Operations

SPECIFIC STATION REQUIREMENTS FOR EL 244

This regulation establishes the procedures for station unique operations and analysis.

Distribution limited to DoD and DoD contractors only; to protect information and technical data which advance the state-of-the-art or describe new technology in an area of significant or potentially significant military application, 2 November 1987. Other requests shall be referred to HQ/DOSB.

1. Operating Concept. Routine operating and maintenance are accomplished during a daily 8-hour period covering approximately 1400 - 2200Z. This 8-hour period of operation is a daily requirement, including holidays and weekends. During the remaining 16-hour period, attendance is required to insure the physical security and fire protection of the facility. Limit operational activities to station equipment checks and maintaining a capability to respond to GSOC data requests or restoral of data transmission to the GSOC. Do not assign tasks requiring the presence of two people during this 16-hour period. The station is authorized to delay their response to the GSOC when compliance requires a second operator to be present on-site.

2. Station Designator. The station designator for EL 244 is FLFL. Use FLF for the three element entry preceding the station designator on data messages. Mark CEN Form 10s, using the appropriate color, with the first two letters of the station designator.

3. Timing Standard. Satellite derived time.

4. Routine Calibrations. Perform SPS and LPS calibrations sequentially using the Central Terminal, commencing immediately after 1700Z. Use an amplitude factor 4 (100mu) for the SPS and an amplitude factor 2 (10U) for the LPS.

5. EDIT tape registration numbers are 5400 through 5499.

6. Training outage. Outage authorized in CENR 55-2 is granted for Tuesday of each week from 1600Z through 1900Z.

7. Analysis and Data Reporting Requirements:

a. The station is exempt from routine analysis and data reporting with the following exceptions:

(1) Transmit data reports covering periods required by the GSOC. Include in this report all events extending into, or continuing out of, the requested period.

(2) If data period covers more than one ZULU day, use a new computer function data line (BBBBBB FLF FLFL) (date CMM PART ONE) to precede each day's data. If data are requested over an extended period of time, each data reporting period will cover eight hours (0001-0800Z, 0801-1600Z, 1601-2400Z).

b. In addition to the above requirement, maintain a continuous capability to respond to review requests. Also, establish analysis and reporting exercises to ensure each person's analysis proficiency.

c. In order to effectively evaluate the station's analysis and reporting capability, provide selected analysis time periods to this headquarters for evaluation. Procedures are as follows:

(1) Analyze 1600-2000Z on the 15th of each month.

(2) Prepare a message, but do not transmit, using correct format as specified in CENR 55-2, Vol 1 and forwarded with the appropriate station log. Do not complete address elements.

Supersedes CENR 55-2, Volume III, 14 November 1986
No. of Printed Pages: 7
OPR: DOSB
Distribution: X

(3) It is not the intent of the program to limit the station's analysis and reporting exercises to one day per month. Analysis and reporting training should be accomplished on a continuing basis and this program should be used to complement that training.

8. SPS Develocorder Presentations:

a. Primary Develocorder:

TRACE	DATA	MAG	ASN CHAN	DISP ID	SCALE	DEV SENS VOLTAGE
1	SZ2BP36013	2000K	SPDS01	SPL360	1.0	0.305
2	SZ2BP06013	2000K	SPDS02	SPL060	1.0	0.305
3	SZ2BP12013	2000K	SPDS03	SPL120	1.0	0.305
4	SZ2BP18013	2000K	SPDS04	SPL180	1.0	0.305
5	SZ2BP24013	2000K	SPDS05	SPL240	1.0	0.305
6	SZ2BP30013	2000K	SPDS06	SPL300	1.0	0.305
7	SZ2BP00099	2000K	SPDS07	SPZ000	1.0	0.305
8	SZ2BP35919	2000K	SPDS08	SPT359	1.0	0.305
9	SZ2I01	500K	SPDS09	SPRW01	0.25	1.22
10	SN2I61H	500K	SPDS15	SPRW20	0.25	1.22
11	SE2I61H	500K	SPDS16	SPRW21	0.25	1.22
12	SZ2I61M	50K	SPDS14	SPRW22	1.0	0.244
13	SZ2I61L	5K#	SPDS14	SPRW22	1.0	2.44

