Installation Engineering Handbook 269
Western Electric
Northern Illinois Works

SECTION

2-27-81
Replaces: Section 730.01
dated 11-23-79

NO. 3 ESS CABLING AND CONNECTING FOR CONTROL FRAME 1 AND NETWORK FRAME 8

CONTENTS

---

1. GENERAL INFORMATION

1.1 This section provides cabling requirements for adding Control Frame 1 and Network Frame 8.

1.2 Refer to Handbook 261 for general information pertaining to cabling No. 3 ESS equipment.

CAUTION: Refer to Handbook 0, Section 13, before running cables to in-service frames and equipment. The Maintenance Center TTY shall be closely monitored for any indication of service interruptions. Further installation must stop, the problem located and cleared before proceeding further.

2. SEQUENCE

2.1 All power cables shall be run and connected. The connecting operation should be done during periods of low traffic.

2.2 All cables in Tables 2 thru 7 shall be run and connected.

NOTE: Cables that terminate at the the master scanner terminal strip shall be connected during periods of low traffic.

2.3 All cables in Table 8 shall be run to their respective locations and connected only at the added frames. Connection to the existing frames will be covered in Section 730.04.

3. REFERENCES

ED-3H100-30	GRP-8 Interframe Connectorized Cabling
ED-3H100-31	GRP-8 Nonconnectorized Cabling
CCJ3H100-30	Cable Connecting Sheets
CCJ3H100-31	Cable Connecting Sheets
ED-3H104-10	Control Frame Cabling Plan
ED-3H105-10	Network Frame Cabling Plan
ED-3H106-10	Misc. Power Frame Cabling Plan
ED-3H107-10	Power Frame Cabling Plan
ED-3H108-10	CDF Cabling Plan
BSP 233-144-100	(TOPS) 151A Power Plant

4. TABLE DESCRIPTIONS

TABLE	FROM	TO
1A	151A PWR Plant	Control Frame 1
1B	151A PWR Plant	Network Frame 8
1C	Misc. PWR Frame	Control Frame 1
2	Control Frame 1	Network Frame 8
3	Control Frame 1	Control Frame 0
4	Network Frame 8	Control Frame 0
5	Control Frame 1	HCDF
6	Network Frame 8	HCDF
7	Network Frame 8	Misc. Power Frame
8	Critical Cables	

5. NOTES

1. Do not connect these leads at active equipment locations until instructed to do so in succeeding Handbook sections.
2. These leads connect to the Master Scanner Term Strip and extreme caution should be used when these leads are connected.
3. These cables are ordered as part of the J3H001B-1 Network Frame
4. Required if the control is equipped with a universal trunk unit.
5. Do not secure these cables with TY-wraps.
6. Due to the terminal arrangement the 24V converters may have to be powered down prior to connecting these leads. Follow the procedure outlined in BSP 233-144-100 (TOPS) for removing the converters.

TABLE 1A. 151A POWER PLANT TO CONTROL FRAME 1

FROM 151A POWER PLANT SD-3H907-01			TO CONTROL FRAME 1 3H902-01			
FUNCTION	LDS	FUSE	LDS	EQ	FS	CAD
48V FRAME PWR LOAD A	-48VA GRD A	PNL 2 BUS A POS 5	-48A -4RTNA	183-43 183-03	42	120
48V FRAME PWR LOAD B	-48VB GRD B	PNL 2 BUS B POS 13	-48B -4RTNB	183-43 183-03	42	120
CONTROLLER 0 PULSER	-48AA	PNL 2 BUS A POS 24	-48PA	83-02	42	120
CONTROLLER 0 PULSER	GRD AA		-48RTNPA	83-02	42	120
CONTROLLER 1	-48BB	PNL 2 BUS B POS 32	-48PB	183-02	42	120
CONTROLLER 1	GRD BB		-48TNPB	183-02	42	120

TABLE 1B. 151A POWER PLANT TO NETWORK FRAME 8

48V FRAME PWR LOAD A	-48A	PNL 3 BUS A POS 5	-48A	083-43	31	120
	GRD A		-48RTNA	038-02	31	120
48V FRAME PWR LOAD B	-48B	PNL 3 BUS B POS 13	-48B	038-43	31	120
	GRD B		-48RTNB	083-02	31	120

TABLE 1C. MISC POWER FRAME TO CONTROL FRAME 1

	MISC. PWR FR 3H905			CONTROL FRAME 1 SD-3H902-01					
FUNCTION			FUSE	FS	CAD	EQ	FS	CAD	NOTES
24V FRAME PWR LOAD A	+24A1	TS-G PCH 7	CF1(0)	FS 4	6	083-37	41	120	6
	GRD A1	TS-G PCH 8		FS 4	6	083-37	41	120	
24V FRAME PWR LOAD B	24B1	TS H PCH 7	CF1(1)	FS 4	7	083-43	41	120	6
	GRD B1	TS H PCH 8							
ZC14 130V TST VERTICAL PWR	-130 FC 2	BR1W	F2(0)	FS 1	11	144-07-100	36	120	
	-130 FC 3	BL1W	F2(1)	FS 1	12	144-37-100	37	120	

