Mechanized Aids To Management Engineering And Administration Data Acquisition System (EADAS) Position Practice Supply, Modify, Verify System Definitions

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1. GENERAL DESCRIPTION

System definitions are the means used to tailor the general purpose EADAS generic to the needs of the Associated Telephone Company. They are entered at the CCU teletype, via the command language.

1.01 Purpose

This position practice is intended to provide assistance in interacting with EADAS to perform the following functions:

A. Bring the CCU teletype and line printer to ready

The use of the CCU teletype and the line printer is first encountered in Task 1 of this position practice. Procedures for loading paper and ribbons are also included.

B. Analyze Input and determine action

Task 2 of this practice provides a table to assist you in choosing the appropriate action to be performed.

C. Supply System Definitions

Task 3 of the practice describes commands, system responses, and proper formats for:

1. Entering the initial batch of system definitions.
2. Adding additional definitions as needed.

D. Modify System Definitions

Task 4 of the practice provides procedures for modification of already existing definitions. Again, commands, format, and system responses are presented.

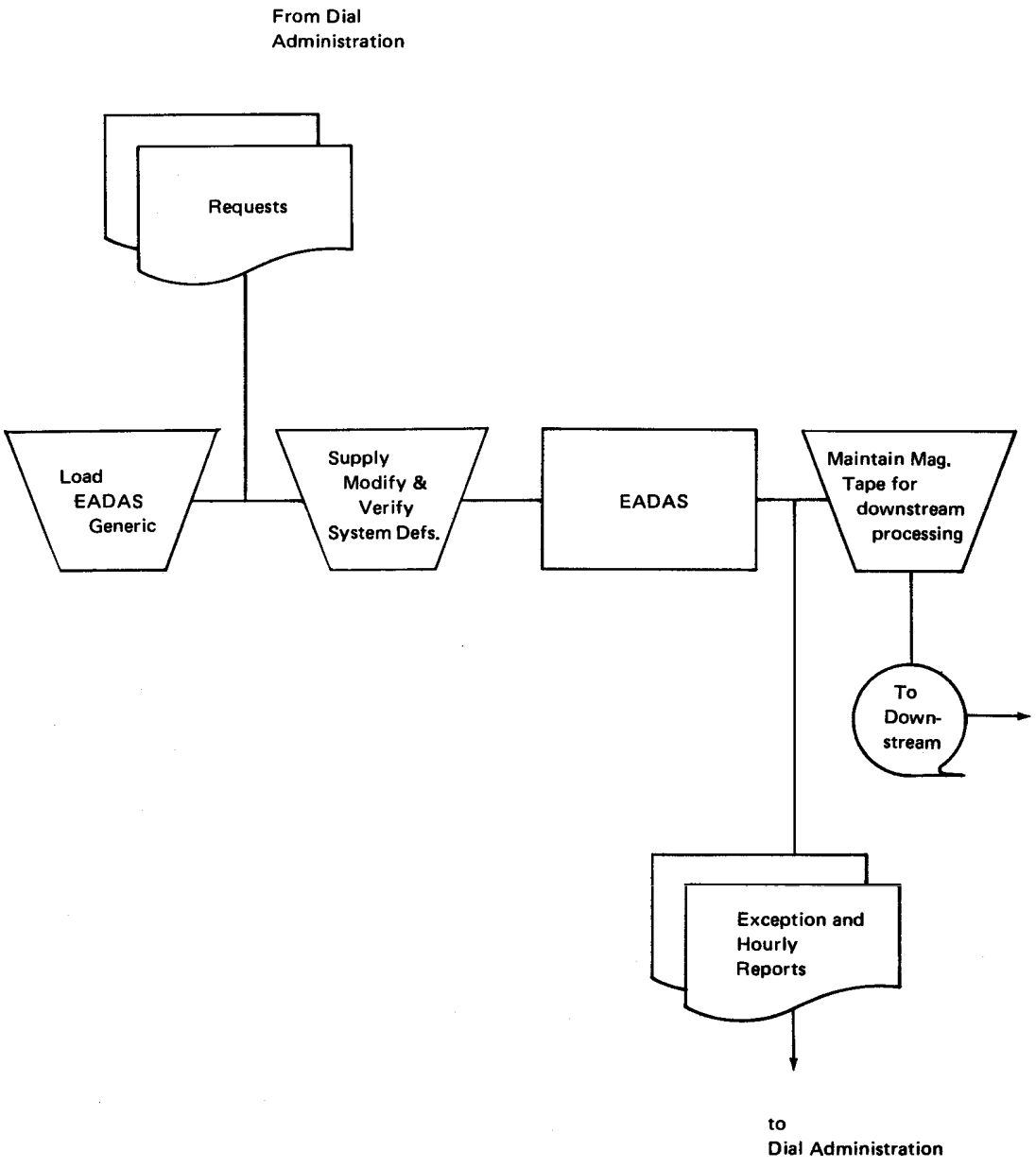
E. Verify System Definitions

Task 5 of this practice provides a means of determining the current value of any system definition.

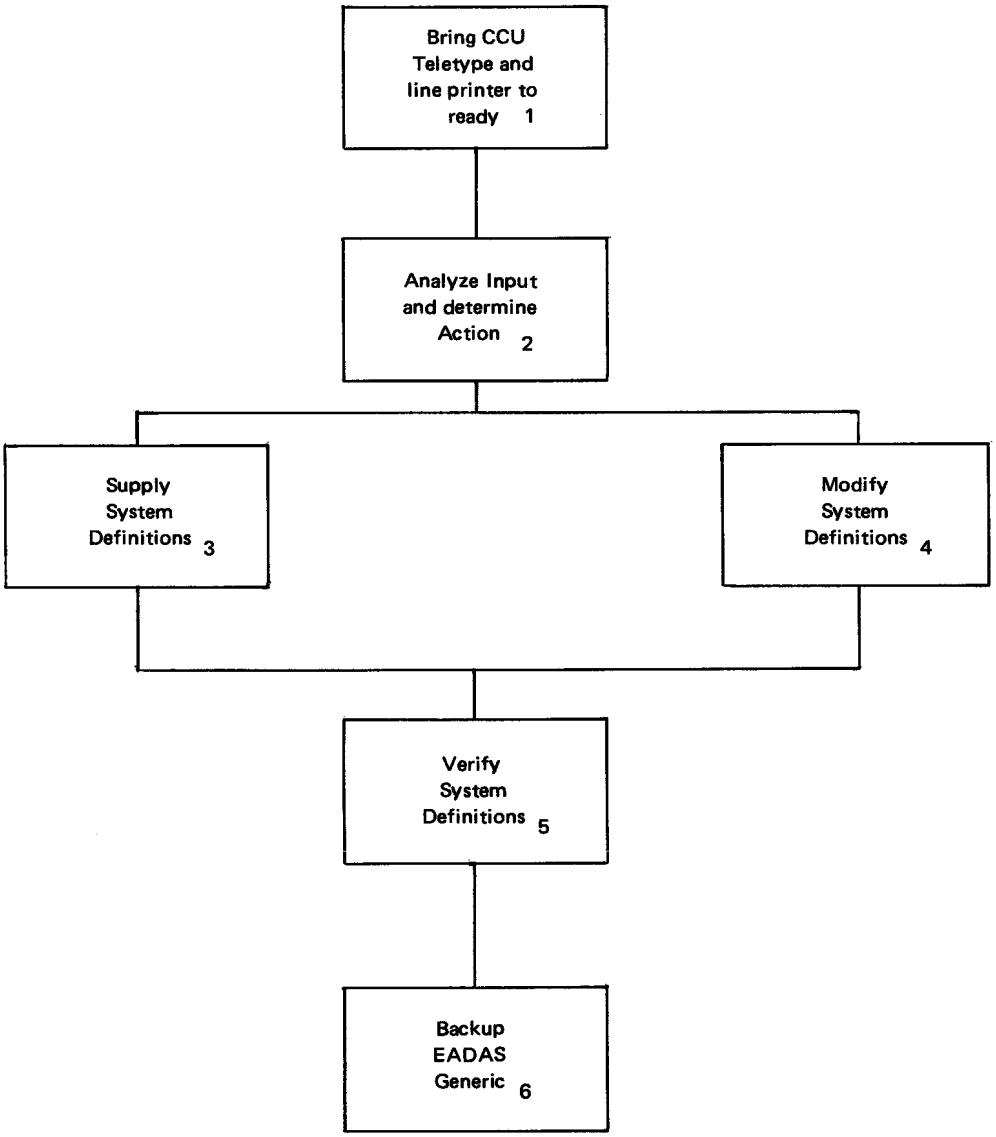
F. Backup the EADAS Generic

After a substantial number of changes to the system definitions have been made, an EADAS generic backup tape should be made. This tape will contain a copy of SYSBAK, the EADAS Generic, and all System Definitions up to the point where the tape is made.

2. POSITION FLOWCHART AND MEDIA LEGEND.



3. POSITION DIAGRAM



4. POSITION PROCEDURES

TASK 1: BRING CCU TELETYPE AND LINE PRINTER TO READY

1A. Bring CCU Teletype to Ready

**If TTY is already operational, go directly to Task 1B.

1. Turn the TTY switch to "LOCAL"

2. Verify that inside lights and TTY motor are turned on.

**If not, go to Corrective Procedure #27.

3. Check that there is an adequate supply of paper in the TTY.

**If not, go to Corrective Procedure #28.

4. Run the machine to check that print is dark enough to be readable.

**If not, go to Corrective Procedure #29.

If you have encountered a paper jam, check that the print hammer box has not been dislodged. If it has been, reset it and then run the Machine to check the print.