Channel jumpered in SDU from equal or higher gain channel.

b. Secondary Develocorder:

TRACE	DATA	MAG	ASN CHAN	DISP ID	SCALE	DEV SENS VOLTAGE
1	SZ2I18	500K	SPDS13	SPRW18	0.25	1.22
2	SZ2I15	500K	SPDS12	SPRW15	0.25	1.22
3	SZ2I01	500K#	SPDS09	SPRW01	0.25	1.22
4	SZ2I11	500K+	SPDS10	SPRW11	0.25	1.22
5	SZ2I13	500K	SPDS11	SPRW13	0.25	1.22
6	SZ2BP00099	2000K#	SPDS07	SPZ000	1.0	0.305
7	SZ2BP35919	2000K#	SPDS08	SPT359	1.0	0.305
8	SZ2I01	250K#	SPDS09	SPRW01	1.0	2.44
9	SN2I61H	250K#	SPDS15	SPRW20	0.25	2.44
10	SE2I61H	250K#	SPDS16	SPRW21	0.25	2.44
11	SZ2I61M	50K#	SPDS14	SPRW22	0.25	0.244
12	SN2I61M	50K#	SPDS15	SPRW20	0.25*	3.05
13	SE2I61M	50K#	SPDS16	SPRW21	0.25*	3.05

Channel jumpered in SDU from equal or higher gain channel.
* Change display scale to 1.0 for develocorder sensitivity checks.
+ Use trace 4 whenever a spare trace is required IAW CENR 55-2 Vol 1.

9. LPS Develocorder Presentation:

TRACE	DATA	MAG	ASN CHAN	DISP ID	SCALE	DEV SENS VOLTAGE
1	LZ5I61M	10K	LPDS01	LPSC11	10*	.358
2	LN5I61M	10K	LPDS02	LPSC12	10*	.358
3	LE5I61M	10K	LPDS03	LPSC13	10*	.358
4	LZ5I61H	50K	LPDS04	LPSC11	50*	.358
5	LN5I61H	50K	LPDS05	LPSC12	50*	.358
6	LE5I61H	50K	LPDS06	LPSC13	50*	.358
7	LZ5I61L	1K	LPDS07	LPSC11	1*	.358

* Set display scale to 1.0 for develocorder sensitivity checks.

10. Channel transmitted to the GSOC:

CHANNEL	DISP ID	SCALE
SPHD01	SPL360	1.0
SPHD02	SPL060	1.0
SPHD03	SPL120	1.0
SPHD04	SPL180	1.0
SPHD05	SPL240	1.0
SPHD06	SPL300	1.0

CHANNEL	DISP ID	SCALE
SPHD07	SPZ000	1.0
SPHD08*	SIN	1.0
SPHD09	SPRW01	1.0
SPHD10	SPRW19	1.0
SPHD11	SPRW20	1.0
SPHD12	SPRW21	1.0
SPHD13	SPRW22	1.0
LPHD01	LPSC1Z	50.0
LPHD02	LPSC1N	50.0
LPHD03	LPSC1E	50.0
LPHD04	LPSC1Z	1.0
LPHD05	LPSC1N	1.0
LPHD06	LPSC1E	1.0

* SET CPU 2 test voltage to 0.305 at 1.0 Hz.

