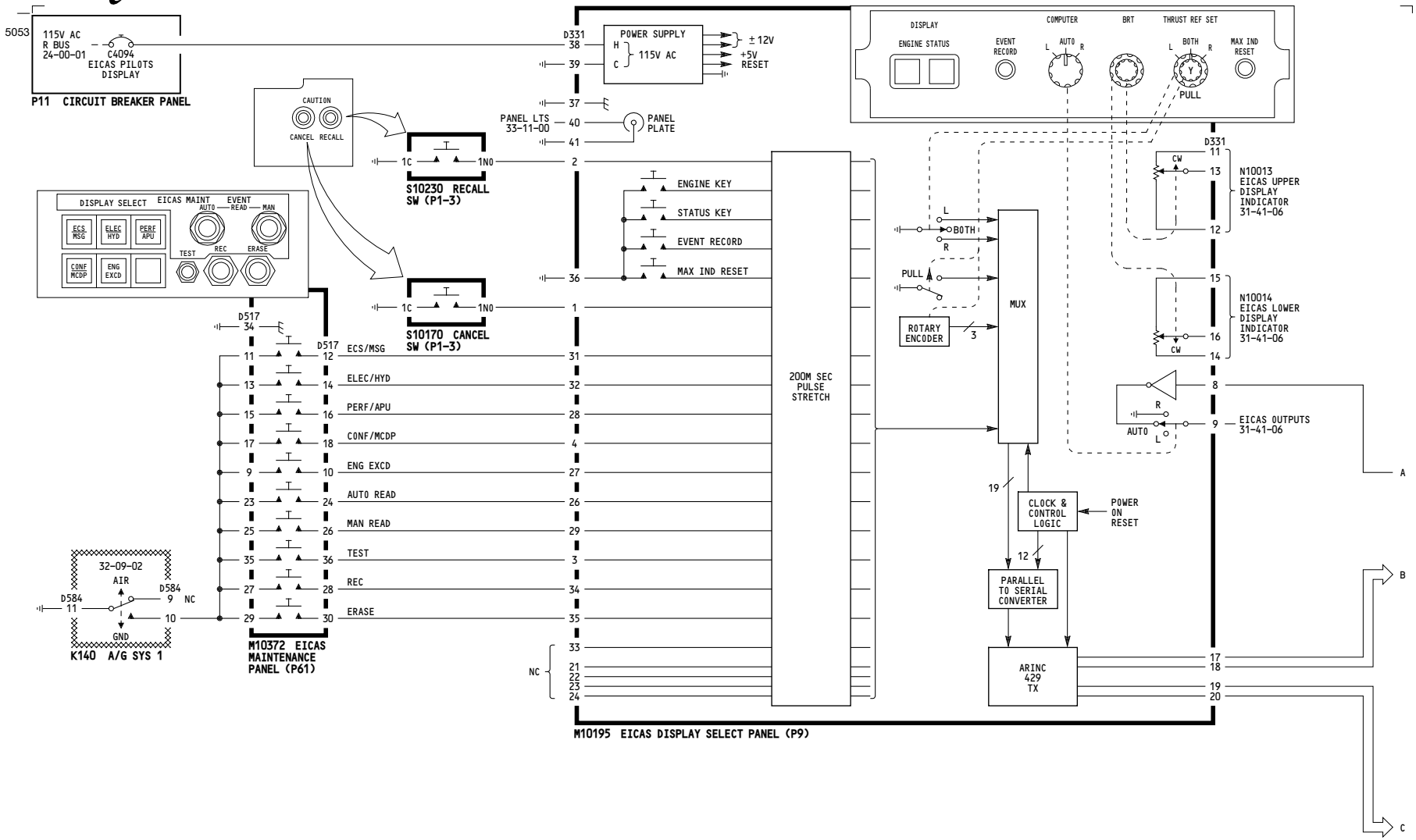
1. SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
2. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
3. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
4. POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

WIRING DIAGRAMS
31-41-11
31-41-12
31-41-14
31-41-19
31-41-24

TABLE 1 EICAS PROGRAM PINS

PROG PIN NO.	PROGRAM WHEN GROUNDED	D319 D321 PIN	L EICAS WIRED TO D755 PIN NO.	R EICAS WIRED TO D757 PIN NO.	INPUT NO.
1		DE10	1	1	183
2	L ENG -535E4	DE4	NC	NC	407
3		DE6	3	3	438
4	SCC INSTALLED	DE11	NC	NC	182
5	CU INSTALLATION= LEFT	DE3	5	NC	406
6		BF11	6	6	264
7	R ENG -535E4	BF7	NC	NC	201
8		BF2	8	8	41
9	FREIGHTER	BF10	NC	NC	265
10	SPARE	BF6	NC	NC	237
11	AIRFRAME TYPE	FB7	NC	NC	473
12	SPARE	FD8	NC	NC	504
13		BC9	NC	NC	208
14	RR ENG	FH5	14	14	326
15		EJ4	NC	NC	213
16	PARITY (ODD)	EJ1	16	NC	53

L EICAS PROGRAM PIN CODE: AD05
R EICAS PROGRAM PIN CODE: A504



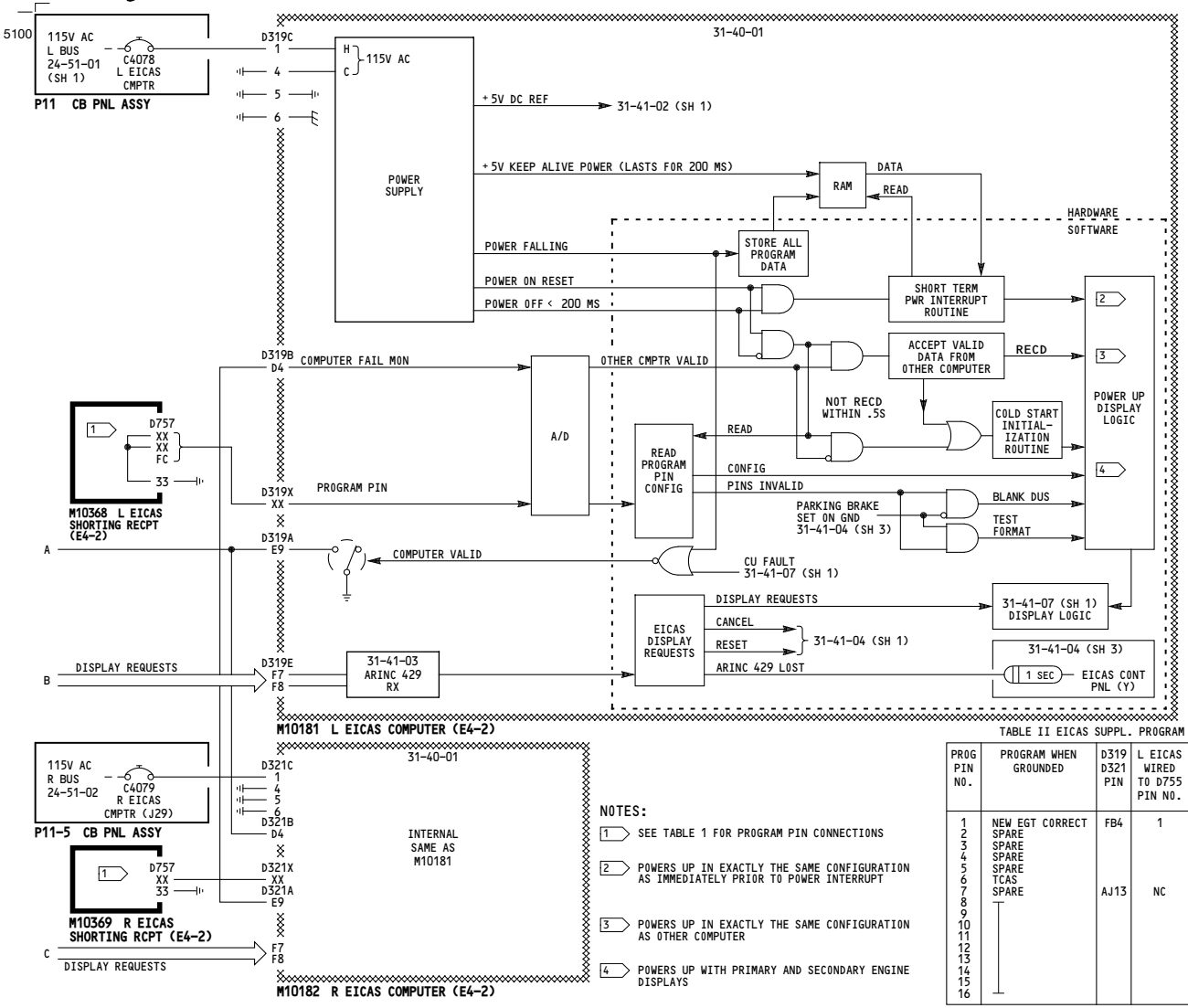
009

EICAS POWER AND CONTROL

D280N032S

31-41-01

Page 102
Sheet 1
Jan 21/2005



NOTES:

1. SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
2. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
3. POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
4. POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

WIRING DIAGRAMS
31-41-11
31-41-12
31-41-14
31-41-19
31-41-24

TABLE 1 EICAS PROGRAM PINS

PROG PIN NO.	PROGRAM WHEN GROUNDED	D319 D321 PIN	L EICAS WIRED TO D755 PIN NO.	R EICAS WIRED TO D757 PIN NO.	INPUT NO.
1	L ENG -535E4	DE10	1	1	183
2		DE4	NC	NC	407
3		DE6	3	3	438
4		DE11	NC	NC	182
5	L INSTL	DE3	5	NC	406
6	R ENG -535E4	BF11	6	6	264
7		BF7	NC	NC	201
8		BF2	8	8	41
9		BF10	NC	NC	265
10	FUEL FLOW FULL TIME	BF6	10	10	237
11	767 INSTL	FB7	NC	NC	473
12	AVM FILTER	FD8	12	12	504
13	METRIC UNITS	BC9	13	13	208
14	ECS IN US UNITS	BC6	NC	NC	48
15	PRECOOL OUTLET TEMP	BD3	15	15	272
16	CERT AGENCY	BD11			432
17	CAA	BB6	17	17	176
18	MID CABIN ZONE	BE13	NC	NC	400
19	APU OIL QTY	EG1	NC	NC	28
20	NEW COOLING SYS	DD8	20	20	252
21	ECS TEMP	AK1	21	21	130
22	BULK CARGO TEMP	AK9	NC	NC	354
23	HYD GEN	BK9	23	23	56
24	APU RPM STATUS	BK6	24	24	280
25	BRAKE TEMP	DK12	NC	NC	178
26	RAM OUTLET DOOR	DJ12	NC	NC	402
27	HYD PRESS. STATUS	EK1	27	27	39
28	3 CREW INSTL	EJ8	NC	NC	263
29	FUEL PRESS.	FJ5	NC	NC	102
30	RR ENG	FH5	30	30	326
31		EJ4	NC	NC	213
32	PARITY (ODD)	EJ1	32	NC	53

L EICAS PROGRAM PIN CODE: AD5A9B25
R EICAS PROGRAM PIN CODE: A55A9B24

TABLE II EICAS SUPPL. PROGRAM PINS

PROG PIN NO.	PROGRAM WHEN GROUNDED	D319 D321 PIN	L EICAS WIRED TO D755 PIN NO.	R EICAS WIRED TO D757 PIN NO.	INPUT NO.
1	NEW EGT CORRECT	FB4	1	1	329
2	SPARE				
3	SPARE				
4	SPARE				
5	SPARE				
6	TCAS				
7	SPARE	AJ13	NC	NC	282
8					
9					
10					
11					
12					
13					
14					
15					
16					

EICAS SUPPL. PROGRAM PIN CODE: 8000

009

EICAS POWER AND CONTROL

D280N032S

31-41-01

Page 102
Sheet 2
Jan 21/2005

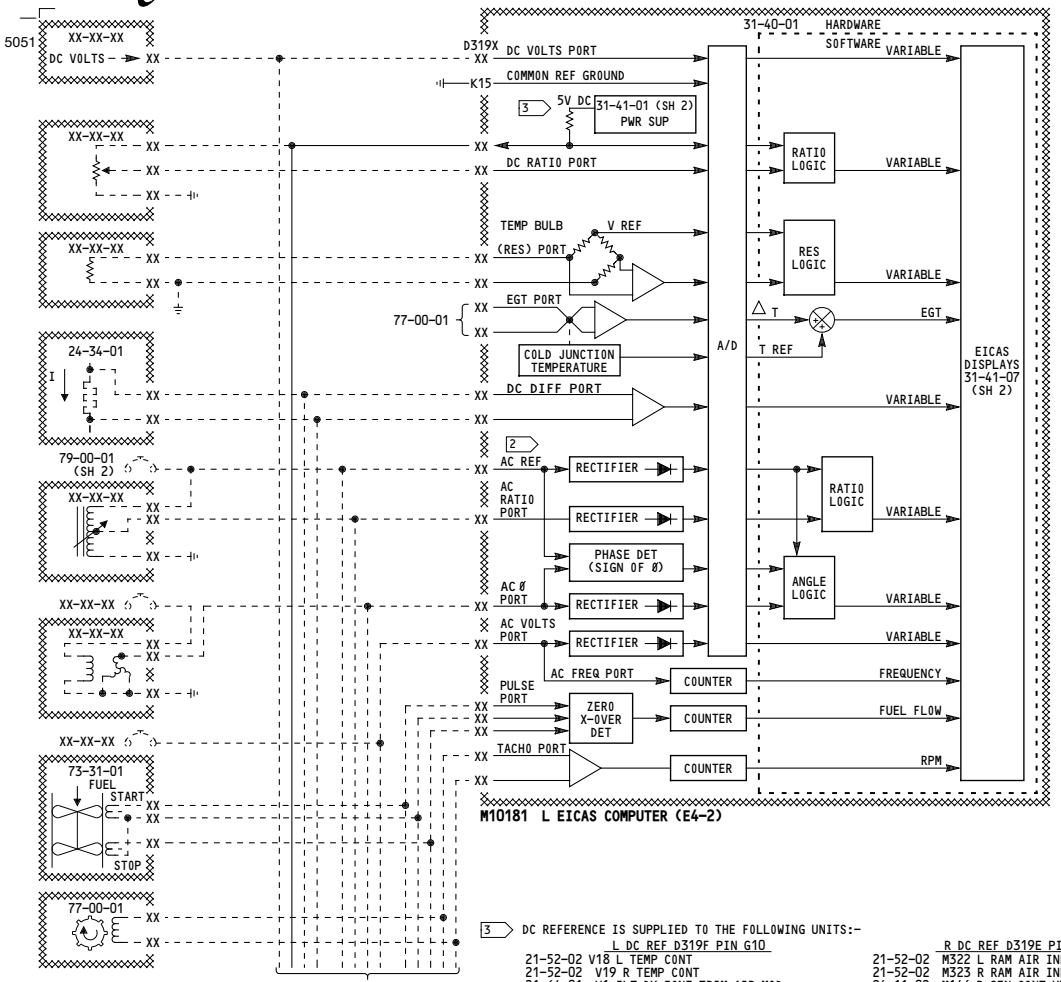


TABLE 1 ANALOG INPUTS [1]

SCHEMATIC REFERENCE	D319 PIN	D321	DESCRIPTION	PORT TYPE
21-52-01	F-A7 F-A8	— —	L PACK COMPRESSOR OUTLET TEMP	TEMP BULB
21-52-01	A-F6 A-F7	— —	L PACK OUTLET TEMPERATURE	TEMP BULB
21-52-01	D-D13 D-D14	— —	L PACK PRIMARY HX OUTLET TEMP	TEMP BULB
21-52-01	A-E15 A-D15	— —	L PACK PRIMARY HX OUTLET TEMP	TEMP BULB
21-52-01	A-F14 A-E14	— —	L PACK SECONDARY HX OUTLET TEMP	TEMP BULB
21-52-01	F-C1 F-D1	— —	L PACK TURBINE INLET TEMP	TEMP BULB
21-52-01	— —	F-A7 F-A8	R PACK COMPRESSOR OUTLET TEMP	TEMP BULB
21-52-01	— —	A-F6 A-F7	R PACK OUTLET TEMPERATURE	TEMP BULB
21-52-01	— —	D-D13 D-D14	R PACK PRIMARY HX INLET TEMP	TEMP BULB
21-52-01	— —	A-E15 A-D15	R PACK PRIMARY H OUTLET TEMP	TEMP BULB
21-52-01	— —	A-F14 A-E14	R PACK SECONDARY HX OUTLET TEMP	TEMP BULB
21-52-01	— —	F-C1 F-D1	R PACK TURBINE INLET TEMP	TEMP BULB
21-52-02	E-H13	—	L PACK TEMP VALVE	DC RATIO
21-52-02	E-J12	—	L RAM AIR INLET	DC RATIO
21-52-02	—	E-H13	R PACK TEMP VALVE	DC RATIO
21-52-02	—	E-J12	R RAM AIR INLET	DC RATIO
21-52-03	E-E2	—	L PACK AIR FLOW	DC VOLTS
21-52-03	—	E-E2	R RAM AIR FLOW	DC VOLTS
21-64-01	F-B9	—	FLT DK TRIM VALVE	DC RATIO
21-66-01	— —	F-B9	AFT CABIN TRIM VALVE	DC RATIO
21-65-02	D-D11 D-D12	— —	FLT DK DUCT TEMP	TEMP BULB
21-65-02	— —	D-D11 D-D12	AFT DUCT TEMP	TEMP BULB

NOTES:

[1] INPUTS NOT CONNECTED TO BOTH EICAS COMPUTERS ARE DISTRIBUTED VIA THE CROSSTALK BUS

[2] L AC REF IS USED IN THE CALCULATION OF: -L INNER AILERON, L OUTER AILERON & L ELEVATOR POSITION; L & C HYD PRESS. & L ENG OIL PRESS.
R AC REF IS USED IN THE CALCULATION OF: -R INNER AILERON, R OUTER AILERON & R ELEVATOR POSITION R HYD PRESS. & R ENG OIL PRESS.

[3] DC REFERENCE IS SUPPLIED TO THE FOLLOWING UNITS:-

L DC REF D319F PIN G10

21-52-02 V18 L TEMP CONT
21-52-02 V19 R TEMP CONT
21-64-01 V1 FLT DK ZONE TRIM AIR MOD
21-64-01 V2 FWD CABIN ZONE TRIM AIR MOD
21-64-01 V3 AFT CABIN ZONE TRIM AIR MOD
24-11-01 M144 L GEN CONT UNIT (VIA R10111)
79-31-01 TS5019 ENG OIL QTY XMTR (L ENG)

R DC REF D319E PIN E4

21-52-02 M322 L RAM AIR INLET DOOR
21-52-02 M323 R RAM AIR INLET DOOR
24-11-02 M146 R GEN CONT UNIT (VIA R11012)
49-27-01 TS5154 OIL LEVER SENSOR (APU)
79-00-01 (SH 1) TS122 ENG OIL QTY XMTR (R ENG)

[4] SEE EICAS OUTPUTS 31-41-06 (SH 1)

[5] SEE 31-41-05 (SH 2)

ALL

EICAS ANALOG INPUTS

D280N032S

5054

SCHEMATIC REFERENCE	D319 PIN	D321 PIN	DESCRIPTION	PORT TYPE
21-65-02	—— ——	D-D9 D-D10	FWD DUCT TEMP	TEMP BULB
24-11-01	E-E7	E-E7	IDG RISE/TEMP-L	DC RATIO
24-11-02	E-E8	E-E8	IDG RISE/TEMP-R	DC RATIO
24-28-01	E-G8	E-G8	APU BUS AC FREQ APU BUS AC VOLTS	AC VOLTS/FREQ
24-28-01	E-E11	E-E11	APU LOAD	DC VOLTS
24-28-01	E-G9	E-G9	BUS AC FREQ-L BUS AC VOLTS-L	AC VOLTS/FREQ
24-28-01	E-G10	E-G10	BUS AC FREQ-R BUS AC VOLTS-R	AC VOLTS/FREQ
24-28-01	E-E9	E-E9	GEN LOAD-L	DC VOLTS
24-28-01	E-E10	E-E10	GEN LOAD-R	DC VOLTS
24-28-01	E-G12	E-G12	GPU AC FREQ GPU AC VOLTS	AC VOLTS/FREQ
24-28-01	E-E12	E-E12	GPU LOAD	DC VOLTS
24-31-02	F-B1 F-B2	F-B1 F-B2	APU BAT CURRENT	DC DIFF
24-31-02	F-A3	F-A3	APU BAT VOLTS	DC VOLTS
24-31-01	B-D6 B-D7	B-D6 B-D7	MAIN BAT CURRENT	DC DIFF
24-32-01	B-D9 B-D10	B-D9 B-D10	TRU CURRENT-L	DC DIFF
24-32-01	B-D12 B-D13	B-D12 B-D13	TRU CURRENT-R	DC DIFF
24-32-01	E-G14	E-G14	TRU VOLTS-L	DC VOLTS
24-32-01	B-E1	B-E1	TRU VOLTS-R	DC VOLTS
24-33-01	EG-11	EG-11	INVERTER AC FREQ INVERTER AC VOLTS	AC VOLTS/FREQ
24-33-01	FA-4	FA-4	MAIN BAT VOLTS	DC VOLTS
27-10-01	E-H4	E-H4	AILERON-L	AC Ø
27-10-01	E-H5	E-H5	AILERON-R	AC Ø
27-10-01	E-H10	E-H10	RUDDER POS	AC Ø
27-10-01	E-H6	E-H6	ELEV POS-L	AC Ø
27-10-01	E-H7	E-H7	ELEV POS-R	AC Ø
29-00-04	B-H4	B-H4	HYD PRESSURE-C	AC RATIO
29-00-02	B-H3	B-H3	HYD PRESSURE-L	AC RATIO
29-00-03	D-K14	D-K14	HYD PRESSURE-R	AC RATIO
29-00-04	D-D4 D-D5	—— ——	C HYD RSVR TEMP	TEMP BULB
29-00-02	B-J4 B-J5	——	L HYD RSVR TEMP	TEMP BULB
29-00-03	——	B-J4 B-J5	R HYD RSVR TEMP	TEMP BULB
29-00-01	A-F4	A-F4	HYD QUANT-C	DC VOLTS
29-00-01	A-F3	A-F3	HYD QUANT-L	DC VOLTS
29-00-01	A-F5	A-F5	HYD QUANT-R	DC VOLTS

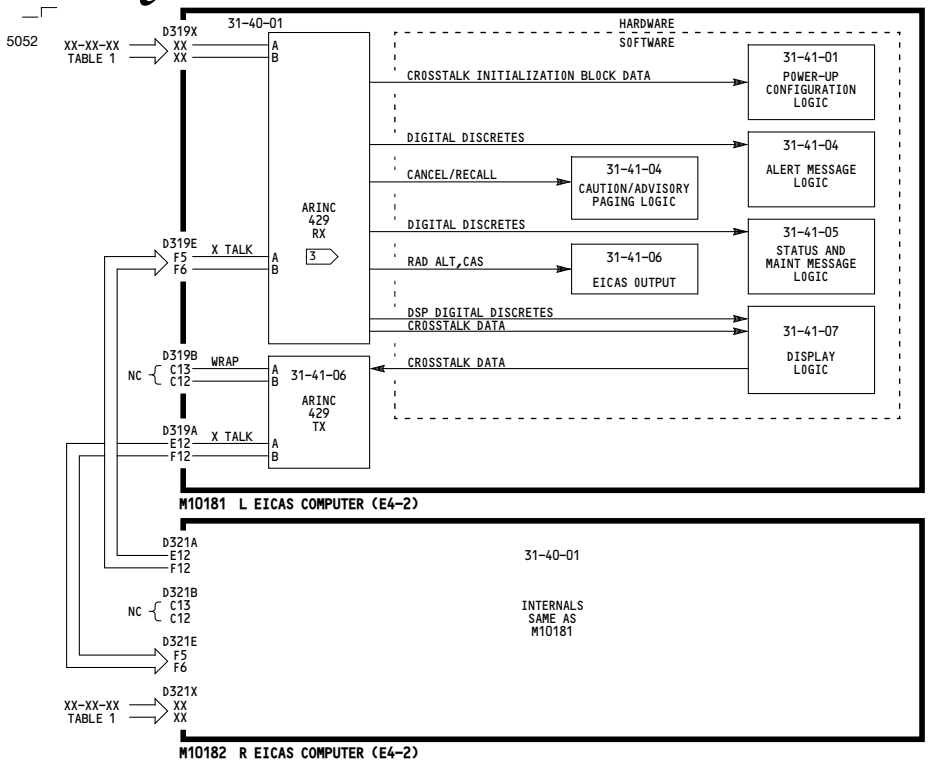
SCHEMATIC REFERENCE	D319 PIN	D321 PIN	DESCRIPTION	PORT TYPE
35-11-01	A-F9	A-F9	CREW OXYGEN PRESS	DC VOLTS
36-21-01	D-H13	——	L BLEED DUCT PRESS	DC VOLTS
36-21-02	——	D-H13	R BLEED DUCT PRESS	DC VOLTS
36-22-02	D-H14 D-H15	——	L PRECOOL OUT TEMP	TEMP BULB
36-22-02	——	D-H14 D-H15	R PRECOOL OUT TEMP	TEMP BULB
49-70-01	F-A5	F-A5	APU EGT	DC VOLTS
49-70-01	FF-A6	FF-A6	APU RPM	DC VOLTS
49-70-01	F-F10	F-F10	APU OIL LEVEL	DC RATIO
73-31-01	A-J8 A-J7 A-J9	A-J8 A-J7 A-J9	ENG FUEL FLOW-L	PULSE
73-31-01	D-J1 D-H1 D-K1	D-J1 D-H1 D-K1	ENG FUEL FLOW-R	PULSE
77-12-01	B-D2 B-D1	B-D2 B-D1	ENG N1 L	TACHO
77-12-01	E-A14 E-B14	E-A14 E-B14	ENG N1 R	TACHO
77-12-02	A-J6 A-J5	A-J6 A-J5	ENG N2 L	TACHO
77-12-02	D-J8 D-J9	D-J8 D-J9	ENG N2 R	TACHO
77-12-03	A-F11 A-D12	A-F11 A-D12	ENG N3 L	TACHO
77-12-03	D-A7 D-A8	D-A7 D-A8	ENG N3 R	TACHO
77-21-01	B-B15 B-A15	9	ENG EGT L	THERMOCOUPLE
77-21-01	9	E-B15 E-A15	ENG EGT R	THERMOCOUPLE
79-31-01	B-J8	B-J8	ENG OIL QTY L	DC VOLTS
79-31-01	E-G13	E-G13	ENG OIL QTY R	DC VOLTS
79-32-01	B-G1	B-G1	AC REFERENCE L	AC REF
79-32-01	D-F15	D-F15	AC REFERENCE R	AC REF
79-32-01	B-H2	B-H2	ENG OIL PR-L	AC RATIO
79-32-01	E-H11	E-H11	ENG OIL PR-R	AC RATIO
79-34-01	A-H11 A-H10	A-H11 A-H10	ENG OIL TEMP L	TEMP BULB
79-34-01	D-H9 D-H10	D-H9 D-H10	ENG OIL TEMP R	TEMP BULB
	A-K15 B-K15 C-K15 D-K15	A-K15 B-K15 C-K15 D-K15	COMMON REFERENCE GROUND	

NOTES: 9 LEFT COMPUTER HAS R DC REF CONNECTED TO E-B15, PIN E-A15 GROUNDED. RIGHT COMPUTER HAS L DC REF TO B-B15, PIN B-A15 GROUNDED.

ALL

EICAS ANALOG INPUTS

D280N032S



NOTES:

1. USED FOR CROSS REFERENCE BETWEEN EICAS SCHEMATICS: DV = DIGITAL VARIABLE, DD = DIGITAL DISCRETE

2. ASCII ENCODED BLOCK DATA TRANSFER PER ARINC 429

3. MINIMUM DETECTION LEVEL OF ± 6.5V DC TO ENSURE DETECTION OF AN OPEN CIRCUIT OR A SHORT CIRCUIT TO GROUND ON EITHER A OR B LINE. THIS DIFFERS FROM THE REQUIREMENTS OF ARINC 429 WHICH RECOMMENDS A MINIMUM DETECTION LEVEL OF ± 5V DC. EICAS REQUIRES BOTH A AND B LINES TO RECEIVE DATA.

ALL	**EICAS DIGITAL INPUTS**
	D280N032S

BUS				SIGNALS			
SCHEMATIC REFERENCE	BUS NAME	D319X A/B	D321X A/B	DESCRIPTION	MNEMONIC [1]	HEX LABEL	SDI 9.10
22-32-02	TMC "D" BUS	E-B6 E-B7	E-B6 E-B7	DISCRETES NO. 2 DISCRETES NO. 3 EPR BUG DRIVE - L EPR BUG DRIVE - R MAX EPR LIMIT TOTAL AIR TEMP TEMP SELECTED	DD351-357 DD360-374 DV403 DV404 DV405 DV412 DV406	146 270 341 341 303 211 213	00 00 10 01 00 00 00
22-41-02	MCDP "A" BUS (HIGH SPEED)	E-B4 E-B5	E-B4 E-B5	DISPLAY DATA [2]		357	
28-41-01	FUEL QTY "A" BUS	E-F1 E-F2	E-F1 E-F2	L TANK FUEL QTY R TANK FUEL QTY C TANK FUEL QTY	DV601 DD311-316 DV602 DD317-322 DV603 DD323-328	256 256 256	10 01 11
31-41-01	EICAS DSP "A" BUS	E-F7 E-F8	E-F7 E-F8	DISCRETES NO. 1 DISCRETES NO. 2	DD154-191	270 271	00 00
34-12-01	L ADC "A" BUS	E-B10 E-B11		COMPUTED AIRSPEED TOTAL AIR TEMP BARO ALTITUDE MACH	DV001 DV002 DV003 DV004	206 211 203 205	10 10 10 10
34-12-02	R ADC "A" BUS		E-B10 E-B11	COMPUTED AIRSPEED TOTAL AIR TEMP BARO ALTITUDE MACH	DV001 DV002 DV003 DV004	206 211 203 205	01 01 01 01
34-25-01	EFIS COMP "A" BUS	E-F11 E-F12	E-F11 E-F12	COMP FLAG WORD COMP WARN WORD	DD101-114 DD115-121	270 271	00 00
34-33-01	L RAD ALT "A" BUS	E-F3 E-F4		RADIO HEIGHT	DV351	164	10
34-33-02	R RAD ALT "A" BUS		E-F3 E-F4	RADIO HEIGHT	DV351	164	01
34-61-03	L FMC "C" BUS	E-B8 E-B9		DISCRETES NO. 1 DISCRETES NO. 2 EPR TARGET GROSS WEIGHT	DD211 DD201-210 DV301 DV303	270 271 341 075	00 10 00 00
34-61-08	R FMC "C" BUS		E-B8 E-B9	DISCRETES NO. 1 DISCRETES NO. 2 EPR TARGET GROSS WEIGHT	DD211 DD201-210 DV301 DV303	270 271 341 075	00 01 00 00
77-11-01	L EPR TX "A" BUS	A-J4 A-J3	A-J4 A-J3	EPR ACTUAL - L	DV151	340	00
77-11-01	R EPR TX "A" BUS	D-J4 D-J5	D-J4 D-J5	EPR ACTUAL - R	DV201	340	00
77-11-01	L EEC "A" BUS	A-J1 A-J2	A-J1 A-J2	EPR COMMAND EPR MAXIMUM MAINTENANCE DISC	DV051 DV052 DD001-009	341 342 270	00 00 00
77-11-01	R EEC "A" BUS	D-J6 D-J7	D-J6 D-J7	EPR COMMAND EPR MAXIMUM MAINTENANCE DISC	DV101 DV102 DD051-059	341 342 270	00 00 00
77-31-01	L AVM "A" BUS	E-B2 E-B3	E-B2 E-B3	BROADBAND VIB ENGINE VIBRATION FILTER 1 VIB (N1) FILTER 2 BIB (N2) FILTER 3 VIB (N3) STATUS WORD	DV259 DV260 DV261 DV262 DV263 DD259-263	357 353 354 355 356 270	10 10 10 10 10 00
77-31-01	R AVM "A" BUS	E-F9 E-F10	E-F9 E-F10	BROADBAND VIB ENGINE VIBRATION FILTER 1 VIB (N1) FILTER 2 BIB (N2) FILTER 3 VIB (N3) STATUS WORD	DV264 DV265 DV266 DV267 DV268 DD264-268	357 353 354 355 356 270	01 01 01 01 01 00

TABLE 1 DIGITAL INPUTS

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5054

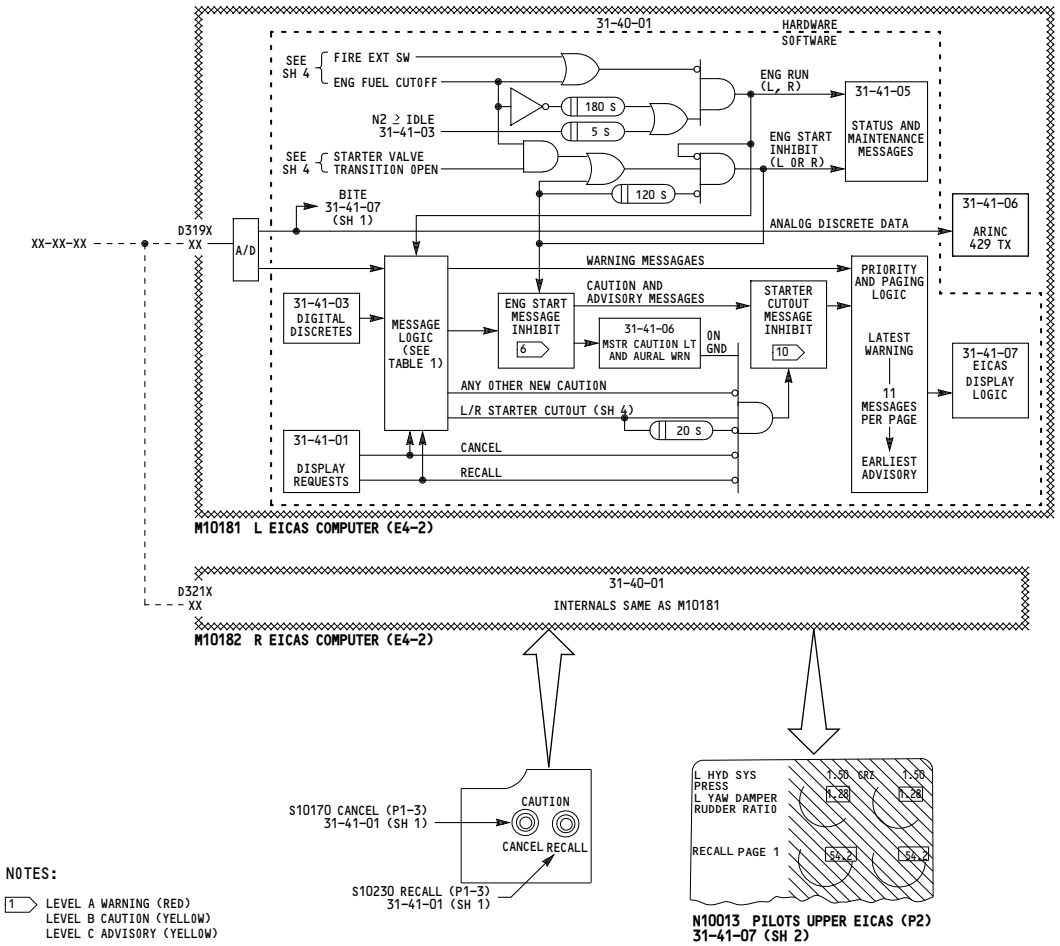


TABLE 1
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]	
21-25-01	AE7	138	138. 1 SEC TD.L UTIL BUS OFF	L RECIR FAN	C	
21-25-02	AD6	362	362. 1 SEC TD.R UTIL BUS OFF	R RECIR FAN	C	
21-31-01		[3]	112, 336. 5 SEC TD	CABIN AUTO. INOP	B	
21-33-01	AF13	291	291	CABIN ALTITUDE	A	
21-51-09	AD8	124	124	L PACK OFF	C	
21-51-09	AE6	92	92	L PACK TEMP	C	
21-51-10	AG10	348	348	R PACK OFF	C	
21-51-10	AD5	316	316	R PACK TEMP	C	
21-58-06	BG8	351	351. 1 SEC TD	FWD EQPT OVHT	C	
21-58-02	FF5	135	135. 1 SEC TD	FWD EQPT SMOKE	C	
21-60-01	DA14	91	91	FLIGHT DECK TEMP	C	
21-60-02	FK9	505	505	FWD CABIN TEMP	C	
21-60-03	EJ10	271	271	AFT CABIN TEMP	C	
21-61-04	DA13	315	315	TRIM AIR	C	
22-14-01	DG7	323	(323 + 244). 0.5 SEC TD	AUTOPILOT DISC	A	
22-14-01	EA9	244				
22-14-01	BJ2	478	478	AUTOPILOT	B	
22-21-01	DA6	212	212	L YAW DAMPER	C	
22-21-02	AD7	52	52	R YAW DAMPER	C	
22-24-01	FE4	425	425	MACH/SPD TRIM	C	
22-34-01	BD8	126	126	AUTOTHROT DISC	B	
24-11-01	DA10	306	306. L ENG RUNNING	L GEN DRIVE	C	
24-11-02	DA1	219	219. R ENG RUNNING	R GEN DRIVE	C	
24-22-02	DB3	236	236	L AC BUS OFF	B	[4]
24-22-02	DB1	59	59. L ENG RUNNING.CAA	L GEN OFF	B	
24-22-04	DB2	76	76	R AC BUS OFF	B	
24-22-04	DA12	283	283. R ENG RUNNING.CAA	R GEN OFF	B	[4]
24-22-06	DC7	187	187. 5 SEC TD	APU GEN OFF	C	
24-22-07	DC6	44	44	L BUS ISOLATED	C	
24-22-08	DC1	268	268	R BUS ISOLATED	C	
24-31-01	EC15	142	142. 10 SEC TD.767	MAIN BAT. DISCH	C	
24-31-01	AD4	250	250	BATTERY OFF	C	[4]
24-33-01	DB4	26	26	STANDBY BUS OFF	C	[4]
24-51-10	AE5	300	300. L AC BUS OFF	L UTIL BUS OFF	C	
24-51-20	DC8	204	204. R AC BUS OFF	R UTIL BUS OFF	C	

NOTES:

[1] LEVEL A WARNING (RED)
LEVEL B CAUTION (YELLOW)
LEVEL C ADVISORY (YELLOW)