5. While running the Machine, also check that the print is clear and sharp.

**If not, go to Corrective Procedure #30.

6. Turn the TTY switch to "LINE".

4. POSITION PROCEDURES (Continued)

1B. Bring CCU Line Printer To Ready

**If the line printer is operational go directly to Task 2.

1. Open front door panel.

2. Lift main AC switches to On.

3. Verify that the power light and fans come on.

**If not, go to Corrective Procedure #6.

4. Verify that printer is loaded with adequate paper supply.

**If not, go to Corrective Procedure #7. You should check your supply daily at 4 p.m.

5. Verify that the print is dark enough to be readable.

**If not, go to Corrective Procedure #8.

6. Turn ON LINE/OFF LINE switch to ON LINE.

4. POSITION PROCEDURES (Continued)

TASK 2: ANALYZE INPUT AND DETERMINE ACTION

If You Wish To:	Go To	
Supply (add) a system definition	Task 3	(p.7)
system parameters	3a	(p.7)
system schedules	3b	(p.8)
hourly report formats	3c	(p.9)
channel definitions	3d	(p.10)
entity definitions	3e	(p.12)
calculation definitions	3f	(p.13)
Modify a system definition	Task 4	(p.14)
system parameters	4a	(p.14)
system schedules	4b	(p.15)
hourly report formats	4c	(p.17)
channel definitions	4d	(p.19)
entity definitions	4e	(p.23)
calculation definitions	4f	(p.26)
Verify a system definition	Task 5	(p.29)
system parameters	5a	(p.29)
system schedules	5b	(p.29)
hourly report formats	5c	(p.30)
channel definitions	5d	(p.31)
entity definitions	5e	(p.32)
calculation definitions	5f	(p.32)

4. POSITION PROCEDURES (Continued)

3. Supply (Add) System Definitions
3a. Enter the required information to ADD Parameters (See Exhibit 1 P.38)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:PA:!	PARAMETER DEFINITION MODE SYSTEM PERIOD = 15 NEW = ?A, ?I, or ?D, go to Corrective Procedures 1, 2, or 3 respectively	1. p. 35
2. System Period	! (leave at 15) *or* 30!	MAG TAPE PERIOD = 15 NEW = INVALID INPUT, re-enter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
3. Magnetic Tape Writing Period	! (leave at 15) *or* 30! or 60!	LONG-TERM START = ØØ:ØØ END = ØØ:ØØ NEW START = INVALID INPUT, re-enter the corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
4. Long-Term Data Storage, Daily Start Time	! (do not schedule long-term data storage) *or* HH:MM! (military time)	NEW END = INVALID INPUT, re-enter the corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
5. Long-Term Data Storage, Daily End Time	! (do not schedule long-term data storage) *or* HH:MM! (military time)	TUR DETECTOR TEST = NONE NEW = INVALID INPUT, re-enter the corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
6. TUR Detector Test Time	! (do not schedule detector test) *or* HH:MM! (military time)	COMPLETED, system exits mode, carriage return, advance 1 line. INVALID INPUT, re-enter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	

4. POSITION PROCEDURES (Continued)

3b. Enter the information required to ADD Schedule Definitions (see Exhibit 2, page 39.)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Enter Mode	EM:SC:!	SCHEDULE DEFINITION MODE SCHEDULE FOR DAY?	If ?A, ?I, or ?D go to C.P. (Corrective Procedures) 1, 2, or 3, respectively.
2. Day (SCHEDULE FOR DAY?)	MO!, TU!, WE!, TH!, FR!, SA!, or SU!	SCHEDULE NUMBER=	If INVALID INPUT, re-enter with corrected information. If INVALID INPUT with correct information go to C.P. 4.
3. Schedule Number (SCHEDULE NUMBER=)	Ø! to 15!	CURRENT SCHEDULE XX IS NOT DEFINED or CURRENT SCHEDULE XX is MT= HR= TUR= COPY SCHED (DAY#)	Same as 2 above.
4. Schedule Indicator (DAY#)	!	MT=	Same as 2 above. See p. 35, notes 2 and 3.
5. Enter Grouped data tape write schedule (MT=)	HH:MM-HH:MM, etc! or DE:! (To delete)	HR=	Same as 2 above. See p. 36, 25.
6. Enter Hourly Report Schedule (HR=)	HH:MM-HH:MM, etc! or DE:! (To delete)	TUR=	Same as 2 above. See p. 36, 25.
7. Enter TUR operations schedule (TUR=)	HH:MM-HH:MM, etc! or DE:! (To delete)	DTS=	Same as 2 above. See p. 36, 25.
8. DTS	!(*)	ICAN	
9. ICAN	!(*)	LB=	
10. LB	!(*)	SCHEDULE FOR DAY?	
11. Schedule Number	Return to Step 2 or EX:!	If EX:!, System response is OK	End of Schedule Definition Mode

(*) For future use with EADAS/ICUR.

4. POSITION PROCEDURES (Continued)

3c. Enter the required information to ADD an Hourly Report Format (See Exhibit 3 p. 40)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:HR:!	*** HOUR REPORT MODE *** FORMATS: AA, BB, CC (as defined) XXXX BYTES OF STORAGE LEFT FORMAT? ?A, ?I, ?D, go to Corrective Procedures 1, 2, 3 respectively	
2. New Format Name	XX! (2 char.)	Advance 1 line, carriage return, print* $$$ NAME ERROR re-enter correct name. $$$ NAME ERROR on entry of correct name. Go to Corrective Procedure 4 $$$ NAME TABLE FULL, go to Corrective Procedure 19 $$$ NO SPACE LEFT, go to Corrective Procedure 20	
3. Function (insert a new format)	IN:ALL:!	Advance 1 line, carriage return, print line number Ø1 $$$ COMMAND ERROR re-enter correct command $$$ COMMAND ERROR on entry of correct command, go to Corrective Procedure 4 3$$ DISK ERROR or $$$ SYSTEM ERROR go to Corrective Procedure 22	
4. Report Line (repeat as required)	72 characters max.!	Advance 1 line, carriage return, print new line number $$$ INVALID CHARACTER. The System will repeat the line up to the invalid character. Complete the line correcting the invalid information. $$$ LINE TOO LONG Re-enter the corrected line.	**5, 6, 7** p. 35
5. Final Report line	↑N!	Advance 1 line, carriage return, print *	
6. Function	PR:ALL!	System prints a copy of the format on the line printer. Teletype advances 1 line, carriage returns, and prints *	**8** p. 35
7. Function	FI:!	FORMAT?	
8. If additional formats are to be added go to step 2.			
9. Command	EX:!	System exits hour report format mode.	

4. POSITION PROCEDURES (Continued)

3d. Enter the information required to ADD Channel Definitions. (see Exhibit 4, p. 42)

	FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
1.	Enter Mode	EM:CH:!	CHANNEL DEFINITION MODE CHAN NO=	If ?A,?I,or ?D go to C.P. (Corrective Procedures) 1,2,or 3, respectively.	
2.	Channel Number (CHAN NO=)	Ø-99!	DCU ID?	If NO INTERFACE AT XXXXX, go to C.P.7. If INVALID INPUT, re-enter with corrected information. If INVALID INPUT with correct information, go to C.P. 4.	
3.	DCU ID (DCU ID?)	11 character maximum	SCHED NO=	CAUTION: The DCU ID is used to identify all data from this channel. If entered incorrectly, enter FI:! and return to Step 2. If the channel is equipped with ICUR, the last 3 characters of the DCU ID must be Snn where nn=the hardware channel no. entered in Step 2. See p. 36 , note 19.	Y
4.	TUR,HR,Grouped data tape schedule number (SCHED NO=)	Ø-15!	CALCS ON?	If INVALID INPUT, re-enter with corrected information. If INVALID INPUT with correct information, go to C.P. 4.	Y
5.	Turn on calculations? (CALCS ON?)	Y! or N!	MAG TAPE ON?	See p. 36 , 20.	Y
6.	Enable Mag Tape writing (MAG TAPE ON?)	Y! or N!	CHAN TYPE?	See p. 36 , 20. This enables writing per schedule on all magnetic tapes.	Y

4. POSITION PROCEDURES (Continued)

3d. (Continued)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
7. Channel Type (CHAN TYPE?)	OTDC!	Proceed to Sub-task 1.	If INVALID INPUT, re-enter with corrected information.	N
	ETDC!	Proceed to Sub-task 2.		
	ES1L!	Proceed to Sub-task 3.		
	ES2L!	Proceed to Sub-task 3.	If INVALID INPUT with correct information, go to C.P. 4.	

3d. Sub-task 1. Channel Type OTDC - TDRS Peg Count Converter

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
Response from last entry		TUR?		
8. TUR Present	Y! or N!	SCALED REGS=		
9. Scaled Inputs (SCALED REGS=)	XXX or XXX-XXX! (valid values are Ø-1Ø23) (! alone indicates none) If a second line is required CR can be used.	PUT ON LINE?	If INVALID INPUT, re-enter with corrected information. If INVALID INPUT with correct information, go to C.P. 4. See p. 36, 24.	Y
10. Begin Channel Functions (PUT ON LINE?)	Y! or N!	CHAN NO=	See p. 36, 20.	Y
11. Channel Number (CHAN NO=)	Return to Task 3d, Step 2 or EX:!	If EX:!, OK	End of Channel Definition Mode	

4. POSITION PROCEDURES (Continued)

3d. Sub-task 2. Channel Type ETDC - EADAS Traffic Data Converter

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
Response from last entry		TUR?		
8. Channel equipped with or controls a TUR (TUR?)	Y! or N!			N
9. Scaled Inputs (SCALED REGS=)	XXX or XXX-XXX! (valid values are Ø-991) (! alone indicates none) If a second line is required, CR can be used.	USAGE REGS=	If INVALID INPUT, re-enter with corrected information If INVALID INPUT with correct information, go to C.P. 4. See p. 36, 24.	Y
10. ETDC Scanning Inputs (USAGE REGS=)	XXX or XXX-XXX! (valid values are Ø-991) (! alone indicates none) If a second line is required, CR can be used.	PEG REGS=	Same as 9 above.	Y
11. Peg Count Inputs (PEG REGS=)	XXX or XXX-XXX! (valid values are Ø-991) (! alone indicates none) If a second line is required, CR can be used.	DISCRETE INPUTS=	Same as 9 above.	Y
12. Discrete Inputs (DISCRETE INPUTS=)	XXX or XXX-XXX! (valid values are Ø-1Ø23) (! alone indicates none) If a second line is required, CR can be used.	TUR?	Same as 9 above.	Y
13. TURs (TUR?)	N! Y!	PUT ON LINE? Go to Step 15. ICUR?		Y

4. POSITION PROCEDURES (Continued)

3d. Sub-task 2. (Continued)

	FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
14.	ETDC equipped ICUR (ICUR?)	N! Y!	PUT ON LINE? Go to ICUR Supply, Modify, Verify System Definitions Position Practice		N
15.	Begin channel functions (PUT ON LINE?)	Y! or N!	CHAN NO=	See p. 36 , 20+ 24(d).	Y
16.	Channel Number (CHAN NO=)	Return to Task 3d, Step 2 or EX:!	If EX:!, OK	End of Channel Definition Mode	

3d. Sub-task 3. Channel Type ES1L or ES2L.

	FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES	MOD.
	Response from last entry		REGS IN C SCHED=		
8.	C Sched. regs	XXXX! Always round the number of registers in the C schedule to the next highest ten.	REGS IN C T/G SCHED=	If INVALID INPUT, re-enter corrected information. If INVALID INPUT with correct information, go to C.P. (Corrective Procedure) 4.	
9.	C T/G Sched. regs.	XXXX! The C T/G schedule entry must be no more than the C schedule entry.	DCU ID FOR H SCHED=	Same as 8 above.	
10.	DCU ID for H Sched.	XXXXXXXXXX!	REGS IN H SCHED=		
11.	Regs in H Sched.	XXXX!	REGS IN H T/G SCHED=	Same as 8 above.	
12.	Regs in H T/G Sched.	XXXX! The H T/G schedule entry must be no more than the H schedule entry.	DCU ID FOR W SCHED=	Same as 8 above.	
13.	DCU ID for W Sched.	XXXXXXXXXX!	REGS IN W SCHED=		
14.	Regs in W Sched.	XXXX!	PUT ON LINE?	Same as 8 above.	
15.	Begin Channel Functions	Y(es) or N(o)	CHANNEL DEFINITION MODE CHAN NO=	20 p. 36	
16.	Channel Type	Return to Task 3d, Step 2 or EX:!	If EX:!, OK	End of Channel Definition Mode	

4. POSITION PROCEDURES (Continued)

3e. Enter the required information to ADD Entity Definitions (see Exhibit 5 p. 43)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:CA:!	* CALCULATION MODE * * ?A, ?I, or ?D, go to Corrective Procedures 1, 2 or 3 respectively.	
2. Function	IN:EN:entityname! where "entityname" is up to 12 alphanumerics	CHANNEL # = ?A, ?I, or ?D, go to Corrective Procedures 1, 2, or 3 respectively. ALREADY ON FILE, or STORAGE CAP EXCEEDED, go to Corrective Procedure 9.	
3. Associated Channel Number	Ø! to 99!	DA TTY # = ?D, re-enter the correct channel number. ?D on correct channel number, go to Corrective Procedure 4	
4. Associated D.A. Teletype Number	Ø! to 15!	THR SCHEDS = (line feed, carriage return) ?D re-enter the correct DA TTY number. ?D and the number appears correct, go to Corrective Procedure 4	
5. Threshold Schedules	Ø-12, 14-17; etc! military time spans hours only	HR FORMAT = ?S, retype the entire corrected series of threshold schedules. ?S on corrected information, go to Corrective Procedure 4	9, 10 p. 35
6. HR Format Name	XX! 2 char. valid HR Format Name	Advance 2 lines, carriage return, Print * ?S go to Corrective Procedure 8	
7. If additional entities are to be defined go to step 2 above.			
8. Exit Mode	EX:!	System exits Calculation mode, advances 1 line, carriage returns.	

4. POSITION PROCEDURES (Continued)

3f. Enter the required information to ADD Calculation Definitions (see Exhibit 6, p. 44)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:CA:!	CALCULATION MODE * ?A, ?I, ?D, go to Corrective Procedures 1, 2, or 3 respectively.	
2. Function	IN:CA:entityname! entityname=up to 12 char. previously defined	CALC NAME= ?A, ?I, ?O, go to Corrective Procedures 1, 2, or 3, respectively.	
3. Calculation Name	XXXXXXXX, M! or XXXXXXXX, S! or XXXXXXXX! or ! (hourly report only calc.)	HR CALC #= ALREADY ON FILE, or NO MASTER CALC, go to Corrective Procedure 11	11 p. 35
4. Hourly Report Format Location Number	Ø1! to 64! (2 numerics) or ! (exception only calc.)	DEFINITION= ?S, go to Corrective Procedure 12	12 p. 35
5. Calculation Definition	Formula!	System will print its version of your formula. ?S, go to Corrective Procedure 13 ?D, go to Corrective Procedure 14 ?O, go to Corrective Procedure 15	10 p. 35
6. Confirmation	"!" (calc. defin. is correct) "X!" (Def. is not correct) -	USAGE? system response other than USAGE?, go to Corrective Procedure 25 System responds "DEFINITION=" as in 4 above. User redefine formula.	21 p. 36
7. TUR data used	Y! or N! (yes or no)	OUTPUT=	20 p. 36
8. Output Labels	XXXX,XXX=T1, etc.; P! (result label, term label=T1, etc; print labels on exception reports)	THRES (TYPE, VAL, SCHED #)= ?S, or KEYWORD TABLE FULL, go to Corrective Procedure 16	13 p. 36
9. Threshold Type value, and schedule	XX,YYYYY/YYYYY,Z! or XX,YYY.YY/YYY.YY,Z! where XX=type(UB, LB, LU, AP, NP), Y=value, Z=schedule (1, 2, 3)	CALC NAME= ?S, go to Corrective Procedure 17.	
10. If additional calculations are to be defined for this entity, return to step 3.			
11. Command	FI:!	Leave the calculation insertion function (IN:CA), print*	
12. Command	EX:!	Exit calculation mode, advance one line, carriage return.	

4. POSITION PROCEDURES (Continued)

4. MODIFY SYSTEM DEFINITIONS

4a. Modification of System Parameters (see Exhibit 7 p. 45)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:PA:!	PARAMETER DEFINITION MODE SYSTEM PERIOD = XX NEW = ?A, ?I, or ?D go to Corrective Procedures 1, 2, and 3 respectively	
2. System Period	15! *or* 30! *or* ! (no change)	MAG TAPE PERIOD = XX NEW = INVALID INPUT, enter corrected system period INVALID INPUT with correct value specified, go to Corrective Procedure 4	1 p. 35
3. Magnetic Tape Writing Interval	System Period ! *or* 60! *or* ! (no change)	LONG-TERM START = XX:XX END = YY:YY NEW START = INVALID INPUT, enter corrected mag. tape writing interval INVALID INPUT with correct value specified, go to Corrective Procedure 4	22, p. 36
4. Long-Term Data Storage, Daily Start Time	! (no change) *or* HH:MM! (military time)	NEW END = INVALID INPUT enter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
5. Long-Term Data Storage, Daily End Time	! (no change) *or* HH:MM! (military time)	TUR DETECTOR TEST = XX:XX NEW = INVALID INPUT enter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
6. TUR Detector Test Time	! (no change) *or* DE! (do not perform test) *or* HH:MM! (military time)	COMPLETED system exits mode, carriage returns, advance 1 line INVALID INPUT enter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	

4. POSITION PROCEDURES (Continued)

4b. Modify System Schedules (See Exhibit 8 p. 46)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:SC:!	SCHEDULE DEFINITION MODE SCHEDULE FOR DAY? ?A, ?I or ?D go to Corrective Procedures 1, 2, or 3 respectively.	
2. Schedule for Day	MO! TU! WE! TH! FR! SA! SU!	SCHEDULE NUMBER = INVALID INPUT re-enter corrected value INVALID INPUT with corrected value, go to Corrective Procedure 4	
3. Schedule Number	Ø – 15!	CURRENT SCHEDULE XX IS MT = Current mag. tape schedule HR = Current hour report schedule TUR = Current TUR schedule COPY SCHEDULE (DAY # OR IF NEW !) CURRENT SCHEDULE XX IS NOT DEFINED go to Corrective Procedure 18 INVALID INPUT re-enter Corrected value INVALID INPUT with correct value, go to Corrective Procedure 4	
4. Set schedule equal to other existing schedule*	*IF* the revised schedule is a copy of an existing schedule, enter: DD NN! where DD=Day NN= schedule number of schedule to be copied. Go to Step 8.	SCHEDULE FOR DAY? INVALID INPUT re-enter corrected value INVALID INPUT with correct input go to Corrective Procedure 4	
4a. Set new schedule values*	*IF* the revised schedule is to be a new schedule enter "!" only. Continue with step 5.	MT = INVALID INPUT re-enter corrected value INVALID INPUT with correct input go to Corrective Procedure 4.	
5. Mag Tape Schedule	HH:MM:–HH:MM! No Change = !	HR = INVALID INPUT re-enter corrected value INVALID INPUT with correct value go to Corrective Procedure 4.	

4. POSITION PROCEDURES (Continued)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
6. Hourly Report Schedule	HH:MM:–HH:MM! No Change = "!"	TU = INVALID re-enter corrected value INVALID with correct value go to Corrective Procedure 4	
7. TUR Sched-ule**	HH:MM:–HH:MM! No Change = !	SCHEDULE FOR DAY? INVALID re-enter corrected value INVALID with correct value, go to Corrective Procedure 4 additional schedule changes are to be made, go to Step 2	
8. If additional schedules are to be modified go to step 2.			
9. Exit Schedule Mode	EX:!	System exits schedule mode, advances 1 line, carriage return	

*If at any time in the Schedule Mode, you want to cause the system to revert to the previously entered schedule values, enter the command FI:! and the system will return to the start of the schedule mode.

**The TUR schedule will be automatically adjusted to agree with other schedule changes.

4. POSITION PROCEDURES (Continued)

4c. Modify Hourly Report Formats (see Exhibits 9A, B and C pp. 47-49)

Subtask 1. Enter Hourly Report Mode

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:HR:!	*** HOUR REPORT MODE *** FORMATS: list of current format names XXXX BYTES OF STORAGE LEFT FORMAT? ?A, ?I, or ?D, go to Corrective Procedures 1, 2, or 3 respectively.	
2. Format Name	aa! Where aa = 2 character name of format to be modified	Advances 2 lines, prints *. $$$ NAME ERROR re-enter correct format name. $$$ NAME ERROR with correct input go to Corrective Procedure 4.	