TABLE 2. NETWORK CONTROL FRAME TO NETWORK FRAME

	NETWORK CONTROL FRAME 1 SD-3H902-01				NETWORK FRAME SD-3H901-01			
CABLE DESIGN	FUNCTION	CAD	EQ LOC	CONTROLLER	FRAME	CAD	EQ LOC	NOTES
ZB3	NETWORK CONTROL GATE CABLES	100	050-26-300	0	8	100	080-01-110	3
		100	050-28-300	0	8	100	080-02-110	
		100	050-29-300	0	8	100	080-03-110	
		100	050-29-310	0	8	100	080-06-110	
		100	050-33-310	0	8	100		
		100	050-32-300	0	8	100	080-17-300	
		100	050-33-300	0	8	100	080-24-300	
		100	050-26-310	0	8	100	080-26-110	
		100	050-28-310	0	8	100	080-27-110	
		100	050-29-310	0	8	100	080-29-110	
		100	150-26-300	1	8	100	080-01-310	
		100	150-28-300	1	8	100	080-02-310	
		100	150-29-300	1	8	100	080-03-310	
		100	150-32-310	1	8	100	080-06-310	
		100	150-33-310	1	8	100		
		100	150-32-300	1	8	100	080-17-310	
		100	150-33-300	1	8	100	080-24-310	
		100	150-26-310	1	8	100	080-26-100	
		100	150-28-310	1	8	100	070-27-100	
		100	150-29-310	1	8	100	080-29-100	
ZB38	NETWORK CONTROL PULSE CABLES	101	050-16-100	0	8	101	080-23-300 080-23-310	
ZB53			150-16-100	1	8		080-23-100 080-23-110	
ZB173	NETWORK CONTROL NODE	102	050-03-100	0	8		080-31-100 080-31-110	
ZB188			150-03-100	1	8		080-31-300 080-31-310	

TABLE 2. (Cont.)

CABLE DESIGN	FUNCTION	CAD	NETWORK CONTROL FRAME 1 SD-3H902-01 CONTROLLER 1	CONTROLLER 0	NETWORK FRAME SD-3H901-01 FRAME	CAD	EQ LOC	NOTES
ZB203	SCANNER DETECTOR & PPD OUTPUTS	103	158-05-300	058-05-300	8	103	036-21-110	3
							036-21-310	
			158-05-310	058-05-310			036-17-110	
							036-17-310	
			058-31-100	158-31-100			036-12-300	
			058-31-110	158-31-110			036-12-100	
ZB378	SCANNER INTER-ROGATE CABLES	104	162-02-300	062-02-300	8	104	058-11-710	3
							072-11-710	
			162-03-300	062-03-300			058-34-710	
							072-34-710	
			162-04-300	062-04-300			036-35-110	
			162-05-300	062-05-300			065-11-710	
							065-34-710	

CABLE DESIGN	FUNCTION	CAD	NETWORK CONTROL FRAME 1 SD-3H902-01 EQ LOC	NETWORK FRAME FRAME	CAD	EQ LOC	NOTES
ZB83	JUNCTOR T&R	106	178-08-110	8	106	40-39-310	
			078-08-110			40-09-310	
ZB98			178-31-110			40-39-110	
			078-31-110			40-09-110	
ZB113			078-08-700			51-11-510	
ZB128			078-31-700			51-34-510	
ZB143			178-08-700			51-11-710	
ZB158			178-31-700			51-34-710	
ZE68	TEST VERTICAL T&R	105	140-07-300	8	105	51-11-500	
						51-34-500	

TABLE 3. NETWORK CONTROL FRAME 1 TO NETWORK CONTROL FRAME 0

NETWORK CONTROL FRAME 1 SD-3H902-01					NETWORK CONTROL FRAME 0 SD-3H902-01				
CABLE DESIGN	FUNCTION	CAD	EQ LOC		CAD	EQ LOC			NOTES
ZC22	MULTI FREQUENCY TRANSMITTER SCANS PTS. LEADS	112	126-17-110 126-17-310		200	CONNECT PER CCJ3H100-31 AND JOB INFORMATION			2
ZC23	SCAN PTS. UNIVERSAL TRKS	112	118-20-110 118-20-310 120-20-110 120-20-310		200	CONNECT PER CCJ3H100-31 AND JOB INFORMATION			2
ZC24	POWER & FCG SCAN PTS.	112	144-03-110	BL1W	SC(01)HA	0	19H	11	2
				2W	SC(01)LA		19L	11	
				01W	SC(02)HA		19H	12	
				2W	SC(02)LA		19L	12	
				G1W	SC(03)HA		19H	13	
				2W	SC(03)LA		19L	13	
				BR1W	SC(00)HO		25H	08	
				2W	SC(00)LO		25L	08	
				S1W	SC(01)HO		25H	09	
				2W	SC(01)LO		25L	09	
				01R	P4BRA34		27H	07	
				BL2R	SC(02)LO		27L	07	
				BL1R	SPARE				
				02R	SPARE				
			144-33-110	G1R	SC(01)HB		21H	00	
				2R	SC(01)LB		21L	00	
				BR1R	SC(02)HB		21H	01	
				2R	SC(02)LB		21L	01	
				S1R	SC(03)HB		21H	02	
				2R	SC(03)LB		21L	02	
				BL1BK	SC(00)H1		23H	10	
				2BK	SC(00)L1		23L	10	
				01BK	SC(01)H1		23H	11	
				2BK	SC(01)L1		23L	11	
				G1BK	P4BRB21		24H	10	
				2BK	SC(02)L1		24L	10	