11. Data Cross-reference Lists:

INST	RTID	CT CHANNEL	DDS GAIN	STPR CH ID	STPR CGAIN	ISENSE MA/CT	DEV ID
U01	SP01	S01	48	SPRW01	0.80	0.08	SZ2I01
U02	SP02	S02	48	SPRW02	0.80	0.08	SZ2I02
U03	SP03	S03	48	SPRW03	0.80	0.08	SZ2I03
U04	SP04	S04	48	SPRW04	0.80	0.08	SZ2I04
U05	SP05	S05	48	SPRW05	0.80	0.08	SZ2I05
U06	SP06	S06	48	SPRW06	0.80	0.08	SZ2I06
U07	SP07	S07	48	SPRW07	0.80	0.08	SZ2I07
U08	SP08	S08	48	SPRW08	0.80	0.08	SZ2I08
U09	SP09	S09	48	SPRW09	0.80	0.08	SZ2I09
U10	SP10	S10	48	SPRW10	0.80	0.08	SZ2I10
U11	SP11	S11	48	SPRW11	0.80	0.08	SZ2I11
U12	SP12	S12	48	SPRW12	0.80	0.08	SZ2I12
U13	SP13	S13	48	SPRW13	0.80	0.08	SZ2I13
U14	SP14	S14	48	SPRW14	0.80	0.08	SZ2I14
U15	SP15	S15	48	SPRW15	0.80	0.08	SZ2I15
U16	SP16	S16	48	SPRW16	0.80	0.08	SZ2I16
U17	SP17	S17	48	SPRW17	0.80	0.08	SZ2I17
U18	SP18	S18	48	SPRW18	0.80	0.08	SZ2I18
KSZ	BB01	S19	48	SPRW19	0.80	0.08	SZ2I61H
KSN	BB01	S20	48	SPRW20	0.80	0.08	SN2I61H
KSE	BB01	S21	48	SPRW21	0.80	0.08	SE2I61H
KSZ	BB01	S22	12	SPRW22	1.00	5.12	SZ2I61M
KSN	BB01	S23	12	** NOT IN STPR **			
KSE	BB01	S24	12				
LPZ	BB01	L01	--	LPSC11	1.00	0.33	LZ5I61
LPN	BB01	L01	--	LPSC12	1.00	0.33	LN5I61
LPE	BB01	L01	--	LPSC13	1.00	0.33	LE5I61
LPZ	BB01	L02	--	LPSC21	1.00	0.33	LZ5I61
LPN	BB01	L02	--	LPSC22	1.00	0.33	LN5I61
LPE	BB01	L02	--	LPSC23	1.00	0.33	LE5I61

12. Central Terminal Configuration Parameters:

a. General Site Configuration (Menu Selection 3):

Site ID Number	03
Number of 9600 BPS Lines	1
Number of analog channels	8
Number of 544 Cards	3
Number of SPRTs	18
Number of LPRTs	0
Number of BBRTs	1

b. RT- Specific Configuration (Menu Selection 4):

RTID	RT ADDR	PORT ADDR	C/W DELAY	TIME SLOT
SP01	1***	1	4	1
SP02	1***	1	4	2
SP03	1***	1	4	3
SP04	1***	1	4	4
SP05	1***	1	4	5
SP06	1***	5	4	1
SP07	1***	5	4	2
SP08	1***	5	4	3
SP09	1***	5	4	4
SP10	1***	5	4	5
SP11	1***	9	4	1
SP12	1***	9	4	2
SP13	1***	9	4	3
SP14	1***	9	4	4
SP15	1***	10	4	1
SP16	1***	10	4	2
SP17	1***	10	4	3
SP18	1***	10	4	4
BB01	3***	21	4	1

*** = Specific RT serial number

c. Analog Channel Configuration (Menu Selection 5):

Analog Channel	RTID	GAIN
0		
1		
2		
3	** All Channels are site selectable **	
4		
5		
6		
7		

d. First Message to TOS Contents (Menu Selection 6):

Number of SPRTs in First Message	18
Number of LPRTs in First Message	0
Number of BBRTs in First Message	1

e. 12 bit A/D/A Channel Gain Assignments (Menu Selection 7):

CHANNEL	RTID	GAIN
S01	SP01	48
S02	SP02	48
S03	SP03	48
S04	SP04	48
S05	SP05	48
S06	SP06	48
S07	SP07	48
S08	SP08	48
S09	SP09	48
S10	SP10	48
S11	SP11	48
S12	SP12	48
S13	SP13	48
S14	SP14	48
S15	SP15	48
S16	SP16	48
S17	SP17	48
S18	SP18	48
S19	BB01SZ	48
S20	BB01SN	48
S21	BB01SE	48
S22	BB01SZ	12
S23	BB01SN	12
S24	BB01SE	12

f. 16 Bit LPUARTS Channel Assignments (Menu Selection 8):