3. Select proper command for Modification Desired based on the table below.

IF MODIFICATION APPLIES TO:	GO TO
Format Name	Subtask 2
line of format or entire format to be deleted	Subtask 3
New line to be added to format	Subtask 4
Contents (line or lines) of format to be modified	Subtask 3 *then* Subtask 4

4. POSITION PROCEDURES (Continued)

Subtask 2. Change a Format Name. (see Exhibit 9A, p. 47)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	GG:aa! where aa = new format name	Advances 1 line, prints *. $$$ COMMAND ERROR re-enter corrected value. $$$ COMMAND ERROR with correct value go to Corrective Procedure 4.	
2. Command	FI:!	FORMAT?	
3. Function	LI:!	Lists all current format names. Space one line then prints *.	
4. Command	FI:!	FORMAT?	
5. If additional changes are to be made return to Subtask 1 step 2.			
6. Exit	EX:!	Exit hourly report mode. Advance 1 line, carriage return.	

Subtask 3. Delete a Format or a Line of a Format. (see Exhibit 9B p. 48)

Note: If an entire format or a line of a format is to be modified, the format or line must first be deleted – then re-entered in Subtask 4.)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	DE:ØØ! where ØØ = line number If entire format is to be deleted, replace ØØ with ALL.	Advances 1 line, prints *. $$$ COMMAND ERROR re-enter corrected value. $$$ COMMAND ERROR with corrected value, go to Corrective Procedure 4. $$$ DISK ERROR or $$$ SYSTEM ERROR go to Corrective Procedure 22.	
2. Command	FI:!	FORMAT?	
3. If additional changes are to be made return to Subtask 1, step 2.			
4. Exit	EX:!	Exit hourly report mode, advance 1 line, carriage return.	

4. POSITION PROCEDURES (Continued)

Subtask 4. Add a Line to an Existing Hourly Report Format (see Exhibit 9c p. 49)

Note: If an entire format is to be added go to Task *3C* of this position practice.

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	IN:ØØ! where ØØ = line number	Advances 1 line prints line number. $$$ COMMAND ERROR re-enter corrected command. $$$ COMMAND ERROR with corrected input go to Corrective Procedure 4.	
2. New Line	new line ! (72 char. max.)	Advances 1 line prints *.	
3. Command	FI:!	FORMAT?	
4. If additional changes are to be made, return to Subtask 1, step 2.			
5. Exit	EX:!	Exit hourly report mode, advance 1 line, carriage return.	

4d. Modify Channel Definitions (See Exhibits 10A, B, and C pp.50-52)

Sub-Task 1. Determine Modification Type.

IF	GO TO
DCU ID or Schedule Number or TUR or Register Assignments are to be modified	Sub-Task 2
Calculation Status is to be changed from "off" to "on" or "on" to "off"	Sub-Task 3
Magnetic tape writing status is to be changed from "off" to "on" or "on" to "off"	Sub-Task 4
Channel status is to be changed from "off-line" to "on-line" or "on-line" to "off-line".	Sub-task 5
Channel Type is to be modified (channel deleted, then reentered.)	Sub-Task 6

4. POSITION PROCEDURES (Continued)

Sub-Task 2. Modify DCU ID, Schedule Numbers, TUR, or Register Assignments (See Exhibit 10A p 50)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:CH:!	CHANNEL DEFINITION MODE CHAN NO = ?A, ?I,or ?D go to Corrective Procedures 1, 2, or 3 respectively.	
2. Channel Number	Ø to 99!	ALREADY DEFINED, MODIFY DCU ID, SCHED TUR OR REG ASS?	
3. Modification designation	DC! = DCU ID SC! = Schedule TU! = TUR (Yes or No) RE! = Register Assignments	DCU ID? (go to step 4) SCHED NO = (go to step 5) TUR? (go to Step 6) SCALED REGS = (go to step 7) if incorrect input, system spaces 1 line, waits for corrected entry	
4. New DCU ID	11 Characters ! CLLI Code	CHANNEL DEFINITION MODE CHAN NO = Go to Step 9	
5. New Schedule Number	Ø! to 15!	CHANNEL DEFINITION MODE CHAN NO = Go to Step 9 *IF* INVALID INPUT re-enter corrected schedule number *IF* INVALID INPUT with correct input go to Corrective Procedure 4.	
6. New TUR status	Y! or N!	CHAN NO = Go to Step 9	20 p. 36
7. New scaled	NNNN-NNNN, NNNN etc.! or "!" if no change	USAGE REGS = *IF* INVALID INPUT re-enter corrected scaled register assignments. *IF* INVALID INPUT with correct input go to corrective procedure 4. *IF* system response is CHAN NO = go to step 9	
8a. New usage register assignments	NNNN-NNNN, NNNN etc.! or ! if no change	PEG REGS = *IF* INVALID INPUT re-enter corrected usage register assignments. *IF* INVALID INPUT with correct input go to corrective procedure 4.	

4. POSITION PROCEDURES (Continued)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
8b. New peg register assign-ments	NNNN-NNNN, NNNN etc.! or ! if no change	DISCRETE INPUTS = *IF* INVALID INPUT re-enter corrected register assignment *IF* INVALID INPUT with correct input go to corrective procedure 4.	
8c. New Dis-crete input assign-ments	NNNN-NNNN, NNNN etc.!	CHAN NO = *IF* INVALID INPUT re-enter corrected discrete register assignments. *IF* INVALID INPUT with correct input go to corrective procedure 4.	
9. If additional channel modifications are to be made go to step 2.			
10. Exit	EX:!	System exits channel definition mode, advance 1 line carriage return	

For addition modification see decision table subtask 1.

Subtask 3. Change status of Calculations (see Exhibit 10B p. 51)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:CH:Channelnumber!	PF, Printout which includes calc. status.	
2. Turn Calcs. "on"	ON:CA:Channelnumber!	OK ?A, ?I, or ?D, go to Corrective Procedures 1, 2, or 3 respectively.	
3. Turn Calcs. "off"	OF:CA:Channelnumber!	OK ?A, ?I or ?D, go to Corrective Procedures 1, 2, or 3 respectively.	

4. POSITION PROCEDURES (Continued)

Subtask 4. Change Status of Magnetic Tape Writing (see Exhibit 10B p. 51)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:CH:Channelnumber!	PF, Printout which includes mag. tape writing status.	
2. Turn Mag. Tape "on"	ON:MT:Channelnumber!	OK ?A, ?I or ?D go to Corrective Procedures 1, 2 or 3 respectively.	
3. Turn Mag. Tape "off"	OF:MT:Channelnumber!	OK ?A, ?I or ?D go to Corrective Procedures 1, 2 or 3 respectively.	

Subtask 5. Change On-Line/Off-Line Status of Channel. (see Exhibit 10B p. 51)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:CH:Channelnumber!	PF, Printout which includes on/off-line status of channel.	
2. Change Status to "on-line"	ON:CH:Channelnumber!	OK ?A, ?I or ?D go to Corrective Procedures 1, 2, or 3 respectively.	
3. Change Status to "off-line"	OF:CH:Channelnumber!	OK ?A, ?I or ?D go to Corrective Procedures 1, 2, or 3 respectively.	

4. POSITION PROCEDURES (Continued)

Subtask 6. Delete a Channel Definition. (See Exhibit 10c, p. 52)

Note: If the TYPE of a defined channel is to be changed, the channel definition must first be deleted. Once this is accomplished, all information for that channel must be re-entered. (See Task 4, Supply Channel Definition.)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	DE:CH:Channelnumber!	IP Completed ?A, ?I or ?D, go to Corrective Procedures 1, 2 or 3 respectively.	

4e. Modify Entity Definitions. (see Exhibits 11A, B pp.53-54)

Subtask 1, Enter Calculation Mode.

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:CA:!	* CALCULATION MODE * System advances 1 line prints * ?A, ?I or ?D, go to Corrective Procedures 1, 2, or 3 respectively.	

2. Determine type of modification desired based on the table below.

IF	GO TO
an entity's name or associated hourly report format name, or associated DA teletype number or an entity's threshold schedules are to be changed	Subtask 2
an entity is to be deleted	Subtask 3
the associated channel number is to be changed	Subtask 3 then Task 2c above

4. POSITION PROCEDURES (Continued)

Subtask 2. Modify entity definition. Name, H. R. Format, D.A. TTY Number, or threshold schedules. (See Exhibit 11A, p. 53)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	CG:EN:entity name!	NAME, HF, TTY # OR THR SCHDS? ?A, ?I or ?D go to Corrective Procedures 1, 2 or 3 respectively. NOT DEFINED go to Corrective Procedure 23.	
2. Change Designation	NA! = Name →	NEW = (go to step 3)	
	HF! = Hourly Report format name →	OLD = XX NEW = (go to step 4)	
	TT! = Teletype number →	OLD = XXXXX NEW = (go to step 5)	
	TS! = Threshold schedule →	GIVE # (go to step 6) if incorrect input, system spaces 1 line, waits for corrected entry	
3. New Name	As many as 12 characters!	Advance 1 line, print *. Go to step 7 INVALID INPUT re-enter corrected value. INVALID INPUT with correct input go to Corrective Procedure 4.	
4. New Hourly Report Format Name	2 characters!	Advance 1 line, print *. Go to step 7 INVALID INPUT re-enter corrected value. INVALID INPUT with correct input, go to Corrective Procedure 4.	
5. New Teletype number	Ø-15	Advance 1 line, print *. Go to step 7 INVALID INPUT re-enter corrected value. INVALID INPUT with correct input go to Corrective Procedure 4.	
6. thresh sched number designator	1-3	OLD = XX, XX, XX, XX, etc. (lists each hour scheduled) NEW =	

4. POSITION PROCEDURES (Continued)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
6a. New Thres-hold Schedule	HH:MM-HH:MM; HH:MM-HH:MM; HH:MM-HH:MM; (To delete one above type DE in its place)	Advance 1 line, print * INVALID INPUT re-enter corrected value. INVALID INPUT with correct input go to Corrective Procedure 4	
7. If additional changes are to be made return to Subtask 1 step 2.			
8. Exit	EX:!	System Exits H.R. format mode, advances 1 line, carriage return	

For additional modifications see decision table Sub-Task 1.

Subtask 3. Entity Deletion. (See Exhibit 11B p. 54)

Note: If the channel number is among those entries in the entity definition to be changed, the entity definition must be deleted. Once this is accomplished, all information for that entity must be re-entered (see Task 2e, Supply Entity Definition).

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	DE:EN:entityname!	system advances 1 line, prints * ?D, re-enter command including entity name. NOT DEFINED, go to Corrective Procedure 23.	
2. If additional modifications are to be made return to subtask 1, step 2.			
3. Exit	EX:!	System exits calculation and Entity Definition Mode, advances 1 line, carriage return.	