TABLE 4. NETWORK FRAME TO NETWORK CONTROL FRAME 0

NETWORK FRAME 8 SD-3H901-01					NETWORK CONTROL FRAME 0 SD-3H902-01				
CABLE DESIGN	FUNCTION	CAD	EQ LOC		CAD				
ZB248	CDPR & RR SCAN PTS.	108	20-20-310		200	CONNECT PER CCJ3H100-31 AND JOB INFORMATION			
ZB263	MISC. SCAN PTS.	109	36-21-100	BL	BL1W	3014H	8	30H	14
					2W	L		L	
					O1W	3014H		30H	11
					2W	L		L	
					G1W	3013H		30H	13
					2W	L		L	
					BR1W	3010H		30H	10
					2W	L		L	
					S1W	3008H		30H	08
					2W	L		L	
					BL1R	3012H		30H	12
					2R	L		L	
					O1R	3009H		30H	09
					2R	L		L	
			36-21-300		G1R	3114H		31H	14
					2R	L		L	
					BR1R	3111H		31H	11
					2R	L		L	
					S1R	3115H		31H	15
					2R	L		L	
					BL1BK	3109H		31H	09
					2BK	L		L	
					O1BK	3113H		31H	13
					2BK	L		L	
					G1BK	3110H		31H	10
					2BK	L		L	
					BR1BK	3108H		31H	08
					2BK	L		L	
					S1BK	3112H		31H	12
					2BK	L		L	
			36-24-100		BL1Y	2814H	8	28H	14
					2Y	L		L	
					O1Y	2811H		28H	11
					2Y	L		L	
					G1Y	2813H		28H	13
					2Y	L		L	
					BR1Y	2810H		28H	10
					2Y	L		L	
					S1Y	2808H		28H	08
					2Y	L		L	
				O	BL1W	2812H		28H	12
					2W	L		L	
					O1W	2809H		28H	09
					2W	L		L	

TABLE 4. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	ROW	COL	NOTES
ZB263 (Cont.)			36-24-300	0	G1W	2914H	8	29H	14	
					2W	L		L		
					BR1W	2911H		29H	11	
					2W	L		L		
					S1W	2909H		29H	09	
					2W	L		L		
					BL1R	2913H		29H	13	
					2R	L		L		
					O1R	2910H		29H	10	
					2R	L		L		
					G1R	2908H		29H	08	
					2R	L		L		
					B1R	2912H		29H	12	
					2R	L		L		
					S1R	2906H		29H	06	
					2R	L		L		
			36-39-310		BL1BK	2906H	8	29H	06	
					2BK	L		L		
					O1BK	3006H		30H	06	
					2BK	L		L		
					G1BK	3106H		31H	06	
					2BK	L		L		
					BR1BK	2807H		28H	07	
					2BK	L		L		
					S1BK	2907H		29H	07	
					2BK	L		L		
					BL1Y	3007H		30H	07	
					2Y	L		L		
					O1Y	3107H		31H	07	
					2Y	L		L		