[2] NO CAUTION AURAL COMMAND FROM EICAS

[3] FOR INPUT SEE 31-41-05

[4] USED IN OTHER MESSAGE LOGIC IN 31-41-04, 31-41-05

[5] NO MASTER CAUTION LIGHT OR CAUTION AURAL

[6] THESE MESSAGES ARE NOT INHIBITED: - L/R ENG SHUTDOWN, L/R STARTER CUTOUT, L/R ENG STARTER

[7] FOR DIGITAL INPUTS SEE 31-41-03

[8] ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:
357 TRUE=28V FALSE=OPEN
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND
ALL IRS INPUTS TRUE=>10V FALSE=0V

[10] REMOVES ALL MESSAGES EXCEPT L/R STARTER CUTOUT FROM DISPLAY FOR 20 SECONDS

001-008, 010-099

EICAS WARNING, CAUTION AND ADVISORY MESSAGES

D280N032S

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
26-11-01	BE4	57	57	L ENG FIRE	A
26-11-02	DG3	99	99	R ENG FIRE	A
26-11-03	BE5	246	246	L ENG OVHT	B
26-11-04	DG5	466	466	R ENG OVHT	B
26-15-01	FF2	359	359	APU FIRE	A
26-16-01	DF7	370	370	FWD CARGO FIRE	A
26-16-02	FF7	472	472	AFT CARGO FIRE	A
26-16-02	EA2	430	430	FIRE/OVHT SYS	C
26-17-01	DB10	203	203	WHEEL WELL FIRE	A
26-18-01	BF4	217	217	L BLD DUCT LEAK	B
26-18-02	DG4	451	451	R BLD DUCT LEAK	B
26-21-01	DG2	114	114	ENG BTL 1	C
26-21-01	FE3	417	417	ENG BTL 2	C
26-22-01	DC9	42	42	APU BTL	C
26-23-01	DD1	146	146	CARGO BTL 1	C
26-23-01	FC08	389	389	CARGO BTL 2	C
27-20-02	DC13	414	414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)	RUDDER RATIO	C
27-40-01	AD11	276	276	STAB. TRIM	C
27-40-01	EB12	302	302	UNSCHD STAB. TRIM	B
27-51-03	DB15	475	475	FLAP LD RELIEF	C
27-51-05	DG15	122	122	TE FLAP ASYM	B
27-51-06	ED1	346	346	TE FLAP DISAGREE	B
27-61-01	DC11	90	90	SPOILERS	C
27-62-01	AG9	66	66	AUTO. SPEEDBRAKE	C
27-81-03	DB14	460	460	LE SLAT DISAGREE	B
27-81-05	EB1	474	474	LE SLAT ASYM	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
28-22-01	ED5	107	107.6 SEC TD	L FUEL SPAR VAL	C
28-22-01	EC1	331	331.6 SEC TD	R FUEL SPAR VAL	C
28-22-01	EC2	399	399.6 SEC TD	FUEL CROSSFEED	C
28-22-01	BE7	87	(322.10 SEC TD).(361.10 SEC TD)	L FUEL SYS PRESS.	B
	FH4	357 [8]	.(87.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)		
28-22-02	DH8	322	322.10 SEC TD. L FUEL SYS PRESS	L FWD FUEL PUMP	C
28-22-02	FH8	361	361.10 SEC TD. L FUEL SYS PRESS	L AFT FUEL PUMP	C
28-22-03	DH6	100	100.10 SEC TD. L FUEL SYS PRESS	CTR L FUEL PUMP	C
28-22-03	FJ9	153	153.10 SEC TD. R FUEL SYS PRESS	CTR R FUEL PUMP	C
28-22-03	DG8	338	(377.10 SEC TD).(452.10 SEC TD) .(338.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)	R FUEL SYS PRESS.	B
28-22-04	FH9	377	377.10 SEC TD. R FUEL SYS PRESS	R FWD FUEL PUMP	C
28-22-04	DH3	452	452.10 SEC TD. R FUEL SYS PRESS	R AFT FUEL PUMP	C
28-41-01	ED3	459	459.31	LOW FUEL	B
28-41-01	ED13	31	459.31	FUEL CONFIG	C
29-00-01	EA3	41C	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	D86	154	154	C HYD QTY	C
29-00-01	AH02	196	196. L AND R ENGINES RUNNING	L HYD RSVR PRES	C
29-00-01	FC10	225	225. L AND R ENGINES RUNNING	C HYD RSVR PRES	C
29-00-01	DK07	404	404. L AND R ENGINES RUNNING	R HYD RSVR PRES	C
29-00-02	DE14	403	403.1 SEC TD	L HYD SYS PRESS.	B
29-00-02	AK2	195	195. L ENG RUN. L HYD SYS PRESS	L HYD ENG PUMP	C
29-00-02	AK11	35	35. L HYD SYS PRESS	L HYD ELEC PUMP	C
29-00-02	FG4	94	94	L ENG HYD OVHT	C
29-00-02	BK7	216	216	L ELEC HYD OVHT	C
29-00-03	FC9	120	120.1 SEC TD	R HYD SYS PRESS.	B
29-00-03	DK13	284	284. R ENG RUN. R HYD SYS PRESS	R HYD ENG PUMP	C
29-00-03	FK2	462	462. R HYD SYS PRESS	R HYD ELEC PUMP	C
29-00-03	AK4	482	482	R ENG HYD OVHT	C
29-00-03	AK8	258	258	R ELEC HYD OVHT	C
29-00-04	AG11	259	259.C HYD SYS PRESS.	C HYD ELEC 1	C
29-00-04	BK8	471	471	C HYD 1 OVHT	C
29-00-04	DJ11	220	220. C HYD SYS PRESS.	C HYD ELEC 2	C
29-00-04	AK3	34	34	C HYD 2 OVHT	C
29-00-04	DJ10	60	60.1 SEC TD	C HYD SYS PRESS.	B
29-00-04	FK6	437	437	RAT. UNLOCKED	C
29-00-01	EA3	410	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	DB6	154	154	C HYD QTY	C
29-00-02			2 OR MORE OF (117,98,137)	FLT CONT VALS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
30-11-01	FG7	318	318. 2.5 SEC TD	L WING ANTI-ICE	C
30-11-01	FJ2	447	447. 2.5 SEC TD	R WING ANTI-ICE	C
30-21-01	EC14	305	305. L ENG RUN. 10 SEC TD.	L ENG ANTI-ICE	C
30-21-02	EA5	238	238. R ENG RUN. 10 SEC TD.	R ENG ANTI-ICE	C
30-31-01	EC3	45	45. PROBE HEAT	CAPT PITOT	C
30-31-01	AD1	269	269. PROBE HEAT	L AUX PITOT	C
30-31-01			2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)	PROBE HEAT	C
30-31-02	EA6	449	449. PROBE HEAT	F/O PITOT	C
30-31-02	DB9	97	97. PROBE HEAT	R AUX PITOT	C
30-32-01	DB5	155	155. PROBE HEAT	L AOA PROBE	C
30-32-02	EA7	241	241. PROBE HEAT	R AOA PROBE	C
30-33-01	EA4	411	411. PROBE HEAT	TAT PROBE	C
30-41-01	EC6	29	29. WINDOW HEAT	L FWD WINDOW	C
30-41-01			2 OR MORE OF (29, 189, 205, 253)	WINDOW HEAT	C
30-41-02	EC5	205	205. WINDOW HEAT	R FWD WINDOW	C
30-41-03	EC4	189	189. WINDOW HEAT	L SIDE WINDOW	C
30-41-04	AD2	253	253. WINDOW HEAT	R SIDE WINDOW	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET ON	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET OFF	C
31-41-01			NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD	EICAS CONT PNL	C
31-41-06			DISPLAY SYSTEM FAULT, 1 SEC TD.	EICAS DISPLAY	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
31-51-03	AG15	235	235	PARKING BRAKE	A
31-51-03	DA15	108	108	FLAPS	A
31-51-03	ED2	332	332	SPOILERS	A
31-51-03	EA1	431	431	STABILIZER	A
31-51-04	BG14	349	349	GEAR NOT DOWN	A
31-51-04	BC14	463	463	SPEEDBRAKES EXT	B
31-51-07	BD14	350	350+134	L ENG SHUTDOWN	B [5]
	BJ11	134			
31-51-07	BJ3	429	429+147	R ENG SHUTDOWN	B [5]
	DK6	147			
32-41-01	EH12	47	47	BRAKE SOURCE	C
32-41-01	AG3	226	226. 235	PARKING BRAKE	C
32-42-03	AG6	290	290	AUTOBRAKES	C
32-42-04	FH10	65	65	ANTISKID	C
32-61-01	DB7	43	(43.298.25 SEC TD).	GEAR DISAGREE	B
	AG12	298			
32-61-01	BF14	125	125. 335. 35 SEC TD	GEAR DOORS	C
	F-C2	335			
33-51-01	EA11	193	193	EMER LIGHTS	C
34-12-01	FE5	136	136 +111	OVERSPEED	A
34-12-02	BC15	111			
34-16-01	BE14	477	477	ALTITUDE ALERT	B [2]
34-21-01	AG8	68	68	L IRS DC FAIL	C
34-21-01	AG5	292	292	L IRS FAULT	C
34-21-01	AG1	228	228	L IRS ON DC	C
34-21-02	DE9	168	168	R IRS DC FAIL	C
[8] 34-21-02	DE2	392	392	R IRS FAULT	C
34-21-02	DE5	424	424	R IRS ON DC	C
34-21-03	FC3	374	374	C IRS DC FAIL	C
34-21-03	FC4	502	502	C IRS FAULT	C
34-21-03	FD5	150	150	C IRS ON DC	C
34-22-31	FA9	289	289	INSTR SWITCH	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. 7	MESSAGE	LEVEL 1
34-25-01	8	DD117	DD117	HDG DISAGREE	C
34-25-01	8	DD118	DD118	TRACK DISAGREE	C
34-25-01	8	DD119	DD119	ATT DISAGREE	B
34-53-01	EA13	79	79	ATC FAULT	C
34-61-02	AG13	299	299	FMC MESSAGE	C
8 34-61-02	EK14	257	257	L FMC FAIL	C
34-61-07	BK1	239	239	R FMC FAIL	C
35-21-01	FF6	141	141	PASS. OXYGEN ON	C
36-11-01	EK3	428	428. L ENG RUN	L ENG BLEED OFF	C
36-11-01	EK7	171	171	L ENG HI STAGE	C
36-11-02	EK6	172	172. R ENG RUN	R ENG BLEED OFF	C
36-11-02	EK11	395	395	R ENG HI STAGE	C
36-11-03	FF1	365	365.6 SECS TD	APU BLEED VAL	C
36-11-05	BB13	461	461.6 SECS TD	BLEED ISLN VAL	C
36-22-01	EK10	396	396	L ENG BLEED VAL	B
36-22-01	EK2	427	427	R ENG BLEED VAL	B
49-61-01	FA10	288	288.6 SEC TD	APU FUEL VAL	C
49-61-01	FB6	105	105	APU FAULT	C
52-71-01	BA11	144	144. L ENTRY DOORS	L CTR ENT DOOR	C
52-71-01	BB12	496	496. EMER DOORS	L EMER DOOR	C
52-71-01	BA10	352	352. L ENTRY DOORS	L FWD ENT DOOR	C
52-71-01	BE12	368	368. L ENTRY DOORS	L AFT ENT DOOR	C
52-71-01			2 OR MORE OF (144, 352, OR 368)	L ENTRY DOORS	C
	BA5	129	129. R ENTRY DOORS	R CTR ENT DOOR	C
52-71-01	BD5	481	481. EMER DOORS	R EMER DOOR	C
52-71-01	AD14	369	369. R ENTRY DOORS	R FWD ENT DOOR	C
52-71-01	AD13	353	353. R ENTRY DOORS	R AFT ENT DOOR	C
52-71-01			2 OR MORE OF (129, 369 OR 353)	R ENTRY DOORS	C
52-71-01			2 OR MORE OF (496, 481, 347, 251, 27 OR 255)	EMER DOORS	C
52-71-01	AE04	347	347. EMER DOORS	L FWD EMER DOORS	C
52-71-01	DA09	251	251. EMER DOORS	L AFT EMER DOORS	C
52-71-01	DC05	27	27. EMER DOORS	R FWD EMER DOORS	C
52-71-01	AE01	255	255. EMER DOORS	R AFT EMER DOORS	C
52-71-01	BB7	416	416.ACCESS DOORS	FWD ACCESS DOOR	C
52-71-01	BA6	160	160. ACCESS DOORS	EE ACCESS DOOR	C
52-71-01			416. 160	ACCESS DOOR	C
52-71-01	AF15	384	384. CARGO DOORS	FWD CARGO DOOR	C
52-71-01	BA7	145	145. CARGO DOORS	AFT CARGO DOOR	C
52-71-01			384. 145	CARGO DOORS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. 7	MESSAGE	LEVEL 1	
73-21-01	BF13	303	303.6 SECS TD	L ENG FUEL VAL	C	
73-21-01	BD14	350	350 + 134	L ENG SHUTDOWN	B	
	BJ11	134				
73-21-02	BD15	415	415.6 SEC TD	R ENG FUEL VAL	C	
73-21-02	BJ3	429	429 + 147	R ENG SHUTDOWN	B	
	DK6	147				
73-21-04	BH08	455	455. L ENG RUNNING. 4 SEC TD	L ENG LIMITER	C	
73-21-05	DH04	167	167.R ENG RUNNING. 4 SEC TD	R ENG LIMITER	C	
73-21-04	BG10	373	373	L EEC OFF	B	
73-21-04	BH6	358	(L ENG RUNNING. 4 SEC TD.) 358. 373	L ENG EEC	C	
73-21-05	DE13	386	386	R EEC OFF	B	
73-21-05	DK9	324	(R ENG RUNNING. 4 SEC TD.) 324. 386	R ENG EEC	C	
78-36-01	BH07	103	(103. L AC BUS OFF. 2 SEC TD) +	REV ISLN VAL	C	
	DH07	391	(391. R AC BUS OFF. 2 SEC TD)			
79-33-01	AH3	483	483. L ENG RUN	L ENG OIL PRESS	C	
79-33-01	DK10	371	371. R ENG RUN	R ENG OIL PRESS	C	
79-35-01	AH04	131	131. L ENG OIL TEMP >10°C	L OIL FILTER	C	
79-35-01	DK03	423	423. R ENG OIL TEMP >10°C	R OIL FILTER	C	
80-11-01	FD09	152	152. 5 SEC TD	L STARTER CUTOUT	B	10
80-11-01	BH11	327	327. 152. 5 SEC TD	L ENG STARTER	C	
	FD09	152				
80-11-02	FB05	121	121. 5 SEC TD	R STARTER CUTOUT	B	
80-11-02	DK02	440	440. 121. 5 SEC TD	R ENG STARTER	C	10
	FB05	121				
77-12-01	BD2 BD1	AV351	(L ENG RUNNING .60 SEC TD) .L ENG N1 < N1 LOW .20 SEC TD	L ENG LOW N1	C	
77-12-01	EA14 EB14	AV352	(R ENG RUNNING .60 SEC TD) .R ENG N1 < N1 LOW .20 SEC TD	R ENG LOW N1	C	

5088

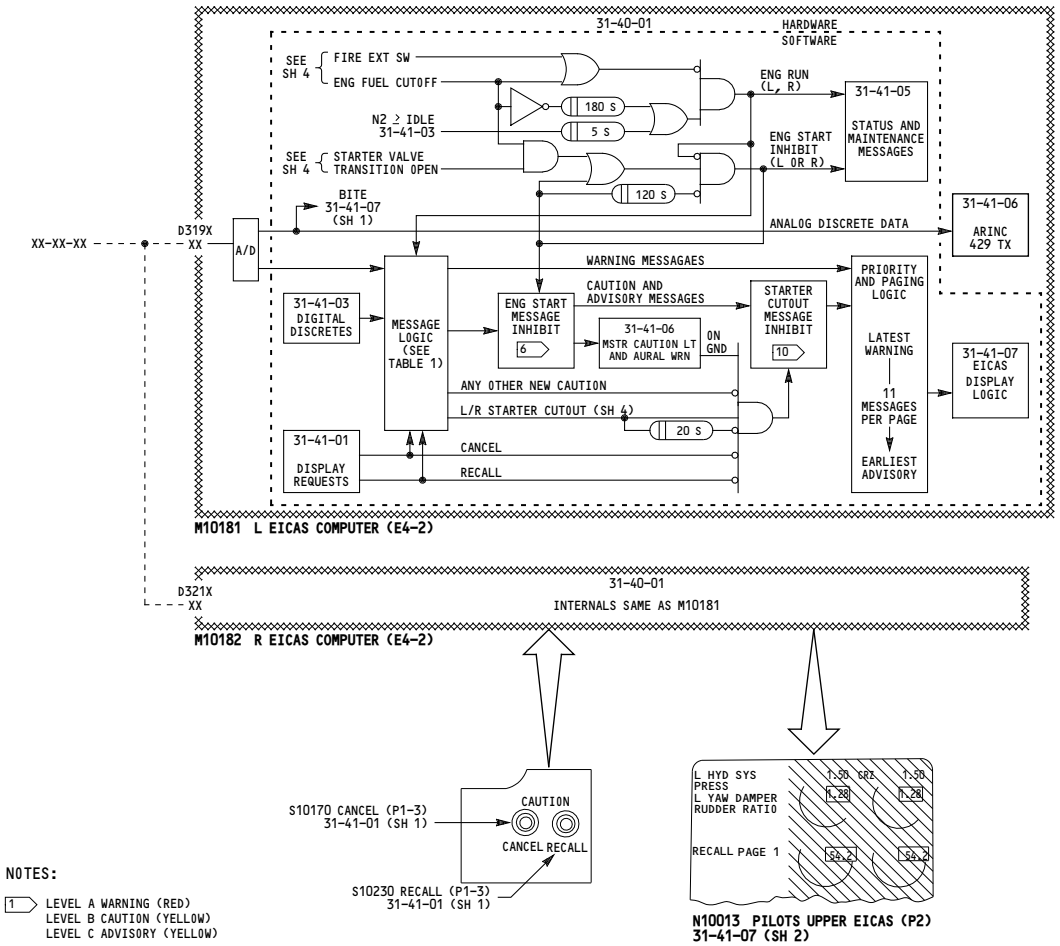


TABLE 1
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]	
21-25-01	AE7	138	138. 1 SEC TD.L UTIL BUS OFF	L RECIR FAN	C	
21-25-02	AD6	362	362. 1 SEC TD.R UTIL BUS OFF	R RECIR FAN	C	
21-31-01		[3]	112, 336. 5 SEC TD	CABIN AUTO. INOP	B	
21-33-01	AF13	291	291	CABIN ALTITUDE	A	
21-51-09	AD8	124	124	L PACK OFF	C	
21-51-09	AE6	92	92	L PACK TEMP	C	
21-51-10	AG10	348	348	R PACK OFF	C	
21-51-10	AD5	316	316	R PACK TEMP	C	
21-58-06	BG8	351	351. 1 SEC TD	FWD EQPT OVHT	C	
21-58-02	FF5	135	135. 1 SEC TD	FWD EQPT SMOKE	C	
21-60-01	DA14	91	91	FLIGHT DECK TEMP	C	
21-60-02	FK9	505	505	FWD CABIN TEMP	C	
21-60-03	EJ10	271	271	AFT CABIN TEMP	C	
21-61-04	DA13	315	315	TRIM AIR	C	
22-14-01	DG7	323	(323 + 244). 0.5 SEC TD	AUTOPILOT DISC	A	
22-14-01	EA9	244				
22-14-01	BJ2	478	478	AUTOPILOT	B	
22-21-01	DA6	212	212	L YAW DAMPER	C	
22-21-02	AD7	52	52	R YAW DAMPER	C	
22-24-01	FE4	425	425	MACH/SPD TRIM	C	
22-34-01	BD8	126	126. 1 SEC TD	AUTOTHROT DISC	B	
24-11-01	DA10	306	306. L ENG RUNNING	L GEN DRIVE	C	
24-11-02	DA1	219	219. R ENG RUNNING	R GEN DRIVE	C	
24-22-02	DB3	236	236	L AC BUS OFF	B	[4]
24-22-02	DB1	59	59. L ENG RUNNING.CAA	L GEN OFF	B	
24-22-04	DB2	76	76	R AC BUS OFF	B	
24-22-04	DA12	283	283. R ENG RUNNING.CAA	R GEN OFF	B	[4]
24-22-06	DC7	187	187. 5 SEC TD	APU GEN OFF	C	
24-22-07	DC6	44	44	L BUS ISOLATED	C	
24-22-08	DC1	268	268	R BUS ISOLATED	C	
24-31-01	EC15	142	142. 10 SEC TD.767	MAIN BAT. DISCH	C	
24-31-01	AD4	250	250	BATTERY OFF	C	[4]
24-33-01	DB4	26	26	STANDBY BUS OFF	C	[4]
24-51-10	AE5	300	300. L AC BUS OFF	L UTIL BUS OFF	C	
24-51-20	DC8	204	204. R AC BUS OFF	R UTIL BUS OFF	C	

NOTES:

[1] LEVEL A WARNING (RED)
LEVEL B CAUTION (YELLOW)
LEVEL C ADVISORY (YELLOW)

[2] NO CAUTION AURAL COMMAND FROM EICAS

[3] FOR INPUT SEE 31-41-05

[4] USED IN OTHER MESSAGE LOGIC IN 31-41-04, 31-41-05

[5] NO MASTER CAUTION LIGHT OR CAUTION AURAL

[6] THESE MESSAGES ARE NOT INHIBITED: - L/R ENG SHUTDOWN, L/R STARTER CUTOUT, L/R ENG STARTER

[7] FOR DIGITAL INPUTS SEE 31-41-03

[8] ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:
357 TRUE=28V FALSE=OPEN
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND
ALL IRS INPUTS TRUE=>10V FALSE=0V

[10] REMOVES ALL MESSAGES EXCEPT L/R STARTER CUTOUT FROM DISPLAY FOR 20 SECONDS

001-008, 010-011

EICAS WARNING, CAUTION AND ADVISORY MESSAGES

Incorporates
31-0059 R01

D280N032S

31-41-04

Page 101.1
Sheet 1
Jan 21/2005

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
26-11-01	BE4	57	57	L ENG FIRE	A
26-11-02	DG3	99	99	R ENG FIRE	A
26-11-03	BE5	246	246	L ENG OVHT	B
26-11-04	DG5	466	466	R ENG OVHT	B
26-15-01	FF2	359	359	APU FIRE	A
26-16-01	DF7	370	370	FWD CARGO FIRE	A
26-16-02	FF7	472	472	AFT CARGO FIRE	A
26-16-02	EA2	430	430	FIRE/OVHT SYS	C
26-17-01	DB10	203	203	WHEEL WELL FIRE	A
26-18-01	BF4	217	217	L BLD DUCT LEAK	B
26-18-02	DG4	451	451	R BLD DUCT LEAK	B
26-21-01	DG2	114	114	ENG BTL 1	C
26-21-01	FE3	417	417	ENG BTL 2	C
26-22-01	DC9	42	42	APU BTL	C
26-23-01	DD1	146	146	CARGO BTL 1	C
26-23-01	FC08	389	389	CARGO BTL 2	C
27-20-02	DC13	414	414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)	RUDDER RATIO	C
27-40-01	AD11	276	276	STAB. TRIM	C
27-40-01	EB12	302	302	UNSCHD STAB. TRIM	B
27-51-03	DB15	475	475	FLAP LD RELIEF	C
27-51-05	DG15	122	122	TE FLAP ASYM	B
27-51-06	ED1	346	346	TE FLAP DISAGREE	B
27-61-01	DC11	90	90	SPOILERS	C
27-62-01	AG9	66	66	AUTO. SPEEDBRAKE	C
27-81-03	DB14	460	460	LE SLAT DISAGREE	B
27-81-05	EB1	474	474	LE SLAT ASYM	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
28-22-01	ED5	107	107.6 SEC TD	L FUEL SPAR VAL	C
28-22-01	EC1	331	331.6 SEC TD	R FUEL SPAR VAL	C
28-22-01	EC2	399	399.6 SEC TD	FUEL CROSSFEED	C
28-22-01	BE7	87	(322.10 SEC TD).(361.10 SEC TD)	L FUEL SYS PRESS.	B
	FH4	357 [8]	.(87.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)		
28-22-02	DH8	322	322.10 SEC TD. L FUEL SYS PRESS	L FWD FUEL PUMP	C
28-22-02	FH8	361	361.10 SEC TD. L FUEL SYS PRESS	L AFT FUEL PUMP	C
28-22-03	DH6	100	100.10 SEC TD. L FUEL SYS PRESS	CTR L FUEL PUMP	C
28-22-03	FJ9	153	153.10 SEC TD. R FUEL SYS PRESS	CTR R FUEL PUMP	C
28-22-03	DG8	338	(377.10 SEC TD).(452.10 SEC TD) .(338.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)	R FUEL SYS PRESS.	B
28-22-04	FH9	377	377.10 SEC TD. R FUEL SYS PRESS	R FWD FUEL PUMP	C
28-22-04	DH3	452	452.10 SEC TD. R FUEL SYS PRESS	R AFT FUEL PUMP	C
28-41-01	ED3	459	459.31	LOW FUEL	B
28-41-01	ED13	31	459.31	FUEL CONFIG	C
29-00-01	EA3	41C	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	D86	154	154	C HYD QTY	C
29-00-01	AH02	196	196. L AND R ENGINES RUNNING	L HYD RSVR PRES	C
29-00-01	FC10	225	225. L AND R ENGINES RUNNING	C HYD RSVR PRES	C
29-00-01	DK07	404	404. L AND R ENGINES RUNNING	R HYD RSVR PRES	C
29-00-02	DE14	403	403.1 SEC TD	L HYD SYS PRESS.	B
29-00-02	AK2	195	195. L ENG RUN. L HYD SYS PRESS	L HYD ENG PUMP	C
29-00-02	AK11	35	35. L HYD SYS PRESS	L HYD ELEC PUMP	C
29-00-02	FG4	94	94	L ENG HYD OVHT	C
29-00-02	BK7	216	216	L ELEC HYD OVHT	C
29-00-03	FC9	120	120.1 SEC TD	R HYD SYS PRESS.	B
29-00-03	DK13	284	284. R ENG RUN. R HYD SYS PRESS	R HYD ENG PUMP	C
29-00-03	FK2	462	462. R HYD SYS PRESS	R HYD ELEC PUMP	C
29-00-03	AK4	482	482	R ENG HYD OVHT	C
29-00-03	AK8	258	258	R ELEC HYD OVHT	C
29-00-04	AG11	259	259.C HYD SYS PRESS.	C HYD ELEC 1	C
29-00-04	BK8	471	471	C HYD 1 OVHT	C
29-00-04	DJ11	220	220. C HYD SYS PRESS.	C HYD ELEC 2	C
29-00-04	AK3	34	34	C HYD 2 OVHT	C
29-00-04	DJ10	60	60.1 SEC TD	C HYD SYS PRESS.	B
29-00-04	FK6	437	437	RAT. UNLOCKED	C
29-00-01	EA3	410	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	DB6	154	154	C HYD QTY	C
29-00-02			2 OR MORE OF (117,98,137)	FLT CONT VALS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
30-11-01	FG7	318	318. 2.5 SEC TD	L WING ANTI-ICE	C
30-11-01	FJ2	447	447. 2.5 SEC TD	R WING ANTI-ICE	C
30-21-01	EC14	305	305. L ENG RUN. 10 SEC TD.	L ENG ANTI-ICE	C
30-21-02	EA5	238	238. R ENG RUN. 10 SEC TD.	R ENG ANTI-ICE	C
30-31-01	EC3	45	45. PROBE HEAT	CAPT PITOT	C
30-31-01	AD1	269	269. PROBE HEAT	L AUX PITOT	C
30-31-01			2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)	PROBE HEAT	C
30-31-02	EA6	449	449. PROBE HEAT	F/O PITOT	C
30-31-02	DB9	97	97. PROBE HEAT	R AUX PITOT	C
30-32-01	DB5	155	155. PROBE HEAT	L AOA PROBE	C
30-32-02	EA7	241	241. PROBE HEAT	R AOA PROBE	C
30-33-01	EA4	411	411. PROBE HEAT	TAT PROBE	C
30-41-01	EC6	29	29. WINDOW HEAT	L FWD WINDOW	C
30-41-01			2 OR MORE OF (29, 189, 205, 253)	WINDOW HEAT	C
30-41-02	EC5	205	205. WINDOW HEAT	R FWD WINDOW	C
30-41-03	EC4	189	189. WINDOW HEAT	L SIDE WINDOW	C
30-41-04	AD2	253	253. WINDOW HEAT	R SIDE WINDOW	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET ON	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET OFF	C
31-41-01			NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD	EICAS CONT PNL	C
31-41-06			DISPLAY SYSTEM FAULT, 1 SEC TD.	EICAS DISPLAY	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
31-51-03	AG15	235	235	PARKING BRAKE	A
31-51-03	DA15	108	108	FLAPS	A
31-51-03	ED2	332	332	SPOILERS	A
31-51-03	EA1	431	431	STABILIZER	A
31-51-04	BG14	349	349	GEAR NOT DOWN	A
31-51-04	BC14	463	463	SPEEDBRAKES EXT	B
31-51-07	BD14	350	350+134	L ENG SHUTDOWN	B [5]
	BJ11	134			
31-51-07	BJ3	429	429+147	R ENG SHUTDOWN	B [5]
	DK6	147			
32-41-01	EH12	47	47	BRAKE SOURCE	C
32-41-01	AG3	226	226. 235	PARKING BRAKE	C
32-42-03	AG6	290	290	AUTOBRAKES	C
32-42-04	FH10	65	65, 199	ANTISKID	C
32-61-01	DB7	43	(43.298.25 SEC TD).	GEAR DISAGREE	B
	AG12	298			
32-61-01	BF14	125	125. 335. 35 SEC TD	GEAR DOORS	C
	F-C2	335			
32-61-01 (SH 2)	FE9	360	360*445.L AC BUS OFF	AIR/GND SYS	C
	BJ13	445	.R AC BUS OFF.G/S <80KTS .10 SEC TD		
32-61-01 (SH 2)	FF8	421	421*157.L AC BUS OFF	NOSE A/G SYS	C
	BH1	157	.R AC BUS OFF.G/S <80KTS .10 SEC TD		
33-51-01	EA11	193	193	EMER LIGHTS	C
34-12-01	FE5	136	136 +111	OVERSPEED	A
34-12-02	BC15	111			
34-16-01	BE14	477	477	ALTITUDE ALERT	B [2]
34-21-01	AG8	68	68	L IRS DC FAIL	C
34-21-01	AG5	292	292	L IRS FAULT	C
34-21-01	AG1	228	228	L IRS ON DC	C
34-21-02	DE9	168	168	R IRS DC FAIL	C
[8] 34-21-02	DE2	392	392	R IRS FAULT	C
34-21-02	DE5	424	424	R IRS ON DC	C
34-21-03	FC3	374	374	C IRS DC FAIL	C
34-21-03	FC4	502	502	C IRS FAULT	C
34-21-03	FD5	150	150	C IRS ON DC	C
34-22-31	FA9	289	289	INSTR SWITCH	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]
34-25-01	[8]	DD117	DD117	HDG DISAGREE	C
34-25-01	[8]	DD118	DD118	TRACK DISAGREE	C
34-25-01	[8]	DD119	DD119	ATT DISAGREE	B
34-53-01	EA13	79	79	ATC FAULT	C
34-61-02	AG13	299	299	FMC MESSAGE	C
[8] 34-61-02	EK14	257	257	L FMC FAIL	C
34-61-07	BK1	239	239	R FMC FAIL	C
35-21-01	FF6	141	141	PASS. OXYGEN ON	C
36-11-01	EK3	428	428. L ENG RUN	L ENG BLEED OFF	C
36-11-01	EK7	171	171	L ENG HI STAGE	C
36-11-02	EK6	172	172. R ENG RUN	R ENG BLEED OFF	C
36-11-02	EK11	395	395	R ENG HI STAGE	C
36-11-03	FF1	365	365.6 SECS TD	APU BLEED VAL	C
36-11-05	BB13	461	461.6 SECS TD	BLEED ISLN VAL	C
36-22-01	EK10	396	396	L ENG BLEED VAL	B
36-22-01	EK2	427	427	R ENG BLEED VAL	B
49-61-01	FA10	288	288.6 SEC TD	APU FUEL VAL	C
49-61-01	FB6	105	105	APU FAULT	C
52-71-01	BA11	144	144. L ENTRY DOORS	L CTR ENT DOOR	C
52-71-01	BB12	496	496. EMER DOORS	L EMER DOOR	C
52-71-01	BA10	352	352. L ENTRY DOORS	L FWD ENT DOOR	C
52-71-01	BE12	368	368. L ENTRY DOORS	L AFT ENT DOOR	C
52-71-01			2 OR MORE OF (144, 352, OR 368)	L ENTRY DOORS	C
	BA5	129	129. R ENTRY DOORS	R CTR ENT DOOR	C
52-71-01	BD5	481	481. EMER DOORS	R EMER DOOR	C
52-71-01	AD14	369	369. R ENTRY DOORS	R FWD ENT DOOR	C
52-71-01	AD13	353	353. R ENTRY DOORS	R AFT ENT DOOR	C
52-71-01			2 OR MORE OF (129, 369 OR 353)	R ENTRY DOORS	C
52-71-01			2 OR MORE OF (496, 481, 347, 251, 27 OR 255)	EMER DOORS	C
52-71-01	AE04	347	347. EMER DOORS	L FWD EMER DOORS	C
52-71-01	DA09	251	251. EMER DOORS	L AFT EMER DOORS	C
52-71-01	DC05	27	27. EMER DOORS	R FWD EMER DOORS	C
52-71-01	AE01	255	255. EMER DOORS	R AFT EMER DOORS	C
52-71-01	BB7	416	416.ACCESS DOORS	FWD ACCESS DOOR	C
52-71-01	BA6	160	160. ACCESS DOORS	EE ACCESS DOOR	C
52-71-01			416. 160	ACCESS DOOR	C
52-71-01	AF15	384	384. CARGO DOORS	FWD CARGO DOOR	C
52-71-01	BA7	145	145. CARGO DOORS	AFT CARGO DOOR	C
52-71-01			384. 145	CARGO DOORS	C
73-14-01	AJ11	50	50. 30 SEC TD	L ENG FUEL FILT	C
73-14-01	DG12	179	179. 30 SEC TD	R ENG FUEL FILT	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]	
73-21-01	BF13	303	303.6 SECS TD	L ENG FUEL VAL	C	
73-21-01	BD14	350	350 + 134	L ENG SHUTDOWN	B	
	BJ11	134				
73-21-02	BD15	415	415.6 SEC TD	R ENG FUEL VAL	C	
73-21-02	BJ3	429	429 + 147	R ENG SHUTDOWN	B	
	DK6	147				
73-21-04	BH08	455	455. L ENG RUNNING. 4 SEC TD	L ENG LIMITER	C	
73-21-05	DH04	167	167.R ENG RUNNING. 4 SEC TD	R ENG LIMITER	C	
73-21-04	BG10	373	373	L EEC OFF	B	
73-21-04	BH6	358	(L ENG RUNNING. 4 SEC TD.) 358. 373	L ENG EEC	C	
73-21-05	DE13	386	386	R EEC OFF	B	
73-21-05	DK9 FB05	324 121	(R ENG RUNNING. 4 SEC TD.) 324. 386	R ENG EEC	C	
77-12-01	BD2 BD1	AV351	(L ENG RUNNING .60 SEC TD) .L ENG N1 < N1 LOW .20 SEC TD	L ENG LOW N1	C	
77-12-01	EA14 EB14	AV352	(R ENG RUNNING .60 SEC TD) .R ENG N1 < N1 LOW .20 SEC TD	R ENG LOW N1	C	
78-36-01	BH07	103	(103. L AC BUS OFF. 2 SEC TD) +	REV ISLN VAL	C	
	DH07	391	(391. R AC BUS OFF. 2 SEC TD)			
79-33-01	AH3	483	483. L ENG RUN	L ENG OIL PRESS	C	
79-33-01	DK10	371	371. R ENG RUN	R ENG OIL PRESS	C	
79-35-01	AH04	131	131.(L OIL TEMP>25)+IN AIR).5 SEC TD	L OIL FILTER	C	
79-35-01	DK03	423	423.(R OIL TEMP>25)+IN AIR).5 SEC TD	R OIL FILTER	C	
80-11-01	FD09	152	152. 5 SEC TD	L STARTER CUTOUT	B	[10]
80-11-01	BH11	327	327. 152. 5 SEC TD	L ENG STARTER	C	
	FD09	152				
80-11-02	FB05	121	121. 5 SEC TD	R STARTER CUTOUT	B	
80-11-02	DK02	440	440. 121. 5 SEC TD	R ENG STARTER	C	[10]