4. POSITION PROCEDURES (Continued)

4f. Modify a Calculation Definition (see Exhibit 12 A, B pp.55-56)

Subtask 1. Enter calculation mode.

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:CA:!	System advances 1 line, prints *. ?A, ?I or ?D go to Corrective Procedures 1, 2 or 3 respectively.	

2. Determine type of modification to be made.

IF	GO TO
A calculation's Name or Threshold type and value or Hourly report location number or Threshold schedule number is to be changed	Subtask 2
a calculation is to be deleted	Subtask 3
other changes are to be made to a calculation	Subtask 3 then *Task* 3f above.

4. POSITION PROCEDURES (Continued)

Subtask 2 – Modify calculation's name, threshold type value or schedule, or Hourly Report format location number (see exhibit 12A, p. 55)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	CG:CA:entityname!	MOD NAME, THRESH, HR#, OR SCHED#? ?A, ?I, ?D go to Corrective Procedures 1, 2, or 3 respectively.	
2. Change designation	NA! = Calcname TH! = Threshold type & value HR! = Hourly report format location number TS! = Threshold *schedule number*	CALCNAME = incorrect change designator given, system spaces 1 line, waits for corrected entry.	
3. Existing calculation name	up to 8 characters!	OLD = existing value chose for modification (not printed for NA!) NEW = NOT DEFINED, no calculation by that name is contained in the entity specified	23 p. 36
4. New name	Up to 8 characters!	System advances 1 line, prints *. Go To Step 8 INVALID INPUT re-enter corrected value. INVALID INPUT with correct value go to Corrective Procedure 4	
5. New threshold type and value	XX, YYY/ZZZ! where: xx = new type yyy = non sched value zzz = sched value	System advances 1 line, prints *. Go To step 8 INVALID INPUT reenter corrected value INVALID INPUT with correct value go to Corrective Procedure 4.	16 p. 35

IF YOU HAVE CHOSEN TO MODIFY	GO TO
Calcname	Step 4
Threshold type and value	Step 5
HR format loc. no.	Step 6
Thres. schedule no.	Step 7

4. POSITION PROCEDURES (Continued)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
6. New hourly report format location number	ØØ! to 64!	System advances 1 line, prints *. Go to Step 8 INVALID INPUT reenter corrected value INVALID INPUT with correct value, go to Corrective Procedure 4.	
7. New threshold schedule number	Ø! to 3!	System advance 1 line, prints *. *IF* response is INVALID INPUT reenter corrected value *IF* response is INVALID INPUT with correct value, go to Corrective Procedure 4.	17 p. 35
8. If additional modifications are to be made return to subtask 1, step 2.			
9. Exit	EX:!	System exits mode, advance 1 line carriage return	

Subtask 3. Delete an Existing Calculation (see Exhibit 12B p. 56)

Note: If a change is to be made to the algebraic definition, usage?, or output label of a calculation, the calculation definition must first be deleted. Once this is accomplished the information for that calculation must be re-entered (see Task 3f, Supply Calculation Definition).

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Function	DE:CA:entityname!	CALC NAME = ?A, ?I, ?D, go to Corrective Procedures 1, 2, or 3, respectively.	
2. Existing calculation name.	Up to 8 characters !	OK, System advances 1 line prints *. NOT DEFINED, no calculation by that name is contained in the specified entity.	
3. If additional modifications are to be made return to subtask 1, step 2.			
4. Exit	EX:!	System leaves mode, advances 1 line, carriage returns.	

4. POSITION PROCEDURES (Continued)

Task 5: Verify System Definitions

5a. Verify current system parameters. (See Exhibit 13 p. 57)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:PA:!	PARAMETER DEFINITION MODE SYSTEM PERIOD = XX NEW = ?A, ?I, or ?D go to Corrective Procedures 1, 2, or 3, respectively.	
2. Response	! (no change)	MAG TAPE PERIOD = XX NEW =	
3. Response	! (no change)	LONG TERM START = XX:XX END = YY:YY NEW START =	
4. Response	! (no change)	NEW END =	
5. Response	! (no change)	TUR DETECTOR TEST = XX:XX NEW =	
6. Response	! (no change)	COMPLETED System exits mode, advances 1 line, carriage return.	

5b. Verification of System Schedules (See Exhibit 14 p. 58)

Repeat steps 2-4 for as many schedules as you have to verify.

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:SC:!	SCHEDULE DEFINITION MODE SCHEDULE FOR DAY? ?A, ?I or ?D go to Corrective Procedures 1, 2 or 3 respectively.	
2. Day	MO! TU! WE! TH! FR! SA! SU!	SCHEDULE NUMBER = INVALID INPUT re-enter correct value.	
3. Existing Schedule	Ø! to 15!	CURRENT SCHEDULE XX is MT = Current mag tape schedule HR = current hourly report schedule TUR = current TUR schedule COPY SCHED (DAY # OR IF NEW!)	
4. Command	FI:!	SCHEDULE FOR DAY?	
5. If additional schedules are to be verified return to step 2.			
6. Exit	EX:!	System exits schedule mode, advances 1 line, carriage return.	

4. POSITION PROCEDURES (Continued)

5c. Verification of Hourly Report Formats (see Exhibit 15, p. 63)

Repeat steps 2 and 3 for as many hourly report formats as you have to verify.

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	EM:HR:!	*** HOUR REPORT MODE *** FORMATS – list of format names FORMAT?	
2. Existing format name	2-character format name!	advances 1 line, prints *.	
3. Function	PR:ALL!	prints a copy of the format on the line printer. Then prints FORMAT? system response is ?I, ?A, or ?D go to Corrective Procedures 1, 2, or 3 respectively.	
4. If additional formats are to be verified, return to step 2.			
5. Exit	EX:!	System exits hourly report format mode, advances 1 line, carriage return.	

4. POSITION PROCEDURES (Continued)

5d. Verify Channel Definitions. (See Exhibit 16, p. 60.)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:CH:a! where a=channel to be verified ESS channels must have a C, H, or W appended to the channel number. If no C, H, or W is appended, the system will default to the C schedule. or VE:CH:ALL! for all channels	The following information will be printed on the line printer: 1. Channel 2. DCU ID 3. Collection device type (With the 1C generic, this will be a meaningless response for ESS Channels.) 4. Schedule number 5. TUR status 6. Calculation status 7. Magnetic tape recording status 8. Internal channel number (For ESS Channels, only the last 2 digits of the 3 digit number will be printed.)	If system response is ?I, ?A, or ?D, go to Corrective Procedure 1, 2, or 3 respectively.
2. Exit	EX:!	System exits channel definition mode, advances 1 line, carriage return.	

4. POSITION PROCEDURES (Continued)

5e. Verify Entity Definitions. (see Exhibit 17 p. 61)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:EN:a! (where a = name of entity to be verified) or VE:EN:ALL! (all entities)	System will print the following information about each entity on the line printer: 1. Entity Name 2. Channel Number 3. DA TTY Number 4. Calculation block definition 5. Hourly Report Format *6. Threshold Schedules *7. For each calculation: a. The calculation's name b. Master or slave c. Threshold type, value and schedule d. Hour report format calculation number e. Usage registers f. An algebraic expression of the Calculation definition g. Term labels. ?A, ?I, or ?D go to Corrective Procedure 4.	

*applies to VE:EN:entityname! *not* to VE:EN:ALL!

5f. Verify Calculation Definitions (see Exhibit 18 p. 62)

FIELD ID	FORMAT	SYSTEM RESPONSE	NOTES
1. Command	VE:CA:entityname, calculation name!	System will print requested calculation definition on the line printer. The items included are: 1. *M*ASTER or *S*LAVE 2. Hourly report format number 3. Threshold type 4. Threshold values 5. Algebraic definition expression 6. Term labels ?A, ?I or ?D, go to Corrective Procedures, 2, or 3 respectively.	

4. POSITION PROCEDURES (Continued)

TASK 6: PREPARE A BACKUP EADAS GENERIC TAPE

Note: Performance of this task will cause normal EADAS processing to halt. Processing will automatically resume when the task is completed.

1. Type "EM:SY:!" on CCU teletype.

   System response: CONFIRM

2. Type "EADAS!" on CCU teletype.

   At this point the system will stop normal EADAS processing.

3. Mount a "scratch" tape on the tape drive.

   A "scratch" tape is either a blank tape or one where any data on the tape is no longer needed. Do not use the MO:MT:! command.

4. Verify that the unit Select thumbwheel switch on the tape drive to be used is set to Ø.

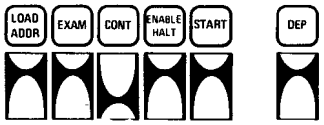
5. Enter octal Ø11111 on the switch register.

   Switch No

   Switch Setting

6. Depress the CONT(inue) key.

   FUNCTION LIGHT

   SWITCH SETTING

   The system will write a copy of SYSBAK, the Generic Program, and a copy of the current System Definitions onto the "scratch" tape.

   **If this task cannot be successfully completed, the system will write a message on the CCU teletype. Go to Corrective Procedure 26, section 6, of this manual, then return to step 7 below.

7. Enter the time and date on the CCU teletype per system request.

   Format:

   Time – TI:HH:MM:SS!

   Date – DA:MM/DD/YY, *first two characters of day, MO = Monday, TU = Tuesday, etc. *Optional

4. POSITION PROCEDURES (Continued)

8. Dismount the newly created EADAS Generic tape and mount a data tape if appropriate.

Do *not* use the DM:MT command.