TABLE 5. NETWORK CONTROL FRAME 1 TO HCDF

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC53	T&R TL & R1 COIN CONT RA	180	114-20-100		BL1W	T0-00	J05	000	
					2W	R0		001	
					O1W	T1		002	
					2W	R1		003	
					G1W	T0-01		004	
					2W	R0		005	
					BR1W	T1		006	
					2W	R1		007	
					S1W	T0-02		010	
					2W	R0		011	
					BL1R	T1		012	
					2R	R1		013	
					O1R	T0-03		014	
					2R	R0		015	
					G1R	T1		016	
					2R	R1		017	
			114-20-300		BR1R	T0-04		020	
					2R	R0		021	
					S1R	T1		022	
					2R	R1		023	
					BL1BK	T0-05		024	
					2BK	R0		025	
					O1BK	T1		026	
					2BK	R1		027	
					G1BK	T0-06		030	
					2BK	R0		031	
					BR1BK	T1		032	
					2BK	R1		033	
					S1BK	T0-07		034	
					2BK	R0		035	
					BL1Y	T1		036	
					2Y	R1		037	
ZC55	T&R T1 & R1 COIN CONT RA	180	114-24-100	BL	BL1W	BA-00	J05	060	
					2W	C0		061	
					O1W	ST1A		062	
					2W	STA		063	
					G1W	BA-01		064	
					2W	C0		065	
					BR1W	ST1A		066	
					2W	STA		067	
					S1W	BA-02		070	
					2W	C0		071	
					BL1R	ST1A		072	
					2R	STA		073	
					O1R	BA-03		074	
					2R	C0		075	
					G1R	ST1A		076	
					2R	STA		077	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC55 (Cont.)			114-24-300	BL	BR1R	BA-04	J05	080	
					2R	CO		081	
					S1R	ST1A		082	
					2R	STA		083	
					BL1BK	BA-05		084	
					2BK	CO		085	
					O1BK	ST1A		086	
					2BK	STA		087	
					G1BK	BA-06		090	
					2BK	CO		091	
					BR1BK	ST1A		092	
					2BK	STA		093	
					S1BK	BA-07		094	
					2BK	CO		095	
			114-24-100		BL1Y	ST1A		096	
					2Y	STA		097	
					O1Y	TT1-00		160	
					2Y	RT1		161	
					B1Y	TT1-01		162	
					2Y	RT1		163	
					BR1Y	TT1-02		164	
					2Y	RT1		165	
					S1Y	TT1-03		166	
					2Y	RT1		167	
				O	BL1W	TT1-04		170	
					2W	RT1		171	
					O1W	TT1-05		172	
					2W	RT1		173	
			114-27-300		G1W	TT1-06		174	
					2W	RT1		175	
					BR1W	TT1-07		176	
					2W	RT1		177	
					S1W	TT1-08		180	
					2W	RT1		181	
					BL1R	TT1-09		182	
					2R	RT1		183	
					O1R	TT1-10		184	
					2R	RT1		185	
					G1R	TT1-11		186	
					2R	RT1		187	
			114-32-100		BR1R	TA0-00		190	
					2R	RA0		191	
					S1R	TA0-01		192	
					2R	RA0		193	
					BL1BK	TA0-02		194	
					2BK	RA0		195	
					O1BK	TA0-03		196	
					2BK	RA0		197	
					G1BK	TA0-04		200	
					2BK	RA0		201	
					BR1BK	TA0-05		202	
					2BK	RA0	J05	203	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC55 (Cont.)			114-32-300	O	S1BK	TA0-06	J05	204	
					2BK	RA0		205	
					BL1Y	TA0-07		206	
					2Y	RA0		207	
					O1Y	TA0-08		210	
					2Y	RA0		211	
					G1Y	TA0-09		212	
					2Y	RA0		213	
					BR1Y	TA0-10		214	
					2Y	RA0		215	
					S1Y	TA0-11		216	
					2Y	RA0		217	
			114-24-110	G	BL1W	BA-08		100	
					2W	C0		101	
					O1W	ST1A		102	
					2W	STA		103	
					G1W	BA-09		104	
					2W	C0		105	
					BR1W	ST1A		106	
					2W	STA		107	
					S1W	BA-10		110	
					2W	C0		111	
					BL1R	ST1A		112	
					2R	STA		113	
					O1R	BA-11		114	
					2R	C0		115	
					G1R	ST1A		116	
					2R	STA		117	
					BR1R	DA-11		120	
					2R	DL1		121	
			114-24-310		S1R	T0-08		040	
					2R	R0		041	
					BL1BK	T1		042	
					2BK	R1		043	
					O1BK	T0-09		044	
					2BK	R0		045	
					G1BK	T1		046	
					2BK	R1		047	
					BR1BK	T0-10		050	
					2BK	R1		051	
					S1BK	T1		052	
					2BK	R1		053	
					BL1Y	T0-11		054	
					2Y	R0		055	
					O1Y	T1		056	
					2Y	R1	J05	057	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC55 (Cont.)			114-32-110	G	G1Y	TT0-00	J05	130	
					2Y	RT0		131	
					BR1Y	TT0-01		132	
					2Y	RT0		133	
					S1Y	TT0-02		134	
					2Y	RT0		135	
				BR	BL1W	TT0-03		136	
					2W	RT0		137	
					O1W	TT0-04		140	
					2W	RT0		141	
					G1W	TT0-05		142	
					2W	RT0		143	
			114-32-310		BR1W	TT0-06		144	
					2W	RT0		145	
					S1W	TT0-07		146	
					2W	RT0		147	
					BL1R	TT0-08		150	
					2R	RT0		151	
					O1R	TT0-09		152	
					2R	RT		153	
					G1R	TT0-10		154	
					2R	RT0		155	
					BR1R	TT0-11		156	
					2R	RT0		157	
ZC34	T&R T1 & R1 COIN, RA	180	114-12-100		BL1W	TA1-00	J05	220	
					2W	RA1		221	
					O1W	TA1-01		222	
					2W	RA1		223	
					G1W	TA1-02		224	
					2W	RA1		225	
					BR1W	TA1-03		226	
					2W	RA1		227	
					S1W	TA1-04		230	
					2W	RA1		231	
					BL1R	TA1-05		232	
					2R	RA1		233	
					O1R	TA1-06		234	
					2R	RA1		235	
					G1R	TA1-07		236	
					2R	RA1		237	
ZC35	T&R T1 & R1 COIN, RA	180	114-12-300		BL1W	TA1-08	J05	240	
					2W	RA1		241	
					O1W	TA1-09		242	
					2W	RA1		243	
					G1W	TA1-10		244	
					2W	RA1		245	
					BR1W	TA1-11		246	
					2W	RA1		247	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC4	T&R UNIVERSAL TRKS	180	118-20-100	BL	BL1W	T-0	G02	000	4
					2W	R		001	
					O1W	T1		002	
					2W	R1		003	
					G1W	EA		004	
					2W	EB		005	
					BR1W	MA		006	
					2W	MB		007	
					S1W	T-1		010	
					2W	R		011	
					BL1R	T1		012	
					2R	R1		013	
					O1R	EA		014	
					2R	EB		015	
					G1R	MA		016	
					2R	MB		017	
			118-20-300		BR1R	T-2		020	
					2R	R		021	
					S1R	T1		022	
					2R	R1		023	
					BL1BK	EA		024	
					2BK	EB		025	
					O1BK	MA		026	
					2BK	MB		027	
					G1BK	T-3		030	
					2BK	R		031	
					BK1BK	T1		032	
					2BK	R1		033	
					S1BK	EA		034	
					2BK	EB		035	
					BL1Y	MA		036	
					2Y	MB		037	
			118-27-100		O1Y	T-4		040	
					2Y	R		041	
					G1Y	T1		042	
					2Y	R1		043	
					BR1Y	EA		044	
					2Y	EB		045	
					S1Y	MA		046	
					2Y	MB		047	
				O	BL1W	T-5		050	
					2W	R		051	
					O1W	T1		052	
					2W	R1		053	
					G1W	EA		054	
					2W	EB		055	
					BR1W	MA		056	
					2W	MB	G02	057	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC4 (Cont.)			118-27-300	O	S1W	T-6	G02	060	
					2W	R		061	
					BL1R	T1		062	
					2R	R1		063	
					O1R	EA		064	
					2R	EB		065	
					G1R	MA		066	
					2R	MB		067	
					BR1R	T-7		070	
					2R	R		071	
					S1R	T1		072	
					2R	R1		073	
					BL1BK	EA		074	
					2BK	EB		075	
					O1BK	MA		076	
					2BK	MB		077	
			118-27-110		G1BK	T-8		080	
					2BK	R		081	
					BR1BK	T1		082	
					2BK	R1		083	
					S1BK	EA		084	
					2BK	EB		085	
					BL1Y	MA		086	
					2Y	MB		087	
					O1Y	T-9		090	
					2Y	R		091	
					G1Y	T1		092	
					2Y	R1		093	
					BR1Y	EA		094	
					2Y	EB		095	
					S1Y	MA		096	
					2Y	MB		097	
			118-27-310	G	BL1W	T-10		100	
					2W	R		101	
					O1W	T1		102	
					2W	R1		103	
					G1W	EA		104	
					2W	EB		105	
					BR1W	MA		106	
					2W	MB		107	
					S1W	T-11		110	
					2W	R		111	
					BL1R	T1		112	
					2R	R1		113	
					O1R	EA		114	
					2R	EB		115	
					G1R	MA		116	
					2R	MB		117	
					BR1R	T-12		120	
					2R	R	G02	121	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC4 (Cont.)			122-20-100	G	S1R	T1	G02	122	
					2R	R1		123	
					BL1BK	EA		124	
					2BK	EB		125	
					O1BK	MA		126	
					2BK	MB		127	
					G1BK	T-13		130	
					2BK	R		131	
					BR1BK	T1		132	
					2BK	R1		133	
					S1BK	EA		134	
					2BK	EB		135	
					BL1Y	MA		136	
					2Y	MB		137	
			122-20-300		O1Y	T-14		140	
					2Y	R		141	
					G1Y	T1		142	
					2Y	R1		143	
					BR1Y	EA		144	
					2Y	EB		145	
					S1Y	MA		146	
					2Y	MB		147	
				BR	BL1W	T-15		150	
					2W	R		151	
					O1W	T1		152	
					2W	R1		153	
					G1W	EA		154	
					2W	EB		155	
					BR1W	MA		156	
					2W	MB		157	
			122-27-100		S1W	T-16		160	
					2W	R		161	
					BL1R	T1		162	
					2R	R1		163	
					O1R	EA		164	
					2R	EB		165	
					G1R	MA		166	
					2R	MB		167	
					BR1R	T-17		170	
					2R	R		171	
					S1R	T1		172	
					2R	R1		173	
					BL1BK	EA		174	
					2BK	EB		175	
					O1BK	MA		176	
					2BK	MB	G02	177	