5054

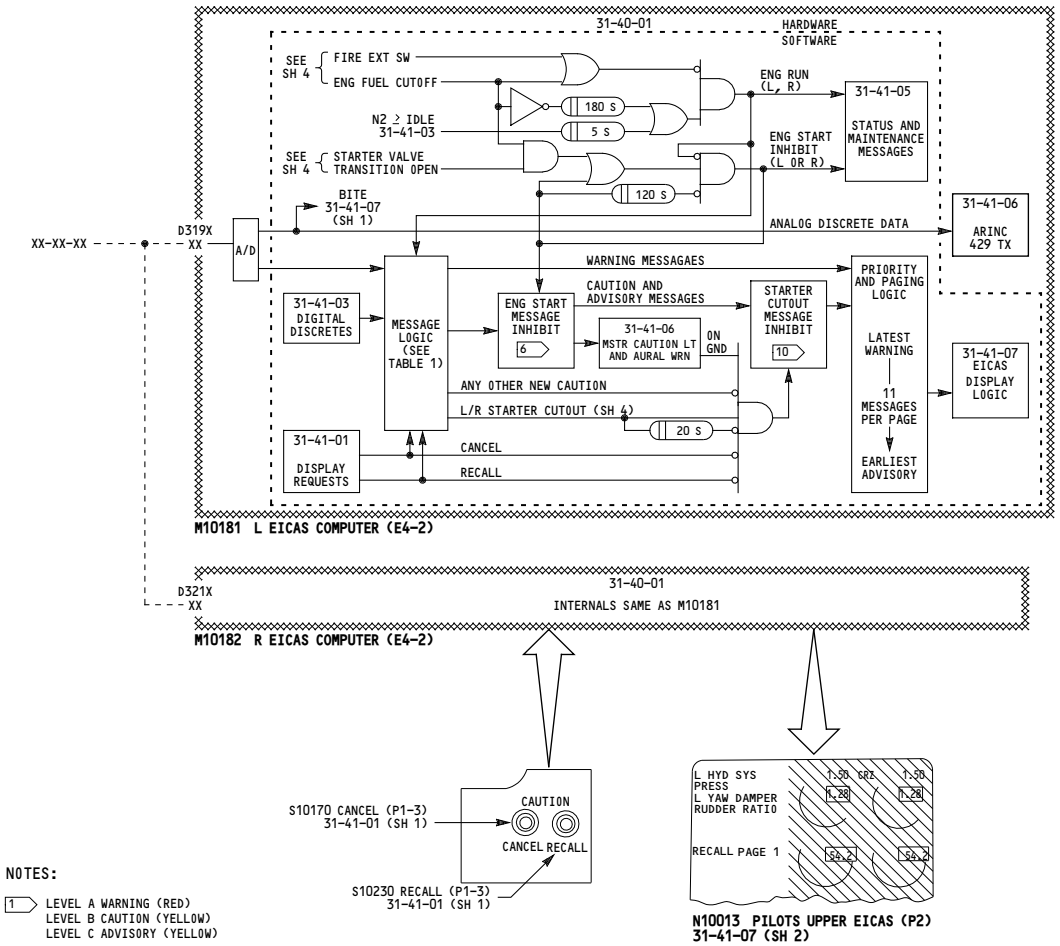


TABLE 1
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]	
21-25-01	AE7	138	138. 1 SEC TD.L UTIL BUS OFF	L RECIR FAN	C	
21-25-02	AD6	362	362. 1 SEC TD.R UTIL BUS OFF	R RECIR FAN	C	
21-31-01		[3]	112, 336. 5 SEC TD	CABIN AUTO. INOP	B	
21-33-01	AF13	291	291	CABIN ALTITUDE	A	
21-51-09	AD8	124	124	L PACK OFF	C	
21-51-09	AE6	92	92	L PACK TEMP	C	
21-51-10	AG10	348	348	R PACK OFF	C	
21-51-10	AD5	316	316	R PACK TEMP	C	
21-58-06	BG8	351	351. 1 SEC TD	FWD EQPT OVHT	C	
21-58-02	FF5	135	135. 1 SEC TD	FWD EQPT SMOKE	C	
21-60-01	DA14	91	91	FLIGHT DECK TEMP	C	
21-60-02	FK9	505	505	FWD CABIN TEMP	C	
21-60-03	EJ10	271	271	AFT CABIN TEMP	C	
21-61-04	DA13	315	315	TRIM AIR	C	
22-14-01	DG7	323	(323 + 244). 0.5 SEC TD	AUTOPILOT DISC	A	
22-14-01	EA9	244				
22-14-01	BJ2	478	478	AUTOPILOT	B	
22-21-01	DA6	212	212	L YAW DAMPER	C	
22-21-02	AD7	52	52	R YAW DAMPER	C	
22-24-01	FE4	425	425	MACH/SPD TRIM	C	
22-34-01	BD8	126	126	AUTOTHROT DISC	B	
24-11-01	DA10	306	306. L ENG RUNNING	L GEN DRIVE	C	
24-11-02	DA1	219	219. R ENG RUNNING	R GEN DRIVE	C	
24-22-02	DB3	236	236	L AC BUS OFF	B	[4]
24-22-02	DB1	59	59. L ENG RUNNING.CAA	L GEN OFF	B	
24-22-04	DB2	76	76	R AC BUS OFF	B	
24-22-04	DA12	283	283. R ENG RUNNING.CAA	R GEN OFF	B	[4]
24-22-06	DC7	187	187. 5 SEC TD	APU GEN OFF	C	
24-22-07	DC6	44	44	L BUS ISOLATED	C	
24-22-08	DC1	268	268	R BUS ISOLATED	C	
24-31-01	EC15	142	142. 10 SEC TD.767	MAIN BAT. DISCH	C	
24-31-01	AD4	250	250	BATTERY OFF	C	[4]
24-33-01	DB4	26	26	STANDBY BUS OFF	C	[4]
24-51-10	AE5	300	300. L AC BUS OFF	L UTIL BUS OFF	C	
24-51-20	DC8	204	204. R AC BUS OFF	R UTIL BUS OFF	C	

NOTES:

[1] LEVEL A WARNING (RED)
LEVEL B CAUTION (YELLOW)
LEVEL C ADVISORY (YELLOW)

[2] NO CAUTION AURAL COMMAND FROM EICAS

[3] FOR INPUT SEE 31-41-05

[4] USED IN OTHER MESSAGE LOGIC IN 31-41-04, 31-41-05

[5] NO MASTER CAUTION LIGHT OR CAUTION AURAL

[6] THESE MESSAGES ARE NOT INHIBITED: - L/R ENG SHUTDOWN, L/R STARTER CUTOUT, L/R ENG STARTER

[7] FOR DIGITAL INPUTS SEE 31-41-03

[8] ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:
357 TRUE=28V FALSE=OPEN
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND
ALL IRS INPUTS TRUE=>10V FALSE=0V

[10] REMOVES ALL MESSAGES EXCEPT L/R STARTER CUTOUT FROM DISPLAY FOR 20 SECONDS

009

EICAS WARNING, CAUTION AND ADVISORY MESSAGES

D280N032S

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
26-11-01	BE4	57	57	L ENG FIRE	A
26-11-02	DG3	99	99	R ENG FIRE	A
26-11-03	BE5	246	246	L ENG OVHT	B
26-11-04	DG5	466	466	R ENG OVHT	B
26-15-01	FF2	359	359	APU FIRE	A
26-16-01	DF7	370	370	FWD CARGO FIRE	A
26-16-02	FF7	472	472	AFT CARGO FIRE	A
26-16-02	EA2	430	430	FIRE/OVHT SYS	C
26-17-01	DB10	203	203	WHEEL WELL FIRE	A
26-18-01	BF4	217	217	L BLD DUCT LEAK	B
26-18-02	DG4	451	451	R BLD DUCT LEAK	B
26-21-01	DG2	114	114	ENG BTL 1	C
26-21-01	FE3	417	417	ENG BTL 2	C
26-22-01	DC9	42	42	APU BTL	C
26-23-01	DD1	146	146	CARGO BTL 1	C
26-23-01	FC08	389	389	CARGO BTL 2	C
27-20-02	DC13	414	414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)	RUDDER RATIO	C
27-40-01	AD11	276	276	STAB. TRIM	C
27-40-01	EB12	302	302	UNSCHD STAB. TRIM	B
27-51-03	DB15	475	475	FLAP LD RELIEF	C
27-51-05	DG15	122	122	TE FLAP ASYM	B
27-51-06	ED1	346	346	TE FLAP DISAGREE	B
27-61-01	DC11	90	90	SPOILERS	C
27-62-01	AG9	66	66	AUTO. SPEEDBRAKE	C
27-81-03	DB14	460	460	LE SLAT DISAGREE	B
27-81-05	EB1	474	474	LE SLAT ASYM	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
28-22-01	ED5	107	107.6 SEC TD	L FUEL SPAR VAL	C
28-22-01	EC1	331	331.6 SEC TD	R FUEL SPAR VAL	C
28-22-01	EC2	399	399.6 SEC TD	FUEL CROSSFEED	C
28-22-01	BE7	87	(322.10 SEC TD).(361.10 SEC TD)	L FUEL SYS PRESS.	B
	FH4	357 [8]	.(87.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)		
28-22-02	DH8	322	322.10 SEC TD. L FUEL SYS PRESS	L FWD FUEL PUMP	C
28-22-02	FH8	361	361.10 SEC TD. L FUEL SYS PRESS	L AFT FUEL PUMP	C
28-22-03	DH6	100	100.10 SEC TD. L FUEL SYS PRESS	CTR L FUEL PUMP	C
28-22-03	FJ9	153	153.10 SEC TD. R FUEL SYS PRESS	CTR R FUEL PUMP	C
28-22-03	DG8	338	(377.10 SEC TD).(452.10 SEC TD) .(338.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)	R FUEL SYS PRESS.	B
28-22-04	FH9	377	377.10 SEC TD. R FUEL SYS PRESS	R FWD FUEL PUMP	C
28-22-04	DH3	452	452.10 SEC TD. R FUEL SYS PRESS	R AFT FUEL PUMP	C
28-41-01	ED3	459	459.31	LOW FUEL	B
28-41-01	ED13	31	459.31	FUEL CONFIG	C
29-00-01	EA3	41C	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	D86	154	154	C HYD QTY	C
29-00-01	AH02	196	196. L AND R ENGINES RUNNING	L HYD RSVR PRES	C
29-00-01	FC10	225	225. L AND R ENGINES RUNNING	C HYD RSVR PRES	C
29-00-01	DK07	404	404. L AND R ENGINES RUNNING	R HYD RSVR PRES	C
29-00-02	DE14	403	403.1 SEC TD	L HYD SYS PRESS.	B
29-00-02	AK2	195	195. L ENG RUN. L HYD SYS PRESS	L HYD ENG PUMP	C
29-00-02	AK11	35	35. L HYD SYS PRESS	L HYD ELEC PUMP	C
29-00-02	FG4	94	94	L ENG HYD OVHT	C
29-00-02	BK7	216	216	L ELEC HYD OVHT	C
29-00-03	FC9	120	120.1 SEC TD	R HYD SYS PRESS.	B
29-00-03	DK13	284	284. R ENG RUN. R HYD SYS PRESS	R HYD ENG PUMP	C
29-00-03	FK2	462	462. R HYD SYS PRESS	R HYD ELEC PUMP	C
29-00-03	AK4	482	482	R ENG HYD OVHT	C
29-00-03	AK8	258	258	R ELEC HYD OVHT	C
29-00-04	AG11	259	259.C HYD SYS PRESS.	C HYD ELEC 1	C
29-00-04	BK8	471	471	C HYD 1 OVHT	C
29-00-04	DJ11	220	220. C HYD SYS PRESS.	C HYD ELEC 2	C
29-00-04	AK3	34	34	C HYD 2 OVHT	C
29-00-04	DJ10	60	60.1 SEC TD	C HYD SYS PRESS.	B
29-00-04	FK6	437	437	RAT. UNLOCKED	C
29-00-01	EA3	410	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	DB6	154	154	C HYD QTY	C
29-00-02			2 OR MORE OF (117,98,137)	FLT CONT VALS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
30-11-01	FG7	318	318. 2.5 SEC TD	L WING ANTI-ICE	C
30-11-01	FJ2	447	447. 2.5 SEC TD	R WING ANTI-ICE	C
30-21-01	EC14	305	305. L ENG RUN. 10 SEC TD.	L ENG ANTI-ICE	C
30-21-02	EA5	238	238. R ENG RUN. 10 SEC TD.	R ENG ANTI-ICE	C
30-31-01	EC3	45	45. PROBE HEAT	CAPT PITOT	C
30-31-01	AD1	269	269. PROBE HEAT	L AUX PITOT	C
30-31-01			2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)	PROBE HEAT	C
30-31-02	EA6	449	449. PROBE HEAT	F/O PITOT	C
30-31-02	DB9	97	97. PROBE HEAT	R AUX PITOT	C
30-32-01	DB5	155	155. PROBE HEAT	L AOA PROBE	C
30-32-02	EA7	241	241. PROBE HEAT	R AOA PROBE	C
30-33-01	EA4	411	411. PROBE HEAT	TAT PROBE	C
30-41-01	EC6	29	29. WINDOW HEAT	L FWD WINDOW	C
30-41-01			2 OR MORE OF (29, 189, 205, 253)	WINDOW HEAT	C
30-41-02	EC5	205	205. WINDOW HEAT	R FWD WINDOW	C
30-41-03	EC4	189	189. WINDOW HEAT	L SIDE WINDOW	C
30-41-04	AD2	253	253. WINDOW HEAT	R SIDE WINDOW	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET ON	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET OFF	C
31-41-01			NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD	EICAS CONT PNL	C
31-41-06			DISPLAY SYSTEM FAULT, 1 SEC TD.	EICAS DISPLAY	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
31-51-03	AG15	235	235	PARKING BRAKE	A
31-51-03	DA15	108	108	FLAPS	A
31-51-03	ED2	332	332	SPOILERS	A
31-51-03	EA1	431	431	STABILIZER	A
31-51-04	BG14	349	349	GEAR NOT DOWN	A
31-51-04	BC14	463	463	SPEEDBRAKES EXT	B
31-51-07	BD14	350	350+134	L ENG SHUTDOWN	B [5]
	BJ11	134			
31-51-07	BJ3	429	429+147	R ENG SHUTDOWN	B [5]
	DK6	147			
32-41-01	EH12	47	47	BRAKE SOURCE	C
32-41-01	AG3	226	226. 235	PARKING BRAKE	C
32-42-03	AG6	290	290	AUTOBRAKES	C
32-42-04	FH10	65	65	ANTISKID	C
32-61-01	DB7	43	(43.298.25 SEC TD).	GEAR DISAGREE	B
	AG12	298			
32-61-01	BF14	125	125. 335. 35 SEC TD	GEAR DOORS	C
	F-C2	335			
33-51-01	EA11	193	193	EMER LIGHTS	C
34-12-01	FE5	136	136 +111	OVERSPEED	A
34-12-02	BC15	111			
34-16-01	BE14	477	477	ALTITUDE ALERT	B [2]
34-21-01	AG8	68	68	L IRS DC FAIL	C
34-21-01	AG5	292	292	L IRS FAULT	C
34-21-01	AG1	228	228	L IRS ON DC	C
34-21-02	DE9	168	168	R IRS DC FAIL	C
[8] 34-21-02	DE2	392	392	R IRS FAULT	C
34-21-02	DE5	424	424	R IRS ON DC	C
34-21-03	FC3	374	374	C IRS DC FAIL	C
34-21-03	FC4	502	502	C IRS FAULT	C
34-21-03	FD5	150	150	C IRS ON DC	C
34-22-31	FA9	289	289	INSTR SWITCH	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]
34-25-01	[8]	DD119	DD119	ATT DISAGREE	B
34-53-01	EA13	79	79	ATC FAULT	C
34-61-02	AG13	299	299	FMC MESSAGE	C
[8] 34-61-02	EK14	257	257	L FMC FAIL	C
34-61-07	BK1	239	239	R FMC FAIL	C
35-21-01	FF6	141	141	PASS. OXYGEN ON	C
36-11-01	EK3	428	428. L ENG RUN	L ENG BLEED OFF	C
36-11-01	EK7	171	171	L ENG HI STAGE	C
36-11-02	EK6	172	172. R ENG RUN	R ENG BLEED OFF	C
36-11-02	EK11	395	395	R ENG HI STAGE	C
36-11-03	FF1	365	365.6 SECS TD	APU BLEED VAL	C
36-11-05	BB13	461	461.6 SECS TD	BLEED ISLN VAL	C
36-22-01	EK10	396	396	L ENG BLEED VAL	B
36-22-01	EK2	427	427	R ENG BLEED VAL	B
49-61-01	FA10	288	288.6 SEC TD	APU FUEL VAL	C
49-61-01	FB6	105	105	APU FAULT	C
52-71-01	BA11	144	144. L ENTRY DOORS	L CTR ENT DOOR	C
52-71-01	BB12	496	496. EMER DOORS	L EMER DOOR	C
52-71-01	BA10	352	352. L ENTRY DOORS	L FWD ENT DOOR	C
52-71-01	BE12	368	368. L ENTRY DOORS	L AFT ENT DOOR	C
52-71-01			2 OR MORE OF (144, 352, OR 368)	L ENTRY DOORS	C
	BA5	129	129. R ENTRY DOORS	R CTR ENT DOOR	C
52-71-01	BD5	481	481. EMER DOORS	R EMER DOOR	C
52-71-01	AD14	369	369. R ENTRY DOORS	R FWD ENT DOOR	C
52-71-01	AD13	353	353. R ENTRY DOORS	R AFT ENT DOOR	C
52-71-01			2 OR MORE OF (129, 369 OR 353)	R ENTRY DOORS	C
52-71-01			2 OR MORE OF (496, 481, 347, 251, 27 OR 255)	EMER DOORS	C C
52-71-01	AE04	347	347. EMER DOORS	L FWD EMER DOORS	C
52-71-01	DA09	251	251. EMER DOORS	L AFT EMER DOORS	C
52-71-01	DC05	27	27. EMER DOORS	R FWD EMER DOORS	C
52-71-01	AE01	255	255. EMER DOORS	R AFT EMER DOORS	C
52-71-01	BB7	416	416.ACCESS DOORS	FWD ACCESS DOOR	C
52-71-01	BA6	160	160. ACCESS DOORS	EE ACCESS DOOR	C
52-71-01			416. 160	ACCESS DOOR	C
52-71-01	AF15	384	384. CARGO DOORS	FWD CARGO DOOR	C
52-71-01	BA7	145	145. CARGO DOORS	AFT CARGO DOOR	C
52-71-01			384. 145	CARGO DOORS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]	
73-21-01	BF13	303	303.6 SECS TD	L ENG FUEL VAL	C	
73-21-01	BD14	350	350 + 134	L ENG SHUTDOWN	B	
	BJ11	134				
73-21-02	BD15	415	415.6 SEC TD	R ENG FUEL VAL	C	
73-21-02	BJ3	429	429 + 147	R ENG SHUTDOWN	B	
	DK6	147				
73-21-04	BH08	455	455. L ENG RUNNING. 4 SEC TD	L ENG LIMITER	C	
73-21-05	DH04	167	167.R ENG RUNNING. 4 SEC TD	R ENG LIMITER	C	
73-21-04	BG10	373	373	L EEC OFF	B	
73-21-04	BH6	358	(L ENG RUNNING. 4 SEC TD.) 358. 373	L ENG EEC	C	
73-21-05	DE13	386	386	R EEC OFF	B	
73-21-05	DK9	324	(R ENG RUNNING. 4 SEC TD.) 324. 386	R ENG EEC	C	
78-36-01	BH07	103	(103. L AC BUS OFF. 2 SEC TD)	L REV ISLN VAL	C	
78-36-01	DH07	391	(391. R AC BUS OFF. 2 SEC TD)	R REV ISLN VAL		
79-33-01	AH3	483	483. L ENG RUN	L ENG OIL PRESS	C	
79-33-01	DK10	371	371. R ENG RUN	R ENG OIL PRESS	C	
79-35-01	AH04	131	131. L ENG OIL TEMP >10°C	L OIL FILTER	C	
79-35-01	DK03	423	423. R ENG OIL TEMP >10°C	R OIL FILTER	C	
80-11-01	FD09	152	152. 5 SEC TD	L STARTER CUTOUT	B	[10]
80-11-01	BH11	327	327. 152. 5 SEC TD	L ENG STARTER	C	
	FD09	152				
80-11-02	FB05	121	121. 5 SEC TD	R STARTER CUTOUT	B	
80-11-02	DK02	440	440. 121. 5 SEC TD	R ENG STARTER	C	[10]
	FB05	121				

5088

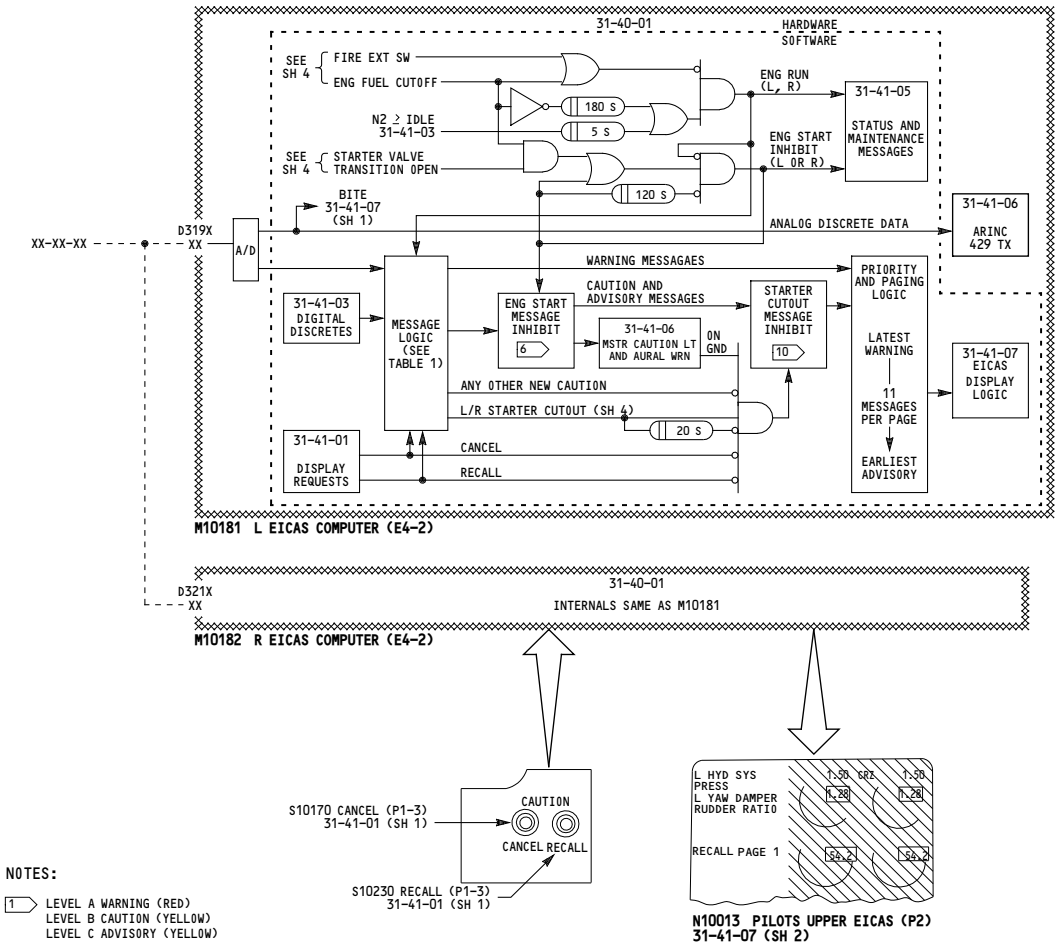


TABLE 1
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]	
21-25-01	AE7	138	138. 1 SEC TD.L UTIL BUS OFF	L RECIR FAN	C	
21-25-02	AD6	362	362. 1 SEC TD.R UTIL BUS OFF	R RECIR FAN	C	
21-31-01		[3]	112, 336. 5 SEC TD	CABIN AUTO. INOP	B	
21-33-01	AF13	291	291	CABIN ALTITUDE	A	
21-51-09	AD8	124	124	L PACK OFF	C	
21-51-09	AE6	92	92	L PACK TEMP	C	
21-51-10	AG10	348	348	R PACK OFF	C	
21-51-10	AD5	316	316	R PACK TEMP	C	
21-58-06	BG8	351	351. 1 SEC TD	FWD EQPT OVHT	C	
21-58-02	FF5	135	135. 1 SEC TD	FWD EQPT SMOKE	C	
21-60-01	DA14	91	91	FLIGHT DECK TEMP	C	
21-60-02	FK9	505	505	FWD CABIN TEMP	C	
21-60-03	EJ10	271	271	AFT CABIN TEMP	C	
21-61-04	DA13	315	315	TRIM AIR	C	
22-14-01	DG7	323	(323 + 244). 0.5 SEC TD	AUTOPILOT DISC	A	
22-14-01	EA9	244				
22-14-01	BJ2	478	478	AUTOPILOT	B	
22-21-01	DA6	212	212	L YAW DAMPER	C	
22-21-02	AD7	52	52	R YAW DAMPER	C	
22-24-01	FE4	425	425	MACH/SPD TRIM	C	
22-34-01	BD8	126	126. 1 SEC TD	AUTOTHROT DISC	B	
24-11-01	DA10	306	306. L ENG RUNNING	L GEN DRIVE	C	
24-11-02	DA1	219	219. R ENG RUNNING	R GEN DRIVE	C	
24-22-02	DB3	236	236	L AC BUS OFF	B	[4]
24-22-02	DB1	59	59. L ENG RUNNING.CAA	L GEN OFF	B	
24-22-04	DB2	76	76	R AC BUS OFF	B	
24-22-04	DA12	283	283. R ENG RUNNING.CAA	R GEN OFF	B	[4]
24-22-06	DC7	187	187. 5 SEC TD	APU GEN OFF	C	
24-22-07	DC6	44	44	L BUS ISOLATED	C	
24-22-08	DC1	268	268	R BUS ISOLATED	C	
24-31-01	EC15	142	142. 10 SEC TD.767	MAIN BAT. DISCH	C	
24-31-01	AD4	250	250	BATTERY OFF	C	[4]
24-33-01	DB4	26	26	STANDBY BUS OFF	C	[4]
24-51-10	AE5	300	300. L AC BUS OFF	L UTIL BUS OFF	C	
24-51-20	DC8	204	204. R AC BUS OFF	R UTIL BUS OFF	C	

NOTES:

[1] LEVEL A WARNING (RED)
LEVEL B CAUTION (YELLOW)
LEVEL C ADVISORY (YELLOW)

[2] NO CAUTION AURAL COMMAND FROM EICAS

[3] FOR INPUT SEE 31-41-05

[4] USED IN OTHER MESSAGE LOGIC IN 31-41-04, 31-41-05

[5] NO MASTER CAUTION LIGHT OR CAUTION AURAL

[6] THESE MESSAGES ARE NOT INHIBITED: - L/R ENG SHUTDOWN, L/R STARTER CUTOUT, L/R ENG STARTER

[7] FOR DIGITAL INPUTS SEE 31-41-03

[8] ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:
357 TRUE=28V FALSE=OPEN
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND
ALL IRS INPUTS TRUE=>10V FALSE=0V

[10] REMOVES ALL MESSAGES EXCEPT L/R STARTER CUTOUT FROM DISPLAY FOR 20 SECONDS

009

EICAS WARNING, CAUTION AND ADVISORY MESSAGES

Incorporates
31-0059 R01

D280N032S

31-41-04

Page 102.1
Sheet 1
Jan 21/2005

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
26-11-01	BE4	57	57	L ENG FIRE	A
26-11-02	DG3	99	99	R ENG FIRE	A
26-11-03	BE5	246	246	L ENG OVHT	B
26-11-04	DG5	466	466	R ENG OVHT	B
26-15-01	FF2	359	359	APU FIRE	A
26-16-01	DF7	370	370	FWD CARGO FIRE	A
26-16-02	FF7	472	472	AFT CARGO FIRE	A
26-16-02	EA2	430	430	FIRE/OVHT SYS	C
26-17-01	DB10	203	203	WHEEL WELL FIRE	A
26-18-01	BF4	217	217	L BLD DUCT LEAK	B
26-18-02	DG4	451	451	R BLD DUCT LEAK	B
26-21-01	DG2	114	114	ENG BTL 1	C
26-21-01	FE3	417	417	ENG BTL 2	C
26-22-01	DC9	42	42	APU BTL	C
26-23-01	DD1	146	146	CARGO BTL 1	C
26-23-01	FC08	389	389	CARGO BTL 2	C
27-20-02	DC13	414	414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)	RUDDER RATIO	C
27-40-01	AD11	276	276	STAB. TRIM	C
27-40-01	EB12	302	302	UNSCHD STAB. TRIM	B
27-51-03	DB15	475	475	FLAP LD RELIEF	C
27-51-05	DG15	122	122	TE FLAP ASYM	B
27-51-06	ED1	346	346	TE FLAP DISAGREE	B
27-61-01	DC11	90	90	SPOILERS	C
27-62-01	AG9	66	66	AUTO. SPEEDBRAKE	C
27-81-03	DB14	460	460	LE SLAT DISAGREE	B
27-81-05	EB1	474	474	LE SLAT ASYM	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ 321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
28-22-01	ED5	107	107.6 SEC TD	L FUEL SPAR VAL	C
28-22-01	EC1	331	331.6 SEC TD	R FUEL SPAR VAL	C
28-22-01	EC2	399	399.6 SEC TD	FUEL CROSSFEED	C
28-22-01	BE7	87	(322.10 SEC TD).(361.10 SEC TD)	L FUEL SYS PRESS.	B
	FH4	357 [8]	.(87.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)		
28-22-02	DH8	322	322.10 SEC TD. L FUEL SYS PRESS	L FWD FUEL PUMP	C
28-22-02	FH8	361	361.10 SEC TD. L FUEL SYS PRESS	L AFT FUEL PUMP	C
28-22-03	DH6	100	100.10 SEC TD. L FUEL SYS PRESS	CTR L FUEL PUMP	C
28-22-03	FJ9	153	153.10 SEC TD. R FUEL SYS PRESS	CTR R FUEL PUMP	C
28-22-03	DG8	338	(377.10 SEC TD).(452.10 SEC TD) .(338.10 SEC TD).(357+399) +(ALL PUMPS LOW PRESS.10 SEC TD)	R FUEL SYS PRESS.	B
28-22-04	FH9	377	377.10 SEC TD. R FUEL SYS PRESS	R FWD FUEL PUMP	C
28-22-04	DH3	452	452.10 SEC TD. R FUEL SYS PRESS	R AFT FUEL PUMP	C
28-41-01	ED3	459	459.31	LOW FUEL	B
28-41-01	ED13	31	459.31	FUEL CONFIG	C
29-00-01	EA3	41C	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	D86	154	154	C HYD QTY	C
29-00-01	AH02	196	196. L AND R ENGINES RUNNING	L HYD RSVR PRES	C
29-00-01	FC10	225	225. L AND R ENGINES RUNNING	C HYD RSVR PRES	C
29-00-01	DK07	404	404. L AND R ENGINES RUNNING	R HYD RSVR PRES	C
29-00-02	DE14	403	403.1 SEC TD	L HYD SYS PRESS.	B
29-00-02	AK2	195	195. L ENG RUN. L HYD SYS PRESS	L HYD ENG PUMP	C
29-00-02	AK11	35	35. L HYD SYS PRESS	L HYD ELEC PUMP	C
29-00-02	FG4	94	94	L ENG HYD OVHT	C
29-00-02	BK7	216	216	L ELEC HYD OVHT	C
29-00-03	FC9	120	120.1 SEC TD	R HYD SYS PRESS.	B
29-00-03	DK13	284	284. R ENG RUN. R HYD SYS PRESS	R HYD ENG PUMP	C
29-00-03	FK2	462	462. R HYD SYS PRESS	R HYD ELEC PUMP	C
29-00-03	AK4	482	482	R ENG HYD OVHT	C
29-00-03	AK8	258	258	R ELEC HYD OVHT	C
29-00-04	AG11	259	259.C HYD SYS PRESS.	C HYD ELEC 1	C
29-00-04	BK8	471	471	C HYD 1 OVHT	C
29-00-04	DJ11	220	220. C HYD SYS PRESS.	C HYD ELEC 2	C
29-00-04	AK3	34	34	C HYD 2 OVHT	C
29-00-04	DJ10	60	60.1 SEC TD	C HYD SYS PRESS.	B
29-00-04	FK6	437	437	RAT. UNLOCKED	C
29-00-01	EA3	410	410	L HYD QTY	C
29-00-01	EC7	221	221	R HYD QTY	C
29-00-01	DB6	154	154	C HYD QTY	C
29-00-02			2 OR MORE OF (117,98,137)	FLT CONT VALS	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
30-11-01	FG7	318	318. 2.5 SEC TD	L WING ANTI-ICE	C
30-11-01	FJ2	447	447. 2.5 SEC TD	R WING ANTI-ICE	C
30-21-01	EC14	305	305. L ENG RUN. 10 SEC TD.	L ENG ANTI-ICE	C
30-21-02	EA5	238	238. R ENG RUN. 10 SEC TD.	R ENG ANTI-ICE	C
30-31-01	EC3	45	45. PROBE HEAT	CAPT PITOT	C
30-31-01	AD1	269	269. PROBE HEAT	L AUX PITOT	C
30-31-01			2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)	PROBE HEAT	C
30-31-02	EA6	449	449. PROBE HEAT	F/O PITOT	C
30-31-02	DB9	97	97. PROBE HEAT	R AUX PITOT	C
30-32-01	DB5	155	155. PROBE HEAT	L AOA PROBE	C
30-32-02	EA7	241	241. PROBE HEAT	R AOA PROBE	C
30-33-01	EA4	411	411. PROBE HEAT	TAT PROBE	C
30-41-01	EC6	29	29. WINDOW HEAT	L FWD WINDOW	C
30-41-01			2 OR MORE OF (29, 189, 205, 253)	WINDOW HEAT	C
30-41-02	EC5	205	205. WINDOW HEAT	R FWD WINDOW	C
30-41-03	EC4	189	189. WINDOW HEAT	L SIDE WINDOW	C
30-41-04	AD2	253	253. WINDOW HEAT	R SIDE WINDOW	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET ON	C
30-81-01	ED6	174	174. CAUTION CANCEL	ICE DET OFF	C
31-41-01			NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD	EICAS CONT PNL	C
31-41-06			DISPLAY SYSTEM FAULT, 1 SEC TD.	EICAS DISPLAY	C

TABLE 1 (CONT)

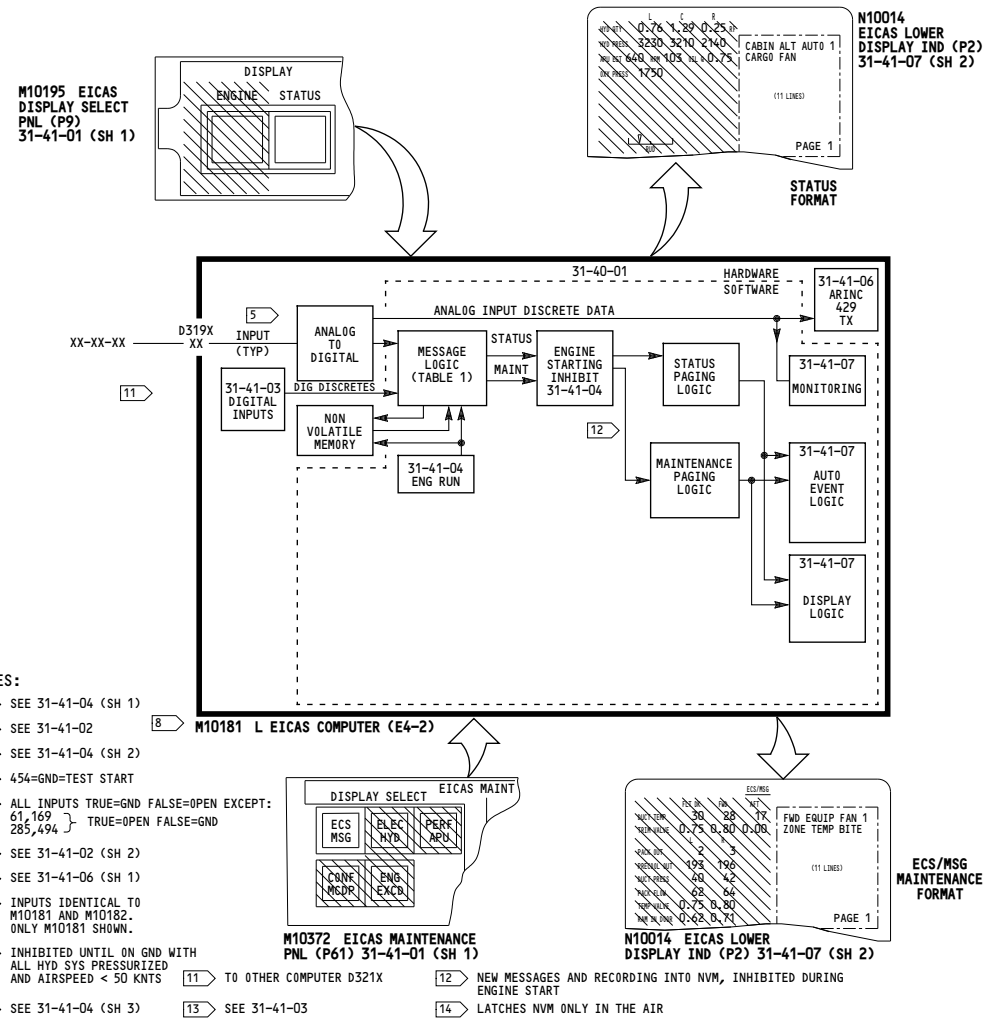
SCHEMATIC REFERENCE	D319 D321 PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [8]	MESSAGE	LEVEL [1]
31-51-03	AG15	235	235	PARKING BRAKE	A
31-51-03	DA15	108	108	FLAPS	A
31-51-03	ED2	332	332	SPOILERS	A
31-51-03	EA1	431	431	STABILIZER	A
31-51-04	BG14	349	349	GEAR NOT DOWN	A
31-51-04	BC14	463	463	SPEEDBRAKES EXT	B
31-51-07	BD14	350	350+134	L ENG SHUTDOWN	B [5]
	BJ11	134			
31-51-07	BJ3	429	429+147	R ENG SHUTDOWN	B [5]
	DK6	147			
32-41-01	EH12	47	47	BRAKE SOURCE	C
32-41-01	AG3	226	226. 235	PARKING BRAKE	C
32-42-03	AG6	290	290	AUTOBRAKES	C
32-42-04	FH10	65	65, 199	ANTISKID	C
32-61-01	DB7	43	(43.298.25 SEC TD).	GEAR DISAGREE	B
	AG12	298			
32-61-01	BF14	125	125. 335. 35 SEC TD	GEAR DOORS	C
	F-C2	335			
32-61-01 (SH 2)	FE9	360	360*445.L AC BUS OFF	AIR/GND SYS	C
	BJ13	445	.R AC BUS OFF.G/S <80KTS .10 SEC TD		
32-61-01 (SH 2)	FF8	421	421*157.L AC BUS OFF	NOSE A/G SYS	C
	BH1	157	.R AC BUS OFF.G/S <80KTS .10 SEC TD		
33-51-01	EA11	193	193	EMER LIGHTS	C
34-12-01	FE5	136	136 +111	OVERSPEED	A
34-12-02	BC15	111			
34-16-01	BE14	477	477	ALTITUDE ALERT	B [2]
34-21-01	AG8	68	68	L IRS DC FAIL	C
34-21-01	AG5	292	292	L IRS FAULT	C
34-21-01	AG1	228	228	L IRS ON DC	C
34-21-02	DE9	168	168	R IRS DC FAIL	C
[8] 34-21-02	DE2	392	392	R IRS FAULT	C
34-21-02	DE5	424	424	R IRS ON DC	C
34-21-03	FC3	374	374	C IRS DC FAIL	C
34-21-03	FC4	502	502	C IRS FAULT	C
34-21-03	FD5	150	150	C IRS ON DC	C
34-22-31	FA9	289	289	INSTR SWITCH	B