9. Label the new back-up EADAS generic tape on the outside face of the reel with:

   a) contents
   b) date
   c) time

NOTES

1. The EADAS generic tape contains certain system definitions, e.g., a system period is predefined as 15 minutes.
2. If schedule is to be copy of one which has been defined, enter the day and schedule number of the already defined schedule, e.g., MO 5 !.
3. If the system response to schedule number entered is that the schedule is not defined, you have the options of copying an already defined schedule or entering a "!" for a new schedule.
4. If the TUR schedule equals the hour report schedule plus the magnetic tape schedule, enter "!" only.
5. If you desire to skip a line for better spacing simply type "!" after the line number and the system will automatically advance.
6. If you wish to correct an error *before* finishing a line, back space to the point where the error occurred and write over the error.
7. If you wish to correct an error after finishing a line, go to Corrective Procedure 5.
8. To erase all entries since the IN:ALL command, type KI:!. Additional formats may be added by returning to step 2, otherwise type EX:! to exit the hour report format mode.
9. A time span within a schedule is indicated by a dash, e.g., 9-12. Groupings of time spans are separated by commas, e.g., 9-12, 14-16. Schedules are separated by a semi-colon 9-12, 14-16; 8-11, 13-17.
10. If all characters cannot fit on a single line, the carriage return key may be used to move to the beginning of the next line.
11. A calculation may have a name or a number or both. If it is unnamed, type !.
12. If the results of a calculation do not appear on an hourly report, the calculation will not have a number. Type !.
13. If the term Labels are to be printed on Exception Reports, the ! should be preceded by ";P".
14. Threshold values must have the same number of decimal places as the calculation results.
15. The system will print the current threshold type, the values associated with it, and the threshold schedule number chosen.
16. Both type, and value, must be entered, even if one is to remain the same.
17. If the hourly report number of this calculation is to be deleted (calc. results will no longer appear on hourly report), DE should be typed in place of a number in response to NEW=.
18. If the calculation is a master calculation with slaves, master and slaves must all be deleted. If they are to be re-entered, they must then be re-entered as a unit in the proper sequence (master, slave 1, slave 2, etc.).

19. DCU ID –

    EADAS expects an eleven character code. However, it will accept more than 11 characters from the CCU teletype. In this case, the first eleven characters will be stored and the additional characters dropped. No warning is given.

20. Y! or N! Input

    EADAS considers any character (including blanks) or combination which does not begin with the letter "Y" as equal to "N" or no. If an error is made type "FI:!" and begin the channel definition again.

21. Confirmation of Calculation Definition

    When the system prints back its version of your calculation definition, the only acceptable response is "!". An attempt to add to this response will cause the system to print it's version of the calculation again and wait for a "!" response.

22. Modify Magnetic Tape Writing Interval

    When the magnetic tape writing interval is modified the system will delete all schedules previously defined.

23. CALCNAME=

    If the calculation was defined as an hourly report only calculation (numbered but not named), that number should be used as a response to CALCNAME=.

24. Assignment of Register Functions:

(a) Single registers may be entered in any order and must be separated by commas.

(b) Ranges of registers must be entered with the smallest number first.

(c) Assignment of one register on an ETDC card to any function automatically assigns all 32 registers on the card to the indicated function.

(d) A particular card can be assigned only one function. If the system responds:

INVALID CARD ASSIGNMENT

SCALED REGS=

consult C.P. 24.

25. HH:MM - HH:MM represents Start and Stop times, inclusive. These must be in military time and in chronological order. Periods may abut but not overlap.

26. The system response "DTS=" has no current meaning. "DE:!" should always be entered in response to "DTS=".

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EXHIBIT 1

Sample parameter definition (underscore indicates manual entries)

EM:PA:!
PARAMETER DEFINITION MODE
SYSTEM PERIOD = 15[1] NEW = 30!
MAG TAPE PERIOD = 15[1] NEW = 60!
LONG TERM START = ØØ:ØØ END = ØØ:ØØ[1]
NEW START = Ø9:ØØ!
NEW END = 18:OA! INVALID INPUT
18:00!
TUR DETECTOR TEST = NONE[1] NEW = 23:30!
COMPLETED

[1]The EADAS generic tape comes equipped with certain system definitions in place. System period, and mag tape period equal to 15 minutes are predefined.

EXHIBIT 2

Sample schedule definition (underscore indicates manual entries)

```
EM:SC:!
SCHEDULE DEFINITION MODE
SCHEDULE FOR DAY? MO!
SCHEDULE NUMBER=Ø1!
CURRENT SCHEDULEØ1 IS NOT DEFINED
COPY SCHEDULE (DAY #) !
MT=Ø9:ØØ-18:ØØ, 19:ØØ-22:ØØ!
HR=Ø9:ØØ-11:ØØ!
TU=Ø8:ØØ-23:ØØ!
DTS=!
ICAN=!
LB=!
SCHEDULE FOR DAY? EX:! OK
```

EXHIBIT 3

Sample hourly report format definition (underscore indicates manual entry)

```
EM:HR:!

                *** HOUR REPORT MODE ***

FORMATS:  NONE
4Ø22 BYTES OF STORAGE LEFT

FORMAT? 5T!

*IN:ALL!

Ø1          ***↑E                    HOURLY REPORT***!
Ø2  !
Ø3  DATE:↑E                HOUR ENDING:↑H!
Ø4  !
Ø5  ORIG!
Ø6  REGS          %DTS    OCC    MB          5OFL←←←←%OFL!
Ø7  DP            ↑X.X    ↑.XX   ↑X.X    ↑X.X!
Ø8  TT            ↑X.X    ↑.XX   ↑X.X    ↑X.X!
Ø9  TOT           ↑X.X!
1Ø  !
11                PC      %OFL    %IA!
12  TOT   ORIG    ↑XXXX   ↑X.X    ↑X.X!
13  TOT   INC     ↑XXXX   ↑X.X    ↑X.X!
14  TOT   INTRA   ↑XXXX   ↑X.X.   ↑X.X!
15  ↑N!

*PR:ALL!
*FI:!

FORMAT? EX:! OK
```

teletype input

EXHIBIT 3 (continued)

FORMAT: 5T

```
Ø1          ***↑E                HOURLY REPORT***
Ø2
Ø3        DATE:↑E          HOUR ENDING:↑H
Ø4
Ø5        ORIG
Ø6        REGS             %DTS      OCC      MB       %OFL
Ø7   Ø1   DP               ↑X.X      ↑.XX     ↑X.X     ↑X.X
Ø8   Ø5   TT               ↑X.X      ↑.XX     ↑X.X     ↑X.X
Ø9   Ø9   TOT              ↑X.X
1Ø
11                            PC      %OFL     %IA
12   1Ø   TOT  ORIG         ↑XXXX     ↑X.X     ↑X.X
13   13   TOT  INC          ↑XXXX     ↑X.X     ↑X.X
14   16   TOT  INTRA        ↑XXXX     ↑X.X     ↑X.X
15        ↑N

= 2Ø2 BYTES
```

line printer output

EXHIBIT 4

Sample channel definition (underscore indicates manual input)

```
EM:CH:!
  CHANNEL DEFINITION MODE
CHAN NO=Ø!
DCU ID?
PHLAPAGLSØØ!
SCHED NO=Ø!
CALC'S ON? N!
MAG TAPE ON? N!
CHAN TYPE? ETDC!
TUR? N!
SCALED REGS=32-63!
USAGE REGS=64-95!
PEG REGS=Ø-31!
DISCRETE INPUTS=!
PUT ONLINE? N!

  CHANNEL DEFINITION MODE
CHAN NO=EX:! OK
```

EXHIBIT 5

Sample entity definition (underscore indicates manual entries)

EM:CA:!
CALCULATION MODE

*IN:EN:PHLAPAGLSØØA!
CHANNEL # = ØØ!
DA TTY # = ØØ!
THR SCHDS =
Ø-11, 13-17; Ø-12; 14-18!
HR FORMAT = 5T!

*EX:! OK

EXHIBIT 6

Sample calculation definition (underscores indicate manual entry)

```
EM:CA:!
                *CALCULATION MODE*

*IN:CA:PHLAPAGLSØØA!
CALC NAME = DTSDP!
HR CALC # = O←Ø1!
DEFINITION =
1ØØ*TI<R2>/T2<R3>,2!
?S
DEFINITION =
1ØØ*T!<R2>/T2<R3>,2!
(1ØØ*R2)/R3
!
USAGE? N!
OUTPUT = 5←%,DLY = T1,TST = T2;P!
THRESH (TYPE, VAL, SCHED #) = UB, 1.ØØ,2←←/2.5Ø,2!
CALC NAME = FI:!

*EX:! OK
```

EXHIBIT 7

Sample modification of system parameters (underscore indicates manual entry)

Modify Mag Tape Period from 3Ø to 6Ø

```
EM:PA:!
   PARAMETER DEFINITION MODE
SYSTEM PERIOD = 3Ø        NEW = !
MAG TAPE PERIOD = 3Ø      NEW = 6Ø!
LONG TERM START = Ø9:ØØ       END = 18:ØØ
NEW START = !
NEW END = !
TUR DETECTOR TEST = 23:3Ø      NEW = !
COMPLETED
```

EXHIBIT 8

Sample modification of system schedule (underscore indicates manual entry)

EM:SC:!
SCHEDULE DEFINITION MODE
SCHEDULE FOR DAY? MO!
SCHEDULE NUMBER = Ø1!

CURRENT SCHEDULE Ø1 IS
MT = 9-18, 19-22
HR = 9-11
TUR = 8-23
COPY SCHEDULE (DAY # OR IF NEW!) !
MT = 9-12, 19-22!
HR = !
TU = 9-22!
SCHEDULE FOR DAY? EX:! OK

EXHIBIT 9A

Modify Hourly Report Formats

Sample of Sub-tasks 1 and 2, modify format name (underscore indicates manual input)

EM:HR:!

HOUR REPORT MODE

FORMATS: 5T, 1E, 1B
3Ø2Ø BYTES OF STORAGE LEFT

FORMAT? 5T!

*CG:5B!
*FI:!

FORMAT? LI:!

