

APPLICATION		REVISIONS					
NEXT ASSY	USED ON	REV	DESCRIPTION			DATE	APPROVED
56333	AN/UPX-29(V) MODE 5	A	INCORPORATED ECO-0199, SH3 REMOVED TB1-1 AND TB1-3			2007/01/18	JC
		B	INCORPORATED ECO-0213, SH5 UPDATED UNIT A TERM NO.				

30	/	/	/	/	/	/	/	/	/	/	/
20	-	-	/	/	/	/	/	/	/	/	/
10	-	-	-	-	-	-	-	-	-	-	-
0	/	B	B	A	-	B	-	-	-	-	-
	0	1	2	3	4	5	6	7	8	9	

SHEET REVISION STATUS

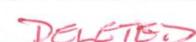
CHECK PRINT

2/7/07 J

STATEMENT C, GOVERNMENT AND THEIR CONTRACTORS,
(NAWCAD ST. INIGOES, MD CODE 4.5.9).
DESTROY BY ANY METHOD

CONTRACT NO. -		DEPARTMENT OF THE NAVY NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION ST. INIGOES, MARYLAND 20684-0010					
APPROVALS	DATE	MODE 5 IFF CONNECTION BOX WIRE LIST					
DRAWN G. MCGREGOR	2006/11/30						
CHECKED PHIL NALLEY	2006/12/07						
APPROVED MIKE LANEY	2006/12/07						
DESIGN ACTIVITY JOE CARUSO	2006/12/08	SIZE A	CAGE CODE 02591	DRAWING NO. WL-56333	REV B		
		SCALE: NONE	2006/12/08		SHEET 1 OF 21		

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV B
SCALE: NONE	2006/12/08	SHEET 2	

CABLE TYPE AND SIZE: 		ACTIVE WIRES: -		CABLE DESIGNATION: NONE
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		MODE 5 IFF CONNECTION BOX		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		-		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
DELETED	-	-	DELETED	DELETED
DELETED	-	-	DELETED	DELETED
TB1-15	-	-	TERM BRD MOUNT	GND JUMPER
TB2-21	-	-	TERM BRD MOUNT	GND JUMPER
TB2-24	-	-	TERM BRD MOUNT	GND JUMPER
TB3-11	-	-	TERM BRD MOUNT	GND JUMPER
TB3-13	-	-	TERM BRD MOUNT	GND JUMPER
TB3-15	-	-	TERM BRD MOUNT	GND JUMPER
TB3-19	-	-	TERM BRD MOUNT	GND JUMPER
TB3-23	-		TERM BRD MOUNT	GND JUMPER
TB1-9			TERM BRD MOUNT	GND JUMPER 
TB2-23	-	-	TB3-17	ISLS INHIBIT JUMPER
TB1-14	-	CENTER	J1 CNTR 	IRIG-B+
TB1-16	-	SHIELD	J1 SHLD 	IRIG-B-

NOTES:

-  USE WIRE P/N M222759/11-18-0 FOR JUMPERS. USE CABLE P/N M17/84-RG-223 FOR J1 TO TB1-14 & TB1-16.
-  USE P/N M39012/18-0102 FOR J1.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV A
SCALE: NONE	2006/12/08	SHEET 3	