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]
34-25-01	[8]	DD119	DD119	ATT DISAGREE	B
34-53-01	EA13	79	79	ATC FAULT	C
34-61-02	AG13	299	299	FMC MESSAGE	C
[8] 34-61-02	EK14	257	257	L FMC FAIL	C
34-61-07	BK1	239	239	R FMC FAIL	C
35-21-01	FF6	141	141	PASS. OXYGEN ON	C
36-11-01	EK3	428	428. L ENG RUN	L ENG BLEED OFF	C
36-11-01	EK7	171	171	L ENG HI STAGE	C
36-11-02	EK6	172	172. R ENG RUN	R ENG BLEED OFF	C
36-11-02	EK11	395	395	R ENG HI STAGE	C
36-11-03	FF1	365	365.6 SECS TD	APU BLEED VAL	C
36-11-05	BB13	461	461.6 SECS TD	BLEED ISLN VAL	C
36-22-01	EK10	396	396	L ENG BLEED VAL	B
36-22-01	EK2	427	427	R ENG BLEED VAL	B
49-61-01	FA10	288	288.6 SEC TD	APU FUEL VAL	C
49-61-01	FB6	105	105	APU FAULT	C
52-71-01	BA11	144	144. L ENTRY DOORS	L CTR ENT DOOR	C
52-71-01	BB12	496	496. EMER DOORS	L EMER DOOR	C
52-71-01	BA10	352	352. L ENTRY DOORS	L FWD ENT DOOR	C
52-71-01	BE12	368	368. L ENTRY DOORS	L AFT ENT DOOR	C
52-71-01			2 OR MORE OF (144, 352, OR 368)	L ENTRY DOORS	C
	BA5	129	129. R ENTRY DOORS	R CTR ENT DOOR	C
52-71-01	BD5	481	481. EMER DOORS	R EMER DOOR	C
52-71-01	AD14	369	369. R ENTRY DOORS	R FWD ENT DOOR	C
52-71-01	AD13	353	353. R ENTRY DOORS	R AFT ENT DOOR	C
52-71-01			2 OR MORE OF (129, 369 OR 353)	R ENTRY DOORS	C
52-71-01			2 OR MORE OF (496, 481, 347, 251, 27 OR 255)	EMER DOORS	C
52-71-01	AE04	347	347. EMER DOORS	L FWD EMER DOORS	C
52-71-01	DA09	251	251. EMER DOORS	L AFT EMER DOORS	C
52-71-01	DC05	27	27. EMER DOORS	R FWD EMER DOORS	C
52-71-01	AE01	255	255. EMER DOORS	R AFT EMER DOORS	C
52-71-01	BB7	416	416.ACCESS DOORS	FWD ACCESS DOOR	C
52-71-01	BA6	160	160. ACCESS DOORS	EE ACCESS DOOR	C
52-71-01			416. 160	ACCESS DOOR	C
52-71-01	AF15	384	384. CARGO DOORS	FWD CARGO DOOR	C
52-71-01	BA7	145	145. CARGO DOORS	AFT CARGO DOOR	C
52-71-01			384. 145	CARGO DOORS	C
73-14-01	AJ11	50	50. 30 SEC TD	L ENG FUEL FILT	C
73-14-01	DG12	179	179. 30 SEC TD	R ENG FUEL FILT	C

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319 D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE BY INPUT NO. [7]	MESSAGE	LEVEL [1]
73-21-01	BF13	303	303.6 SECS TD	L ENG FUEL VAL	C
73-21-01	BD14	350	350 + 134	L ENG SHUTDOWN	B
	BJ11	134			
73-21-02	BD15	415	415.6 SEC TD	R ENG FUEL VAL	C
73-21-02	BJ3	429	429 + 147	R ENG SHUTDOWN	B
	DK6	147			
73-21-04	BH08	455	455. L ENG RUNNING. 4 SEC TD	L ENG LIMITER	C
73-21-05	DH04	167	167.R ENG RUNNING. 4 SEC TD	R ENG LIMITER	C
73-21-04	BG10	373	373	L EEC OFF	B
73-21-04	BH6	358	(L ENG RUNNING. 4 SEC TD.) 358. 373	L ENG EEC	C
73-21-05	DE13	386	386	R EEC OFF	B
73-21-05	DK9	324	(R ENG RUNNING. 4 SEC TD.) 324. 386	R ENG EEC	C
78-36-01	BH07	103	(103. L AC BUS OFF. 2 SEC TD)	L REV ISLN VAL	C
78-36-01	DH07	391	(391. R AC BUS OFF. 2 SEC TD)	R REV ISLN VAL	
79-33-01	AH3	483	483. L ENG RUN	L ENG OIL PRESS	C
79-33-01	DK10	371	371. R ENG RUN	R ENG OIL PRESS	C
79-35-01	AH04	131	131.(L OIL TEMP>25)+IN AIR).5 SEC TD	L OIL FILTER	C
79-35-01	DK03	423	423.(R OIL TEMP>25)+IN AIR).5 SEC TD	R OIL FILTER	C
80-11-01	FD09	152	152. 5 SEC TD	L STARTER CUTOUT	B [10]
80-11-01	BH11	327	327. 152. 5 SEC TD	L ENG STARTER	C
	FD09	152			
80-11-02	FB05	121	121. 5 SEC TD	R STARTER CUTOUT	B
80-11-02	DK02	440	440. 121. 5 SEC TD	R ENG STARTER	C [10]
	FB05	121			



NOTES:

1. SEE 31-41-04 (SH 1)
2. SEE 31-41-02
3. SEE 31-41-04 (SH 2)
4. 454=GND=TEST START
5. ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 61,169 285,494 } TRUE=OPEN FALSE=GND
6. SEE 31-41-02 (SH 2)
7. SEE 31-41-06 (SH 1)
8. INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
9. INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
10. SEE 31-41-04 (SH 3)
11. TO OTHER COMPUTER D321X
12. NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
13. SEE 31-41-03
14. LATCHES NVM ONLY IN THE AIR

TABLE 1
EICAS MESSAGE LOGIC

SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) 5	MESSAGE	STATUS	MAINTENANCE	NVM	
21-31-01	EF14	112	112.5 SEC TD	CABIN ALT AUTO. 1	X	X		1
21-31-02	EF13	336	336.5 SEC TD	CABIN ALT AUTO. 2	X	X		
21-43-01	DA5	227	227. L UTIL BUS OFF. 1 SEC TD	FWD CARGO FAN	X	X	X	
21-44-01	AJ15	67	67. R UTIL BUS OFF. 1 SEC TD	AFT CARGO FAN	X	X	X	
21-51-09	FD2	397	397	L PACK BITE		X		
21-51-10	DF11	69	69	R PACK BITE		X		
21-58-01	DA3	84	84. ON GND .30 SEC TD	FWD EQ SUP FLOW		X	X	
21-58-01	DA4	244	244. ON GND .30 SEC TD	FWD EQ EXH FLOW		X	X	
21-58-01	FH7	375	375. ON GND .30 SEC TD	AFT EQ FLOW		X	X	
21-58-02			376.454 .2 SEC TD	FWD EQPT EXH DET		X	X	
21-58-01	——	——	(FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)	EQPT CLG FLOW	X			
21-58-03	AE11	330	330. LAC BUS OFF. CLG TEST .4 SEC TD	FWD EQ SUP FAN 1		X	X	
21-58-03	AD9 E-D14	58 304	(58.CLG TEST.304.R AC BUS OFF.2 SEC TD) +(58.CLG TEST).2 SEC TD	FWD EQ SUP FAN 2		X	X	
21-58-03	——	——	(FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 1) + (AFT EQ SUP FAN 2)	EQ CLG FAN	X			
21-58-03	AG14	249	249. L AC BUS OFF. 2 SEC TD	AFT EQ EXH FAN 1		X	X	
21-58-03	AK14	74	74. R AC BUS OFF. 2 SEC TD	AFT EQ EXH FAN 2		X	X	
21-58-03	FJ7	503	503. LAC BUS OFF.3 SEC TD	AFT EQ SUP FAN 1		X	X	
21-58-03	FK7	151	151. RAC BUS OFF .4 SEC TD	AFT EQ SUP FAN 2				
21-58-06	F-K5	454 4	(ENGINES SHUTDOWN .15 SEC TD .454 .LAC BUS OFF) + (EITHER ENGINE RUNNING .454 .STBY BUS OFF)	EQPT CLG TEST		X	X	
21-58-01			ANYONE OF THE FOLLING 3	EQPT CLG SENSOR	X			
21-58-01	D-A3	84	84 .454 .2 SEC TD	FWD EQ SUP SNSR		X	X	
21-58-01	D-A4	244	244 .454 .2 SEC TD	FWD EQ EXH SNSR		X	X	
21-58-01	F-H7	375	375 .454 .2 SEC TD	AFT EQ SNSR		X	X	
21-58-02	DE15	266	266 .454 .10 SEC TD	OVBD EX VAL TEST		X	X	
21-58-02	D-E15	266	266 .454. 2 SEC TD	OVBD EX VAL OPEN	X	X	X	
21-58-02	E-D14	304	304 .454 .10 SEC TD	EQPT SMOKE TEST	X	X	X	
21-58-02	D-A2	308	308 .454 .2 SEC TD	FWD EQPT DET 1				
21-58-02	DF13	229	229 .454 .2 SEC TD	FWD EQPT DET 2		X	X	
21-61-01	D88	186	186	ZONE TEMP BITE		X		
24-11-01		2	L IDG OIL TEMP RISE > 175°C	L IDG TEMP SENS		X		
24-11-01		2	L IDG OIL TEMP > 140°C. L IDG TEMP SENS.300 SEC TD	L IDG OIL TEMP		X	X	
24-11-02		2	R IDG OIL TEMP > 175°C	R IDG TEMP SENS		X		
24-11-02		2	R IDG OIL TEMP > 140°C. R IDG TEMP SENS.300 SEC TD	R IDG OIL TEMP		X	X	
24-11-02	DA12 D-B1	283 59 2	(ABS(IDG OIL TEMP RISE DIFF(L-R)) > 6).L IDG TEMP SENS. R IDG TEMP SENSE.283.59 .600 SEC TD	IDG RISE TEMP		X	X	
24-25-01	FJ04	133	133	HYD GEN ON	X	X	X	14
24-25-01	EB13	67	67 .5 SEC TD	HYD GEN VAL	X	X		

ALL

EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

5058

TABLE 1 (CONT)

	SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO) [5]	MESSAGE	STATUS	MAINTENANCE	NVM
[5]	24-31-01	EA12	494	494. R AC BUS OFF. 10 SEC TD	MAIN BAT. CHGR	X	X	X
	24-31-02	FED2	169	169. R AC BUS OFF. 10 SEC TD	APU BAT CHGR	X	X	X
	24-31-02	FBD3	345	345. 1 SEC TD	APU BAT NO STBY	X	X	X
	24-32-01	EJ14	62	62	T-R UNIT	X	X	
	24-33-01	AD4	250	INV AC VOLTS >124 + <106	STBY INVERTER	X	X	X
		EG11	541	0.7 SEC TD. BAT SW ON				
[3]	24-51-61	BH14	285	285. R AC BUS OFF	F/O INSTR XFER	X	X	
[5]	24-51-61	BJ14	61	61. L AC BUS OFF	CAPT INSTR XFER	X	X	
	26-11-01	DG6	467	467. 57	L ENG FIRE LP 1	X		
		[3]	57	467	L ENG FIRE LP 1		X	
	26-11-01	EG4	233	233. 57	L ENG FIRE LP 2	X		
		[3]	57	233	L ENG FIRE LP 2		X	
	26-11-02	AG2	484	484. 99	R ENG FIRE LP 1	X		
		[3]	99	484	R ENG FIRE LP 1		X	
	26-11-02	BE9	311	311. 99	R ENG FIRE LP 2	X		
		[3]	99	311	R ENG FIRE LP 2		X	
	26-11-03	AG4	356	356. 246	L ENG OH LP 1	X		
		[3]	246	356	L ENG OH LP 1		X	
	26-11-03	BE6	453	453. 246	L ENG OH LP 2	X		
		[3]	246	453	L ENG OH LP 2		X	
	26-11-04	DG9	339	339. 466	R ENG OH LP 1	X		
		[3]	466	339	R ENG OH LP 1		X	
	26-11-04	EG6	297	297. 466	R ENG OH LP 2	X		
		[3]	466	297	R ENG OH LP 2		X	
	26-12-01	AG7	132	132. 246	L STRUT OH DET 1	X		
		[3]	246	132	L STRUT OH DET 1		X	
	26-12-01	BG4	88	88. 246	L STRUT OH DET 2	X		
		[3]	246	88	L STRUT OH DET 2		X	
	26-12-01	DG1	115	115. 466	R STRUT OH DET 1	X		
		[3]	466	115	R STRUT OH DET 1		X	
	26-12-01	EG7	262	262. 466	R STRUT OH DET 2	X		
		[3]	466	262	R STRUT OH DET 2		X	
	26-13-01	AH7	260	260. 57	L TURB OH DET 1	X		
		[3]	57	260	L TURB OH DET 1		X	
	26-13-01	BG2	312	312. 57	L TURB OH DET 2	X		
		[3]	57	312	L TURB OH DET 2		X	
	26-13-02	DF5	388	388. 99	R TURB OH DET 1	X		
		[3]	99	388	R TURB OH DET 1		X	
	26-13-02	EG5	38	38. 99	R TURB OH DET 2	X		
		[3]	99	38	R TURB OH DET 2		X	
	26-15-01	DF4	420	420. 359	APU FIRE LP 1	X		
		[3]	359	420	APU FIRE LP 1		X	
	26-15-01	FD4	161	161. 359	APU FIRE LP 2	X		
		[3]	359	161	APU FIRE LP 2		X	
	26-16-01	FE7	385	385. 20 SEC TD	CARGO DET AIR	X		
	26-16-01	DG11	419	419. 10 SEC TD	FWD DET FAN		X	
	26-16-01	AH6	36	36. 370	FWD CARGO DET 1	X		
		[3]	370	36	FWD CARGO DET 1		X	
	26-16-01	BG5	247	247. 370	FWD CARGO DET 2	X		
		[3]	370	247	FWD CARGO DET 2		X	
	26-16-02	EC11	206	206. 10 SEC TD	AFT DET FAN		X	
	26-16-02	DF1	164	164. 472	AFT CARGO DET 1	X		
		[3]	472	164	AFT CARGO DET 1		X	
	26-16-02	EG2	73	73. 472	AFT CARGO DET 2	X		
		[3]	472	73	AFT CARGO DET 2		X	
	26-17-01	DC10	158	158. 2 SEC TD	DUCT LEAK BITE		X	

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) [5]	MESSAGE	STATUS	MAINTENANCE	NVM
27-09-05	FD3	270	270. STBY BUS OFF. 30 SEC TD	L FLT CONT ELEC		X	
27-09-05	EA10	222	222. STBY BUS OFF. 30 SEC TD	R FLT CONT ELEC		X	
27-23-01	FD7	328	328. [9]	L ELEV PCU	X	X	X
27-23-01	ED8	286	286. [9]	R ELEV PCU	X	X	X
27-23-01	BE8	281	281. [9]	RUDDER PCU	X	X	X
27-23-01	——	——	(IN AIR). (281+ 286+ 328). 10 SEC TD	PCU MONITOR		X	X
27-30-01	AH9	469	469+275. ALL HYD SYS POWERED.	ELEV L HYD PRESS	X	X	X
	BH9	275	2.5 SEC TD				
27-30-01	FK8	397	397+181. ALL HYD SYS POWERED.	ELEV C HYD PRESS	X	X	X
	FJ6	181	2.5 SEC TD				
27-30-01	DH2	450	450+180. ALL HYD SYS POWERED.	ELEV R HYD PRESS	X	X	X
	DK4	180	2.5 SEC TD				
27-30-01	EG15	464	464. 5 SEC TD	ELEV ASYM	X	X	
27-30-01	DC4	314	314. ALL HYD SYS POWERED. 10 SEC TD	ELEV FEEL	X	X	[14]
27-50-01	DC17	442	442. R AC BUS OFF. 15 SEC TD	FLAP/SLAT BITE		X	X
27-50-01	DF3	500	500. STBY BUS OFF. 5 SEC TD	FLAP/SLAT ELEC	X	X	
27-51-02	ED9	366	366. L HYD SYS PRESS >1700. 1 SEC TD	FLAP ISLN VAL	X	X	X
27-20-02	EK09	77	77. 20 SEC TD	RUDDER RATIO		X	
27-61-01	AH14	82	82. STBY BUS OFF. 10 SEC TD	SPOILERS		X	
22-21-01	EK13	301	301. STBY BUS OFF	YAW DAMPER		X	
27-40-01	EJ11	207	207. STBY BUS OFF	STAB TRIM		X	
28-25-01	FD10	192	192	DC FUEL PUMP ON		X	
28-41-01	FD4	175	175	FUEL QTY BITE		X	
28-41-03	[13]		DD311+ DD312+DD313+DD317+DD318 +DD319+DD323+DD324+DD325	FUEL QTY CHANNEL	X		
28-41-03	[13]		DD314+ DD315+DD316+DD320+DD321 +DD322+DD326+DD327+DD328	FUEL QYT IND	X		
28-41-03	EDD4	175	(DV601 INVALID+DV602 INVALID+ DV603 INVALID). 175. FUEL QTY CHANNEL .FUEL QTY IND	FUEL QTY BITE	X		
	[13]						
29-00-02 (SH 1)	DE14	403	L HYD SYS PRESS < 2800. 403. BOTH ENG RUN. 60 SEC TD	L HYD SYS MAINT	X	X	X
		[6]					
29-00-03 (SH 1)	FC09	120	R HYD SYS PRESS < 2800. 120. BOTH ENG RUN. 60 SEC TD	R HYD SYS MAINT	X	X	X
		[6]					
29-00-04 (SH 1)	DJ10	60	C HYD SYS PRESS < 2800. 60. BOTH ENG RUN. 60 SEC TD	C HYD SYS MAINT	X	X	X
		[6]					
29-00-04	DK5	184	184. STBY BUS OFF 5 SEC TD	POWER XFER UNIT	X	X	X
29-00-04	FH6	405	405.	RAT	X	X	
32-41-01	FK10	64	64. 2 SEC TD	RSV BRAKE VAL		X	X
29-00-01	[6]	AV105	HYD QTY L ≥1.22	L HYD QTY 0/FULL		X	
29-00-01	[6]	AV104	HYD QTY C ≥1.22	C HYD QTY 0/FULL		X	
29-00-01	[6]	AV106	HYD QTY R ≥1.22	R HYD QTY 0/FULL		X	
30-21-01	FG5	95	95. 10 SEC TD	L ENG TAI VALVE	X	X	X
30-21-01	FG8	319	319. 10 SEC TD	R ENG TAI VALVE	X	X	X
30-30-01	FB8	457	457. ON GND. 10 SEC TD	CAPT PITOT HEAT		X	X
30-30-01	EK5	170	170. ON GND. 10 SEC TD	L AUX PITOT HEAT		X	X
30-30-02	EK12	394	394. ON GND. 10 SEC TD	F/O PITOT HEAT		X	X
30-30-02	EK8	241	241. ON GND. 10 SEC TD	R AUX PITOT HEAT		X	X
30-40-01	DB11	463	463. L AC BUS OFF.5 SEC TD	L ENG PROBE HEAT	X	X	X
30-40-01	EA8	483	483. R AC BUS OFF.5 SEC TD	R ENG PROBE HEAT	X	X	X
31-31-01	EC10	113	113. 75. BOTH ENGINES RUNNING	FLT DATA	X	X	[14]
	AJ14	75	.L AC BUS OFF. 60 SEC TD	REC			
31-31-01	AJ14	75	75. L AC BUS OFF. BOTH ENGINES RUNNING. 60 SEC TD	FLT DATA ACQ	X	X	[14]
31-41-09	BD4	——	(OTHER FAIL .L)+(OWN FAIL .L)	L EICAS CMPTR	X		
			(OTHER FAIL .L)+(OWN FAIL .L)	R EICAS CMPTR	X		
31-41-09	——	——	SELF DETECTED FAULT ONSIDE+ SELF DETECTED FAULT OFFSIDE+ L EICAS CMPTR+R EICAS CMPTR +(NO X-TALK DATA, ALTN EICAS CMPTR)	EICAS BITE		X	
31-41-09	——	——	ENG DISAGREE IN NVM+CAUT ALERT FAULT	EICAS DISAGREE	X		
31-51-01 (SH 1)	BC8	412	412. STBY BUS OFF	WARN ELEX	X	X	

ALL

EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) 5	MESSAGE	STATUS	MAINT	NVM
32-09-02 (SH 1)	FE9	360	360 ⊕ 445 • R AC BUS OFF • 10 SEC TD	AIR/GND DISAGREE	X	X	X
	BJ13	445					
32-09-02 (SH 1)	FF8	421	421 ⊕ 157 • R AC BUS OFF • 10 SEC TD	NOSE A/G DISAGREE	X	X	X
	BH1	157					
32-42-04 (SH 2)	BF15	159	159 • ANTI-SKID OFF	NORM ANTISKID	X	X	
32-42-04 (SH 2)	AD3	398	398 • ANTI-SKID OFF	ALTN ANTISKID	X	X	
32-42-04 (SH 2)	DB12	78	78	ANTISKID/AUTO BRK		X	
32-61-01	AG12	298	(298 ⊕ 43) •(439 + 277) •	GEAR DISAGREE		X	X
	DB07	43	RAC BUS OFF • 2 SEL TD				
	DE07	439					
	EJ07	277					
32-61-01	DF06	372	(372 ⊕ 344) • R AC BUS OFF • 30 SEC TD	NOSE GEAR DOWN		X	X
	FC07	344					
32-61-01	AD10	83	(83 ⊕ 202) • R AC BUS OFF • 2 SEC TD	NOSE GEAR LOCKED		X	X
	DC12	202					
32-61-01	DF06	372	191 • 372 • 344 • R AC BUS OFF • 30 SEC TD	ALL GEAR DOWN		X	X
	ED11	191					
	FC07	344					
32-61-01	—	—	191 • (439 + 277) • R AC BUS OFF • 60 SEC TD	GEAR LEVER		X	X
32-61-01	FD06	104	(104 ⊕ 387) • R AC BUS OFF • 30 SEC TD	R GEAR DOWN		X	X
	DF08	387					
32-61-01	FC05	456	(456 ⊕ 163) • R AC BUS OFF • 30 SEC TD	L GEAR DOWN		X	X
	DG13	163					
32-61-01	—	—	ANY OF THE PREVIOUS SEVEN MESSAGES	LDG GEAR MONITOR	X		
32-61-01	BF14	125	(((298 ⊕ 43) • 439 • 277 • R AC BUS OFF) •	PSEU BITE		X	X
	FC02	335	2 SEC TD)+(((125 ⊕ 335) • R AC BUS OFF) • 10 SEC TD)				
34-46-01 (SH 2)	BJ1	33	33 • STBY BUS OFF • 5 SEC TD	GND PROX BITE	X	X	
49-27-01	EK4	426	426.60 SEC TD	APU OIL QTY	X	X	X
49-52-02	FE1	393	393 • 60 SEC TD	APU DOOR	X	X	
49-61-01	BA13	480	480	APU BITE		X	X
73-21-01	13	DD001	DD001	L EEC BITE		X	X
73-21-01	13	DD051	DD051	R EEC BITE		X	X
73-31-01	AJ11	50	50 • 10 SEC TD	L ENG FUEL FILT	X	X	X
73-31-01	AK7	274	274 • 10 SEC TD	R ENG FUEL FILT	X	X	X
73-31-01	EH5	341	341 • L ENG RUNNING • 5 SEC TD	L ENG LP PUMP	X	X	X
73-31-01	EJ5	214	214 • R ENG RUNNING • 5 SEC TD	R ENG LP PUMP	X	X	X
74-31-01	BH15	317	317	L IGN STBY BUS		X	
74-31-01	BK2	413	413	R IGN STBY BUS		X	
75-32-01	AH5	51	51 • L ENG RUNNING • 5 SEC TD	L ENG SURGE CONT	X	X	X
75-32-01	DJ2	436	436 • R ENG RUNNING • 5 SEC TD	R ENG SURGE CONT	X	X	X
75-32-01	BJ10	486	486 • L ENG RUNNING • 5 SEC TD	L ENG SURGE BITE		X	X
75-32-01	DJ3	499	499 • R ENG RUNNING • 5 SEC TD	R ENG SURGE BITE		X	X
77-12-01	6	——	LN1<19.8% • (L ENG RUN • 60 SEC TD • 20 SEC TD	L ENG LOW N1	X	X	X
77-12-01	6	——	RN1<19.8% • (R ENG RUN • 60 SEC TD • 20 SEC TD	R ENG LOW N1	X	X	X
77-12-04	FJ10	32	(32 • N3 > IDLE + 32 • STBY BUS OFF • N3 > IDLE • 10 SEC TD	L ENG SPEED CARD	X	X	X
77-12-05	FB10	256	(256 • N37 > IDLE + 256 • STBY BUS OFF • N3 > IDLE • 10 SEC TD	R ENG SPEED CARD	X	X	X
77-31-01	13	DD261	DD261 • 10 SEC TD	L ENG VIB	X		X
77-31-01	13	DD259	(DD259 + DD261) • 10 SEC TD	L ENG VIB BITE		X	X
77-31-01	13	DD266	DD266 • 10 SEC TD	R ENG VIB	X		X
77-31-01	13	DD274	(DD264 + DD266) • 10 SEC TD	R ENG VIB BITE		X	X
78-36-01	BH7	103	103 • L AC BUS OFF • 2 SEC TD	L REV ISLN VAL		X	X
78-36-01	DH7	391	391 • R AC BUS OFF • 2 SEC TD	R REV ISLN VAL		X	X

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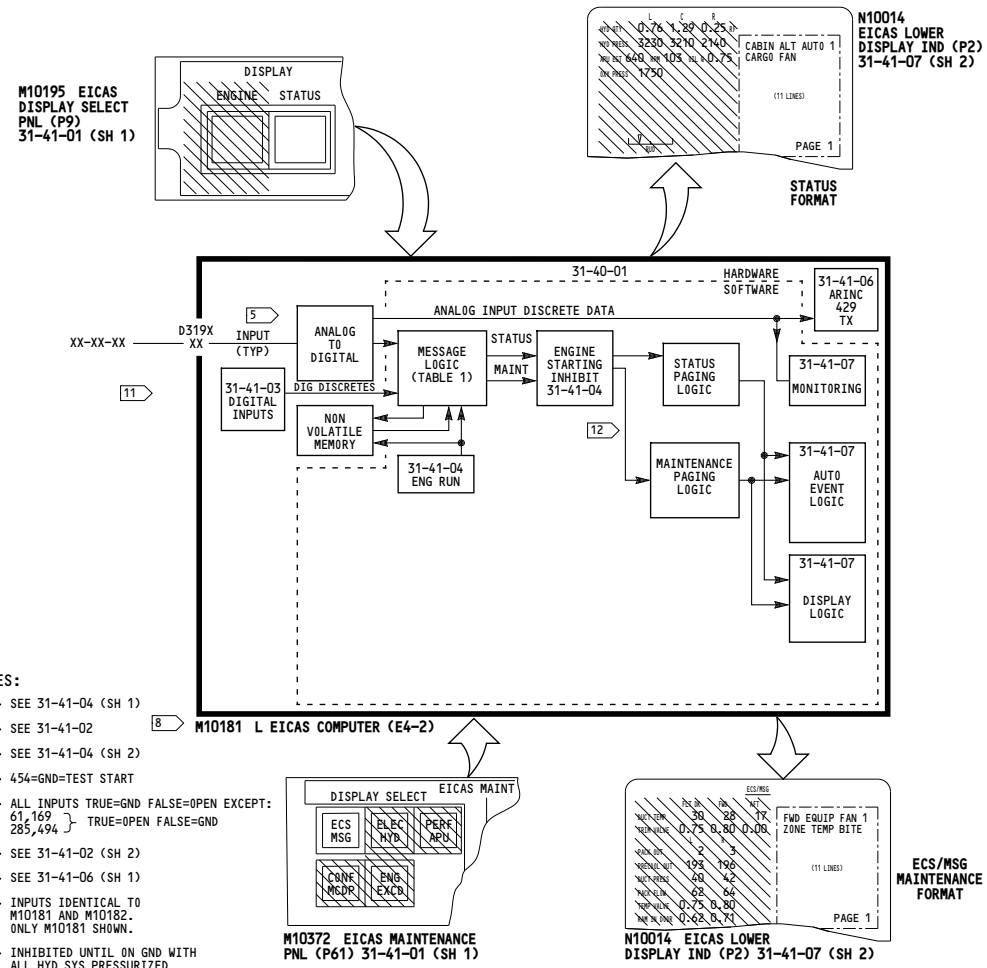

NOTES:

1. SEE 31-41-04 (SH 1)
2. SEE 31-41-02
3. SEE 31-41-04 (SH 2)
4. 454=GND=TEST START
5. ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 61,169 285,494 } TRUE=OPEN FALSE=GND
6. SEE 31-41-02 (SH 2)
7. SEE 31-41-06 (SH 1)
8. INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
9. INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
10. SEE 31-41-04 (SH 3)
11. TO OTHER COMPUTER D321X
12. NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
13. SEE 31-41-03
14. LATCHES NVM ONLY IN THE AIR

TABLE 1
EICAS MESSAGE LOGIC

SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) 5	MESSAGE	STATUS	MAINTENANCE	NVM
21-31-01	EF14	112	112.5 SEC TD	CABIN ALT AUTO. 1	X	X	
21-31-02	EF13	336	336.5 SEC TD	CABIN ALT AUTO. 2	X	X	
21-43-01	DA5	227	227. L UTIL BUS OFF. 1 SEC TD	FWD CARGO FAN	X	X	X
21-44-01	AJ15	67	67. R UTIL BUS OFF. 1 SEC TD	AFT CARGO FAN	X	X	X
21-51-09	FD2	397	397	L PACK BITE		X	
21-51-10	DF11	69	69	R PACK BITE		X	
21-58-01	DA3	84	84. ON GND .30 SEC TD	FWD EQ SUP FLOW		X	X
21-58-01	DA4	244	244. ON GND .30 SEC TD	FWD EQ EXH FLOW		X	X
21-58-01	FH7	375	375. ON GND .30 SEC TD	AFT EQ FLOW		X	X
21-58-02			376.454 .2 SEC TD	FWD EQPT EXH DET		X	X
21-58-01	——	——	(FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)	EQPT CLG FLOW	X		
21-58-03	AE11	330	330. LAC BUS OFF. CLG TEST .4 SEC TD	FWD EQ SUP FAN 1		X	X
21-58-03	AD9 E-D14	58 304	(58.CLG TEST.304.R AC BUS OFF.2 SEC TD) +(58.CLG TEST).2 SEC TD	FWD EQ SUP FAN 2		X	X
21-58-03	——	——	(FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 1) + (AFT EQ SUP FAN 2)	EQ CLG FAN	X		
21-58-03	AG14	249	249. L AC BUS OFF. 2 SEC TD	AFT EQ EXH FAN 1		X	X
21-58-03	AK14	74	74. R AC BUS OFF. 2 SEC TD	AFT EQ EXH FAN 2		X	X
21-58-03	FJ7	503	503. LAC BUS OFF.3 SEC TD	AFT EQ SUP FAN 1		X	X
21-58-03	FK7	151	151. RAC BUS OFF .4 SEC TD	AFT EQ SUP FAN 2			
21-58-06	F-K5	454 4	(ENGINES SHUTDOWN .15 SEC TD .454 .LAC BUS OFF) + (EITHER ENGINE RUNNING .454 .STBY BUS OFF)	EQPT CLG TEST		X	X
21-58-01			ANYONE OF THE FOLLING 3	EQPT CLG SENSOR	X		
21-58-01	D-A3	84	84 .454 .2 SEC TD	FWD EQ SUP SNSR		X	X
21-58-01	D-A4	244	244 .454 .2 SEC TD	FWD EQ EXH SNSR		X	X
21-58-01	F-H7	375	375 .454 .2 SEC TD	AFT EQ SNSR		X	X
21-58-02	DE15	266	266 .454 .10 SEC TD	OVBD EX VAL TEST		X	X
21-58-02	D-E15	266	266 .454. 2 SEC TD	OVBD EX VAL OPEN	X	X	X
21-58-02	E-D14	304	304 .454 .10 SEC TD	EQPT SMOKE TEST	X	X	X
21-58-02	D-A2	308	308 .454 .2 SEC TD	FWD EQPT DET 1			
21-58-02	DF13	229	229 .454 .2 SEC TD	FWD EQPT DET 2		X	X
21-61-01	D88	186	186	ZONE TEMP BITE		X	
24-11-01		2	L IDG OIL TEMP RISE > 175°C+ ((L IDG OIL TEMP RISE <= 0.5). L ENG RUNNING. 59.60 SEC TD)	L IDG TEMP SENS	X	X	
24-11-01		2	L IDG OIL TEMP > 140°C. L IDG TEMP SENS.300 SEC TD	L IDG OIL TEMP		X	X
24-11-02		2	R IDG OIL TEMP RISE > 175°C+ ((R IDG OIL TEMP RISE <= 0.5). R ENG RUNNING. 283.60 SEC TD)	R IDG TEMP SENS	X	X	
24-11-02		2	R IDG OIL TEMP > 140°C. R IDG TEMP SENS.300 SEC TD	R IDG OIL TEMP		X	X
24-11-02	DA12 D-B1	283 59 2 2	(ABS(IDG OIL TEMP RISE DIFF(L-R)) > 6).L IDG TEMP SENS. R IDG TEMP SENSE.283.59 .600 SEC TD	IDG RISE TEMP		X	X
24-25-01	FJ04	133	133	HYD GEN ON	X	X	X
24-25-01	EB13	67	67 .5 SEC TD	HYD GEN VAL	X	X	

001-011

EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

Incorporates 31-0059 R01

31-41-05

Page 101.1
Sheet 1
Jan 21/2005

5058

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO) [5]	MESSAGE	STATUS	MAINTENANCE	NVM
24-31-01	EA12	494	494. R AC BUS OFF. 10 SEC TD	MAIN BAT. CHGR	X	X	X
24-31-02	FED2	169	169. R AC BUS OFF. 10 SEC TD	APU BAT CHGR	X	X	X
24-31-02	FBD3	345	345. 1 SEC TD	APU BAT NO STBY	X	X	X
24-32-01	EJ14	62	62	T-R UNIT	X	X	
24-33-01	AD4	250	INV AC VOLTS >124 + <106	STBY INVERTER	X	X	X
	EG11	541	0.7 SEC TD. BAT SW ON				
[3] 24-51-61	BH14	285	285. R AC BUS OFF	F/O INSTR XFER	X	X	
[3] 24-51-61	BJ14	61	61. L AC BUS OFF	CAPT INSTR XFER	X	X	
[5] 26-11-01	DG6	467	467. 57	L ENG FIRE LP 1	X		
	[3]	57	467	L ENG FIRE LP 1		X	
26-11-01	EG4	233	233. 57	L ENG FIRE LP 2	X		
	[3]	57	233	L ENG FIRE LP 2		X	
26-11-02	AG2	484	484. 99	R ENG FIRE LP 1	X		
	[3]	99	484	R ENG FIRE LP 1		X	
26-11-02	BE9	311	311. 99	R ENG FIRE LP 2	X		
	[3]	99	311	R ENG FIRE LP 2		X	
26-11-03	AG4	356	356. 246	L ENG OH LP 1	X		
	[3]	246	356	L ENG OH LP 1		X	
26-11-03	BE6	453	453. 246	L ENG OH LP 2	X		
	[3]	246	453	L ENG OH LP 2		X	
26-11-04	DG9	339	339. 466	R ENG OH LP 1	X		
	[3]	466	339	R ENG OH LP 1		X	
26-11-04	EG6	297	297. 466	R ENG OH LP 2	X		
	[3]	466	297	R ENG OH LP 2		X	
26-12-01	AG7	132	132. 246	L STRUT OH DET 1	X		
	[3]	246	132	L STRUT OH DET 1		X	
26-12-01	BG4	88	88. 246	L STRUT OH DET 2	X		
	[3]	246	88	L STRUT OH DET 2		X	
26-12-01	DG1	115	115. 466	R STRUT OH DET 1	X		
	[3]	466	115	R STRUT OH DET 1		X	
26-12-01	EG7	262	262. 466	R STRUT OH DET 2	X		
	[3]	466	262	R STRUT OH DET 2		X	
26-13-01	AH7	260	260. 57	L TURB OH DET 1	X		
	[3]	57	260	L TURB OH DET 1		X	
26-13-01	BG2	312	312. 57	L TURB OH DET 2	X		
	[3]	57	312	L TURB OH DET 2		X	
26-13-02	DF5	388	388. 99	R TURB OH DET 1	X		
	[3]	99	388	R TURB OH DET 1		X	
26-13-02	EG5	38	38. 99	R TURB OH DET 2	X		
	[3]	99	38	R TURB OH DET 2		X	
26-15-01	DF4	420	420. 359	APU FIRE LP 1	X		
	[3]	359	420	APU FIRE LP 1		X	
26-15-01	FD4	161	161. 359	APU FIRE LP 2	X		
	[3]	359	161	APU FIRE LP 2		X	
26-16-01	FE7	385	385. 20 SEC TD	CARGO DET AIR	X		
26-16-01	DG11	419	419. 10 SEC TD	FWD DET FAN		X	
26-16-01	AH6	36	36. 370	FWD CARGO DET 1	X		
	[3]	370	36	FWD CARGO DET 1		X	
26-16-01	BG5	247	247. 370	FWD CARGO DET 2	X		
	[3]	370	247	FWD CARGO DET 2		X	
26-16-02	EC11	206	206. 10 SEC TD	AFT DET FAN		X	
26-16-02	DF1	164	164. 472	AFT CARGO DET 1	X		
	[3]	472	164	AFT CARGO DET 1		X	
26-16-02	EG2	73	73. 472	AFT CARGO DET 2	X		
	[3]	472	73	AFT CARGO DET 2		X	
26-17-01	DC10	158	158. 2 SEC TD	DUCT LEAK BITE		X	