TABLE 5. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZC4 (Cont.)			122-27-300	BR	G1BK	T-18	G02	180	
					2BK	R		181	
					BR1BK	T1		182	
					2BK	R1		183	
					S1BK	EA		184	
					2BK	EB		185	
					BL1Y	MA		186	
					2Y	MB		187	
					O1Y	T-19		190	
					2Y	R		191	
					G1Y	T1		192	
					2Y	R1		193	
					BR1Y	EA		194	
					2Y	EB		195	
					S1Y	MA		196	
					2Y	MB		197	
			122-27-110	S	BL1W	T-20		200	
					2W	R		201	
					O1W	T1		202	
					2W	R1		203	
					G1W	EA		204	
					2W	EB		205	
					BR1W	MA		206	
					2W	MB		207	
					S1W	T-21		210	
					2W	R		211	
					BL1R	T1		212	
					2R	R1		213	
					O1R	EA		214	
					2R	EB		215	
					G1R	MA		216	
					2R	MB		217	
			122-27-310		BR1R	T-22		220	
					2R	R		221	
					S1R	T1		222	
					2R	R1		223	
					BL1BK	EA		224	
					2BK	EB		225	
					O1BK	MA		226	
					2BK	MB		227	
					G1BK	T-23		230	
					2BK	R		231	
					BR1BK	T1		232	
					2BK	R1		233	
					S1BK	EA		234	
					2BK	EB		235	
					BL1Y	MA		236	
					2Y	MB	G02	237	
ZC2	T&R MF TRANSMITTER	180	126-27-300		BL1W	TO	J01	100	
					2W	RO		101	
					O1W	T1		102	
					2W	R1		103	
					G1W	T2		104	
					2W	R2		105	
					BR1W	T3		106	
					2W	R3		107	

TABLE 6.