CABLE TYPE AND SIZE: LSMSCU-19		ACTIVE WIRES: 16		CABLE DESIGNATION: R-IC(3)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		AN/UPX-41(C)		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3456W28-11S		-
BACKSHELL		M85049/11-57W		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J20 A	1	BLK	- 	SPARE
J20 B	2	WHT	- 	SPARE
J20 C	-	-	-	NOT USED
J20 D	3	RED	TB2-23	P2 INHIBIT
J20 E	4	GRN		REMOTE
J20 F	5	ORN		DEFRUIT 6.3VAC
J20 G	6	BLU		DEFRUIT SWITCHED GND
J20 H	7	WHT/BLK		DEFRUIT/STANDBY CONTROL
J20 I	8	RED/BLK		DEFRUIT RTN
J20 J	9	GRN/BLK	TB2-21	SYSTEM GND
J20 K	10	ORN/BLK		SPARE
J20 L	-	-	-	NOT USED
J20 M	11	BLU/BLK		STANDBY RTN
J20 N	12	BLK/WHT	TB2-15	ISLS FAULT ALARM  IND
J20 P	13	RED/WHT	TB2-5	CODE A/B SELECT  MODE 4
J20 R	14	GRN/WHT	TB2-1 	VERIFY BIT 1
J20 S	-	-	-	NOT USED
J20 T	15	BLU/WHT	TB2-9	ZEROIZE CONTROL
J20 U	16	BLK/RED	TB2-11	MODE 4 LOCKOUT ALARM  IND
J20 V	17	WHT/RED	TB2-7	MODE 4 LOCKOUT OVRD
J20 W	18	ORN/RED	TB2-13	KIR ZEROIZE STATUS  IND
J20 X	19	BLU/RED		SYSTEM TRIGGER FAULT 

NOTE:

 INSULATE AND TIE BACK

MODE 4

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 4	

CABLE TYPE AND SIZE: LSMSCU-10		ACTIVE WIRES: 9		CABLE DESIGNATION: R-IC(4)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		AN/UPX-41(C)		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3456W20-33P		-
BACKSHELL		M85049/11-33W		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J13 A	1	BLK	TB2-2	MODE 1 ENABLE
J13 B	2	WHT	TB2-4	MODE 2 ENABLE
J13 C	3	RED	TB2-6	MODE 3/A ENABLE
J13 D	4	GRN	TB2-8	MODE C ENABLE
J13 E	5	ORN	TB2-10	MODE 4 ENABLE
J13 F	6	BLU	TB2-12	MODE 4 OVRD
J13 H	7	WHT/BLK	TB2-14	6.3VAC
J13 J	8	RED/BLK	TB2-16	6.3VAC RTN
J13 K	9	GRN/BLK	TB2-24	SYSTEM GND
J13 L	10	ORN/BLK	↗ ↳	SPARE
J13 M	-	-	-	NOT USED

NOTES:

△ INSULATE AND TIE BACK

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV B
SCALE: NONE	2006/12/08	SHEET 5	

CABLE TYPE AND SIZE: LSTTSU-3		ACTIVE WIRES: 5		CABLE DESIGNATION: R-IC(5)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		AN/UPX-41(C)		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3456W12-10SX ms34176w12-10SX		-
BACKSHELL		M85049/11-13W		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J26 A	PR 1	1-BLK	TB3-1	BIT 1
J26 B	PR 1	1-WHT	TB3-3	BIT 2
J26 C	PR 2	2-BLK	TB3-5	BIT 3
J26 D	PR 2	2-WHT	TB3-7	BIT 4
J26 E	PR 3	3-BLK	TB3-9	SYSTEM GND Power Control GND
J26 F	PR 3	3-WHT	/	SPARE
J26 G	-	-	-	SPARE NOT USED
J26 H	-	-	-	SPARE NOT USED
J26 J	-	-	-	SPARE NOT USED
J26 K	-	-	-	SPARE NOT USED

NOTES:

 INSULATE AND TIE BACK

Power Control

B

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 6	

CABLE TYPE AND SIZE: LS2SU-7		ACTIVE WIRES: 5		CABLE DESIGNATION: R-IC(7)
		UNIT A		UNIT B
UNIT NUMBER		UNIT 3		-
UNIT NAME		C-10063/UPX CONTROL ANTENNA		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3476L12-8PN		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
3J8 E	1	WHT	TB3-8	R1 SYNCHRO OUT
3J8 F	1	BLK	TB3-10	R2 SYNCHRO OUT
3J8 C	2	BLK	TB3-16	S2 SYNCHRO OUT
3J8 B	3	WHT	TB3-14	S1 SYNCHRO OUT
3J8 D	2	WHT	TB3-21	S3 SYNCHRO OUT
3J8 1	-	SHIELD	2	SHIELD-GND
3J8 G	4	BLK	1 2 3	NOT USED SPARE
3J8 A	4	WHT	1 2 3	NOT USED SPARE
	3	BLK	-	NOT USED
	5	WHT	-	NOT USED
	5	BLK	-	NOT USED
	6	WHT	-	NOT USED
	6	BLK	-	NOT USED
	7	WHT	-	NOT USED
	7	BLK	-	NOT USED