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319X/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) [5]	MESSAGE	STATUS	MAINTENANCE	NVM
27-09-05	FD3	270	270. STBY BUS OFF. 30 SEC TD	L FLT CONT ELEC		X	
27-09-05	EA10	222	222. STBY BUS OFF. 30 SEC TD	R FLT CONT ELEC		X	
27-23-01	FD7	328	328. [9]	L ELEV PCU	X	X	X
27-23-01	ED8	286	286. [9]	R ELEV PCU	X	X	X
27-23-01	BE8	281	281. [9]	RUDDER PCU	X	X	X
27-23-01	—	—	(IN AIR). (281+ 286+ 328). 10 SEC TD	PCU MONITOR		X	X
27-30-01	AH9	469	469+275. ALL HYD SYS POWERED.	ELEV L HYD PRESS	X	X	X
	BH9	275	2.5 SEC TD				
27-30-01	FK8	397	397+181. ALL HYD SYS POWERED.	ELEV C HYD PRESS	X	X	X
	FJ6	181	2.5 SEC TD				
27-30-01	DH2	450	450+180. ALL HYD SYS POWERED.	ELEV R HYD PRESS	X	X	X
	DK4	180	2.5 SEC TD				
27-30-01	EG15	464	464. 5 SEC TD	ELEV ASYM	X	X	
27-30-01	DC4	314	314. ALL HYD SYS POWERED. 10 SEC TD	ELEV FEEL	X	X	[14]
27-50-01	DC17	442	442. R AC BUS OFF. 15 SEC TD	FLAP/SLAT BITE		X	X
27-50-01	DF3	500	500. STBY BUS OFF. 5 SEC TD	FLAP/SLAT ELEC	X	X	
27-51-02	ED9	366	366. L HYD SYS PRESS >1700. 1 SEC TD	FLAP ISLN VAL	X	X	X
27-20-02	EK09	77	77. 20 SEC TD	RUDDER RATIO		X	
27-61-01	AH14	82	82. STBY BUS OFF. 10 SEC TD	SPOILERS		X	
22-21-01	EK13	301	301. STBY BUS OFF	YAW DAMPER		X	
27-40-01	EJ11	207	207. STBY BUS OFF	STAB TRIM		X	
28-25-01	FD10	192	192	DC FUEL PUMP ON		X	
28-41-01	FD4	175	175	FUEL QTY BITE		X	
28-41-03	[13]		DD311+ DD312+DD313+DD317+DD318 +DD319+DD323+DD324+DD325	FUEL QTY CHANNEL	X		
28-41-03	[13]		DD314+ DD315+DD316+DD320+DD321 +DD322+DD326+DD327+DD328	FUEL QYT IND	X		
28-41-03	EDD4	175	(DV601 INVALID+DV602 INVALID+ DV603 INVALID). 175. FUEL QTY CHANNEL .FUEL QTY IND	FUEL QTY BITE	X		
	[13]						
29-00-02 (SH 1)	DE14	403	L HYD SYS PRESS < 2800.	L HYD SYS MAINT	X	X	X
		[6]	403. BOTH ENG RUN. 60 SEC TD				
29-00-03 (SH 1)	FC09	120	R HYD SYS PRESS < 2800.	R HYD SYS MAINT	X	X	X
		[6]	120. BOTH ENG RUN. 60 SEC TD				
29-00-04 (SH 1)	DJ10	60	C HYD SYS PRESS < 2800.	C HYD SYS MAINT	X	X	X
		[6]	60. BOTH ENG RUN. 60 SEC TD				
29-00-04	DK5	184	184. STBY BUS OFF 5 SEC TD	POWER XFER UNIT	X	X	X
29-00-04	FH6	405	405.	RAT	X	X	
32-41-01	FK10	64	64. 2 SEC TD	RSV BRAKE VAL		X	X
29-00-01	[6]	AV105	HYD QTY L ≥1.22	L HYD QTY 0/FULL		X	
29-00-01	[6]	AV104	HYD QTY C ≥1.22	C HYD QTY 0/FULL		X	
29-00-01	[6]	AV106	HYD QTY R ≥1.22	R HYD QTY 0/FULL		X	
30-21-01	FG5	95	95. 10 SEC TD	L ENG TAI VALVE	X	X	X
30-21-01	FG8	319	319. 10 SEC TD	R ENG TAI VALVE	X	X	X
30-30-01	FB8	457	457. ON GND. 10 SEC TD	CAPT PITOT HEAT		X	X
30-30-01	EK5	170	170. ON GND. 10 SEC TD	L AUX PITOT HEAT		X	X
30-30-02	EK12	394	394. ON GND. 10 SEC TD	F/O PITOT HEAT		X	X
30-30-02	EK8	241	241. ON GND. 10 SEC TD	R AUX PITOT HEAT		X	X
30-40-01	DB11	463	463. L AC BUS OFF.5 SEC TD	L ENG PROBE HEAT	X	X	X
30-40-01	EA8	483	483. R AC BUS OFF.5 SEC TD	R ENG PROBE HEAT	X	X	X
31-31-01	EC10	113	113. 75. BOTH ENGINES RUNNING	FLT DATA	X	X	[14]
	AJ14	75	.L AC BUS OFF. 60 SEC TD	REC			
31-31-01	AJ14	75	75. L AC BUS OFF. BOTH ENGINES RUNNING. 60 SEC TD	FLT DATA ACQ	X	X	[14]
31-41-09	BD4	—	(OTHER FAIL .L)+(OWN FAIL .L)	L EICAS CMPTR	X		
			(OTHER FAIL .L)+(OWN FAIL .L)	R EICAS CMPTR	X		
31-41-09	—	—	SELF DETECTED FAULT ONSIDE+ SELF DETECTED FAULT OFFSIDE+ L EICAS CMPTR+R EICAS CMPTR +(NO X-TALK DATA, ALTN EICAS CMPTR)	EICAS BITE		X	
31-41-09	—	—	ENG DISAGREE IN NVM+CAUT ALERT FAULT	EICAS DISAGREE	X		
31-51-01 (SH 1)	BC8	412	412. STBY BUS OFF	WARN ELEX	X	X	

001-011

EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

TABLE 1 (CONT)

SCHEMATIC REFERENCE	D319/ D321X PIN	INPUT NO.	INPUT REQ FOR MESSAGE (BY INPUT NO.) 5	MESSAGE	STATUS	MAINT	NVM
32-09-02 (SH 1)	FE9 BJ13	360 445	360 ⊕ 445 • R AC BUS OFF • 10 SEC TD	AIR/GND DISAGREE	X	X	X
32-09-02 (SH 1)	FF8 BH1	421 157	421 ⊕ 157 • R AC BUS OFF • 10 SEC TD	NOSE A/G DISAGREE	X	X	X
32-42-04 (SH 2)	BF15	159	159 • ANTI-SKID OFF	NORM ANTISKID	X	X	
32-42-04 (SH 2)	AD3	398	398 • ANTI-SKID OFF	ALTN ANTISKID	X	X	
32-42-04 (SH 2)	DB12	78	78	ANTISKID/AUTO BRK		X	
32-61-01	AG12 DB07 DE07 EJ07	298 43 439 277	(298 ⊕ 43) •(439 + 277) • RAC BUS OFF • 2 SEL TD	GEAR DISAGREE		X	X
32-61-01	DF06 FC07	372 344	(372 ⊕ 344) • R AC BUS OFF •30 SEC TD	NOSE GEAR DOWN		X	X
32-61-01	AD10 DC12	83 202	(83 ⊕ 202) • R AC BUS OFF • 2 SEC TD	NOSE GEAR LOCKED		X	X
32-61-01	DF06 ED11 FC07	372 191 344	191 • 372 • 344 • R AC BUS OFF •30 SEC TD	ALL GEAR DOWN		X	X
32-61-01	—	—	191 • (439 + 277) • R AC BUS OFF • 60 SEC TD	GEAR LEVER		X	X
32-61-01	FD06 DF08	104 387	(104 ⊕ 387) • R AC BUS OFF •30 SEC TD	R GEAR DOWN		X	X
32-61-01	FC05 DG13	456 163	(456 ⊕ 163) • R AC BUS OFF •30 SEC TD	L GEAR DOWN		X	X
32-61-01	—	—	ANY OF THE PREVIOUS SEVEN MESSAGES	LDG GEAR MONITOR	X		
32-61-01	BF14 FC02	125 335	(((298 ⊕ 43) • 439 • 277 • R AC BUS OFF) • 2 SEC TD)+(((125 ⊕ 335) •R AC BUS OFF) • 10 SEC TD)	PSEU BITE		X	X
34-46-01 (SH 2)	BJ1	33	33 • STBY BUS OFF• 5 SEC TD	GND PROX BITE	X	X	
49-27-01	EK4	426	(426. APU OIL QTY SEL) +(APU OIL QTY "ADD". APU OIL QTY SEL. 300 SEC TD)	APU OIL QTY	X	X	X
49-52-02	FE1	393	393 • 60 SEC TD	APU DOOR	X	X	
49-61-01	BA13	480	480	APU BITE		X	X
73-21-01	13	DD001	DD001	L EEC BITE		X	X
73-21-01	13	DD051	DD051	R EEC BITE		X	X
73-31-01	AJ11	50	50 • 10 SEC TD	L ENG FUEL FILT	X	X	X
73-31-01	AK7	274	274 • 10 SEC TD	R ENG FUEL FILT	X	X	X
73-31-01	EH5	341	341 • L ENG RUNNING • 5 SEC TD	L ENG LP PUMP	X	X	X
73-31-01	EJ5	214	214 • R ENG RUNNING • 5 SEC TD	R ENG LP PUMP	X	X	X
74-31-01	BH15	317	317	L IGN STBY BUS		X	
74-31-01	BK2	413	413	R IGN STBY BUS		X	
75-32-01	AH5	51	51 • L ENG RUNNING • 5 SEC TD	L ENG SURGE CONT	X	X	X
75-32-01	DJ2	436	436 • R ENG RUNNING • 5 SEC TD	R ENG SURGE CONT	X	X	X
75-32-01	BJ10	486	486 • L ENG RUNNING • 5 SEC TD	L ENG SURGE BITE		X	X
75-32-01	DJ3	499	499 • R ENG RUNNING • 5 SEC TD	R ENG SURGE BITE		X	X
77-12-01	6	——	LN1<19.8% • (L ENG RUN • 60 SEC TD • 20 SEC TD	L ENG LOW N1	X	X	X
77-12-01	6	——	RN1<19.8% • (R ENG RUN • 60 SEC TD • 20 SEC TD	R ENG LOW N1	X	X	X
77-12-04	FJ10	32	(32 • N3 > IDLE + 32 • STBY BUS OFF • N3 > IDLE • 10 SEC TD	L ENG SPEED CARD	X	X	X
77-12-05	FB10	256	(256 • N37 > IDLE + 256 • STBY BUS OFF • N3 > IDLE • 10 SEC TD	R ENG SPEED CARD	X	X	X
77-31-01	13	DD261	DD261 • 10 SEC TD	L ENG VIB	X		X
77-31-01	13	DD259	(DD259 + DD261) • 10 SEC TD	L ENG VIB BITE		X	X
77-31-01	13	DD266	DD266 • 10 SEC TD	R ENG VIB	X		X
77-31-01	13	DD274	(DD264 + DD266) • 10 SEC TD	R ENG VIB BITE		X	X
78-36-01	BH7	103	103 • L AC BUS OFF • 2 SEC TD	L REV ISLN VAL		X	X
78-36-01	DH7	391	391 • R AC BUS OFF • 2 SEC TD	R REV ISLN VAL		X	X
79-35-01	AH4	131	131. ((L OIL TEMP>25)+IN AIR).5 SEC TD	L OIL FILTER	X	X	X
79-35-01	DK3	423	423. ((R OIL TEMP>25)+IN AIR).5 SEC TD	R OIL FILTER	X	X	X

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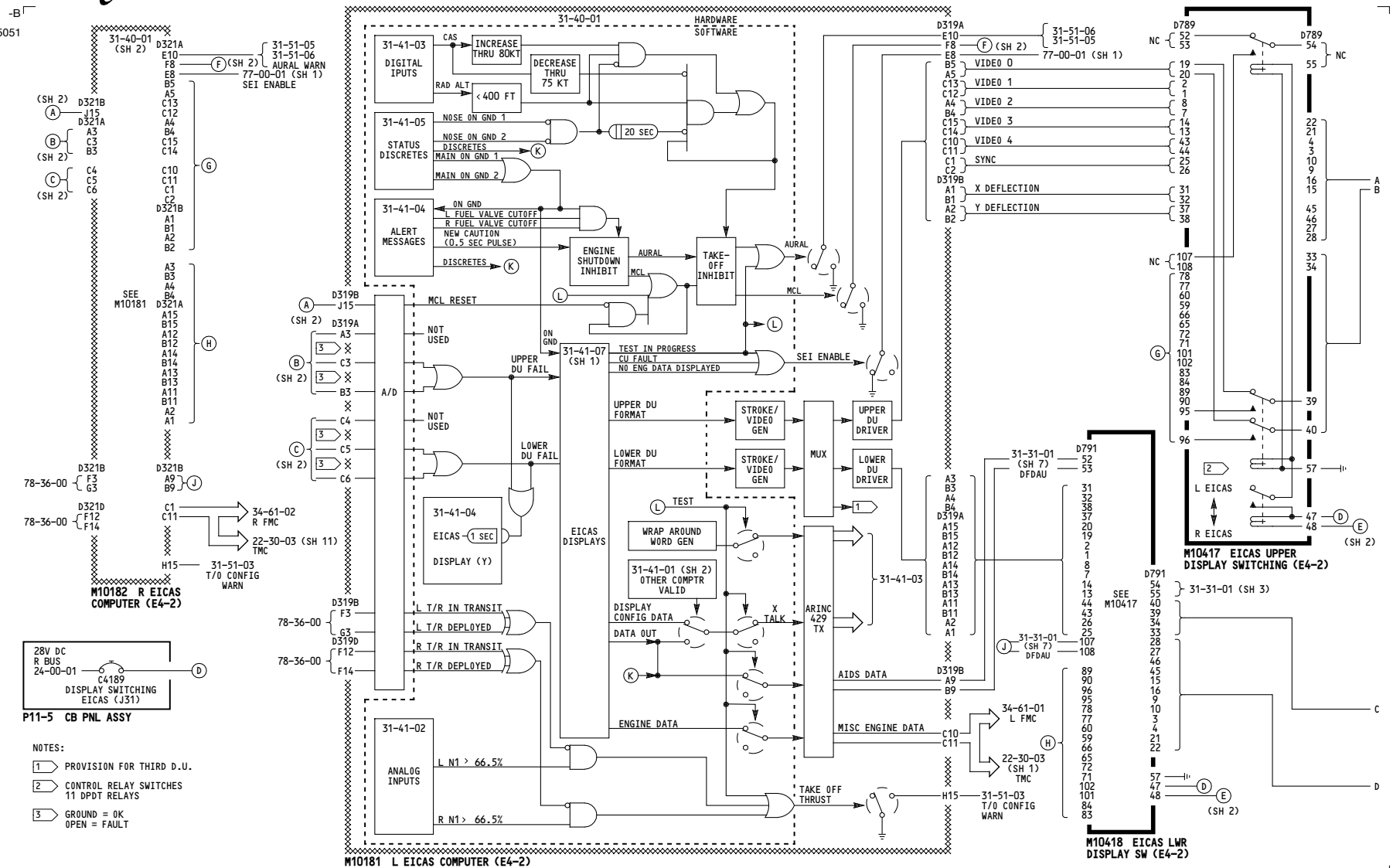
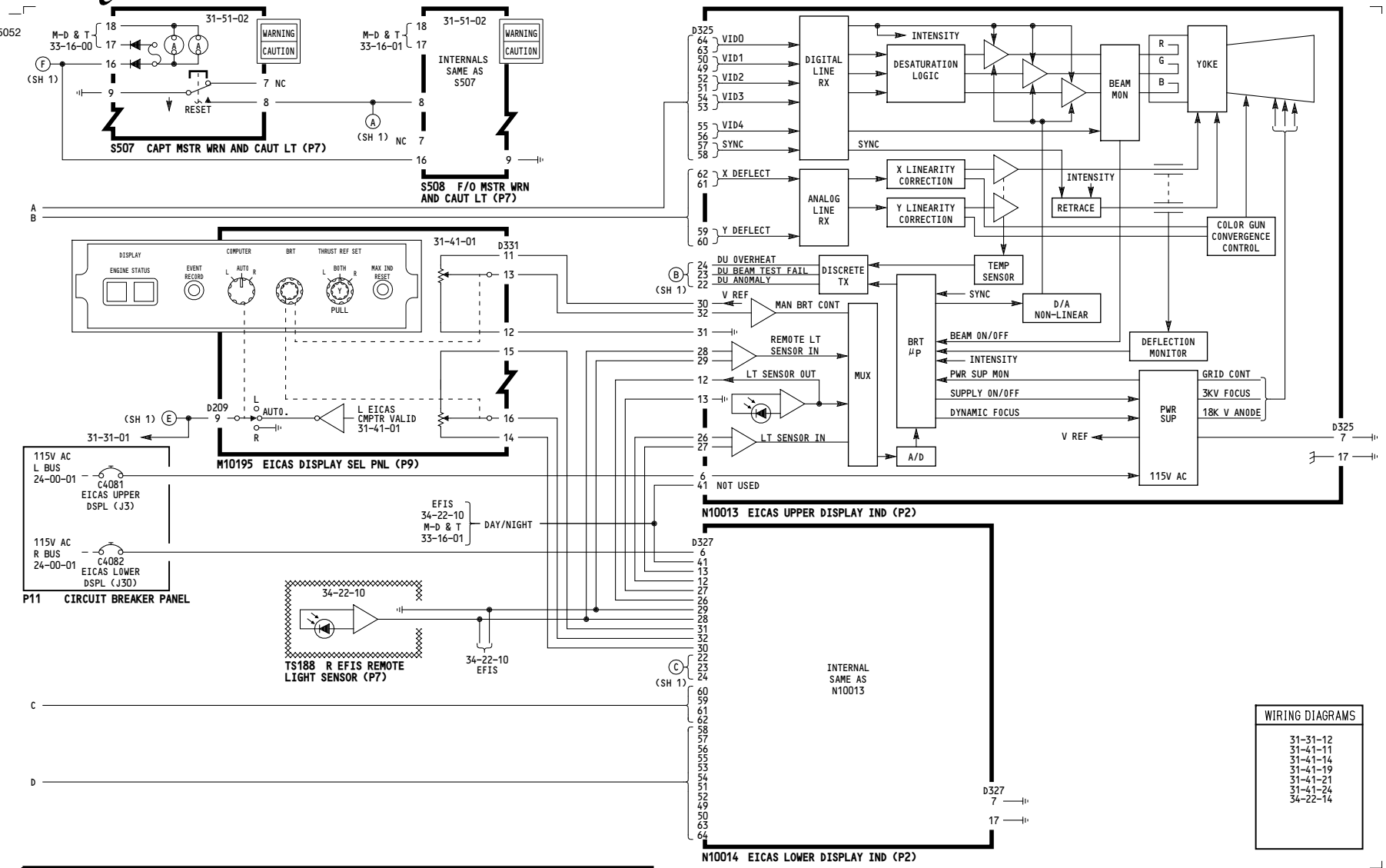


ALL	EICAS OUTPUTS
	D280N032S

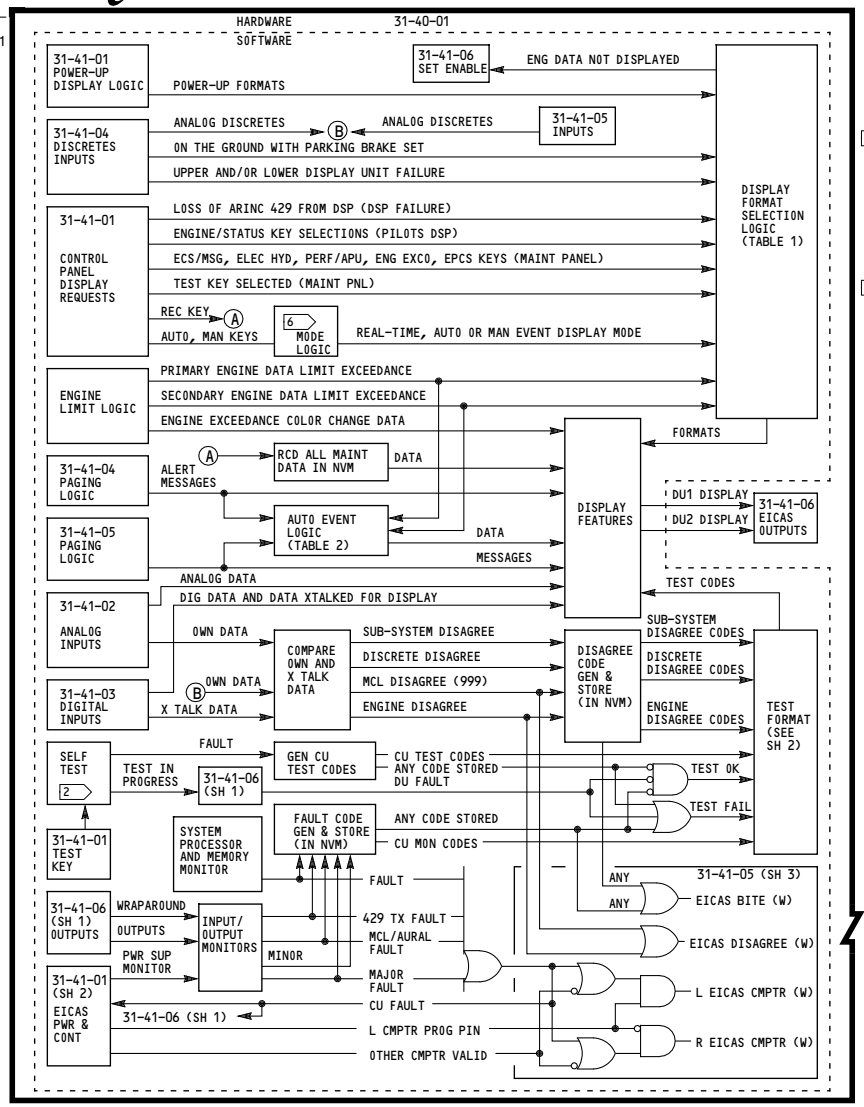


ALL	EICAS OUTPUTS
	D280N032S

WIRING DIAGRAMS

31-31-12
31-41-11
31-41-14
31-41-19
31-41-21
31-41-24
34-22-14

5051



M10181 L EICAS COMPUTER (E4-2) 1

	NO SECONDARY ENGINE EXCEEDANCE							EXISTING SECONDARY EXCEEDANCE					PRESENT DISPLAY UPPER LOWER
	PRIMARY BLANK	PRIMARY SEC-PART	PRIMARY SEC-FULL	PRIMARY STATUS	COMP-P STATUS	COMP-F STATUS	TEST TEST	PRIMARY SEC-PART	PRIMARY SEC-FULL	COMP-P STATUS	COMP-F STATUS	TEST TEST	
ENGINE KEY	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY BLANK	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	NO CHNG 4	PRIMARY SEC-FULL	PRIMARY SEC-PART	PRIMARY SEC-FULL	PRIMARY SEC-FULL	NO CHNG 4	
7 STATUS KEY	PRIMARY STATUS	PRIMARY STATUS	PRIMARY STATUS	PRIMARY BLANK	PRIMARY BLANK	PRIMARY STATUS	NO CHNG 4	COMP-P STATUS	COMP-P STATUS	PRIMARY SEC-PART	COMP-P STATUS	NO CHNG 4	
NEW PRIM EXCEED	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	PRIMARY BLANK	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	PRIMARY SEC-PART	NO CHANGE	
NEW SEC EXCEED	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	
TEST 2	TEST TEST	TEST TEST	TEST TEST	TEST TEST	TEST TEST	TEST TEST	PRIMARY SEC-FULL	TEST TEST	TEST TEST	TEST TEST	TEST TEST	PRIMARY SEC-FULL	
6 MAINT 3	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	5	NO CHNG 4	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	5	NO CHNG 4	
UPR DU FAIL	PRIMARY	PRIMARY	COMP-F	PRIMARY	PRIMARY	PRIMARY	TEST	COMP-P	COMP-F	COMP-P	COMP-P	TEST	
LWR DU FAIL	PRIMARY	PRIMARY	COMP-F	PRIMARY	PRIMARY	PRIMARY	TEST	COMP-P	COMP-F	COMP-P	COMP-P	TEST	
DSP FAIL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	
INPUT													

TABLE 1 DISPLAY FORMAT SELECTION

SNAPSHOT	AUTO EVENT	EICAS REF	SYSTEM	SNAPSHOT	AUTO EVENT	EICAS REF	SYSTEM
ECS	FLT DK, FWD OR AFT CABIN TEMP L, R PACK TEMP	31-41-04	21-60-XX 21-50-XX	PERF	ANY EXCD:- N1, N2 OR EGT	31-41-02	77-00-XX
					ANY EXCD:- OIL PRESS, QTY OR TEMP	31-41-02	79-00-XX
ELEC	L, R GEN DRIVE	31-41-04	24-11-XX				
	L, R IDG OIL TEMP IDG RISE TEMP	31-41-05	24-11-XX	APU	APU FAULT	31-41-04	49-00-XX
HYD	L, C, R HYD SYS PRESS L, C, R HYD QTY L, R ENG HYD OVHT C HYD 1, 2 OVHT L, R ELEC HYD OVHT	31-41-04	29-00-XX		APU OIL QTY	31-41-05	49-00-XX

TABLE 2 AUTO-EVENTS

NOTES:

1 M10181 SHOWN. M10182 R EICAS COMPUTER (E4-2) SIMILAR

2 ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET, WRAPS TEST SIGNAL INTO ALL FREQUENCY AND DISCRETE INPUT PORTS

3 ELEC/HYD, ECS/MSG, PERF/APU, ENG EXCD OR CONF/MCDP KEY (ACTIVE ON GROUND ONLY)

4 INDICATES WHICH KEY PRESSED ON THE TEST FORMAT

5 IF SAME KEY PRESSED AS MAINT FORMAT ALREADY ON DISPLAY, WILL CHANGE TO PRIMARY/SEC-FULL. IF ANY OTHER MAINT KEY 3 PRESSED, LOWER DISPLAY WILL CHANGE TO THAT FORMAT.

6 IF COMP-F/MAINT IS DISPLAYED BY SELECTION OF A MAINT 3 KEY, THE DATA ON DISPLAY WILL BE REAL-TIME. IF THE MAN KEY ON THE MAINT PANEL IS THEN PRESSED, THE DATA ON THE MAINT FORMAT WILL CHANGE TO THAT RECORDED BY THE LAST MANUAL SNAPSHOT. IF THE MAN KEY IS PRESSED AGAIN, THE DISPLAY WILL CHANGE BACK TO THE REAL-TIME DATA. ALTERNATELY, IF THE AUTO KEY IS PRESSED, THE DATA WILL CHANGE TO THAT RECORDED BY AN AUTO-EVENT.

7 THE STATUS KEY IS INOPERATIVE IN THE AIR IF EITHER UPPER OR LOWER DISPLAY UNIT IS FAILED.

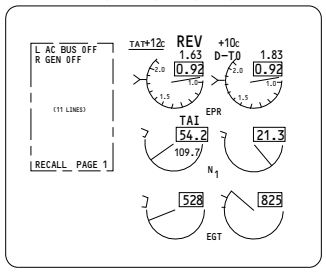
8 NOT ALL PARAMETERS ARE SHOWN WHEN "PARTIAL".

ALL

EICAS DISPLAYS

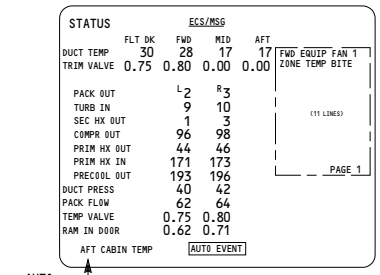
D280N032S

OPERATIONAL FORMATS



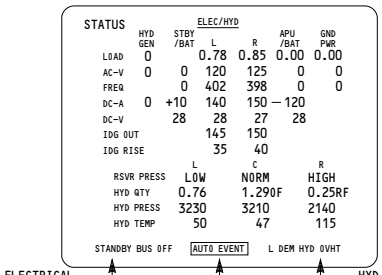
PRIMARY

MAINTENANCE FORMATS



AUTO EVENT MESSAGE

ENVIRONMENT CONTROL SYSTEM/MESSAGE

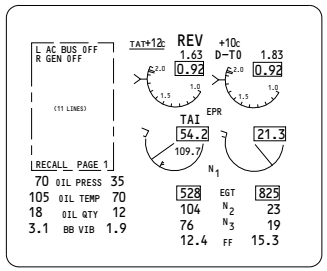


ELECTRICAL AUTO EVENT MESSAGE

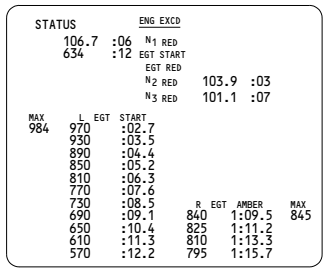
AUTO EVENT OR MAN EVENT

HYD AUTO EVENT MESSAGE

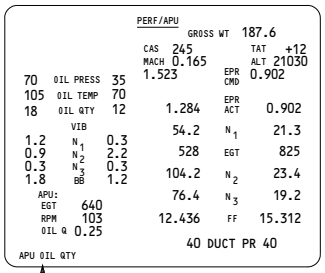
(BLANK FOR REAL-TIME DATA)
ELECTRICAL/HYDRAULIC



COMPACTED (FULL)

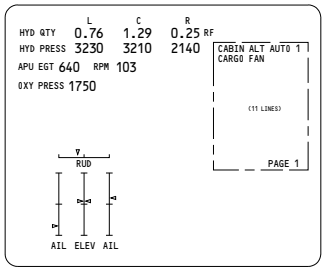


ENGINE EXCEEDANCES

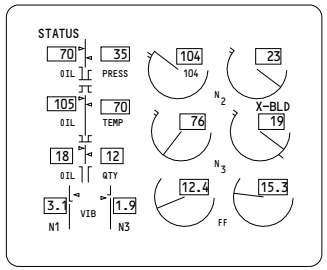


APU AUTO EVENT MESSAGE

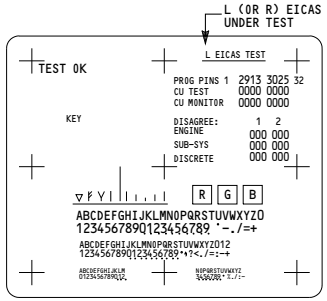
PERFORMANCE/APU



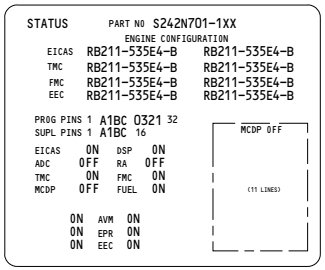
STATUS



SECONDARY (FULL)



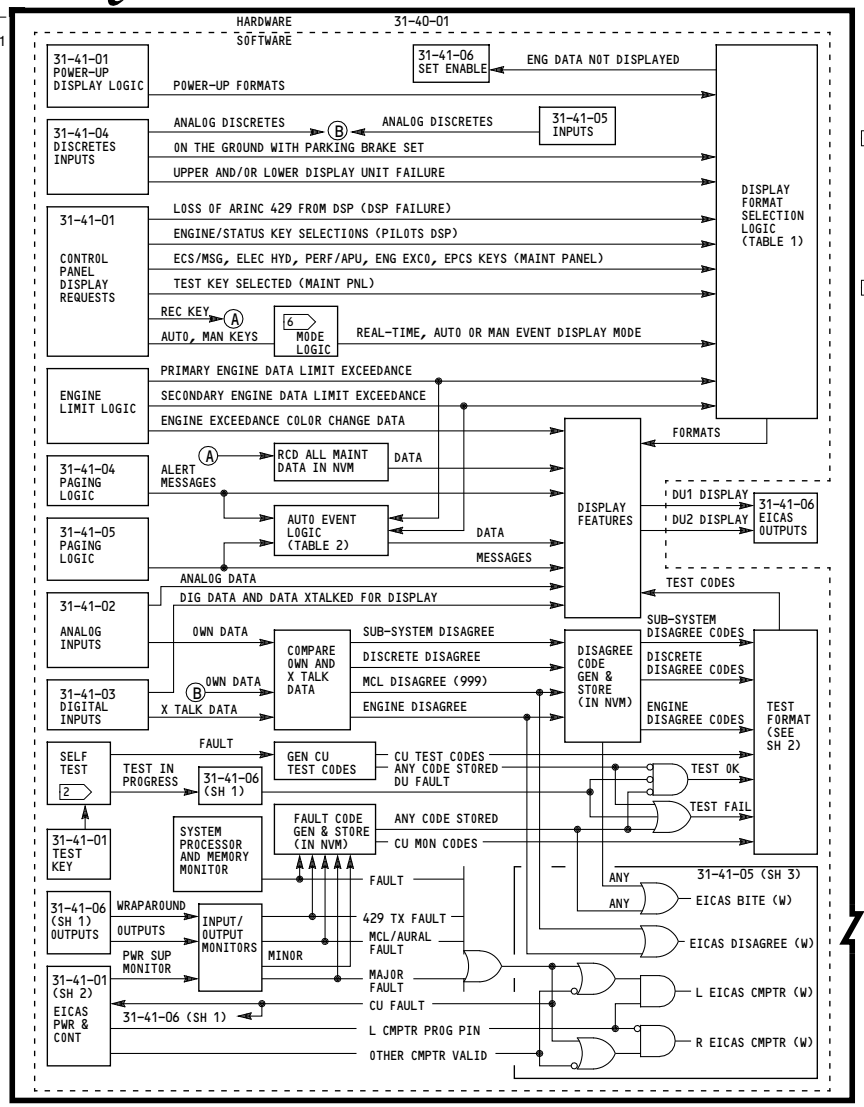
TEST



CONFIGURATION/MCDP SYSTEM MESSAGE

ALL	**EICAS DISPLAYS**
	D280N032S

5051



M10181 L EICAS COMPUTER (E4-2) 1

		NO SECONDARY ENGINE EXCEEDANCE							EXISTING SECONDARY EXCEEDANCE					PRESENT DISPLAY UPPER LOWER
		PRIMARY BLANK	PRIMARY SEC-PART	PRIMARY SEC-FULL	PRIMARY STATUS	COMP-P STATUS	COMP-F STATUS	TEST TEST	PRIMARY SEC-PART	PRIMARY SEC-FULL	COMP-P STATUS	COMP-F STATUS	TEST TEST	
	ENGINE KEY	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY BLANK	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	NO CHNG 4	PRIMARY SEC-FULL	PRIMARY SEC-PART	PRIMARY SEC-FULL	PRIMARY SEC-FULL	NO CHNG 4	
7	STATUS KEY	PRIMARY STATUS	PRIMARY STATUS	PRIMARY STATUS	PRIMARY BLANK	PRIMARY BLANK	PRIMARY STATUS	NO CHNG 4	COMP-P STATUS	COMP-P STATUS	PRIMARY SEC-PART	COMP-P STATUS	NO CHNG 4	
	NEW PRIM EXCEED	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	PRIMARY BLANK	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	PRIMARY SEC-PART	NO CHANGE	
	NEW SEC EXCEED	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	NO CHANGE	PRIMARY SEC-PART	PRIMARY SEC-PART	NO CHANGE	
	TEST 2	TEST TEST	TEST TEST	TEST TEST	TEST TEST	TEST TEST	TEST TEST	PRIMARY SEC-FULL	TEST TEST	TEST TEST	TEST TEST	TEST TEST	PRIMARY SEC-FULL	
6	MAINT 3	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	5	NO CHNG 4	COMP-F MAINT	COMP-F MAINT	COMP-F MAINT	5	NO CHNG 4	
	UPR DU FAIL	PRIMARY	PRIMARY	COMP-F	PRIMARY	PRIMARY	PRIMARY	TEST	COMP-P	COMP-F	COMP-P	COMP-P	TEST	
	LWR DU FAIL	PRIMARY	PRIMARY	COMP-F	PRIMARY	PRIMARY	PRIMARY	TEST	COMP-P	COMP-F	COMP-P	COMP-P	TEST	
	DSP FAIL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	PRIMARY SEC-FULL	
	INPUT													

TABLE 1 DISPLAY FORMAT SELECTION

SNAPSHOT	AUTO EVENT	EICAS REF	SYSTEM
ECS	FLT DK, FWD OR AFT CABIN TEMP L, R PACK TEMP	31-41-04	21-60-XX 21-50-XX
ELEC	L, R GEN DRIVE	31-41-04	24-11-XX
	L, R IDG OIL TEMP IDG RISE TEMP	31-41-05	24-11-XX
HYD	L, C, R HYD SYS PRESS L, C, R HYD QTY L, R ENG HYD OVHT C HYD 1, 2 OVHT L, R ELEC HYD OVHT	31-41-04	29-00-XX

SNAPSHOT	AUTO EVENT	EICAS REF	SYSTEM
PERF	ANY EXCD:- N1, N2 OR EGT	31-41-02	77-00-XX
	ANY EXCD:- OIL PRESS, QTY OR TEMP	31-41-02	79-00-XX
APU	APU FAULT	31-41-04	49-00-XX
	APU OIL QTY	31-41-05	49-00-XX

TABLE 2 AUTO-EVENTS

NOTES:

1 M10181 SHOWN. M10182 R EICAS COMPUTER (E4-2) SIMILAR

2 ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET, WRAPS TEST SIGNAL INTO ALL FREQUENCY AND DISCRETE INPUT PORTS

3 ELEC/HYD, ECS/MSG, PERF/APU, ENG EXCD OR CONF/MCDP KEY (ACTIVE ON GROUND ONLY)

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5 IF SAME KEY PRESSED AS MAINT FORMAT ALREADY ON DISPLAY, WILL CHANGE TO PRIMARY/SEC-FULL. IF ANY OTHER MAINT KEY 3 PRESSED, LOWER DISPLAY WILL CHANGE TO THAT FORMAT.

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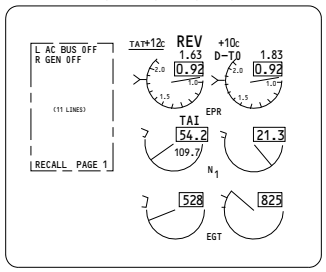
7 THE STATUS KEY IS INOPERATIVE IN THE AIR IF EITHER UPPER OR LOWER DISPLAY UNIT IS FAILED.

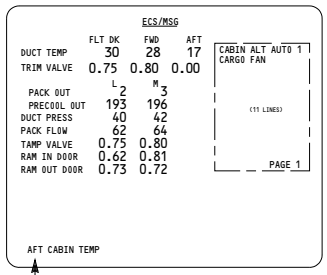
8 NOT ALL PARAMETERS ARE SHOWN WHEN "PARTIAL".