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB278	T&R	130	024-20-100	BL	BL1W	T-00	G06	000	
	T1 & R1				2W	R		001	
	EA & MA				O1W	T1		002	
	EB & MB				2W	R1		003	
	FOR				G1W	EA		004	
	UNIVERSAL				2W	EB		005	
	TRUNKS				BR1W	MA		006	
					2W	MB		007	
					S1W	T-01		010	
					2W	R		011	
					BL1R	T1		012	
					2R	R1		013	
					O1R	EA		014	
					2R	EB		015	
					G1R	MA		016	
					2R	MB		017	
			024-20-300		BR1R	T-02		020	
					2R	R		021	
					S1R	T1		022	
					2R	R1		023	
					BL1BK	EA		024	
					2BK	EB		025	
					O1BK	MA		026	
					2BK	MB		027	
					G1BK	T-03		030	
					2BK	R		031	
					BK1BK	T1		032	
					2BK	R1		033	
					S1BK	EA		034	
					2BK	EB		035	
					BL1Y	MA		036	
					2Y	MB		037	
			24-27-100		O1Y	T-04		040	
					2Y	R		041	
					G1Y	T1		042	
					2Y	R1		043	
					BR1Y	EA		044	
					2Y	EB		045	
					S1Y	MA		046	
					2Y	MB		047	
				0	BL1W	T-05		050	
					2W	R		051	
					O1W	T1		052	
					2W	R1		053	
					G1W	EA		054	
					2W	EB		055	
					BR1W	MA		056	
					2W	MB	G06	057	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB278 (Cont.)			24-27-300	0	S1W	T-06	G06	060	
					2W	R		061	
					BL1R	T1		062	
					2R	R1		063	
					O1R	EA		064	
					2R	EB		065	
					G1R	MA		066	
					2R	MB		067	
					BR1R	T-07		070	
					2R	R		071	
					S1R	T1		072	
					2R	R1		073	
					BL1BK	EA		074	
					2BK	EB		075	
					O1BK	MA		076	
					2BK	MB		077	
			24-27-110		G1BK	T-08		080	
					2BK	R		081	
					BR1BK	T1		082	
					2BK	R1		083	
					S1BK	EA		084	
					2BK	EB		085	
					BL1Y	MA		086	
					2Y	MB		087	
					O1Y	T-09		090	
					2Y	R		091	
					G1Y	T1		092	
					2Y	R1		093	
					BK1Y	EA		094	
					2Y	EB		095	
					S1Y	MA		096	
					2Y	MB		097	
			24-27-310	G	BL1W	T-10		100	
					2W	R		101	
					O1W	T1		102	
					2W	R1		103	
					G1W	EA		104	
					2W	EB		105	
					BK1W	MA		106	
					2W	MB		107	
					S1W	T-11		110	
					2W	R		111	
					BL1R	T1		112	
					2R	R1		113	
					O1R	EA		114	
					2R	EB		115	
					G1R	MA		116	
					2R	MB	G06	117	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB278 (Cont.)			028-20-100	G	BR1R	T-12	G06	120	
					2R	R		121	
					S1R	T1		122	
					2R	R1		123	
					BL1BK	EA		124	
					2BK	EB		125	
					O1BK	MA		126	
					2BK	MB		127	
					G1BK	T-13		130	
					2BK	R		131	
					BR1BK	T1		132	
					2BK	R1		133	
					S1BK	EA		134	
					2BK	EB		135	
					BL1Y	MA		136	
					2Y	MB		137	
			028-20-300		O1Y	T-14		140	
					2Y	R		141	
					G1Y	T1		142	
					2Y	R1		143	
					BR1Y	EA		144	
					2Y	EB		145	
					S1Y	MA		146	
					2Y	MB		147	
				BR	BL1W	T-15		150	
					2W	R		151	
					O1W	T1		152	
					2W	R1		153	
					G1W	EA		154	
					2W	EB		155	
					BR1W	MA		156	
					2W	MB		157	
			028-27-100		S1W	T-16		160	
					2W	R		161	
					BL1R	T1		162	
					2R	R1		163	
					O1R	EA		164	
					2R	EB		165	
					G1R	MA		166	
					2R	MB		167	
					BR1R	T-17		170	
					2R	R		171	
					S1R	T1		172	
					2R	R1		173	
					BL1BK	EA		174	
					2BK	EB		175	
					O1BK	MA		176	
					2BK	MB		177	
			028-27-300		G1BK	T-18		180	
					2BK	R		181	
					BR1BK	T1		182	
					2BK	R1		183	
					S1BK	EA		184	
					2BK	EB		185	
					BL1Y	MA		186	
					2Y	MB		187	
					O1Y	T-19		190	
					2Y	R		191	
					G1Y	T1		192	
					2Y	R1		193	
					BR1Y	EA		194	
					2Y	EB		195	
					S1Y	MA		196	
					2Y	MB	G06	197	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB278 (Cont.)			028-27-110	S	BL1W	T-20		200	
					2W	R		201	
					O1W	T1		202	
					2W	R1		203	
					G1W	EA		204	
					2W	EB		205	
					BR1W	MA		206	
					2W	MB		207	
					S1W	T-21		210	
					2W	R		211	
					BL1R	T1		212	
					2R	R1		213	
					O1R	EA		214	
					2R	EB		215	
					G1R	MA		216	
					2R	MB		217	
			028-27-310		BR1R	T-22		220	
					2R	R		221	
					S1R	T1		222	
					2R	R1		223	
				S	BL1BK	EA	G06	224	
					2BK	EB		225	
					O1BK	MA		226	
					2BK	MB		227	
					G1BK	T-23		230	
					2BK	R		231	
					BR1BK	T1		232	
					2BK	R1		233	
					S1BK	EA		234	
					2BK	EB		235	
					BL1Y	MA		236	
					2Y	MB		237	
ZB293	CDPR & RR DT DR RCT RCR LEADS	130	020-20-300		BL1W	DTO-0	J02	070	
					2W	DRO-0		071	
					O1W	TO		060	
					2W	RO		061	
					G1W	DTO-1		072	
					2W	DRO-1		073	
					BR1W	T1		062	
					2W	R1		063	
					S1W	DTO-2		074	
					2W	DRO-2		075	
					BL1R	T2		064	
					2R	R2		065	
					O1R	DTO-3		076	
					2R	DRO-3		077	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB308	T&R 15A GRID	130	058-08-002	BL	BL1W		D05	006	
					2W			007	
					O1W			016	
					2W			017	
					G1W			026	
					2W			027	
					BR1W			036	
					2W			037	
					S1W			046	
					2W			047	
					BL1R			056	
					2R			057	
					O1R			066	
					2R			067	
					G1R			076	
					2R			077	
					BR1R			004	
					2R			005	
					S1R			014	
					2R			015	
					BL1BK			024	
					2BK			025	
					O1BK			034	
					2BK			035	
					G1BK			044	
					2BK			045	
					BR1BK			054	
					2BK			055	
					S1BK			064	
					2BK			065	
					BL1Y			074	
					2Y			075	
			058-08-302		O1Y			002	
					2Y			003	
					G1Y			012	
					2Y			013	
					BR1Y			022	
					2Y			023	
					S1Y			032	
					2Y			033	
				O	BL1W			042	
					2W			043	
					O1W			052	
					2W			053	
					G1W			062	
					2W			063	
					BR1W			072	
					2W			073	
					S1W			000	
					2W			001	
					BL1R			010	
					2R			011	
					O1R			020	
					2R			021	
					G1R			030	
					2R			031	
					BR1R			040	
					2R			041	
					S1R			050	
					2R			051	
					BL1BK			060	
					2BK			061	
					O1BK			070	
					2BK		D05	071	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB308 (Cont.)			065-08-002	0	G1BK		D05	086	
					2BK			087	
					BR1BK			096	
					2BK			097	
					S1BK			106	
					2BK			107	
					BL1Y			116	
					2Y			117	
					O1Y			126	
					2Y			127	
					G1Y			136	
					2Y			137	
					BR1Y			146	
					2Y			147	
					S1Y			156	
					2Y			157	
				G	BL1W			084	
					2W			085	
					O1W			094	
					2W			095	
					G1W			104	
					2W			105	
					BR1W			114	
					2W			115	
					S1W			124	
					2W			125	
					BL1R			134	
					2R			135	
					O1R			144	
					2R			145	
					G1R			154	
					2R			155	
			065-08-302		BR1R			082	
					2R			083	
					S1R			092	
					2R			093	
					BL1BK			102	
					2BK			103	
					O1BK			112	
					2BK			113	
					G1BK			122	
					2BK			123	
					BR1BK			132	
					2BK			133	
					S1BK			142	
					2BK			143	
					BL1Y			152	
					2Y			153	
					O1Y			080	
					2Y			081	
					G1Y			090	
					2Y			091	
					BR1Y			100	
					2Y			101	
					S1Y			110	
					2Y		D05	111	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB308 (Cont.)			072-08-302	BR	BL1W		D05	120	
					2W			121	
					O1W			130	
					2W			131	
					G1W			140	
					2W			141	
					BR1W			150	
					2W			151	
			072-08-002		S1W			166	
					2W			167	
					BL1R			176	
					2R			177	
					O1R			186	
					2R			187	
					G1R			196	
					2R			197	
					BR1R			206	
					2R			207	
					S1R			216	
					2R			217	
					BL1BK			226	
					2BK			227	
					O1BK			236	
					2BK			237	
					G1BK			164	
					2BK			165	
					BR1BK			174	
					2BK			175	
					S1BK			184	
					2BK			185	
			072-08-302		BL1Y			194	
					2Y			195	
					O1Y			204	
					2Y			205	
					G1Y			214	
					2Y			215	
					BR1Y			224	
					2Y			225	
					S1Y			234	
					2Y			235	
				S	BL1W			162	
					2W			163	
					O1W			172	
					2W			173	
					G1W			182	
					2W			183	
					BR1W			192	
					2W			193	
					S1W			202	
					2W			203	
					BL1R			212	
					2R			213	
					O1R			222	
					2R			223	
					G1R			232	
					2R			233	
					BR1R			160	
					2R		D05	161	