CHANNEL	RTID
L01	BB01
L02	BB01

g. Hardware Settings:

SP Desired Gain Setting	0.01 #
LP Desired Gain Setting	0.333 ##
Seconds Datachron Set Behind Time	37.001 seconds +/- 0.0005 seconds
Datum TCG Time Setting	Sync to actual time
FTS Receiver Settings	Latitude:
	Longitude: *FROM ON SITE DOCUMENTS*
	Elevation:
FTS Filter Factor	10
Reasonableness Test	Enabled

Set SP desired gain setting to 0.005 upon implementation of Block 1 FUA software.
Set LP desired gain setting to 0.167 upon implementation of Block 1 FUA software.

13. STPK CPU Configuration Parameters:

a. CPU 1:

```
CONFIGURATION IDENTIFICATION = Cxxxx-1HL
OPERATE1 IDENTIFICATION = OPERATE1
SITE IDENTIFICATION = 244
LP DATA AND INSTRUMENT TYPE (A,31,36) = 36
NUMBER OF SHORT PERIOD ARRAY CHANNELS = 18
NUMBER OF SHORT PERIOD OTHER CHANNELS = 4
NUMBER OF LONG PERIOD ARRAY CHANNELS = 3
NUMBER OF LONG PERIOD OTHER CHANNELS = 3
TYPE OF LP OTHER CHANNELS (A,B) = B
NUMBER OF SHORT PERIOD PROCESSES = 8
NUMBER OF LONG PERIOD PROCESSES = 1
SHORT PERIOD FREQUENCY FILTER LENGTH = 99
LONG PERIOD FREQUENCY FILTER LENGTH = 1
AMOUNT OF SHORT PERIOD TIME DELAY REQUIRED = 0
AMOUNT OF LONG PERIOD TIME DELAY REQUIRED = 0
SP COORDINATES:
0,0,0
1,0.196,0.741
2,1.766,0.680
3,2.034,-0.772
4,0.892,-0.803
5,-0.446,-1.143
6,-0.946,-0.093
7,-1.392,0.834
8,0.321.1.761
9,1.820,3.954
10,2.515,2.317
11,3.479,-0.185
12,4.193,-2.286
13,0.624,-3.490
14,-1.855,-2.934
15,-3.015,-0.710
16,-3.890,1.884
17,-2.248,3.2431
18,-0.036,4.540
LP COORDINATES:
0,0,0
1,0,0,C
SP FREQUENCY FILTER PARAMETERS:
50
0.0006,0.0005,-.0002,-.0012,-.0022,-.0026,-.0024,-.0016,-.0007,-.0004
-.0007,-.0015,-.0022,-.0020,-.0009,0.0010,0.0028,0.0038,0.0036,0.0025
0.0014,0.0014,0.0027,0.0049,0.0067,0.0068,0.0046,0.0008,-.0031,-.0052
-.0046,-.0024,-.0010,-.0029,-.0095,-.0192,-.0280,-.0316,-.0276,-.0188
-.0120,-.0161,-.0354,-.0648,-.0869,-.0777,-.0174,0.0911,0.2099,0.2658
0.2099,0.0911,-.0174,-.0777,-.0869,-.0648,-.0354,-.0161,-.0120,-.0188
-.0276,-.0316,-.0280,-.0192,-.0095,-.0029,-.0010,-.0024,-.0046,-.0052
-.0031,0.0008,0.0046,0.0068,0.0067,0.0049,0.0027,0.0014,0.0014,0.0025
```

```
0.0036,0.0038,0.0028,0.0010,-.0009,-.0020,-.0022,-.0015,-.0007,-.0004
-.0007,-.0016,-.0024,-.0026,-.0022,-.0012,-.0002,0.0005,0.0006

LP FREQUENCY FILTER PARAMETERS
0
0.9999
SP BEAM PARAMETERS:
SPL360,0,000,13.0,8
SPL060,0,060,13.0,8
SPL120,0,120,13.0,8
SPL180,0,180,13.0,8
SPL240,0,240,13.0,8
SPL300,0,300,13.0,8
SPZ000,0,0,0,8
SPT359,0,359,19.0,8
LP BEAM PARAMETERS:
LPB36Z,1,000,3.5,8
SP PROCESSING DELAY = 60
LP PROCESSING DELAY = 1
```