OPERATIONAL FORMATS



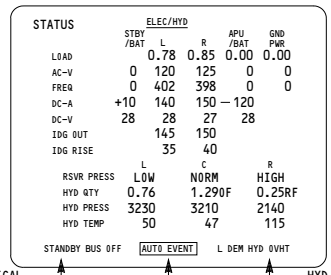
PRIMARY

MAINTENANCE FORMATS



AUTO EVENT MESSAGE

ENVIRONMENT CONTROL SYSTEM/MESSAGE

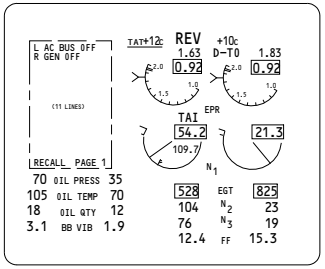


ELECTRICAL AUTO EVENT MESSAGE

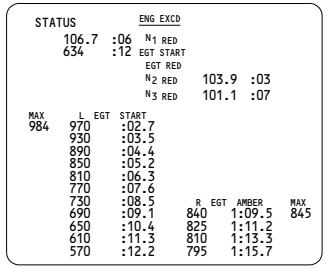
AUTO EVENT OR MAN EVENT

HYD AUTO EVENT MESSAGE

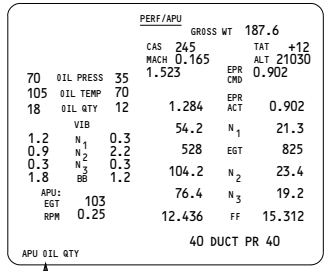
(BLANK FOR REAL-TIME DATA)
ELECTRICAL/HYDRAULIC



COMPACTED (FULL)

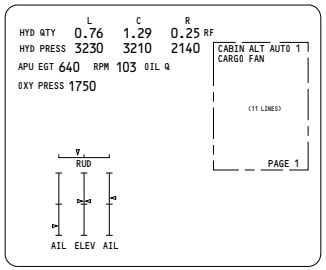


ENGINE EXCEEDANCES

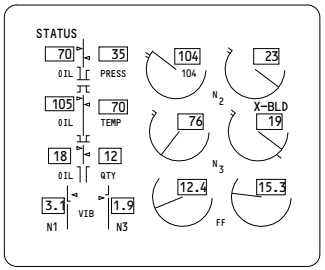


APU AUTO EVENT MESSAGE

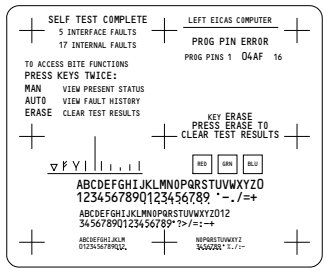
PERFORMANCE/APU



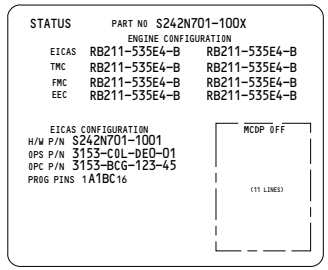
STATUS



SECONDARY (FULL)

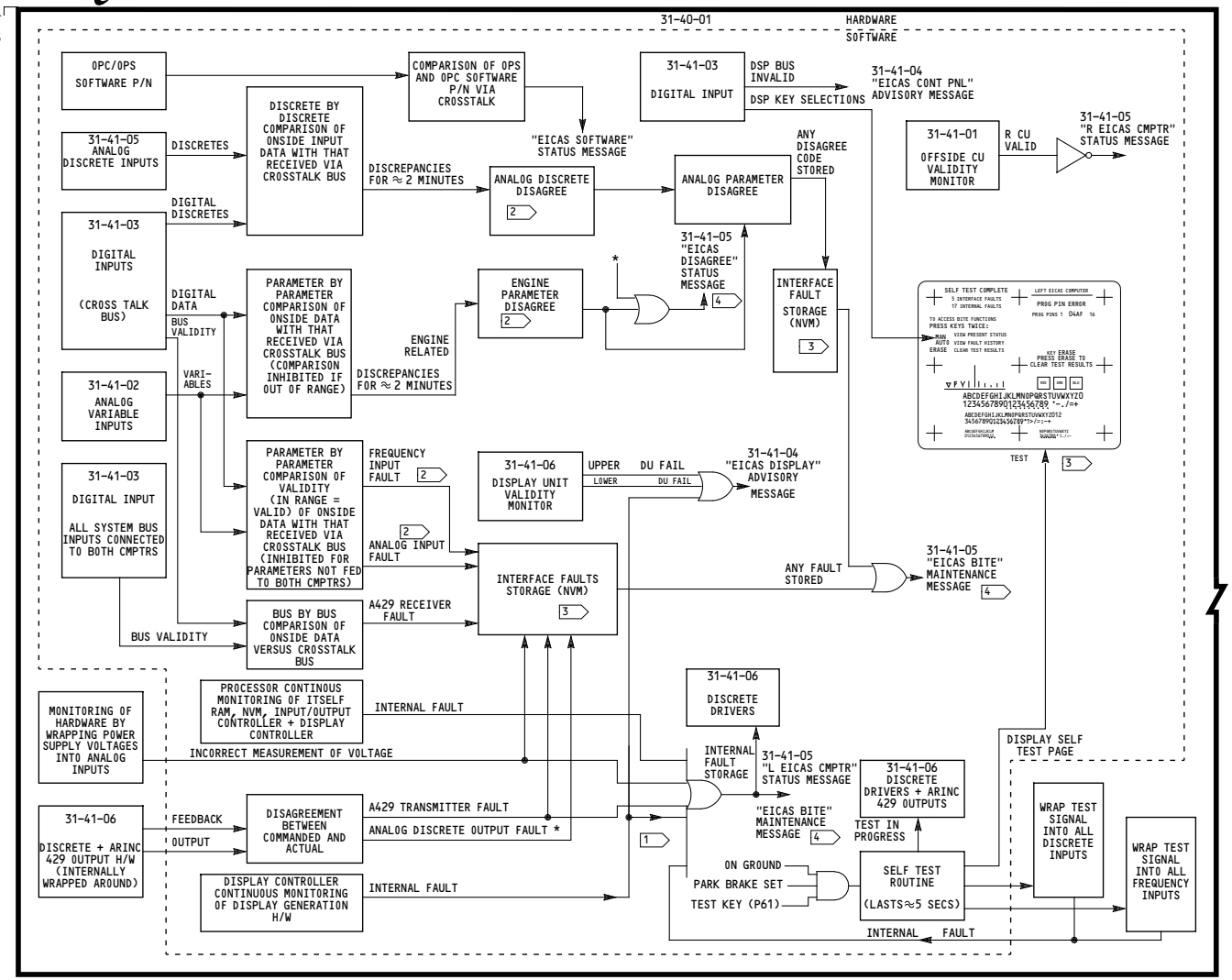


TEST



CONFIGURATION/MCDP SYSTEM MESSAGE

5025



M10181 L EICAS COMPUTER (E4-2)

NOTES:
1. ONLY WHEN COMBINATION OF FAULTS BLANKS BOTH DISPLAY
2. REFER TO FIM FOR FAIL CODES
3. THE NUMBER OF PRESENT INTERFACE AND INTERNAL FAULTS ARE SHOWN ON THE TEST PAGE. INSTRUCTIONS TO VIEW PRESENT STATUS OR FAULT HISTORY ARE SHOWN IF FAULTS RESIDE IN NVM. EXIT SELF TEST PAGE AND WAIT 3 MINUTES BEFORE REPEATING SELF TEST.
4. FAULTS RECORDED IN FAULT HISTORY WILL LATCH MESSAGE

31-40-01

INTERNAL SAME AS M10181

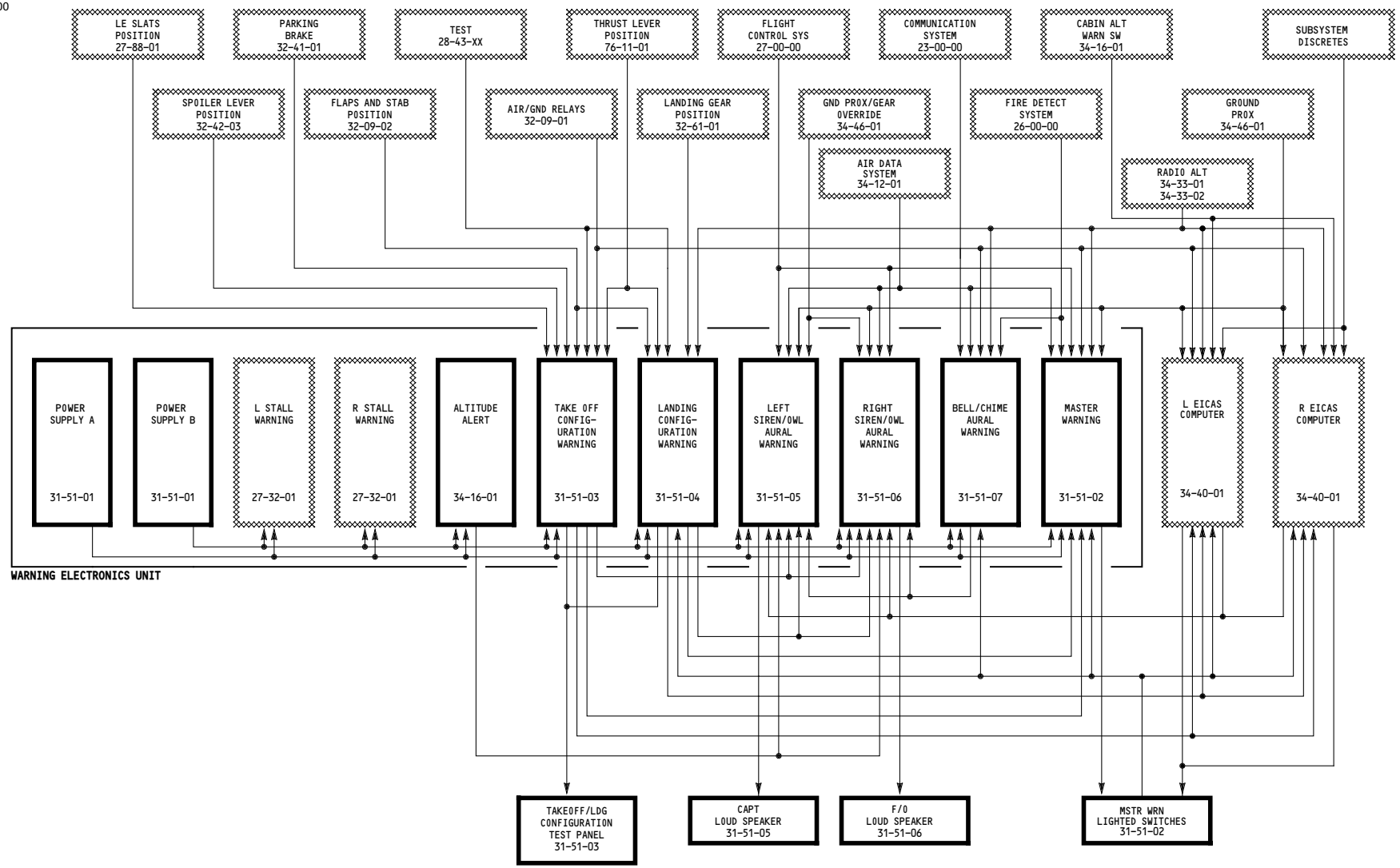
M10182 R EICAS COMPUTER (E4-2)

001-011

EICAS FAILURE DETECTION

Incorporates
31-0059 R01

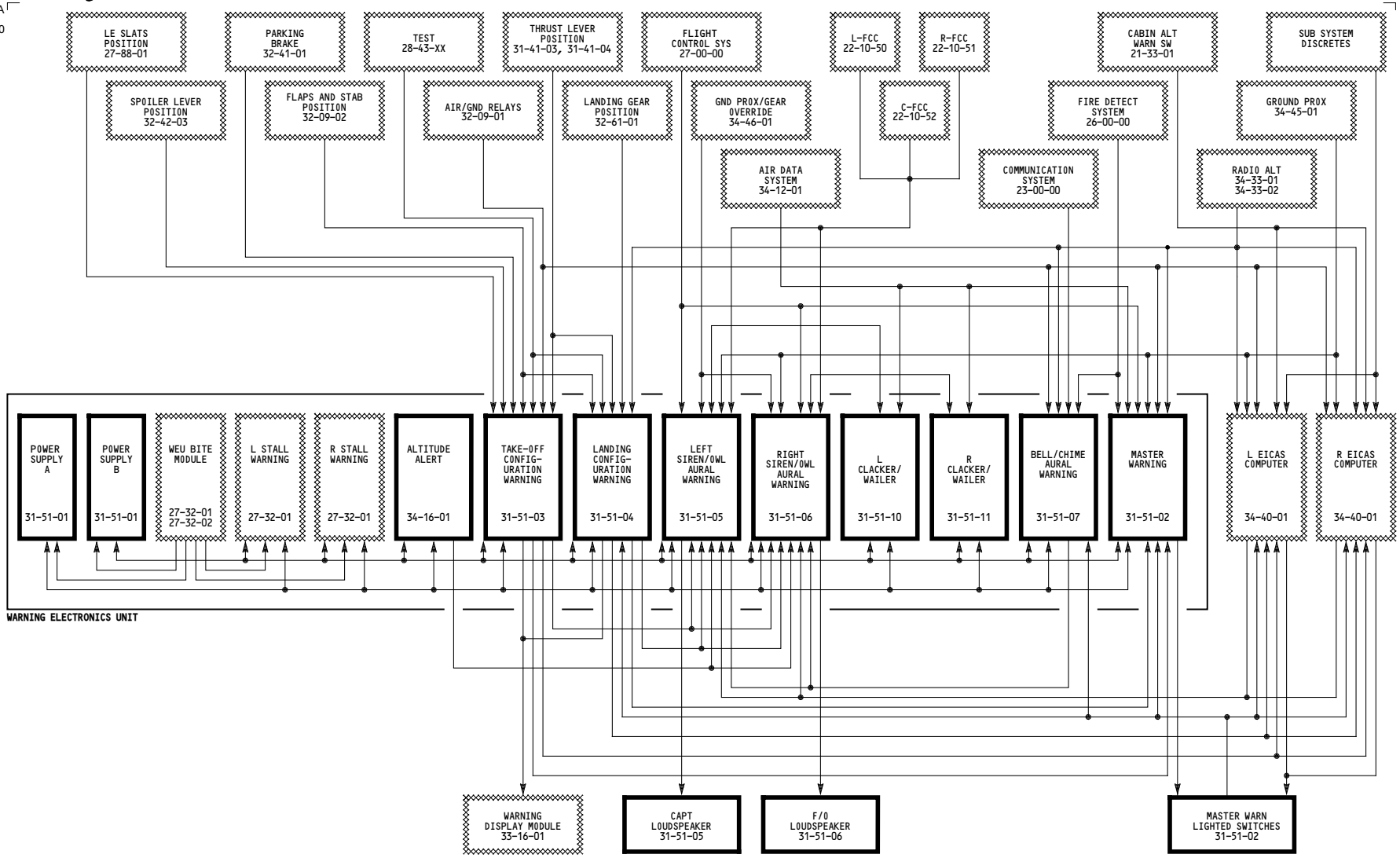
D280N032S



001-008, 010-099

WARNING SYSTEM - SIMPLIFIED

D280N032S

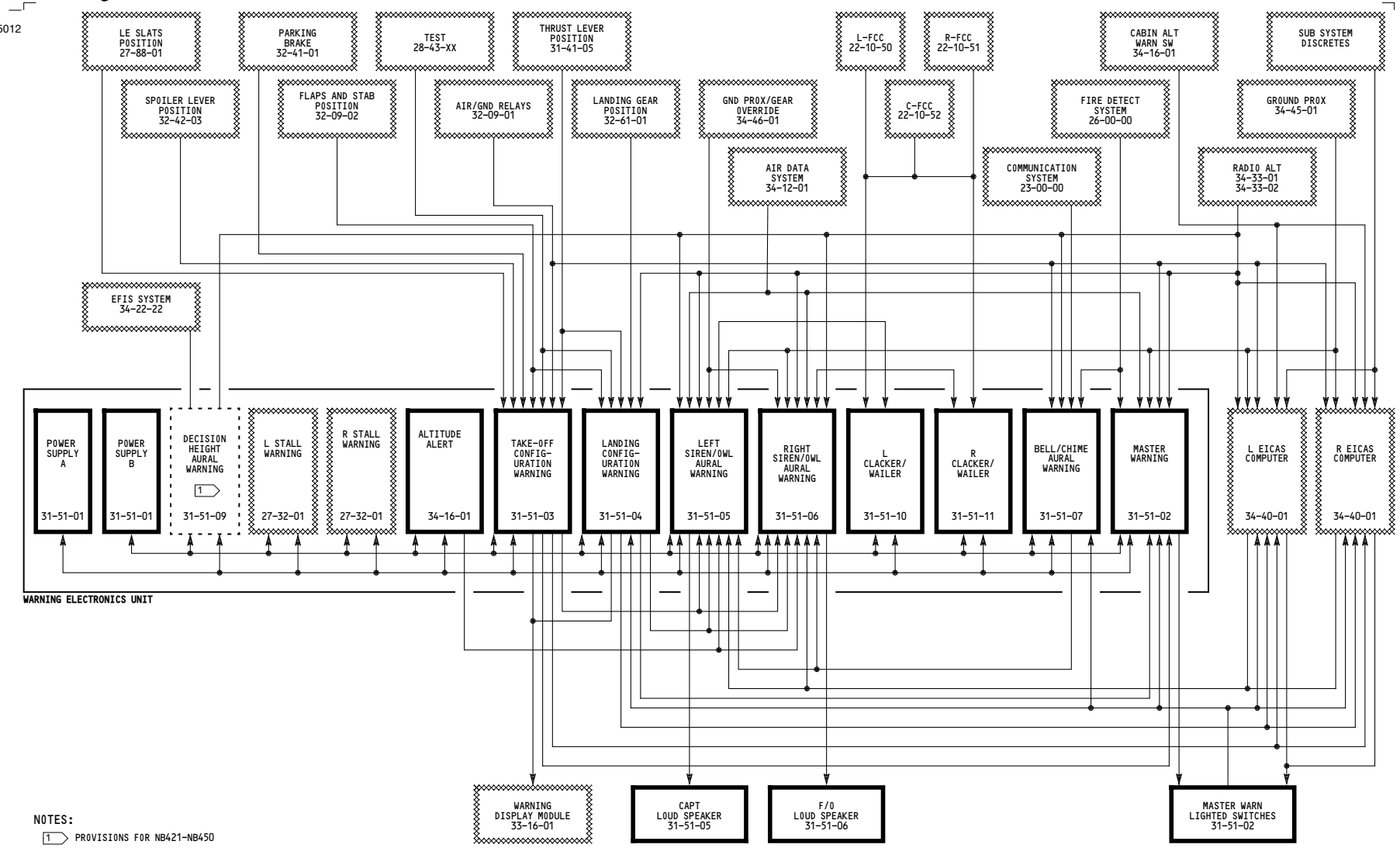


001

WARNING SYSTEM - SIMPLIFIED

D280N032S

Incorporates
31-0164 R03



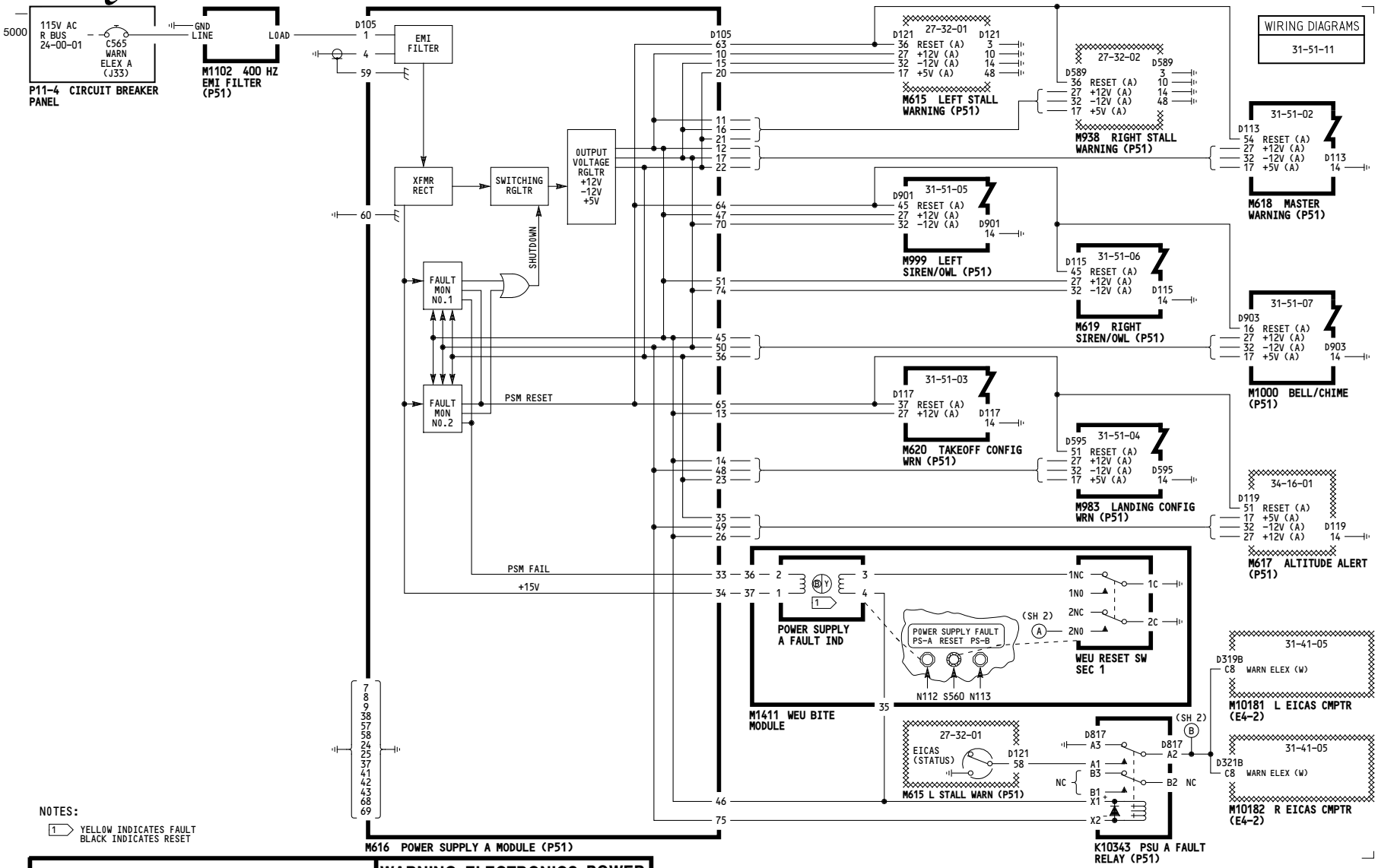
NOTES:

1 PROVISIONS FOR NB421-NB450

009

WARNING SYSTEM - SIMPLIFIED

D280N032S



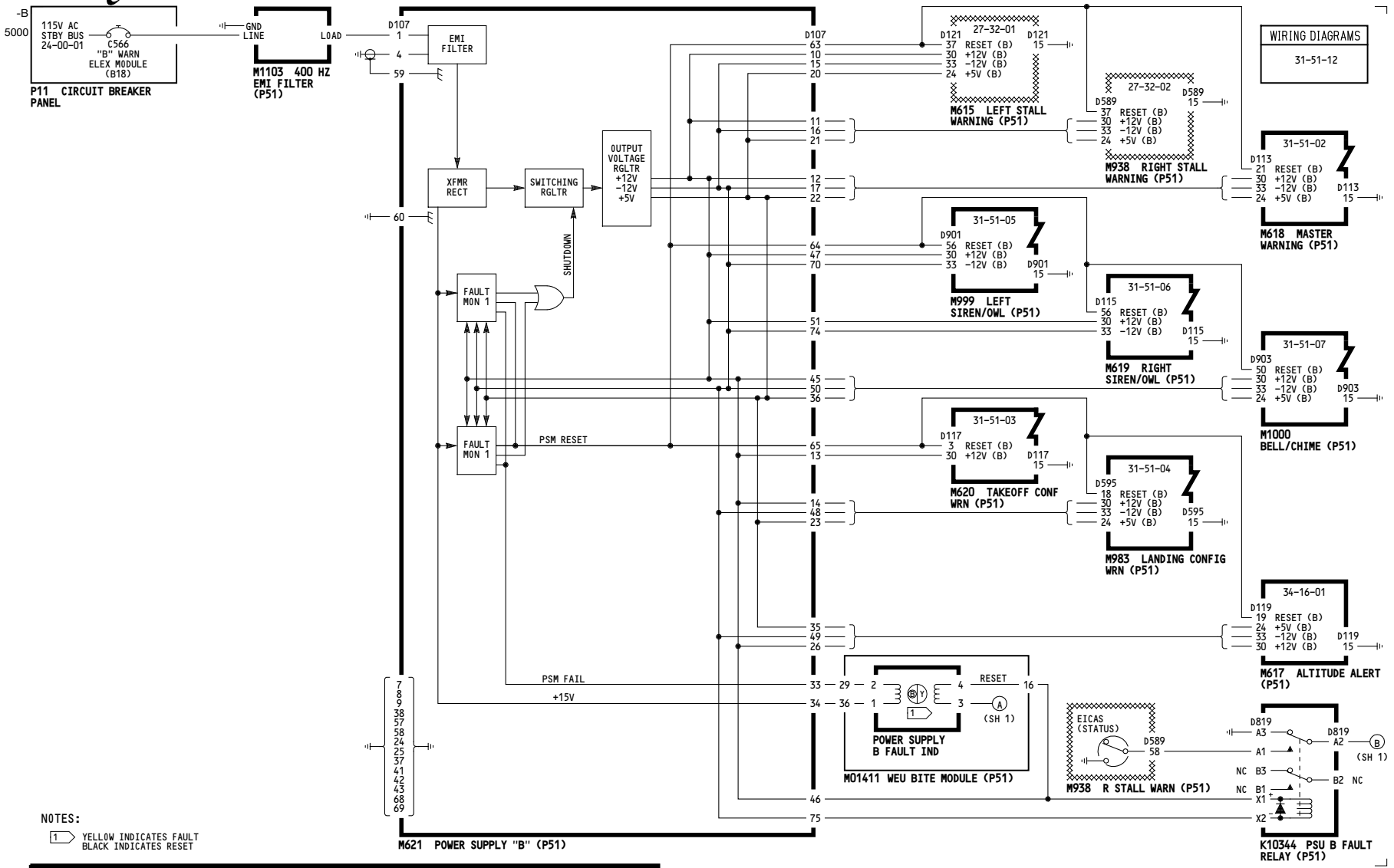
001-008, 010-099

WARNING ELECTRONICS POWER

D280N032S

31-51-01

Page 101
Sheet 1
Jan 21/2005



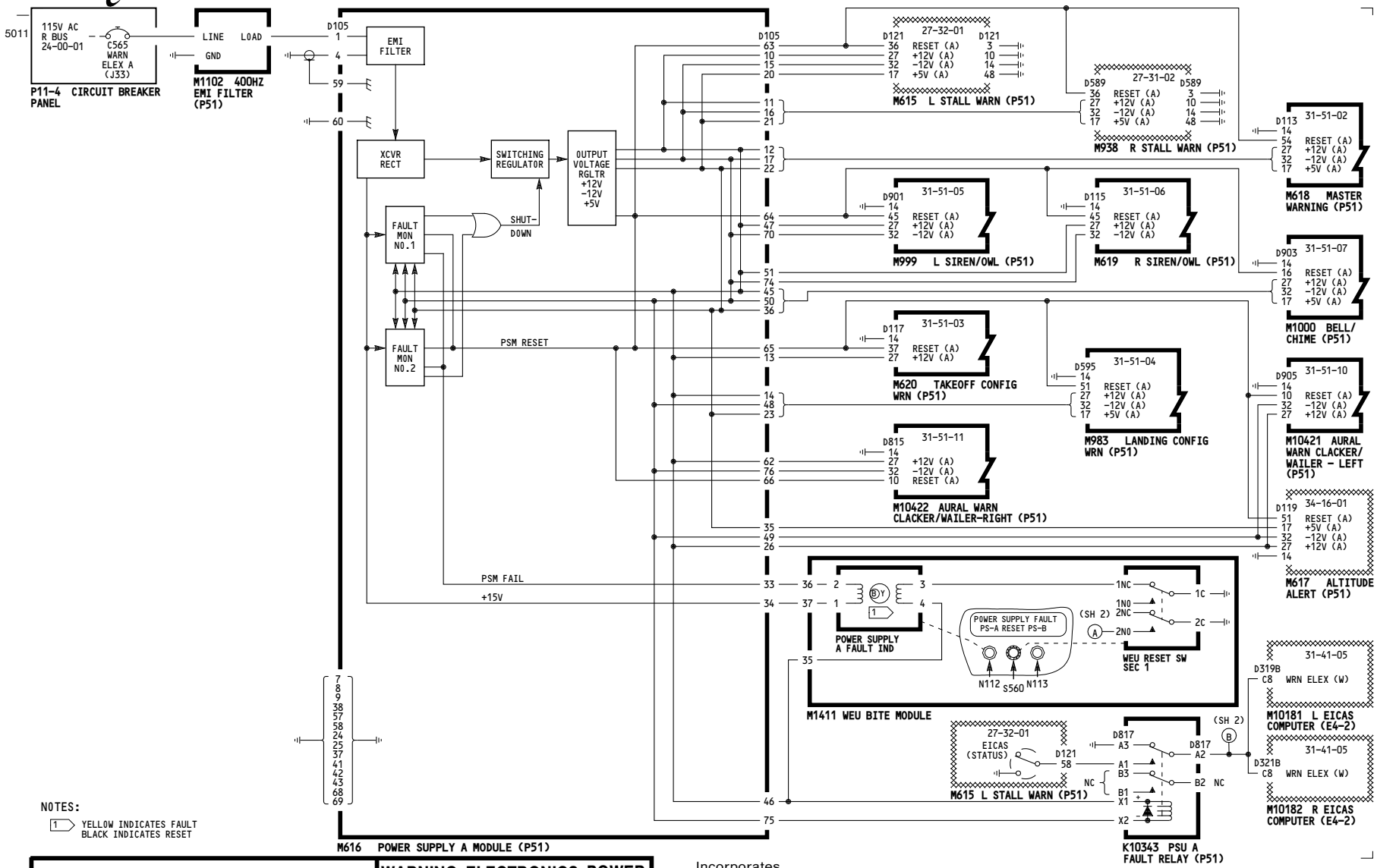
NOTES:

1 YELLOW INDICATES FAULT
BLACK INDICATES RESET

001-008, 010-099	**WARNING ELECTRONICS POWER**
	D280N032S

31-51-01

Page 101
Sheet 2
May 06/2009



001

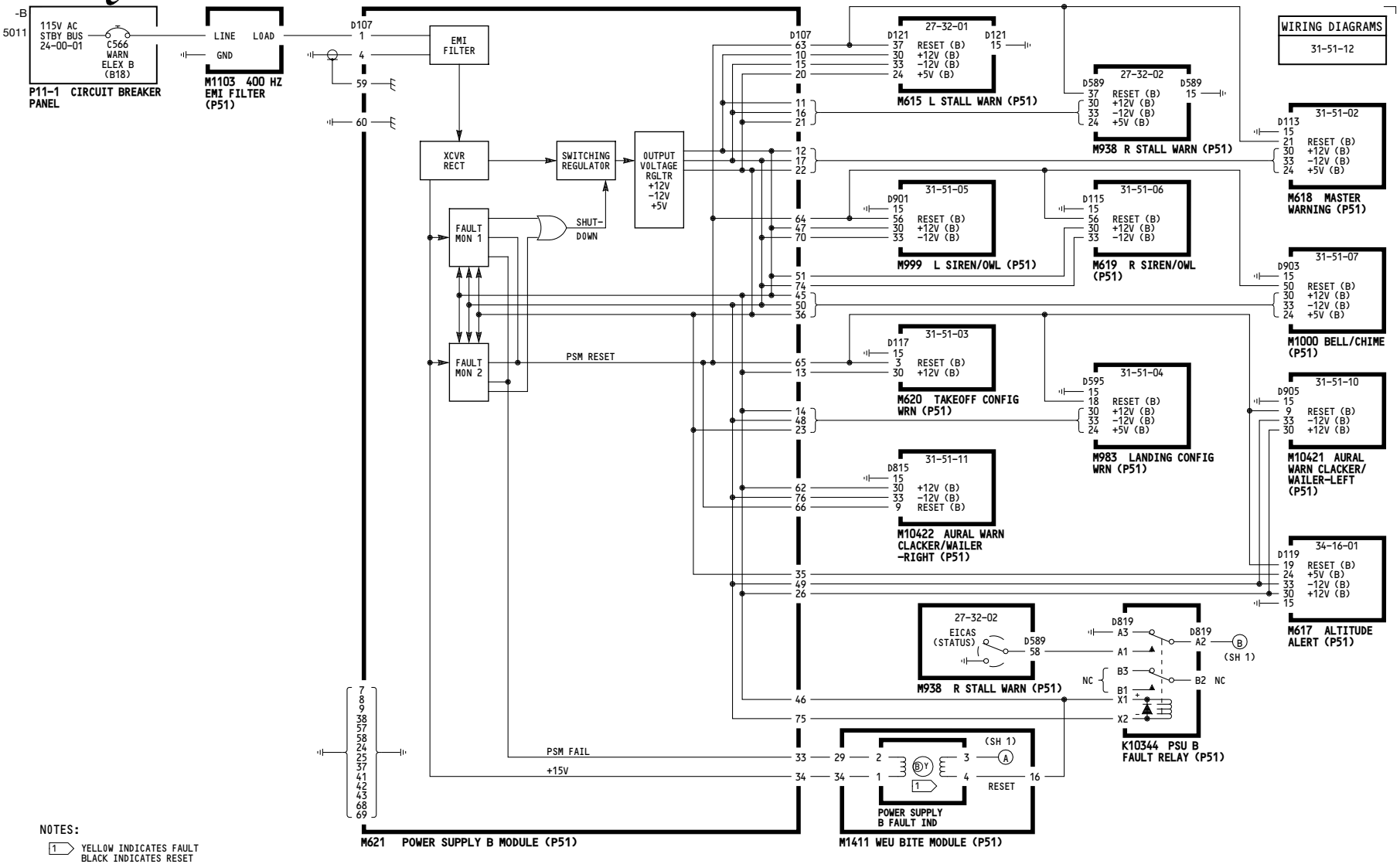
WARNING ELECTRONICS POWER

Incorporates
31-0164 R03

D280N032S

31-51-01

Page 101.1
Sheet 1
May 06/2009



001

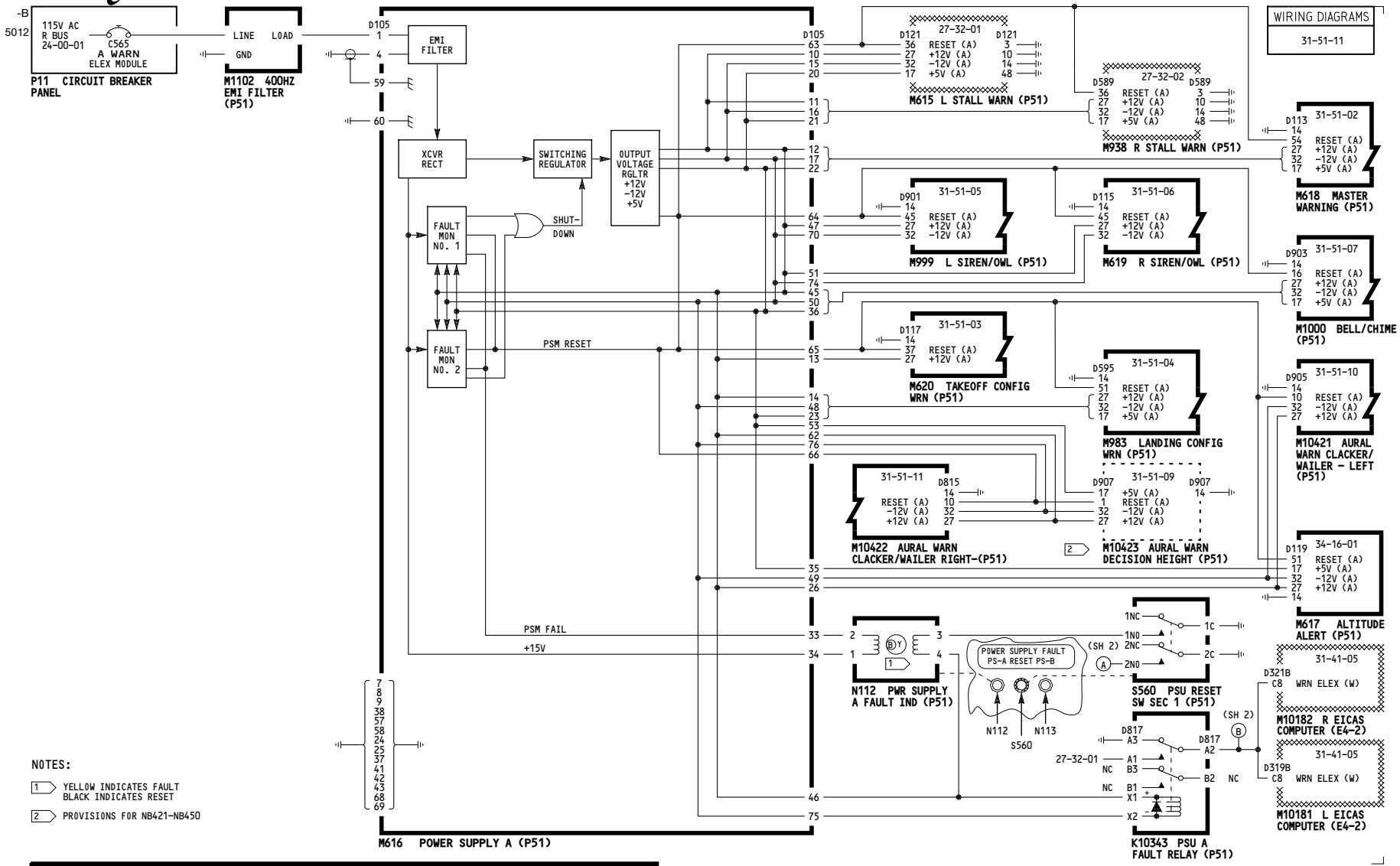
WARNING ELECTRONICS POWER

Incorporates
31-0164 R03

D280N032S

31-51-01

Page 101.1
Sheet 2
May 06/2009



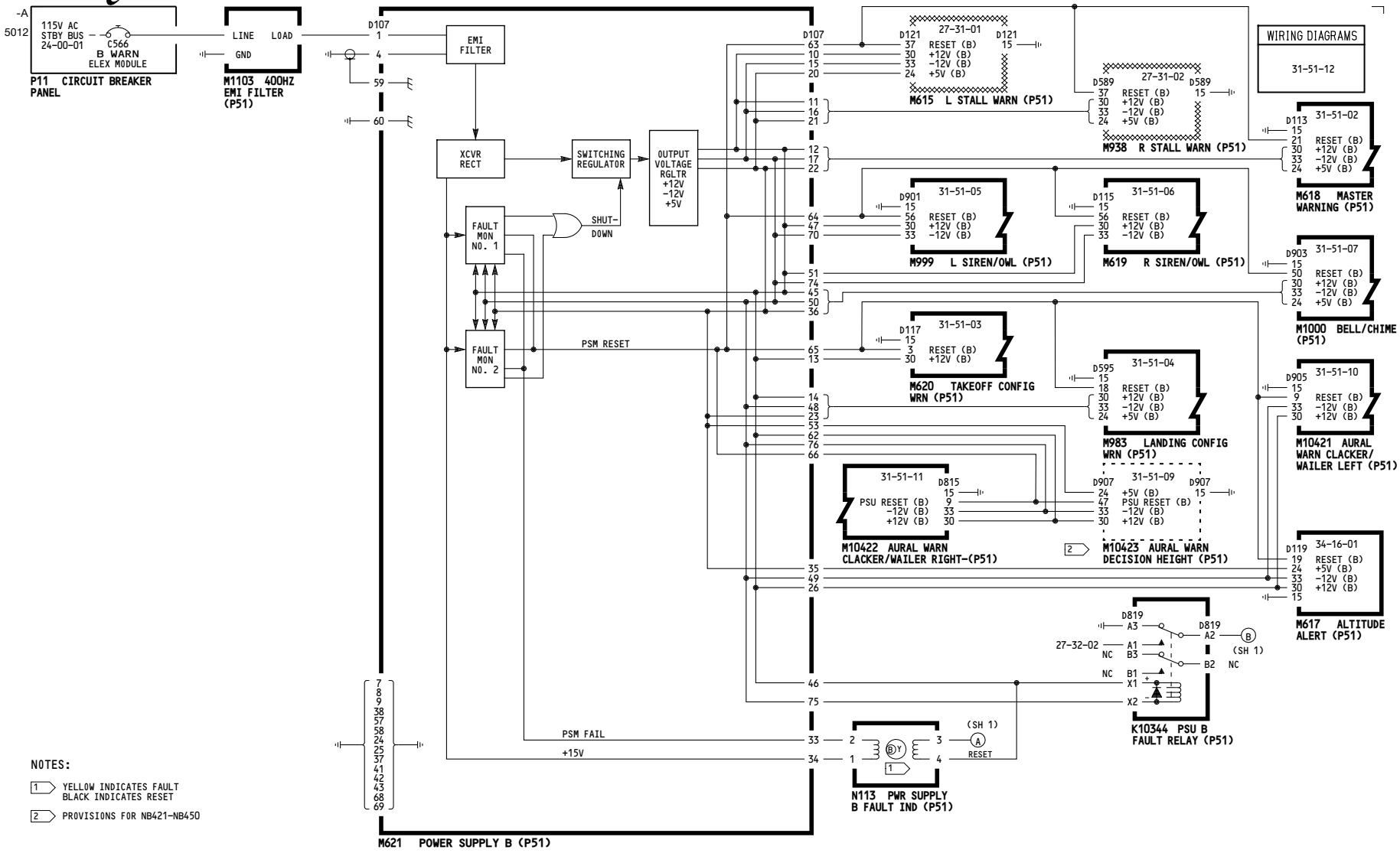
009

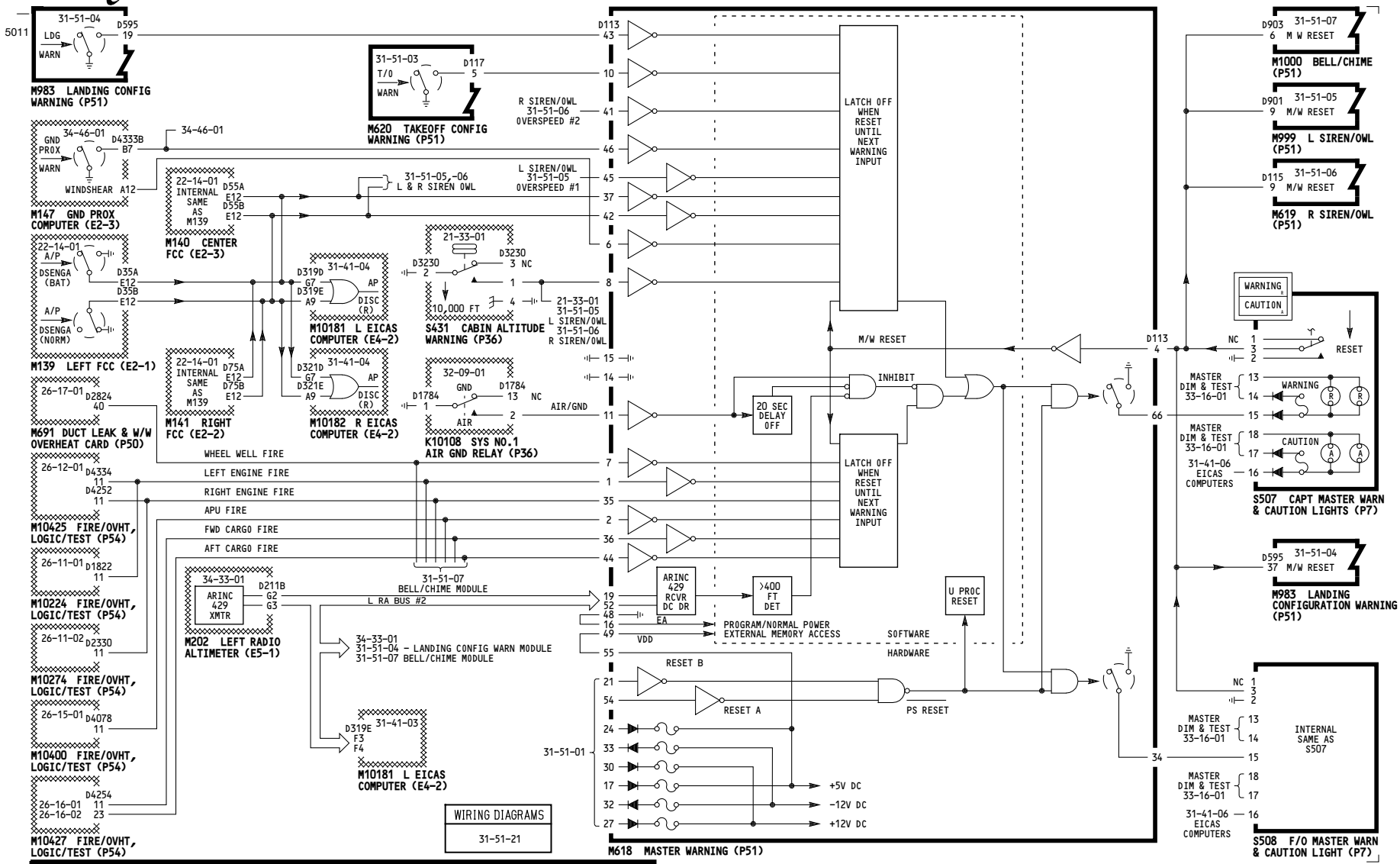
WARNING ELECTRONICS POWER

D280N032S

31-51-01

Page 102
Sheet 1
May 06/2009

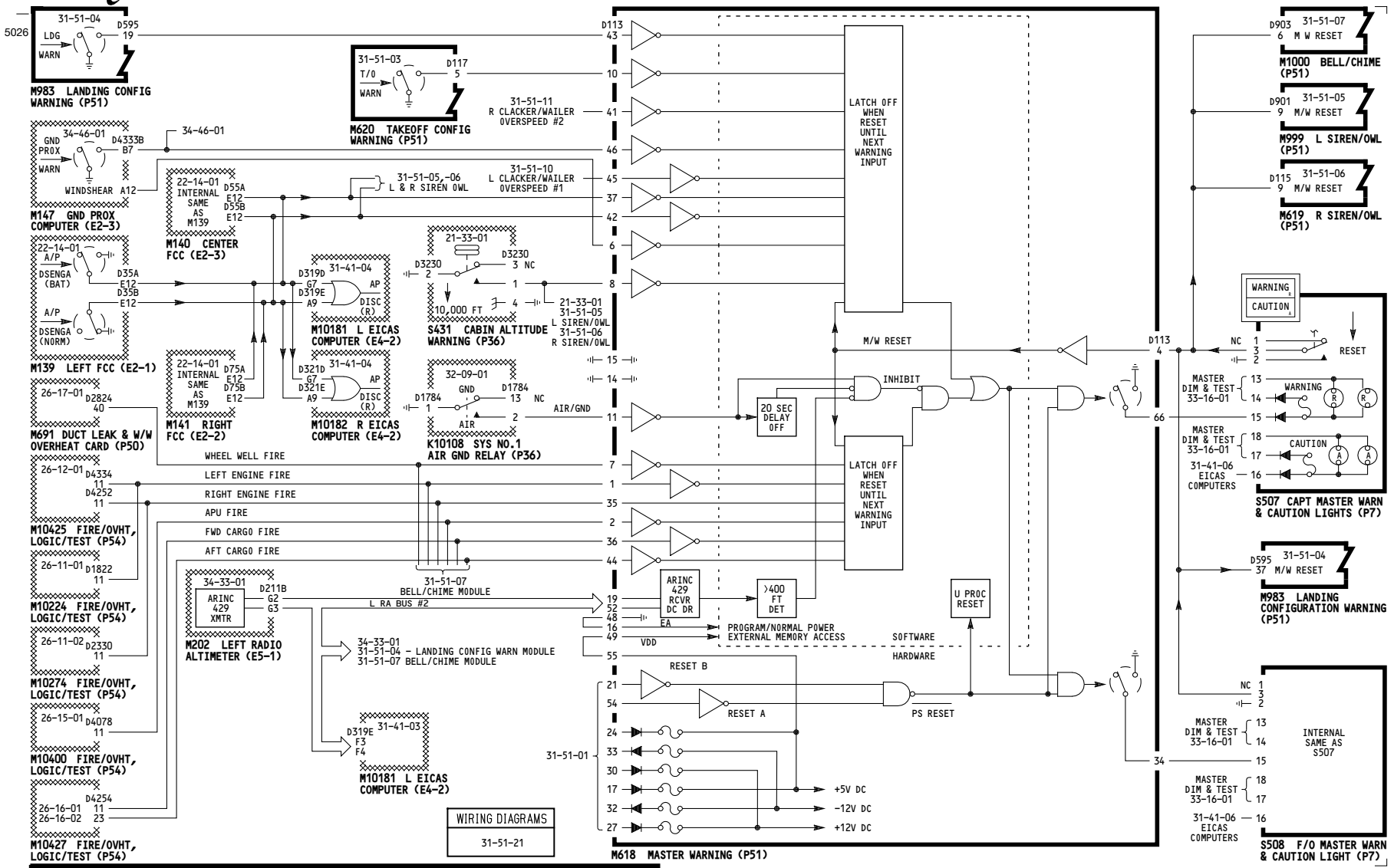




001-008, 010-099

MASTER WARNING

D280N032S



001

MASTER WARNING

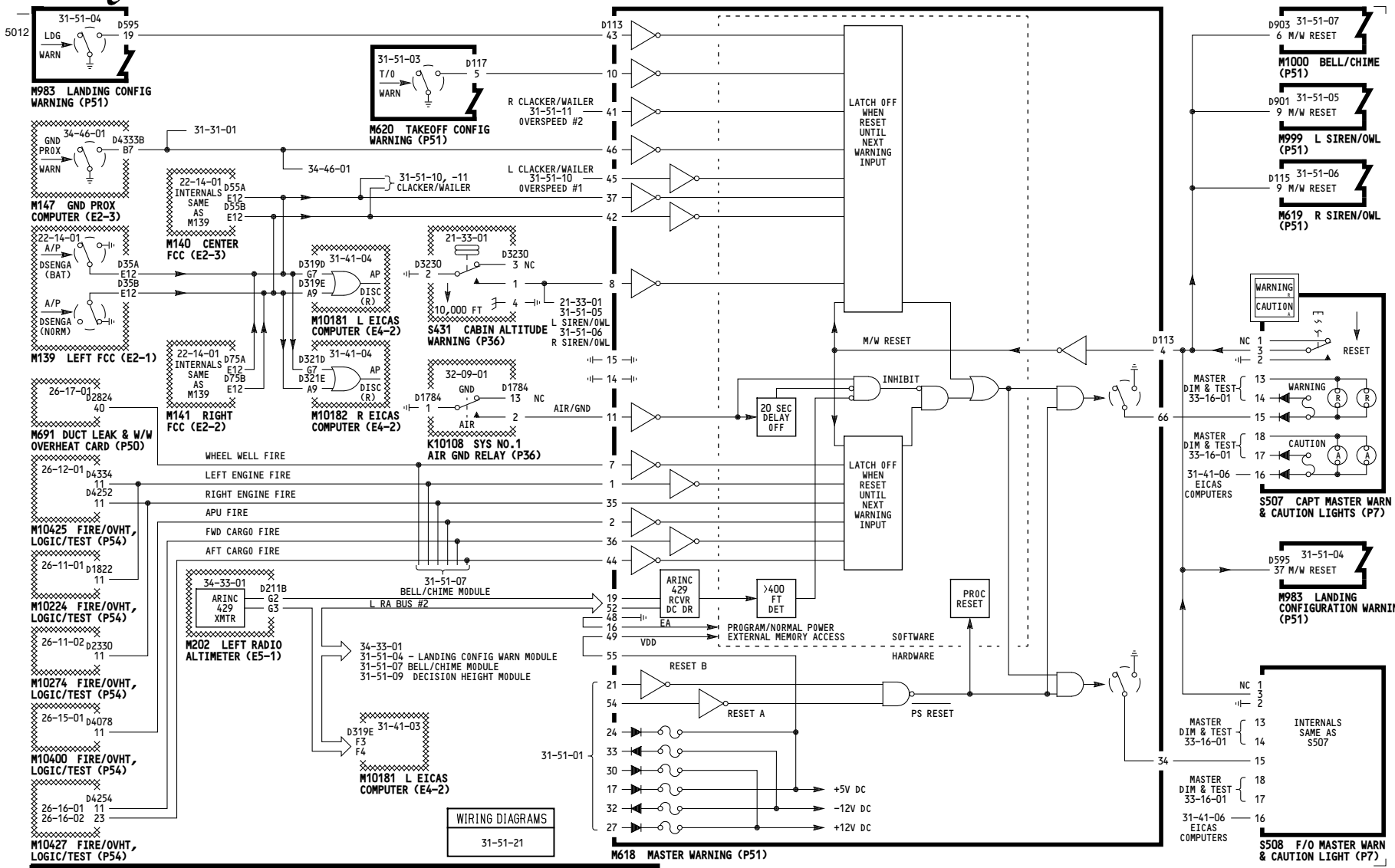
Incorporates
31-0164 R03

D280N032S

31-51-02

Page 101.1

May 06/2009

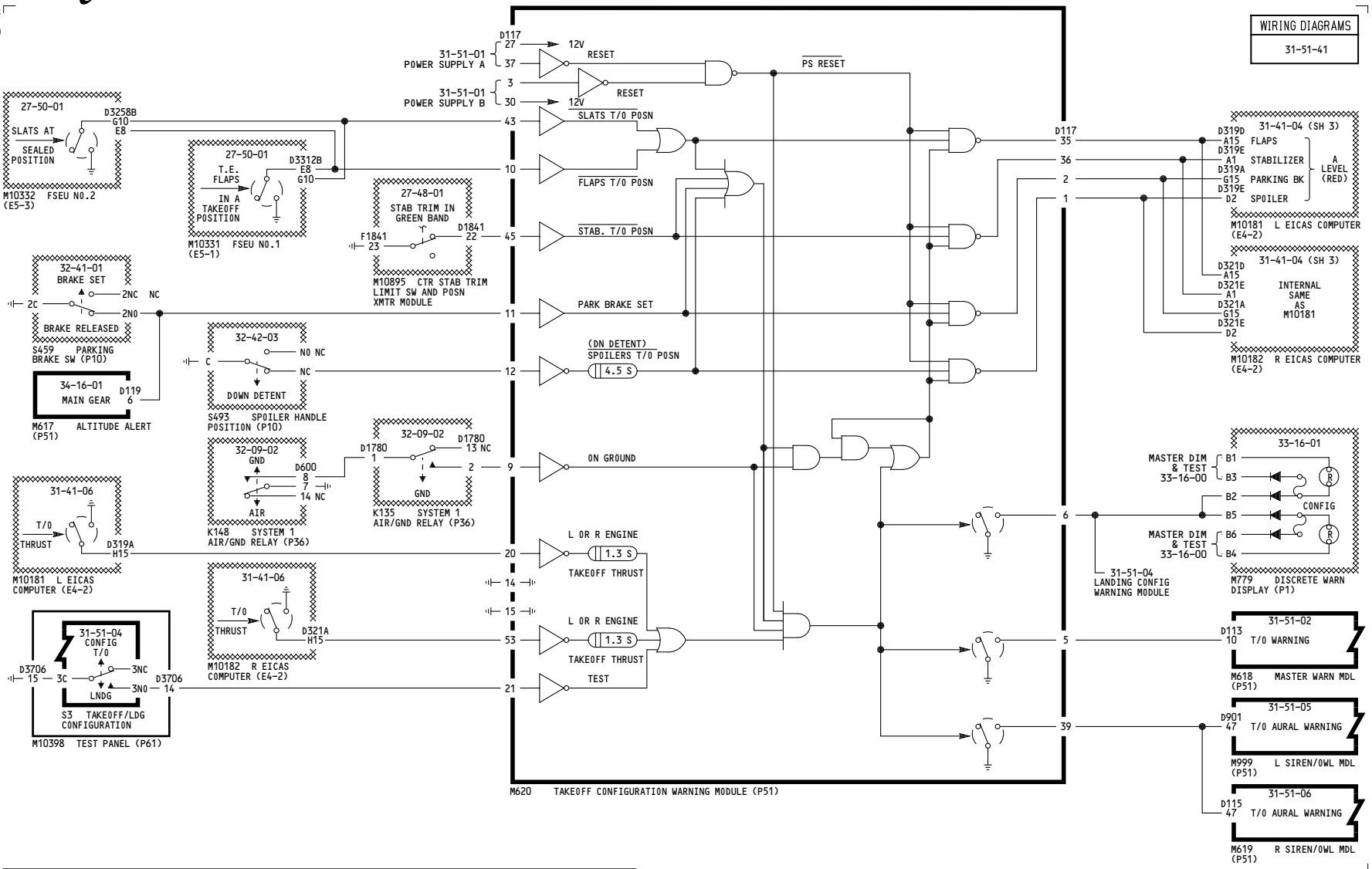


009

MASTER WARNING

D280N032S

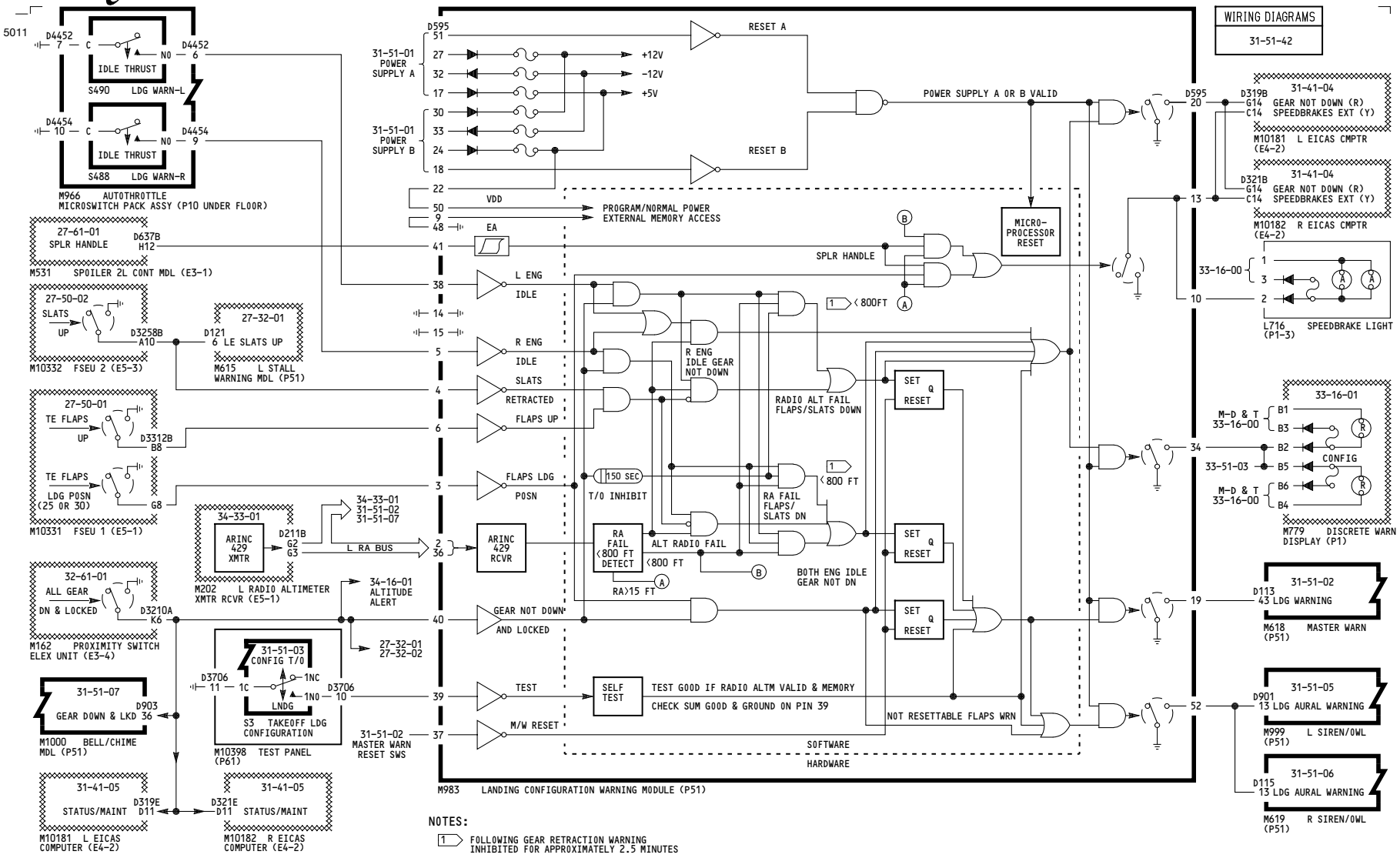
31-51-02



ALL

TAKEOFF CONFIGURATION WARNING

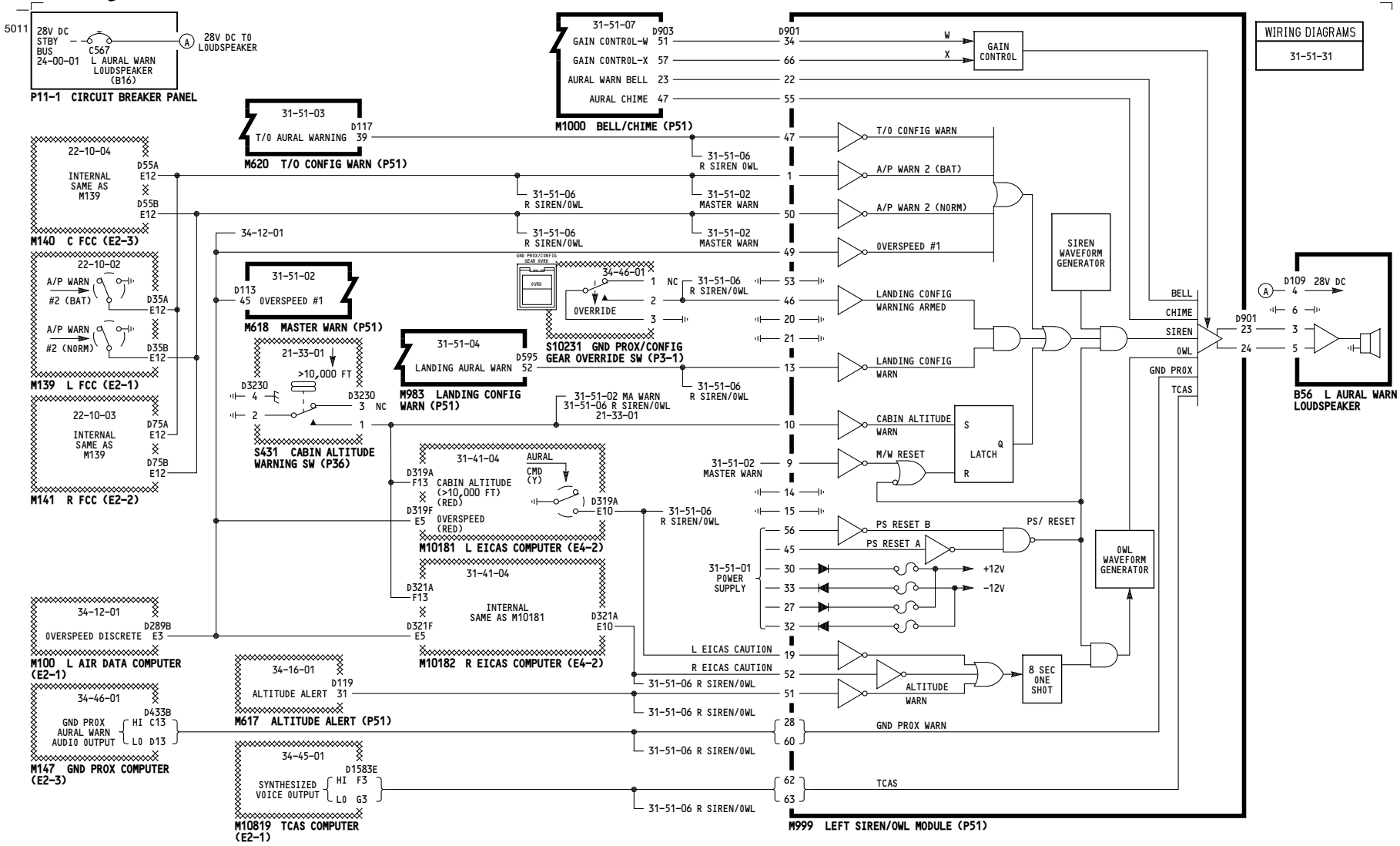
D280N032S



ALL

LANDING CONFIGURATION WARNING

D280N032S



001-008, 010-099

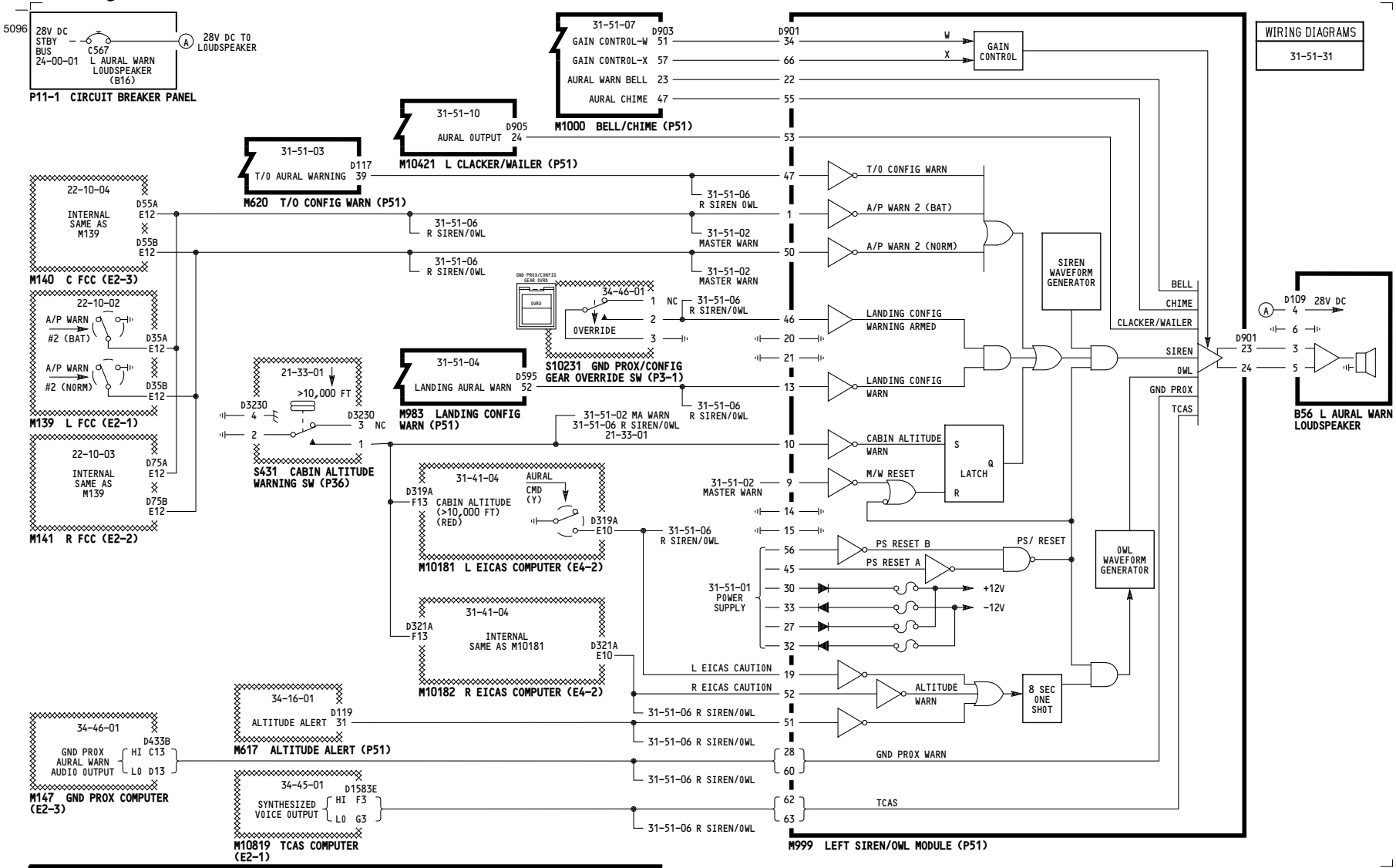
LEFT SIREN/OWL AURAL WARNING

D280N032S

31-51-05

Page 101

Jan 21/2005



001

LEFT SIREN/OWL AURAL WARNING

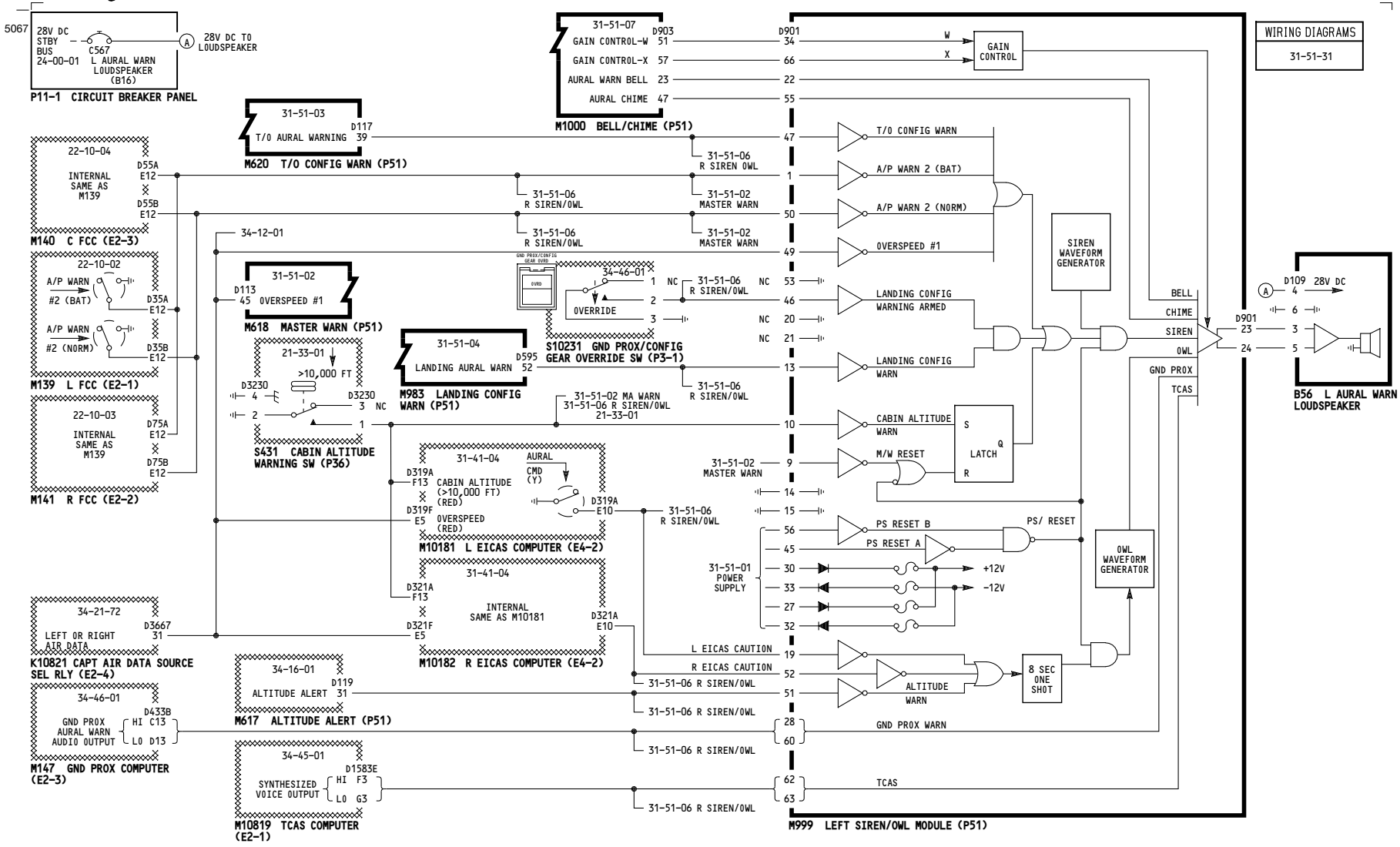
D280N032S

Incorporates
- 31-0055
- 31-0164 R03
- 34A0222

31-51-05

Page 101.1

May 06/2009



002

LEFT SIREN/OWL AURAL WARNING

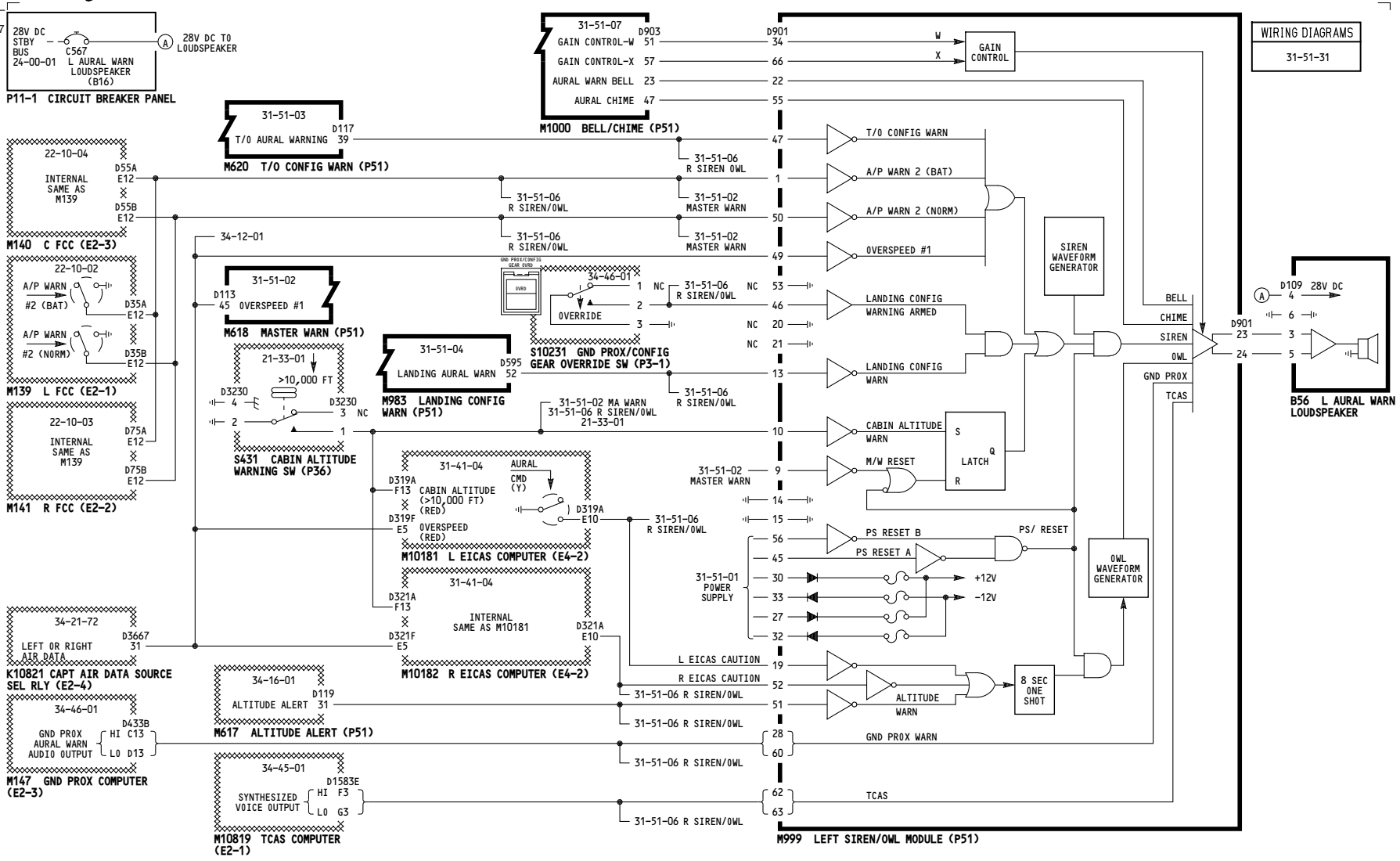
D280N032S

Incorporates