TABLE 6. (Cont.)

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB308 (Cont.)			072-08-302	S	S1R		D05	170	
					2R			171	
					BL1BK			180	
					2BK			181	
					O1BK			190	
					2BK			191	
					G1BK			200	
					2BK			201	
					BR1BK			210	
					2BK			211	
					S1BK			220	
					2BK			221	
					BL1Y		D05	230	
					2Y			231	
ZB323			58-14-002		Color code same as ZB308.				
			58-14-302		Connect at TS.		D06		
			65-14-002						
			65-14-302						
			72-14-002						
			72-14-302						
ZB338			58-14-002		Color code same as ZB308.				
			58-14-302		Connect at TS.		D07		
			65-14-002						
			65-14-302						
			72-14-002						
			72-14-302						
ZB353	T&R 15A GRID	130	58-37-002		Color code same as ZB308.				
			58-37-302		Connect at TS.		D08		
			65-37-002						
			65-37-302						
			72-37-002						
			72-37-302						

TABLE 7. NETWORK FRAME 8 TO MISC. POWER FRAME

	NETWORK FRAME 8				MISC. PWR FRAME 0 RING & TONE CKTS SD-82255-01				
CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB405	DIAL TONE RINGING & LEADS	121	20-20-100		BL1W	T(TT)0	F	24	
					2W	R(TT)		34	
					O1W	T(TT)1		25	
					2W	R(TT)		35	
					G1W	T(TT)2		26	
					2W	R(TT)		36	
					BR1W	T(TT)3		27	
					2W	R(TT)		37	
							FUSE		
					S1W	AC-DC	40 AC-DC		FUSE
					2W	RING G	40 AC-DC		G
					BL1R	TRP	40-TRP		FUSE
					2R	RING G	40-TRP		G
					O1R	AC-DC	41 AC-DC		FUSE
					2R	RING G	41 AC-DC		G
					G1R	TRP	41-TRP		FUSE
					2R	RING G	41-TRP		G
					BR1R	AC-DC	42 AC-DC		FUSE
					2R	AC-DC	42 AC-DC		G
					S1R	TRP	42-TRP		FUSE
					2R	RING G	42-TRP		G