NOTES:

1) SHIELDS FOR PAIRS 1, 2, AND 3 ARE TIED TOGETHER AT UNIT "A" AND CONNECTED TO PIN H.

2) SHIELD FOR PAIR 1 IS CONNECTED TO TB3-6 AT UNIT B. SHIELDS FOR PAIRS 2 AND 3 ARE TIED TOGETHER AND CONNECTED TO TB3-12 OF UNIT "B".

3) INSULATE AND TIE BACK

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
	SCALE: NONE	2006/12/08	SHEET 7

CABLE TYPE AND SIZE: M24643/59		ACTIVE WIRES: 5	CABLE DESIGNATION: R-IC(8A)
UNIT A		UNIT B	
UNIT NUMBER		-	
UNIT NAME		AN/UPX-41(C) PRIMARY	
CABLE CONNECTOR		M24308/2-1	
BACKSHELL		M85049/48-2-1	

UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J40 1	-	-	-	SPARE NOT USED
J40 2	PR 1	WHT/BLU	TB3-20	CH4 TXD A (+)
J40 3	PR 2	WHT/ORN	TB3-24	CH4 RXD A (+)
J40 4	-	-	-	SPARE NOT USED
J40 5	SHIELD	DRAIN/WIRE	TB3-23	GND
J40 6	-	-	-	SPARE NOT USED
J40 7	PR 1	BLU/WHT	TB3-18	CH4 TXD B (-)
J40 8	PR 2	ORN/WHT	TB3-22	CH4 RXD B (-)
J40 9	-	-	-	SPARE NOT USED

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 8	

CABLE TYPE AND SIZE: M24643/59		ACTIVE WIRES: 5		CABLE DESIGNATION: R-IC(8B)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		AN/UPX-41(C) ALTERNATE		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		M24308/2-1		-
BACKSHELL		M85049/48-2-1		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J40 1	-	-	-	SPARE NOT USED
J40 2	PR 1	WHT/BLU	TB1-19	CH4 TXD A (+)
J40 3	PR 2	WHT/ORN	TB1-23	CH4 RXD A (+)
J40 4	-	-	-	SPARE NOT USED
J40 5	SHIELD	DRAIN/WIRE	TB1-15	GND
J40 6	-	-	-	SPARE NOT USED
J40 7	PR 1	BLU/WHT	TB1-17	CH4 TXD B (-)
J40 8	PR 2	ORN/WHT	TB1-21	CH4 RXD B (-)
J40 9	-	-	-	SPARE NOT USED

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 9	

CABLE TYPE AND SIZE: LS2SU-3		ACTIVE WIRES: 4		CABLE DESIGNATION: R-IC(9)
	UNIT A		UNIT B	
UNIT NUMBER	UNIT 3		-	
UNIT NAME	C-10063/UPX CONTROL,ANTENNA		MODE 5 IFF CONNECTION BOX	
CABLE CONNECTOR	MS3476L12-8PW		-	
BACKSHELL	-		-	
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
3J10 A	1	WHT	TB3-17	ISLS INHIBIT
3J10 H	1	BLK	TB3-19	ISLS INHIBIT GND RTN
3J10 B	2	WHT	TB2-18	T/R OUT
3J10 C	2	BLK	TB2-20	T/R OUT RTN
3J10 D △	-	-	+ △	SHIELD-GND
3J10 E	3	WHT	+ △	SPARE
3J10 F	3	BLK	+ △	SPARE
3J10 G	-	-	-	NOT USED

NOTES:

1) SHIELDS FOR PAIRS 1 AND 2 ARE TIED TOGETHER AT UNIT A AND ~~NOT~~ CONNECTED TO PIN D

2) INSULATE AND TIE BACK

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 10	

CABLE TYPE AND SIZE: 6323052		ACTIVE WIRES: 1		CABLE DESIGNATION: R-IC(10)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		MODE 5 IFF CONNECTION BOX		-
CABLE CONNECTOR		M39012/16-0225		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J1 CENTER		COND	-	IRIG-B
J1 SHIELD		SHIELD	-	SHIELD

NOTES:

 CONNECTED TO J1 VIA BNC "T" CONNECTOR TO FACILITATE IRIG-B SIGNAL PASSES THROUGH TO NEXT SYSTEM.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 11	

CABLE TYPE AND SIZE: 6323052		ACTIVE WIRES: 1		CABLE DESIGNATION: R-IC(11)
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		MODE 5 IFF CONNECTION BOX		-
CABLE CONNECTOR		M39012/16-0225		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J1 CENTER	△1	COND	-	IRIG-B
J1 SHIELD	△1	SHIELD	-	SHIELD

NOTES:

⚠ CONNECTED TO J1 VIA BNC "T" CONNECTOR TO FACILITATE IRIG-B SIGNAL PASSES THROUGH TO NEXT SYSTEM.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08		SHEET 12

CABLE TYPE AND SIZE: 2XSO-7		ACTIVE WIRES: 4	CABLE DESIGNATION: R-IT(7)	
		UNIT A		UNIT B
UNIT NUMBER		UNIT 3		-
UNIT NAME		J-6616/APX INTERCONNECTING BOX		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3476W12-10P		-
BACKSHELL		M85049/52-1-12W		-

UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J13 B	1	BLK	TB3-24	RS-422 IN + RXD
J13 C	2	WHT	TB3-22	RS-422 IN - RXD
J13 G	3	BLK	TB3-20	RS-422 OUT + TXD
J13 H	4	WHT	TB3-18	RS-422 OUT -TXD
J13 E	SHIELD	-	TB3-23	GND

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 13	

CABLE TYPE AND SIZE: 2XSAOW-7		ACTIVE WIRES: 5		CABLE DESIGNATION: R-IZ(39)
		UNIT A		UNIT B
UNIT NUMBER		UNIT 1		-
UNIT NAME		CP-1273/UPX-24(V) PROCESSOR CONTROLLER		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3476L12-10S		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J82 PIN B	1	BLK	TB3-8	R1 SYNCHRO OUT
J82 PIN C	-	WHT	TB3-10	R2 SYNCHRO OUT
J82 PIN D	-	SHIELD	TB3-6	SHIELD (R)
J82 PIN F	2	BLK	TB3-14	S1 SYNCHRO OUT
J82 PIN G	-	WHT	TB3-16	S2 SYNCHRO OUT
J82 1	-	SHIELD	1	SHIELD (S1, S2)
J82 PIN H	3	BLK	TB3-21	SYNCHRO S3 synchro out
J82 3	-	WHT	f 13	SPARE
J82 1	-	SHIELD	1	SHIELD(S3)
J82 3	4	BLK	f 13	SPARE
J82 3	-	WHT	f 13	SPARE
J82 3	-	SHIELD	f 13	SPARE
J82 3	5	BLK	f 13	SPARE
J82 3	-	WHT	f 13	SPARE
J82 3	-	SHIELD	f 13	SPARE
J82 3	6	BLK	f 13	SPARE
J82 3	-	WHT	f 13	SPARE
J82 3	-	SHIELD	L 13	SPARE

NOTES:

CONTINUED ON NEXT SHEET

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 14	

CABLE TYPE AND SIZE: 2XSAOW-7		ACTIVE WIRES: 5		CABLE DESIGNATION: R-IZ(39) CONT
		UNIT A		UNIT B
UNIT NUMBER		UNIT 1		-
UNIT NAME		CP-1273/UPX-24(V) PROCESSOR CONTROLLER		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		MS3476L12-10S		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J82 ③	7	BLK	1- ③	SPARE
J82 ③	-	WHT	† ③	SPARE
J82 ③	-	SHIELD	† ②	SPARE
J82 PIN A	-	②	-	INTERLOCK
J82 PIN J	-	②	-	INTERLOCK

NOTES:

① SHIELD FOR PAIR 2 AND 3 ARE TIED TOGETHER AT EACH END. AT UNIT "A" END, THEY ARE CONNECTED TO PIN K. AT UNIT "B" END, THEY ARE CONNECTED TO TB3-12.

② AT UNIT "A" END, JUMPER PIN A TO PIN J USING WIRE TYPE M22759/11-20-9 OR EQUIVALENT.

③ INSULATE AND TIE BACK.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 15	

2XAD-18

CABLE TYPE AND SIZE: 2XSAO-18		ACTIVE WIRES: 30		CABLE DESIGNATION: R-IZ(61)
		UNIT A		UNIT B
UNIT NUMBER		UNIT 1		-
UNIT NAME		CP-1273/UPX-24(V) PROCESSOR CONTROLLER		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		M83723/86R20-41N		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J88 PIN 1	1	BLK	TB2-2	MODE 1 ENABLE
J88 PIN 2	-	WHT	TB2-4	MODE 2 ENABLE
J88 PIN 3	2	WHT/YEL	TB2-6	MODE 3 ENABLE
J88 PIN 22	-	WHT	TB2-8	MODE C ENABLE
J88 PIN 4	3	RED	TB2-10	MODE 4 ENABLE
J88 PIN 21	-	WHT	TB2-12	MODE 4 OVRD
J88 PIN 23	4	GRN	TB3-11	MODE RTN TO I/R
J88  1	-	WHT	+ 	SPARE
J88 PIN 17	5	ORN	TB3-1	10KW PWR CONT 1
J88 PIN 18	-	WHT	TB3-3	10KW PWR CONT 2
J88 PIN 19	6	BLU	TB3-5	10KW PWR CONT 4
J88 PIN 32	-	WHT	TB3-7	10KW PWR CONT 8
J88 PIN 33	7	WHT/BLK	TB3-9	10KW PWR CONT RTN
J88  1	-	WHT	+ 	SPARE
J88 PIN 7	8	RED/BLK	TB2-1	MODE 4 VERIFY BIT 1
J88 PIN 8	-	WHT	TB2-3	MODE 4 VERIFY BIT 2
J88 PIN 10	9	GRN/BLK	TB2-5	MODE 4 CODE A/B SELECT
J88 PIN 9	-	WHT	TB2-7	MODE 4 LOCKOUT OVRD
J88 PIN 25	10	ORN/BLK	TB2-9	MODE 4 ZEROIZE CONTROL
J88 PIN 26	-	WHT	TB2-13	MODE 4 ZEROIZE ALARM
J88 PIN 36	11	BLU/BLK	TB2-11	MODE 4 LOCKOUT ALARM IND
J88 PIN 37	-	WHT	+ 	KIR GND
J88 PIN 11	12	BLK/WHT	TB2-15	ISLS FAULT IND

NOTES:

CONTINUED ON NEXT SHEET

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 16	

~~2XAO-18~~

CABLE TYPE AND SIZE: 2XSAO-18		ACTIVE WIRES: 30		CABLE DESIGNATION: R-IZ(61) CONT
UNIT NUMBER		UNIT A		UNIT B
UNIT NAME		CP-1273/UPX-24(V) PROCESSOR CONTROLLER		MODE 5 IFF CONNECTION BOX
CABLE CONNECTOR		M83723/86R20-41N		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J88 PIN 12	-	WHT	TB3-13	ISLS SWT GND
J88 PIN 13	13	RED/WHT	1 	GTC CONT LONG/SHORT
J88 PIN 30	-	WHT	TB3-15	I/R GND
J88 PIN 14	14	GRN/WHT	1 	HV OVRD
J88 PIN 15	-	WHT	1 	HV RESET
J88 PIN 28	15	BLU/WHT	TB2-14	6.3VAC
J88 PIN 29	-	WHT	TB2-16	6.3VAC RTN
J88 PIN 39	16	BLK/RED	TB2-18	TRUE BRG IND
J88 PIN 40	-	WHT	TB2-20	TRUE BRG RTN
J88  1	17	WHT/RED	1 	SPARE
J88  1	-	WHT	1 	SPARE
J88  1	18	ORN/RED	1 	SPARE
J88  1	-	WHT	1 	SPARE