- 31-0055
- 34-0200
- 34A0222

31-51-05

Page 101.2

Jan 21/2005



003-011

LEFT SIREN/OWL AURAL WARNING

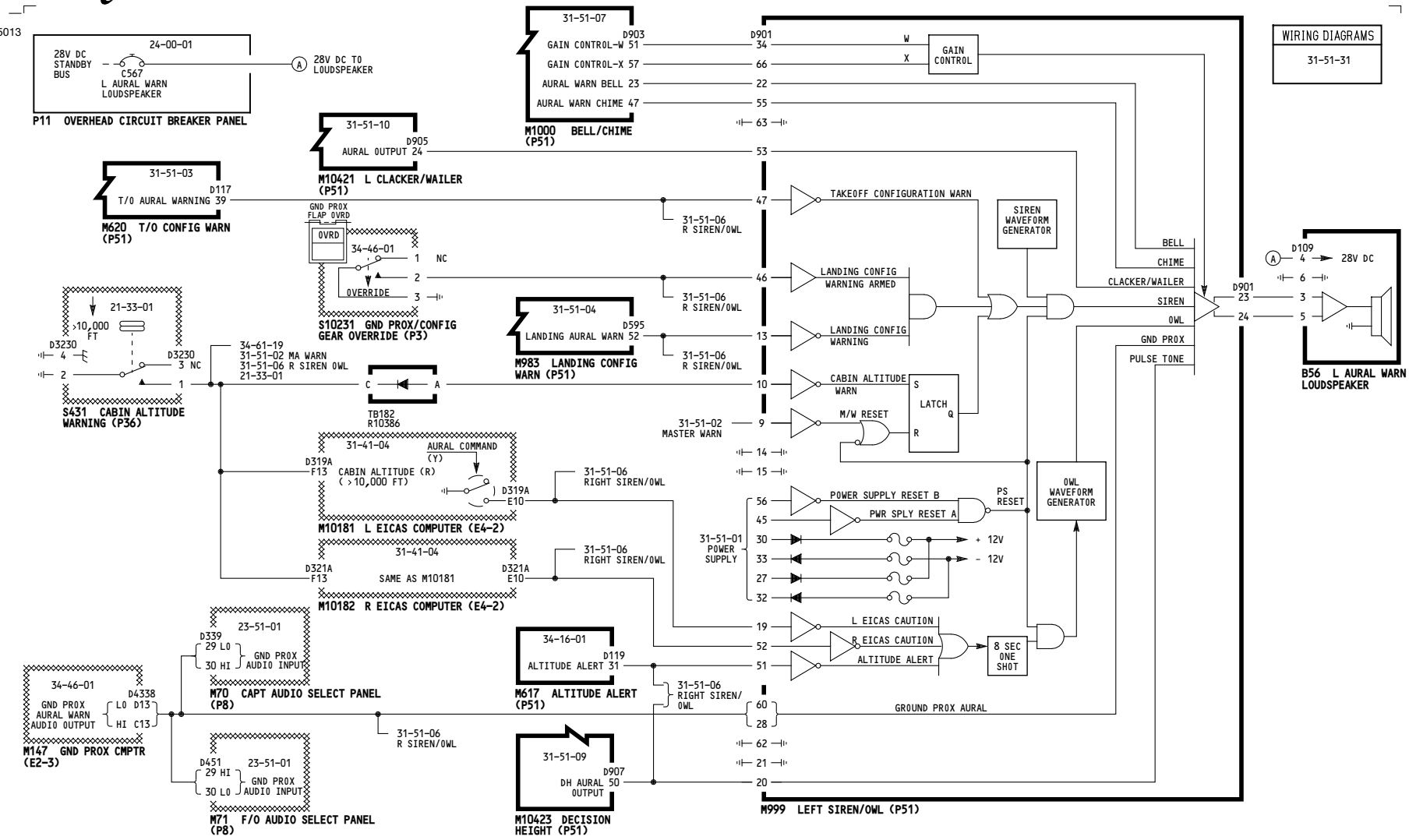
D280N032S

Incorporates
31-0055
34A0222

31-51-05

Page 101.3

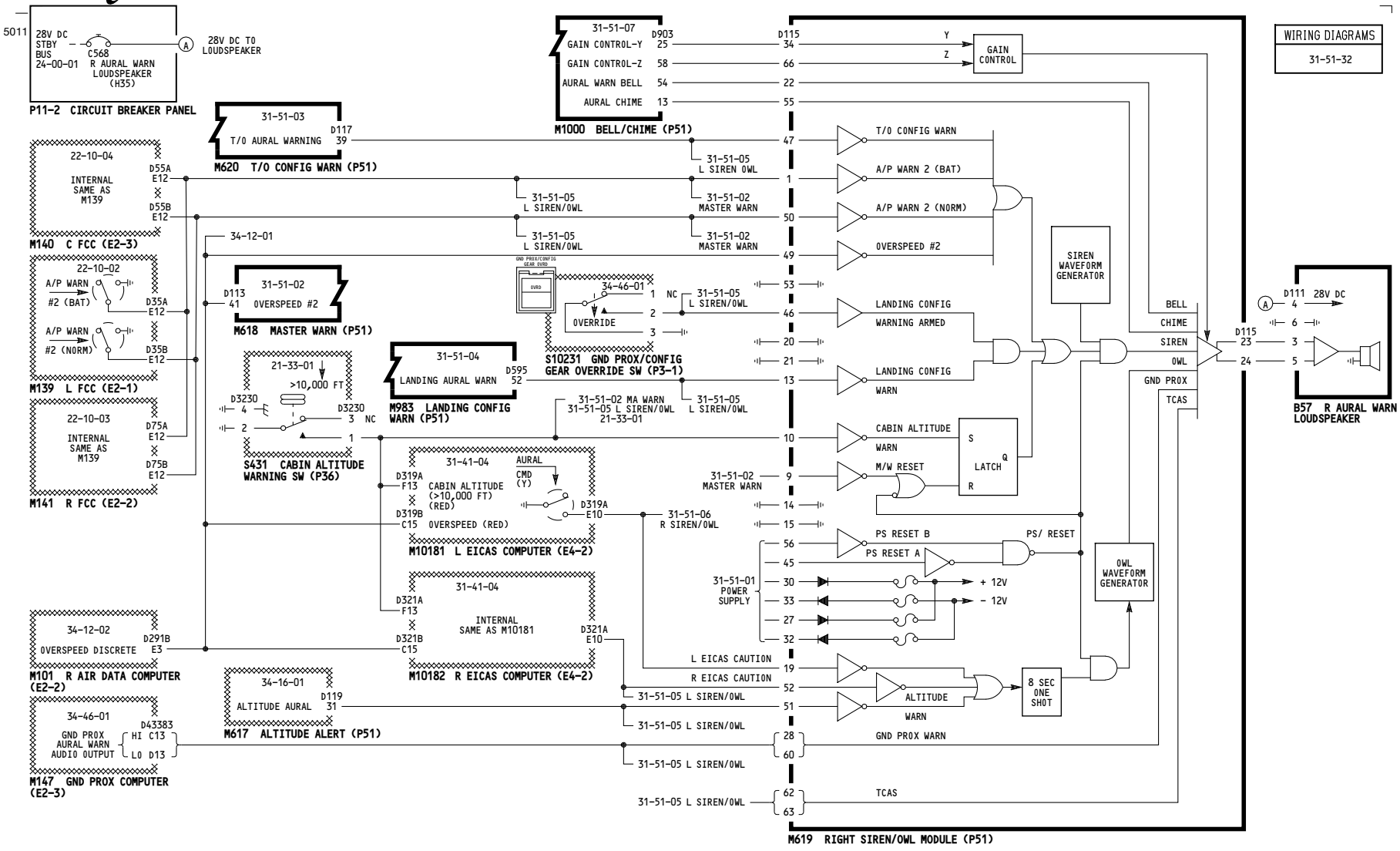
May 06/2009



009

LEFT SIREN/OWL AURAL WARNING

D280N032S



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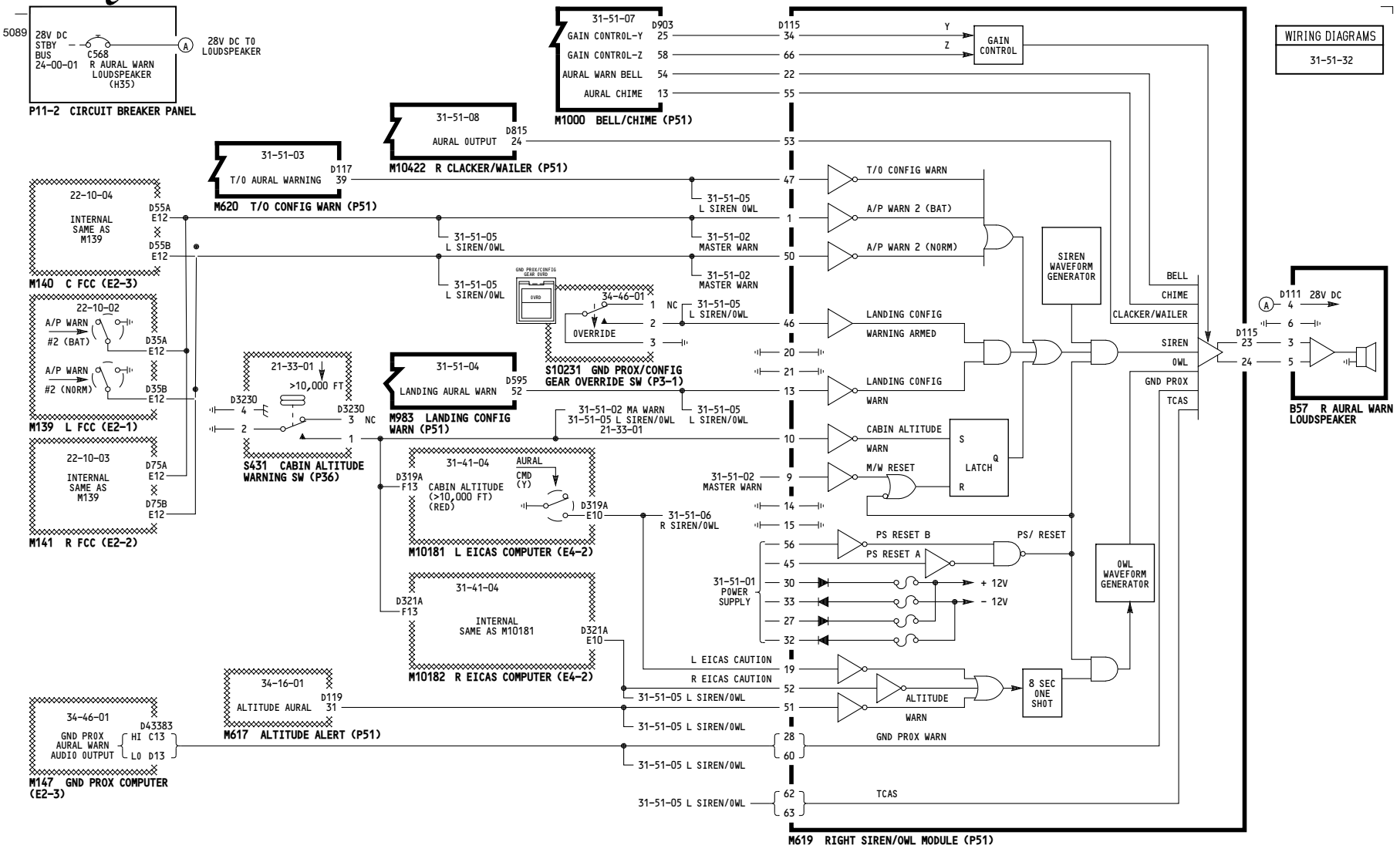
RIGHT SIREN/OWL AURAL WARNING

D280N032S



001

RIGHT SIREN/OWL AURAL WARNING

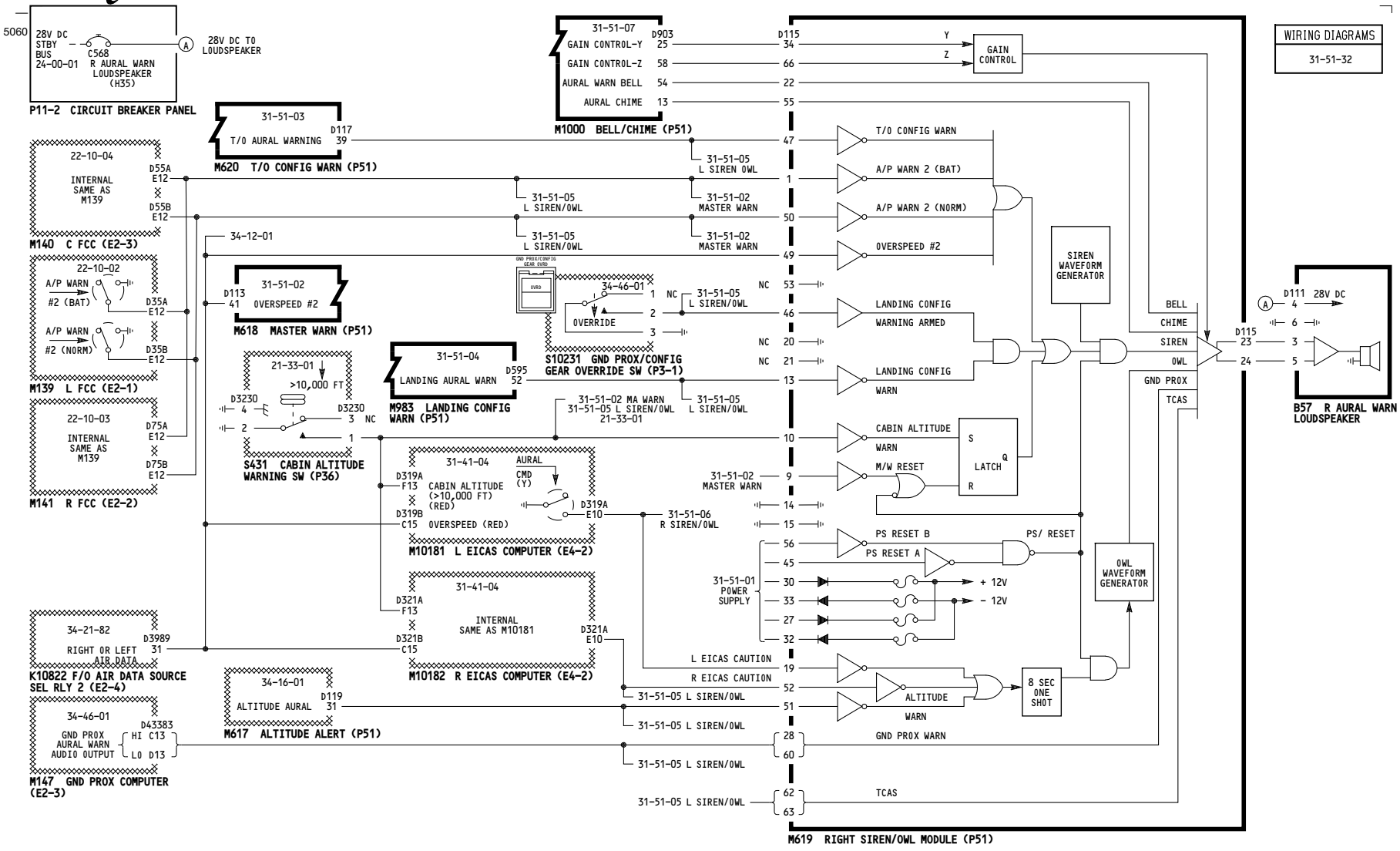
D280N032S

Incorporates
- 31-0055
- 31-0164 R03
- 34A0222

31-51-06

Page 101.1

May 06/2009



002

RIGHT SIREN/OWL AURAL WARNING

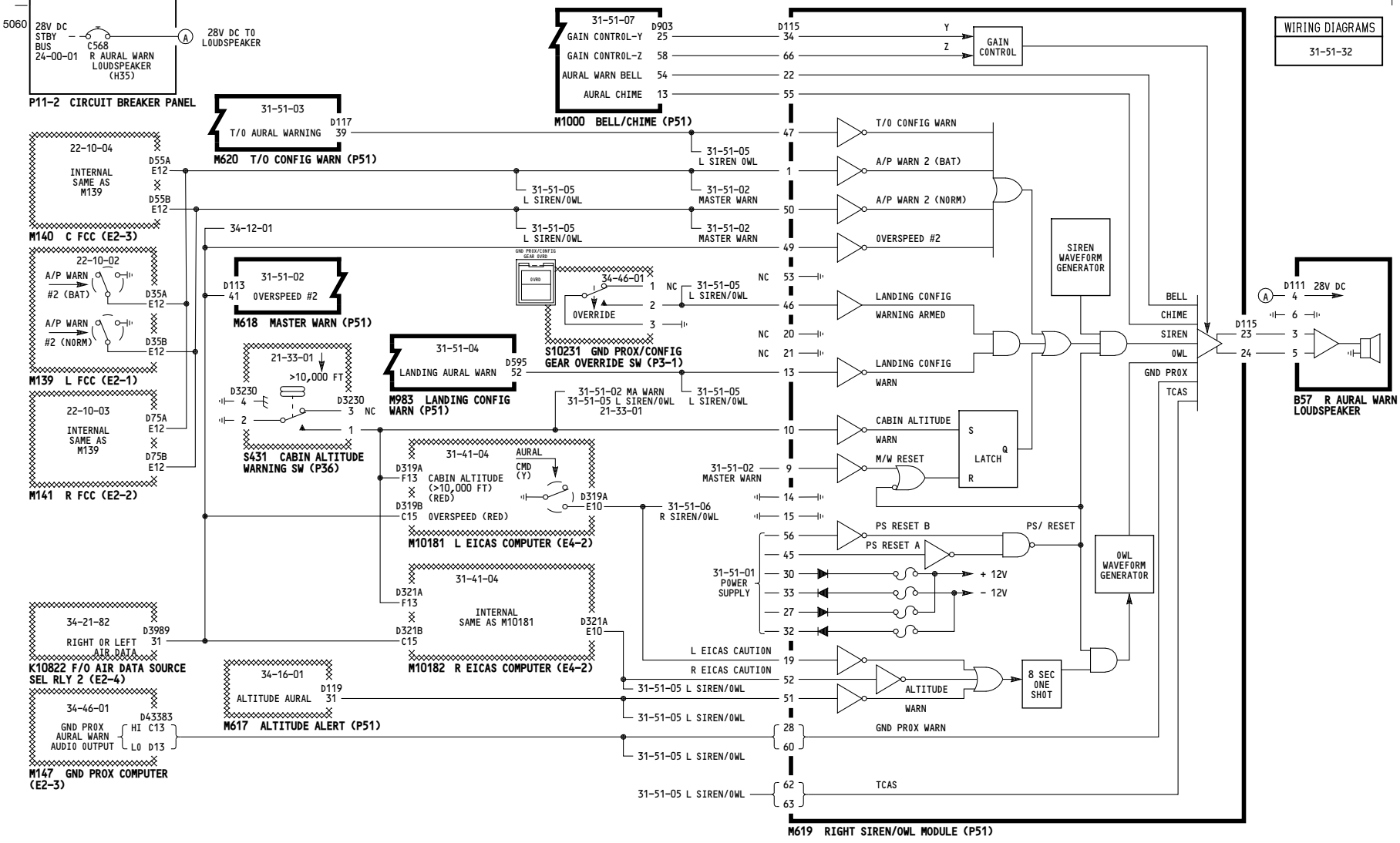
D280N032S

Incorporates
- 31-0055
- 34-0200
- 34A0222

31-51-06

Page 101.2

Jan 21/2005



003-011

RIGHT SIREN/OWL AURAL WARNING

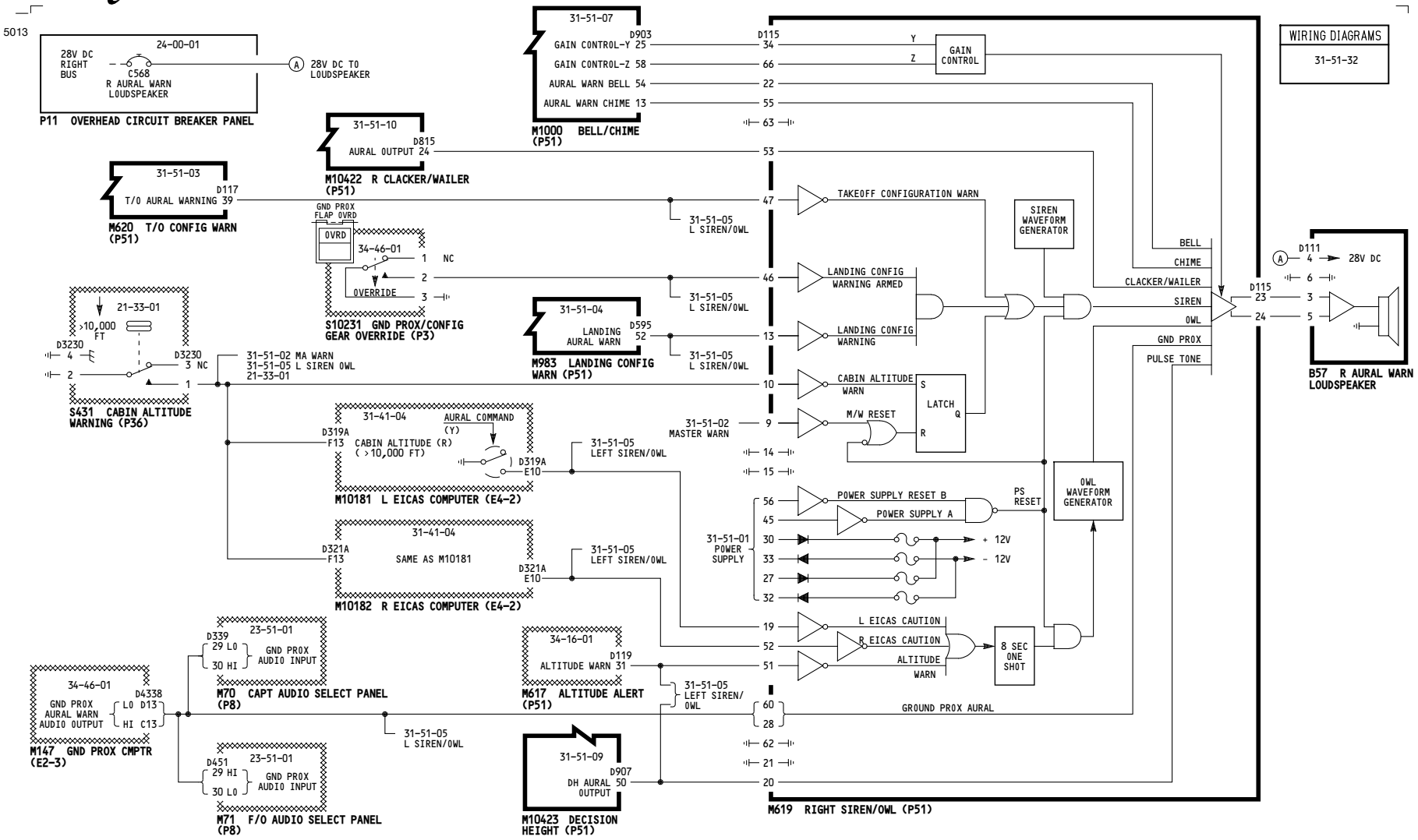
D280N032S

Incorporates
31-0055
34A0222

31-51-06

Page 101.3

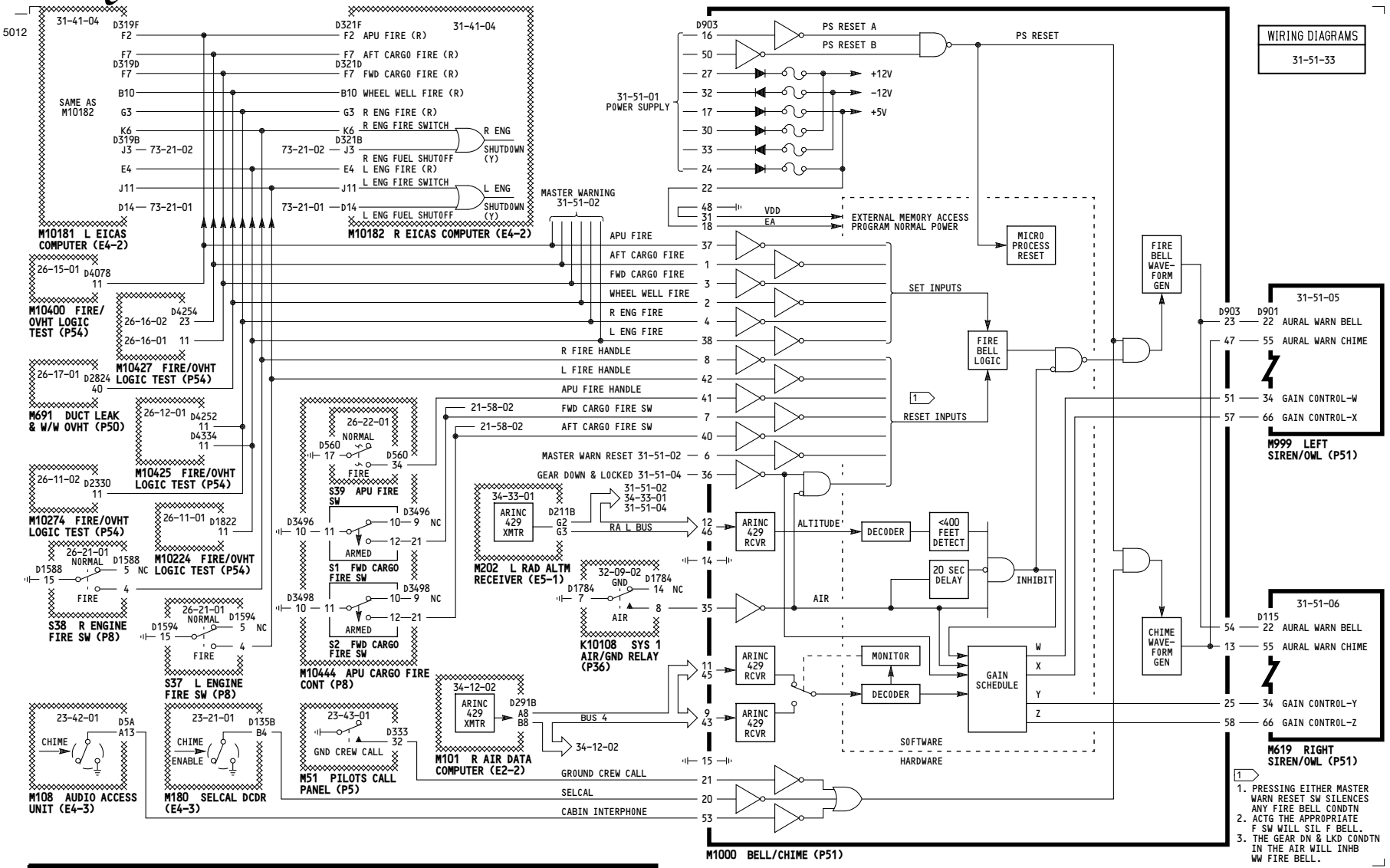
May 06/2009



009

RIGHT SIREN/OWL AURAL WARNING

D280N032S

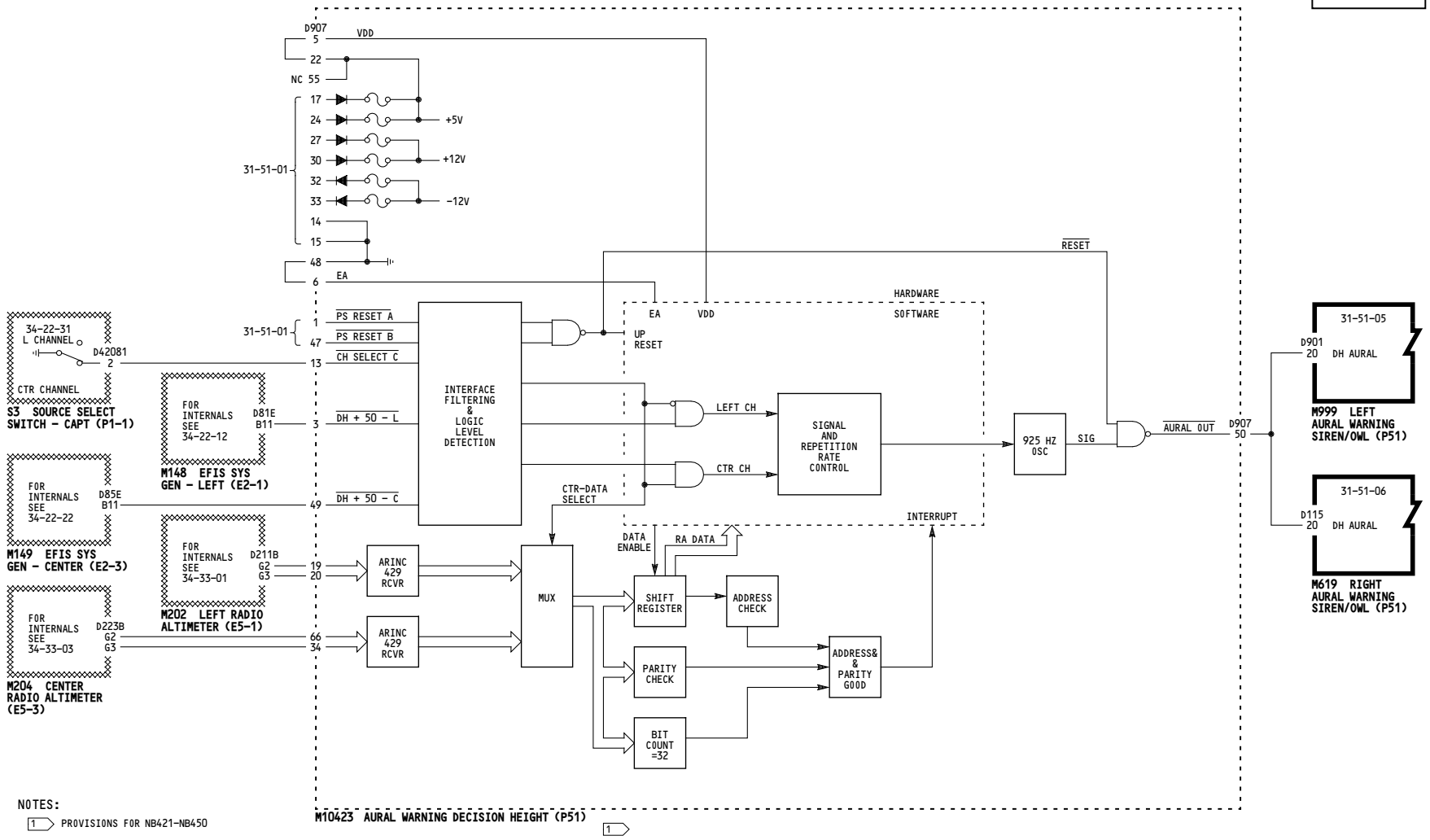


ALL

BELL/CHIME AURAL WARNING

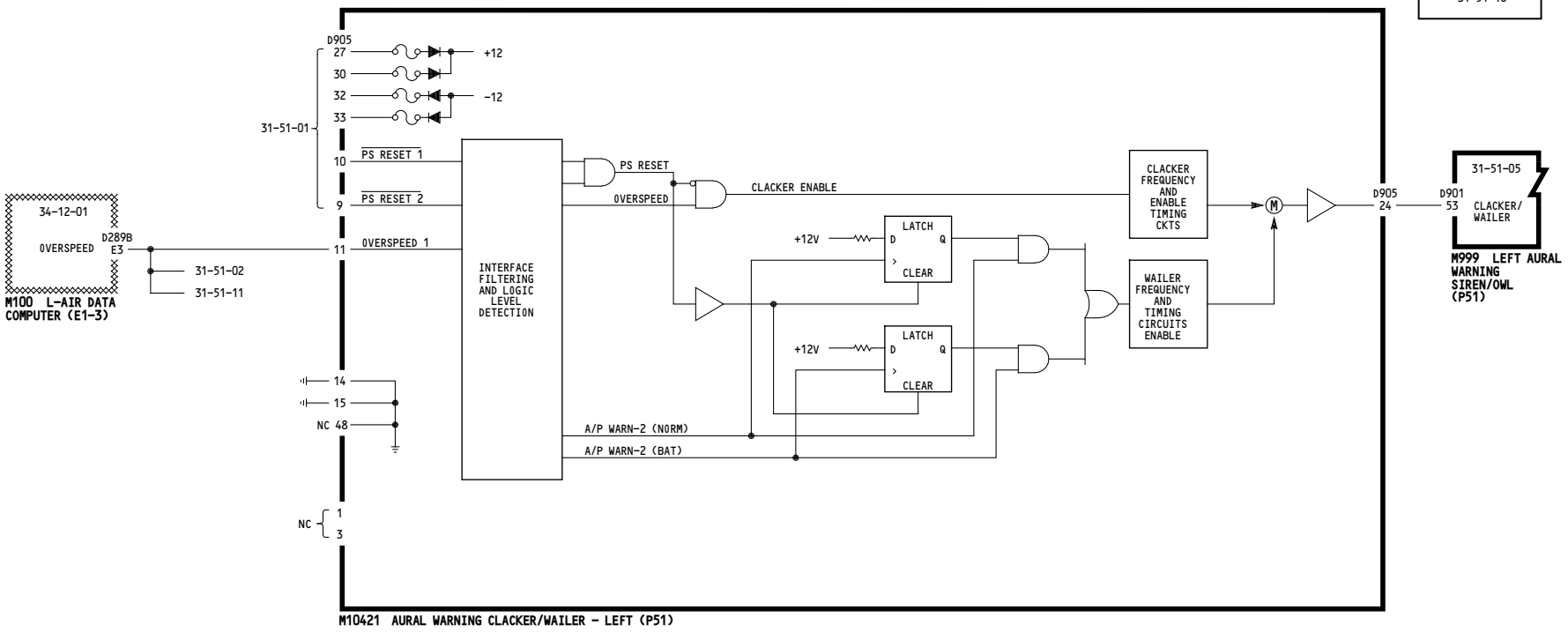
D280N032S

31-51-07



NOTES:

1 PROVISIONS FOR NB421-NB450

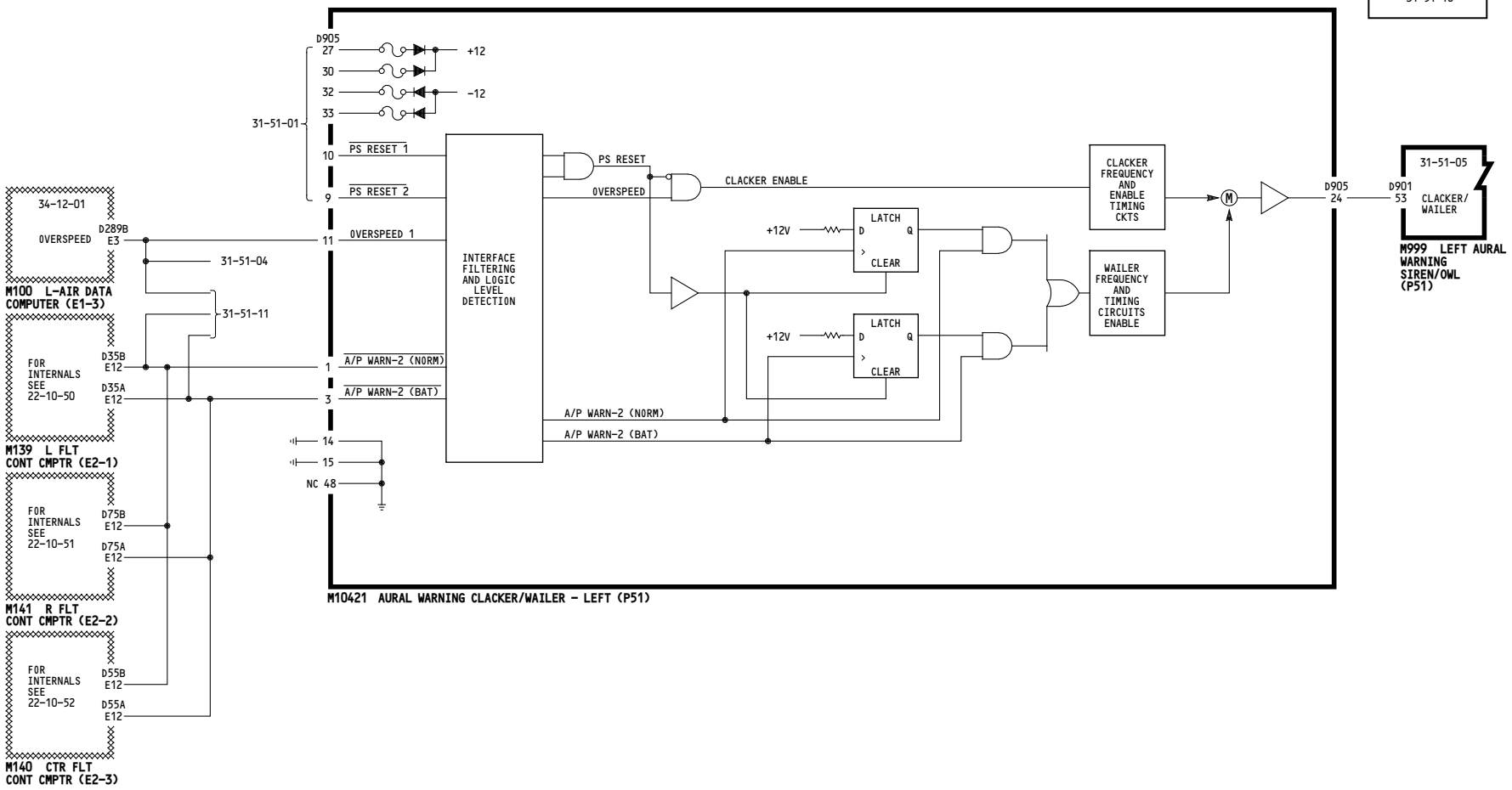


001

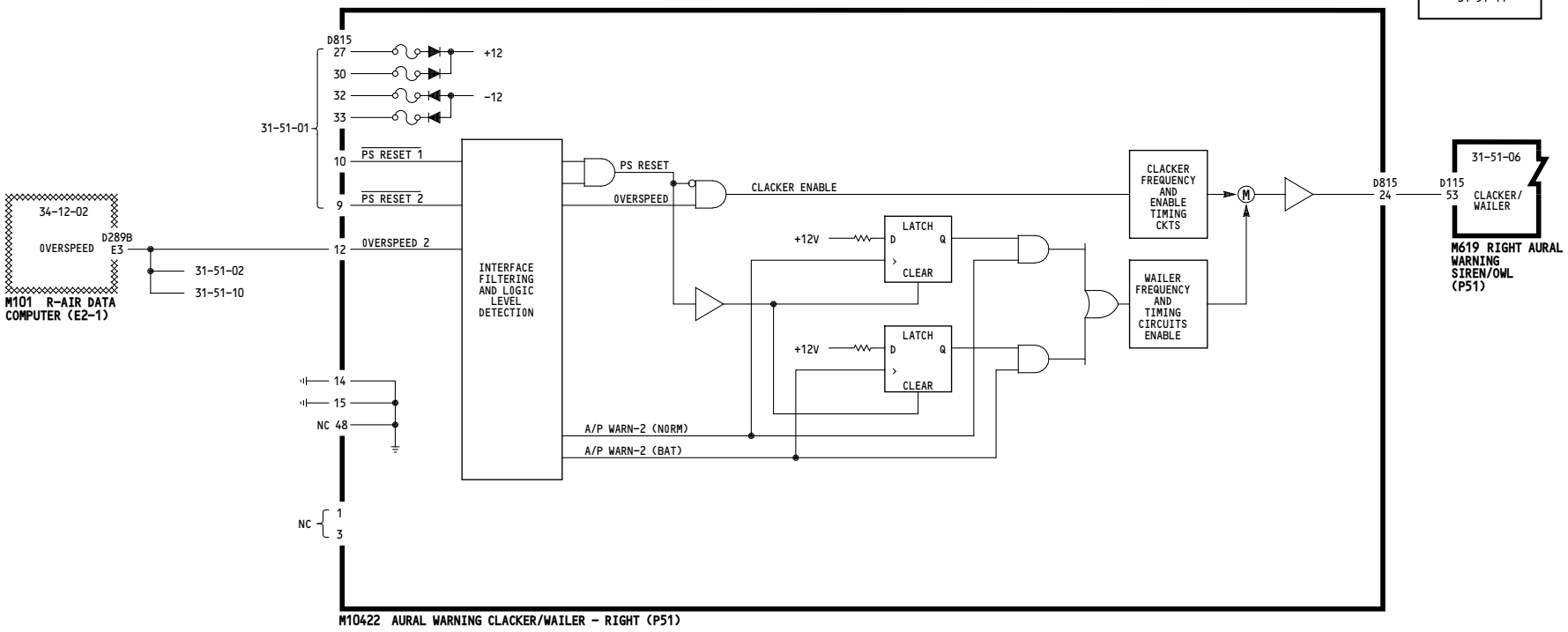
CLACKER/WAILER AURAL WARNING - LEFT

D280N032S

Incorporates
31-0164 R03



009	CLACKER/WAILER AURAL WARNING - LEFT
	D280N032S



001

CLACKER/WAILER AURAL WARNING - RIGHT

D280N032S

Incorporates
31-0164 R03