D. CPU 2:

```
CONFIGURATION IDENTIFICATION = Cxxxx-2HL
OPERATE2 IDENTIFICATION = OPERATE2
SITE IDENTIFICATION = 244
LP DATA AND INSTRUMENT TYPE (A,31,36) = 36
NUMBER OF SHORT PERIOD ARRAY CHANNELS = 18
NUMBER OF SHORT PERIOD OTHER CHANNELS = 4
NUMBER OF LONG PERIOD ARRAY CHANNELS = 3
NUMBER OF LONG PERIOD OTHER CHANNELS = 3
TYPE OF LP OTHER CHANNELS (A,B) = B
NUMBER OF SHORT PERIOD PROCESSES = 8
NUMBER OF LONG PERIOD PROCESSES = 1
NO SP CHAN TO BE TRANSMITTED VIA HSM = 13
NO LP CHAN TO BE TRANSMITTED VIA HSM = 6
NUMBER OF CONTACT SENSOR MONITORS = 4
NUMBER OF A/D CHANNEL CHANNEL MONITORS = 1
AMOUNT OF SP EDIT TIME DELAY REQUIRED = 0
AMOUNT OF LP EDIT TIME DELAY REQUIRED = 0
SP COORDINATES:
0,0,0
1,0.196,0.741
2,1.766,0.680
3,2.034,-0.772
4,0.892,-0.803
5,-0.446,-1.143
6,-0.946,-0.093
7,-1.392,0.834
8,0.321.1.761
9,1.820,3.954
10,2.515,2.317
11,3.479,-0.185
12,4.193,-2.286
13,0.624,-3.490
14,-1.855,-2.934
15,-3.015,-0.710
16,-3.890,1.884
17,-2.248,3.2431
18,-0.036,4.540
LP COORDINATES:
0,0,0
1,0,0,C
SP CALIBRATION DEFAULT PARAMETERS:
0.833,1.0,10.0,0,170000,0.9,1.1,2.928,8
1.00,1.708
0.5,1.708
0.8,1.708
1.5,1.708
2.0,1.708
2.5,1.708
3.0,1.708
4.0,1.708
```

LP CALIBRATION DEFAULT PARAMETERS:
0.2539,0.04,10.0,0,173000,0.9,1.1,1.97,7,3
0.04,.2243
0.1,2.243
0.067,.2243
0.05,.2243
0.033,.2243
0.025,.2243
0.020,.2243
SP CHANNEL CONFIGURATION FOR CALIBRATION SYSTEM:
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
1,10
1,11
1,12
1,13
1,14
1,15
1,16
1,17
1,18
1,24
1,24
1,24
1,24
SP BEAM PARAMETERS:
SPL360,0,000,13.0,B
SPL060,0,060,13.0,B
SPL120,0,120,13.0,B
SPL180,0,180,13.0,B
SPL240,0,240,13.0,B
SPL300,0,300,13.0,B
SPZ000,0,0,0,B
SPT359,0,359,19.0,B
LP BEAM PARAMETERS:
LPB36Z,1,000,3.5,B
CHANNEL CONFIGURATION FOR HIGH SPEED MODEM:
SPL360,SPL060,SPL120,SPL180,SPL240,SPL300,SPZ000,SPRW02,SPRW01,SPRW19,
SPRW20,SPRW21,SPRW22,LPSC1Z,LPSC1N,LPSC1E,LPSC1Z,LPSC1N,LPSC1E
RELAY IDENTIFIERS AND NORMAL STATUS FOR EACH CONTACT SENSOR MONITOR:
LOBATT,1
ACOFF,1
REVXFR,1
LOXTR,1
IDENTIFIERS AND LIMITS FOR EACH A/D CHANNEL MONITOR:
LNPOWR,5.4,6.6

UFFICIAL

SUMMARY OF CHANGES
Rewrote in active voice. Added purpose and distribution statements. Deleted specific references to Vol I.