NOTES:

 INSULATE AND TIE BACK.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 17	

CABLE TYPE AND SIZE: 2XSAO-3		ACTIVE WIRES: 2		CABLE DESIGNATION: W3
		UNIT A		UNIT B
UNIT NUMBER		-		-
UNIT NAME		MODE 5 IFF CONNECTION BOX		NAVSSI (FWD)
CABLE CONNECTOR		-		-
BACKSHELL		-		-
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
TB1-23	1	BLK	-	TX FROM NAVSSI + (FWD)
TB1-21	1	WHT	-	TX FROM NAVSSI - (FWD)
△1	1	SHIELD	-	SHIELD
△1	2	BLK	-	NOT USED
△1	2	WHT	-	NOT USED
△1	2	SHIELD	-	SHIELD
△1	3	BLK	-	NOT USED
△1	3	WHT	-	NOT USED
△1	3	SHIELD	-	SHIELD

NOTES:

△1 TIE INDICATED CONDUCTORS AND SHIELDS TOGETHER BY GROUP USING SOLDER SLEEVE OR EQUIVALENT AND SIZE 22AWG WIRE, P/N M81044/12-20-9, COLOR WHITE. CONNECT EACH GROUP TO THE CABLE OVERALL SHIELD USING SIZE 20AWG WIRE, P/N M81044/12-20-9, COLOR WHITE.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 18	

CABLE TYPE AND SIZE: 2XSAO-3		ACTIVE WIRES: 2		CABLE DESIGNATION: W4	
		UNIT A		UNIT B	
UNIT NUMBER		-		-	
UNIT NAME		MODE 5 IFF CONNECTION BOX		NAVSSI (AFT)	
CABLE CONNECTOR		-		-	
BACKSHELL		-		-	
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION	
TB1-23	1	BLK	-	TX FROM NAVSSI + (AFT)	
TB1-21	1	WHT	-	TX FROM NAVSSI - (AFT)	
△1	1	SHIELD	-	SHIELD	
△1	2	BLK	-	NOT USED	
△1	2	WHT	-	NOT USED	
△1	2	SHIELD	-	SHIELD	
△1	3	BLK	-	NOT USED	
△1	3	WHT	-	NOT USED	
△1	3	SHIELD	-	SHIELD	

NOTES:

△1 TIE INDICATED CONDUCTORS AND SHIELDS TOGETHER BY GROUP USING SOLDER SLEEVE OR EQUIVALENT AND SIZE 22AWG WIRE, P/N M81044/12-20-9, COLOR WHITE. CONNECT EACH GROUP TO THE CABLE OVERALL SHIELD USING SIZE 20AWG WIRE, P/N M81044/12-20-9, COLOR WHITE.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 19	