FORMATS: 5B, 1E, 1B
3Ø2Ø BYTES OF STORAGE LEFT

FORMAT? EX:! OK

EXHIBIT 9B

Modify Hourly Report Formats

Sample of Sub-tasks 1 and 3 delete a line of an existing format (underscore indicates manual input)

```
EM:HR:!

          ***HOUR REPORT MODE***

FORMATS: 5B, 1E, 1B
3ØØ3 BYTES OF STORAGE LEFT

FORMAT? 5B!

*DE:Ø3!
*PR:ALL!
*FI:!

FORMAT? EX:! OK
```

teletype input

```
FORMAT: 5B

Ø1          ***↑E                HOURLY REPORT***
Ø2
Ø3
Ø4        ORIG
Ø5        REGS              %DTS   OCC    MB     %OFL
Ø6  Ø1    DP                ↑X.X   ↑.XX   ↑X.X   ↑X.X
Ø7  Ø5    TT                ↑X.X   ↑.XX   ↑X.X.   ↑X.X
Ø8  Ø9    TOT               ↑X.X
Ø9
1Ø                            PC    %OFL   %IA
11  1Ø    TOT   ORIG        ↑XXXX  ↑X.X   ↑X.X
12  13    TOT   INC         ↑XXXX  ↑X.X   ↑X.X
13  16    TOT   INTRA       ↑XXXX  ↑X.X   ↑X.X
14        END OF REPORT
15        ↑N

= 193 BYTES
```

line printer output

note added lines

EXHIBIT 9C

```
EM:HR!

            ***HOUR REPORT MODE***

FORMATS: 5B, 1E, 1B
3Ø2Ø BYTES OF STORAGE LEFT

FORMAT? 5B!

*IN:15!
15 ENS←D OF REPORT!
*IN:16!
16 ↑N!
*PR:ALL!
*FI:!

FORMAT? EX:! OK
```

teletype input

```
FORMAT: 5B

Ø1          ***↑E                  HOURLY REPORT***
Ø2
Ø3          DATE:↑E              HOUR ENDING:↑H
Ø4
Ø5          ORIG
Ø6          REGS              %DTS   OCC     MB    %OFL
Ø7   Ø1     DP                ↑X.X   ↑.XX    ↑X.X   ↑X.X
Ø8   Ø5     TT                ↑X.X   ↑.XX    ↑X.X   ↑X.X
Ø9   Ø9     TOT               ↑X.X
1Ø
11                                  PC    %OFL   %IA
12   1Ø     TOT   ORIG        ↑XXXX   ↑X.X   ↑X.X
13   13     TOT   INC         ↑XXXX   ↑X.X   ↑X.X
14   16     TOT   INTRA       ↑XXXX   ↑X.X   ↑X.X
15          END OF REPORT
16          ↑N

= 216 BYTES
```

note added lines

line printer output

EXHIBIT 10A

Sample modification of a channel's DUC ID, schedule, TUR status, register assignments (underscore indicates manual entry)

EM:CH:!
  CHANNEL DEFINITION MODE
CHAN NO = Ø1←Ø!
ALREADY DEFINED – MODIFY DCU ID, SCHED, TUR, OR REG ASS?DC!
DCU ID?
PHLAPAGLSØ1!

  CHANNEL DEFINITION MODE
CHAN NO = ØØ!
ALREADY DEFINED – MODIFY DCU ID, SCHED, TUR, OR REG ASS?SC!
SCHED NO = Ø1!

  CHANNEL DEFINITION MODE
CHAN NO = ØØ!
ALREADY DEFINED – MODIFY DCU ID, SCHED, TUR, OR REG ASS?TU!
TUR? Y!

  CHANNEL DEFINITION MODE
CHAN NO = ØØ!
ALREADY DEFINED – MODIFY DCU ID, SCHED, TUR, OR REG ASS?RE!
SCALED REGS = 32-63!
USAGE REGS = 64-95!
PEG REGS = Ø-31!
DISCRETE INPUTS = !

  CHANNEL DEFINITION MODE
CHAN NO = EX:! OK

EXHIBIT 10B

Sample of channel modification (underscore indicates manual entry)

A. Channel status printout:

VE:CH:ØØ!
CH ØØ OFF DCU PHLAPAGLSØ! DEV ETDC SCHD Ø1 TUR OFF CALC OFF MT OFF
DISCRETE REGS NONE
USAGE REGS 64-95
PEG COUNT REGS Ø-31
SCALED REGS 32-63

B. Change status of calculations on a channel

ON:CA:ØØ! (off to on) OK
OF:CA:ØØ! (on to off) OK

C. Change magnetic tape writing status of a channel

ON:MT:ØØ! OK
OF:MT:ØØ! OK

D. Place or remove the channel from "on-line" status

ON:CH:ØØ! OK
OF:CH:ØØ! OK

EXHIBIT 10C

Sample deletion of channel.

DE:CH:Ø9! OK
COMPLETED

EXHIBIT 11A

Sample entity modification (underscore indicates manual entry)

A. Name change:

```
EM:CA:!
          *CALCULATION MODE*

*CG:EN:PHLAPAGLSØØA!
NAME, HF, TTY# OR THRS SCHDS? NA!
NEW = PHLAPAGLSØ1A!
```

B. D.A. tty number change:

```
*CG:EN:PHLAPAGLSØ1A!
NAME, HF, TTY# OR THRS SCHDS? TT!
OLD = ØØØØØ, NEW = Ø1!
```

C. Hourly report format number change:

```
*CG:EN:PHLAPAGLSØ1A!
NAME, HF, TTY# OR THRS SCHDS? HF!
OLD = 5T    ,   NEW = 5B!
```

D. Threshold schedule change:

```
*CG:EN:PHLAPAGLSØ1A!
NAME, HF, TTY# OR THRS SCHDS? TS!
GIVE # 1!
OLD = ØØ,Ø1,Ø2,Ø3,Ø4,Ø5,Ø6,Ø7,Ø8,Ø9, 1Ø,13,14,15,16
NEW =
8-12!

*EX:! OK
```

EXHIBIT 11B

Sample entity deletion (underscore indicates manual entry)

EM:CA:!
CALCULATION MODE

*DE:EN:PHLAPAGLSØ1A!

*EX:! OK

EXHIBIT 12A

Sample calculation modification (underscore indicates a manual entry)

A. Modify calculation name:

EM:CA:!
CALCULATION MODE

*CG:CA:PHLAPAGLSØØA!
MOD NAME, THRESH, HR # OR SCHED #? NA!
CALC NAME = DTSDP!
NEW = DTDDP!

B. Modify threshold type and/or value:

*CG:CA:PHLAPAGLSØØA!
MOD NAME, THRESH, HR # OR SCHED #? TH!
CALC NAME = DTDDP!
OLD = UB, ØØ1.ØØ/ØØ2.5Ø NEW = 1.5Ø/3.ØØ!
?S
OLD = UB, ØØ1.ØØ/ØØ2.5Ø NEW = UB, 1.5Ø/3.ØØ!

C. Modify hourly report format location number:

*CG:CA:PHLAPAGLSØØA!
MOD NAME, THRESH, HR # OR SCHED #? HR!
CALC NAME = DTDDP!
OLD = Ø2,
NEW = Ø3!

D. Modify threshold schedule number:

*CG:CA:PHLAPAGLSØØA!
MOD NAME, THRESH, HR # OR SCHED #? TS!
CALC NAME = DTDDP!
OLD = 2
NEW = 1!

*EX:! OK

EXHIBIT 12B

Sample calculation deletion (underscore indicates manual entry)

EM:CA:!

CALCULATION MODE

*DE:CA:PHLAPAGLSØØA!
CALC NAME = IFFMDP!

*EX:! OK

EXHIBIT 13

Sample system parameter verification (underscore indicates manual entries)

```
EM:PA:!
   PARAMETER DEFINITION MODE
SYSTEM PERIOD = 3Ø    NEW = !
MAG TAPE PERIOD = 3Ø    NEW = !
LONG TERM START = Ø9:ØØ    END = 18:ØØ
NEW START = !
NEW END = !
TUR DETECTOR TEST = 23:3Ø    NEW = !
COMPLETED
```

EXHIBIT 14

Sample schedule verification (underscore indicates manual entries)

EM:SC:!
SCHEDULE DEFINITION MODE
SCHEDULE FOR DAY? MO!
SCHEDULE NUMBER = Ø1!
CURRENT SCHEDULE Ø1 IS
MT = 9-18, 19-22
HR = 9-11
TUR = 8-23
COPY SCHEDULE (DAY # OR IF NEW !) FI:!
SCHEDULE FOR DAY? EX:! OK

EXHIBIT 15

Sample hourly report format verification (underscore indicates manual entries)

```
EM:HR:!

          ***HOUR REPORT MODE***

FORMATS: 5T
382Ø BYTES OF STORAGE LEFT

FORMAT? 5T!

*PR:ALL!
*EX:! OK
```

teletype input

```
FORMAT: 5T

Ø1                ***↑E                HOURLY REPORT***
Ø2
Ø3     DATE:↑E                  HOUR ENDING:↑H
Ø4
Ø5         ORIG
Ø6         REGS              %DTS   OCC    MB    %OFL
Ø7   01    DP                ↑X.X   ↑.XX   ↑X.X  ↑X.X
Ø8   Ø5    TT                ↑X.X   ↑.XX   ↑X.X  ↑X.X
Ø9   Ø9    TOT               ↑X.X
1Ø
11                                PC   %OFL   %IA
12   1Ø    TOT    ORIG        ↑XXXX  ↑X.X   ↑X.X
13   13    TOT    INC         ↑XXXX  ↑X.X   ↑X.X
14   16    TOT    INTRA       ↑XXXX  ↑X.X   ↑X.X
15         ↑N

= 2Ø2 BYTES
```

line printer output

EXHIBIT 16

Sample channel verification (underscore indicates manual entries)

A. Single channel

VE:CH:ØØ!
CH ØØ OFF DCU PHLAPAGLSØØ DEV ETDC SCHD ØØ TUR NONE CALC OFF MT OFFØ
DISCRETE REGS NONE
USAGE REGS 64-95
PEG COUNT REGS Ø-31
SCALED REGS 32-63

B. "ALL" channels

VE:CH:ALL! OK

CH ØØ OFF DCU PHLAPAGLSØØ DEV ETDC SCHD ØØ TUR NONE CALC OFF MT OFFØ

teletype input

line printer output

EXHIBIT 17

Sample entity verification (underscore indicates manual entries)

A. Using VE:EN: entityname:

```
VE:EN:PHLAPAGLSØØA!  <-- teletype

PHLAPAGLSØØA CHAN#ØØØØØTTY#ØØØØØBLK#ØØØØ2HR FORMAT=5T


THRESH SCHEDS=

1) ØØ,Ø1,Ø2,Ø3,Ø4,Ø5,Ø6,Ø7,Ø8,Ø9,1Ø,13,14,15,16
2) ØØ,Ø1,Ø2,Ø3,Ø4,Ø5,Ø6,Ø7,Ø8,Ø9,1Ø,11
3) 14,15,16,17
DTSDP,M UB,ØØ1.ØØ/ØØ2.5Ø,2HR#Ø1
(100*R2)/R3
TERM LABELS:DLY,TST


IFFMDP,M UB,ØØØ55 /ØØØ66 ,1
R45
TERM LABELS:

HRØ3M NP,ØØØØ /ØØØØØ ,1HR#Ø3
R47+R48
TERM LABELS:
```

} line printer

B. Using VE:EN:ALL!:

```
VE:EN:ALL!  <-- teletype

PHLAPAGLSØØA CHAN#ØØØØØTTY#ØØØØØBLK#ØØØØ2HR FORMAT=5T
```

line printer <--

EXHIBIT 18

Sample calculation verification (underscore indicates manual entries)

VE:CA:PHLAPAGLSØØA, DTSDP! PF
M, 2, UB, THRESH 1 = ØØ1.ØØ THRESH 2 = ØØ2.5Ø
(1.ØØ*Rs)/R3
TERM LABELS: DLY,TST

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33. Change line printer ribbon..... 89

5. CORRECTIVE PROCEDURES

CORRECTIVE PROCEDURE #1

System response – ?I, command ignored

?A indicates that an error was made in entering the first part of the command.