TABLE 8. NETWORK CONTROL FRAME TO PROCESSOR FRAME

CABLE DESIGN	NETWORK CONTROLLER SD-3H902-01 FUNCTION	CAD	EQ LOC	CONTROLLER	PROCESSOR FRAME SD-1900-01 EQ LOC	MARKER	SUB	PROCESSOR	NOTES
ZC27	SERIAL I/O LEADS	130	054-13-110	0	065-21	C2	12S	0	1,5
						C1	14S		
						C0	18S		
						C3	19S		
						C4	13R		
ZC28	SERIAL I/O	130	154-13-110	1	165-21	D2	12S	1	1,5
						D1	14S		
						D0	18S		
						D3	19S		
						D4	13R		

CABLE DESIGN	NETWORK CONTROL FRAME 1 SD-3H902-01 FUNCTION	CAD	EQ LOC	NETWORK CONTROL FRAME 0 SD-3H902-01 CAD	EQ LOC	NOTES
ZC15	STAGE III T&R LEADS	111	078-37-100	111	071-37-100	1
			078-34-500		071-34-500	
			078-34-100		071-34-100	
			078-31-500		071-31-500	
			078-14-100		071-14-100	
			078-11-500		071-11-500	
			078-11-100		071-11-100	
			078-08-500		071-08-500	
			078-37-120		071-37-120	
			078-34-520		071-34-520	
			078-34-120		071-34-120	
			078-31-520		071-31-520	
			078-14-120		071-14-120	
			078-11-520		071-11-520	
			078-11-120		071-11-120	
			078-08-520		071-08-520	
ZC16	STAGE III T&R LEADS	111	178-08-500	111	171-08-500	1
			178-11-100		171-11-100	
			178-11-500		171-11-500	
			178-14-100		171-14-100	
			178-31-500		171-31-500	
			178-34-100		171-34-100	
			178-34-500		171-34-500	
			178-37-100		171-37-100	
			178-08-520		171-08-520	
			178-11-120		171-11-120	
			178-11-520		171-11-520	

TABLE 8. (Cont.)

CABLE DESIGN	FUNCTION	NETWORK CONTROL FRAME 1 SD-3H902-01 CAD	NETWORK CONTROL FRAME 1 SD-3H902-01 EQ LOC	NETWORK CONTROL FRAME 0 SD-3H902-01 CAD	NETWORK CONTROL FRAME 0 SD-3H902-01 EQ LOC	NOTES
ZC17	STAGE III T&R LEADS	111	071-37-100 071-34-500 071-34-100 071-31-500 071-14-100 071-11-500 071-11-100 071-08-500 071-37-120 071-34-520 071-34-120 071-31-520 071-14-120 071-11-520 071-11-120 071-08-520	111	078-37-100 078-34-500 078-34-100 078-31-500 078-14-100 078-11-500 078-11-100 078-08-500 078-37-120 078-34-520 078-34-120 078-31-520 078-14-120 078-11-520 078-11-120 078-08-520	1
ZC18	STAGE III T&R LEADS	111	171-08-500 171-11-100 171-11-500 171-14-100 171-31-500 171-34-100 171-34-500 171-37-100 171-08-520 171-11-120 171-11-520 171-14-120 171-31-520 171-34-120 171-34-520 171-37-120	111	178-08-500 178-11-100 178-11-500 178-14-100 178-31-500 178-34-100 178-34-500 178-37-100 178-08-520 178-11-120 178-11-520 178-14-120 178-31-520 178-34-120 178-34-520 178-37-120	1
ZC19	TV T&R LEADS	110	144-33-100	110	144-33-100	1
ZC20	TEL & SP JKS, FA FOR TRKS JCT & SVC CKTS	110	140-42-110	110	140-42-110	1
ZC21	PASS, FAIL, EXEC, LEADS	110	140-42-300	110	140-42-310	1

TABLE 8. (Cont.)

CABLE DESIGN	FUNCTION	NETWORK FRAME 8 CAD	NETWORK FRAME 8 EQ LOC	NETWORK FRAME 7 CAD	NETWORK FRAME 7 EQ LOC	NOTES
ZB225	TEL & SPARE JKS.	107	080-43-100	111	080-43-300	1
ZB226	PWR ALM A & B BATTERY BOOST. ALM. R & T TRFR. ALM.		080-44-310	107	080-44-300	1

CABLE DESIGN	FUNCTION	CAD	EQ LOC	BINDER	COLOR	LEAD	TS	TERM	NOTES
ZB420	R.T. SUPPLY LEADS	120	46-06-TSA		BL1W	AR(10)T1		21	1
					2W	R1		22	
					01W	AR(10)T0		23	
					2W	R0		24	
					G1W	BT(120)T1		01	
					2W	R1		02	
					BK1W	BT(120)T0		03	
					2W	R0		04	
					S1W	TRFR		53	

Manager, Development Engineering -
2/2B, 3, 4 and 5 ESS

1-31-81

Reason for Reissue:
To include information for 3E3 Generic.