CABLE TYPE AND SIZE: 2XSAOW-7		ACTIVE WIRES: 5		CABLE DESIGNATION: W7			
	UNIT A			UNIT B			
UNIT NUMBER	-			-			
UNIT NAME	MODE 5 IFF CONNECTION BOX			RADAR DISTRIBUTION			
CABLE CONNECTOR	-			-			
BACKSHELL	-			-			
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION			
TB3-8	1	BLK	-	SYNCHRO R1			
TB3-10	1	WHT	-	SYNCHRO R2			
TB3-6	1	SHIELD	-	SHIELD R1 & R2			
TB3-14	2	BLK	-	SYNCHRO S1			
TB3-16	2	WHT	-	SYNCHRO S2			
△1	2	SHIELD	-	SHIELD S1 & S2			
TB3-21	3	BLK	-	SYNCHRO S3			
△2	3	WHT	-	SPARE			
△1	3	SHIELD	-	SHIELD S3			
△2	4	BLK	-	SPARE			
△2	4	WHT	-	SPARE			
△2	4	SHIELD	-	SPARE			
△2	5	BLK	-	SPARE			
△2	5	WHT	-	SPARE			
△2	5	SHIELD	-	SPARE			
△2	6	BLK	-	SPARE			
△2	6	WHT	-	SPARE			
△2	6	SHIELD	-	SPARE			
△2	7	BLK	-	SPARE			
△2	7	WHT	-	SPARE			
△2	7	SHIELD	-	SPARE			

NOTES:

△1 SHIELD FOR PAIR 2 AND 3 ARE TIED TOGETHER AT EACH END. AT UNIT "A" END, THEY ARE CONNECTED TO PIN K. AT UNIT "B" END, THEY ARE CONNECTED TO TB3-12. AT UNIT "B" END, THEY ARE CONNECTED TO THAT UNIT'S GROUND TERMINAL.

△2 INSULATE AND TIE BACK.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 20	

CABLE TYPE AND SIZE: TTXSO-8		ACTIVE WIRES: 4		CABLE DESIGNATION: W86
	UNIT A		UNIT B	
UNIT NUMBER	UNIT 1		-	
UNIT NAME	CP-1273/UPX-24(V) PROCESSOR CONTROLLER		MODE 5 IFF CONNECTION BOX	
CABLE CONNECTOR	MS3476W12-10P ms347lw14-19P		-	
BACKSHELL	M85049/52-1-12W		-	
UNIT A TERM NO.	WIRE NO.	COLOR CODE	UNIT B TERM NO.	FUNCTION
J 97 PIN T	1	BLK	TB1-11	HAVEQUICK II MSG RXD (+)
J 97 PIN S	-	WHT	TB1-13	HAVEQUICK II MSG RXD (-)
J 97 PIN P	2	BLK	TB1-4	HAVEQUICK II SERIAL DATA RXD
J 97 PIN R	-	WHT	TB1-2	TIME TAG EXTERNAL EVENT RXD
J 97 PIN J	3	BLK	TB1-14	IRIG-B RXD (+)
J 97 PIN H	-	WHT	TB1-16	IRIG-B RXD (-)
J 97 PIN F	4	BLK	TB1-18	GPS-150 TIME MARK PULSE INPUT
J 97 PIN G	-	WHT	TB1-20	CP PMC2 SIG GND 1
J 97 PIN B	5	BLK	TB1-23	GPS-150 TIME MARK MSG 3 RXD (+)
J 97 PIN A	-	WHT	TB1-21	GPS-150 TIME MARK MSG 3 RXD (-)
J 97 PIN N	6	BLK	TB1-6	GPS-060 1 PPS INPUT
J 97 PIN M	-	WHT	TB1-8	CP PMC2 SIG GND 2
J 97 PIN D	7	BLK	TB1-24	GPS-060 PTT1 PCD MSG RXD (+)
J 97 PIN C	-	WHT	TB1-22	GPS-060 PTT1 PCD MSG RXD (-)
J 97 PIN K	8	BLK	TB1-12	USER DEFINED RS-422 RXD (+)
J 97 PIN L	-	WHT	TB1-10	USER DEFINED RS-422 RXD (-)
J 97 PIN E	9	BLK 	TB1-15	GND (BACKSHELL)

NOTES:

 AT UNIT "A" END, JUMPER PIN E TO THE BACKSHELL USING WIRE TYPE M22759/11-20-9 OR EQUIVALENT.

SIZE A	CAGE CODE 02591	DWG. NO. WL-56333	REV -
SCALE: NONE	2006/12/08	SHEET 21	