1. The first two letters did not form a valid command (e.g., EN:PA:! vs. EM:PA:!)
2. The delimeter (:) between the first and second parts of the command was missing (e.g., EMPA:! vs. EM:PA:!)

Corrective action

Re-enter the command correctly.

CORRECTIVE PROCEDURE #2

System response – ?I, command ignored

?I indicates one of the following errors:

1. The second two letters of the command were an invalid combination (e.g., EM:PI:! vs. EM:PA:!)
2. The second two letters of the command were valid of themselves, but invalid in combination with the first two letters (e.g., EM:EN:!, EN may be used only with IN:,CG:, or DE:).
3. The delimeter (:) between the second and third parts of the command was missing (e.g., EM:PA! vs. EM:PA:!).

Corrective action

Re-enter the command correctly.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #3

System Response – ?D, command ignored

?D indicates an error in the third section of the command as follows:

1. One or more of the fields following the second delimeter has been specified incorrectly (e.g., ON:CH: 1Ø1! is invalid, channel numbers range from Ø-99).
2. If several fields follow the second delimeter, a comma or slash between fields is missing (e.g., DA:Ø1Ø1/74! vs. DA:Ø1/Ø1/74!).

Corrective Action

Re-enter the command correctly.

CORRECTIVE PROCEDURE #4

System Response – any negative response to apparently valid input.

Corrective Action

1. Gather all available information about the state of the system at the time the problem occurred. This should include:
   A. The status (on-line/off-line) of all devices.
   B. Any system messages occurring within the system period when the problem occurred and actions taken to correct them.
   C. Any related or contemporaneous printouts (CCU teletype and line printer).
2. Inform the EADAS administrator of the situation and associated information.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #5

System Response – none

An error (e.g., spelling) has been discovered in a line of text after "!" has been given for that line.

Corrective Action

The error cannot be corrected at this point.

1. Complete the format noting any errors of this type.
2. After the format has been completed perform the procedures detailed in modify HR format Task of this practice to correct the problem. (Task 4c)

CORRECTIVE PROCEDURE #7

System Response – NO INTERFACE AT XXXXXX

A required piece of EADAS hardware is missing for the channel number entered.

Corrective Procedure

1. Double check the channel number used. If it was typed incorrectly, retype the correct channel number.
2. If the channel number was typed correctly, notify the EADAS administrator of the situation.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #9

System Response – ALREADY ON FILE

The entity name, as typed, already exists.

Corrective Procedure

1. If the entity name has been entered incorrectly re-enter the entire command with the corrected entity name.
2. If the command was given correctly, go to corrective procedure #4.

System Response – STORAGE CAP EXCEEDED

The area allotted for storage of entity names is full.

Corrective Procedure

Notify the EADAS administrator of the situation.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #10

System Response – ?S

The two-character hourly report format name does not correspond to any format name defined under EM:HR:Report Format Verification Command "LI:!".

Corrective Procedure

1. Insure that the name was entered correctly. If it was typed incorrectly, re-enter the corrected value.
2. If the name was typed correctly:
   A. Verify the available hourly report names (see Task 4c,Subtask 2, above).
   B. Notify the EADAS administrator if the name does not appear on the list of valid hourly report format names.
   C. If the name appears on the list, go to corrective procedure #4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #11

System Response – ALREADY ON FILE

An attempt has been made to define a calculation which has already been defined.

Corrective Procedure

1. Check the name of the calculation which was typed. If it is incorrect, re-enter the corrected name.
2. If the name has been typed correctly, use the calculation verification procedures to locate the previous calculation with the same name.
3. Notify the EADAS administrator of the situation.
4. If the verification procedures do not show a calculation with the same name, go to corrective procedure #4.

System Response – NO MASTER CALC

The calculation was designated as a slave, but it did not follow a master in the order of entry.

Corrective Action

1. Insure that the group of calculations being entered is in the correct order. If not, delete all calculations from this set of master and slaves, and re-enter them correctly.
2. If the calculations appear to have been entered correctly, go to corrective procedure #4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #12

System Response – ?S

Either a number outside the valid range of Ø-64 has been entered for HRCALC#= or the values for both CALCNAME = and HRCALC#= have been left blank.

Corrective Procedure

1. If the calculation number has been specified incorrectly, or incorrectly left out, re-enter the corrected calculation number.
2. If the calculation number has been specified correctly or if the calculation number was not specified but the name was, go to corrective procedure #4.

CORRECTIVE PROCEDURE #13

System Response – ?S Calculation Definition Ignored

?S means that an error has been caused by one of the following conditions:

1. The number of left and right parens or term designators are not equal (every "(" must have a ")"; every "<" a ">").
2. An invalid sequence of characters has been input
   - characters valid after "(", "<", "+", "-", "*", and "/" are "R" "T", "S", "<", "(" or numeric digits (e.g., (R101 + R102) is not).
   - characters valid after ")" and ">" are ")", ">" (term within a term), "+", "-", "*", "/", carriage return, or comma.
   - characters valid after a number are ")", "<", ",", ">", "+", "-", "*", "/", carriage return, or comma.
   - after a comma only a single digit (values 0-2) is allowed to specify the number of decimal places to be printed.

Corrective Action

1. Analyze the calculation definition character by character using the rules above.
2. Re-enter the corrected definition.
3. If the definition appears to be correct, reenter the definition. If ?S is printed again, go to Corrective Procedure 4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #14

System Response – ?D calculation definition ignored

?D means that a data error has occurred. This is caused by one of the following conditions:

1. More than five terms (T1, T2, etc.) have been specified in a single definition.
2. One or more of the register numbers used in the definition is invalid or exceeded 1Ø23.
3. The result or any term of the calculation was specified as having more than two decimal places.
4. If the definition does not contain a division, the number of decimal places for the result must equal Ø.
5. If two divisions appear in a definition, the number of decimal places in the result must = Ø.
6. The definition contains a reference to a channel which has not been defined.
7. The definition is in illegal format.

Corrective Action

1. Re-enter the corrected definition.
2. If the definition appears to be correct go to corrective procedure #4.

CORRECTIVE PROCEDURE #15

System response – ?0 calculation definition ignored.

?0 means that an overflow condition has occurred. This is caused by one of the following conditions:

1. A constant greater than 32,767 has been included in the definition.
2. The calculation will not fit into its allotted storage area. The calculation must be broken up.

Corrective action

1. Break up any large constants if this appears to be the problem (e.g., 37,000 will cause ?0 370 * 100 will not).
2. Notify the EADAS Administrator of the situation.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #16

System response – ?S term mnemonics ignored

This error is caused by one of the following conditions:

1. The calculation result label exceeds four characters.
2. One or more term result labels contain more than three characters.
3. A term was specified outside the range of T1 to T5.
4. A term was given a mnemonic which was not used in the calculation definition.

Corrective Action

1. Re-enter the corrected term mnemonics.
2. If the mnemonics seem correct, go to Corrective Procedure #4.

System Response – KEYWORD TABLE FULL, Term mnemonics ignored

EADAS maintains a table of mnemonic values used throughout the system. The total number of entries in this table may not exceed 255. This message indicates that this attempt to add term mnemonics exceeded the system's capacity.

Corrective Action

1. If you wish to define this calculation without mnemonics type "!" and continue with the definition.
2. FInish this calculation and EXit from the calculation mode. Use the utility command "OP:KW:!" to obtain a list of the mnemonics currently in use.
3. Notify the person responsible for writing the calculation of the situation and forward a copy of the attempted entry and the keyword table.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #17

System response – ?S– Threshold type, value, and schedule number are ignored

?S means that an error has been caused by one of the following conditions:

1. An invalid threshold type was given (valid values: LU, UB, LB, AP, NP).
2. A comma or a "/" are missing or improperly positioned.
3. The schedule number specified is not in the valid range of 1 to 3.
4. The values are missing or have been specified incorrectly (e.g., too many decimal places).

Corrective action

1. Retype the corrected type, value and schedule.
2. If the entry has been typed correctly, go to corrective procedure #4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #18

System Response – CURRENT SCHEDULE XX NOT DEFINED COPY SCHED (DAY # OR ! IF NEW)

This message indicates that the schedule day and number on which you wish to make modifications has not been defined.

Corrective Procedures

1. If the day and schedule number has been entered incorrectly, type "FI:!" than enter the corrected values.
2. If the day and schedule number has been typed correctly, type "FI:!" then notify the EADAS Administrator of the situation.

CORRECTIVE PROCEDURE #19

System Response – $$$ NAME TABLE FULL

This response indicates that the maximum sixteen hourly report formats have already been entered into the system.

Corrective Procedure

1. Count the number of hour report format names which appear after the system prints FORMATS:. If there are 16 names listed, notify the EADAS administrator of that fact and provide him with a list of the 16 format names currently in the system.
2. If there are not 16 names in the list, try the procedure again. If it still doesn't work, go to corrective procedure #4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #20

System Response – $$$ NO SPACE LEFT FOR DEFINITION

EADAS allots a total of 4022 characters for all 16 hour report formats. If these characters are used up for less than 16 formats, no additional formats may be entered.

Corrective Procedure

Notify the EADAS administrator that all available space for storage of hourly report formats has been used up. Provide copies of all hourly report formats if requested. (See procedures for verification of system definitions.)

CORRECTIVE PROCEDURE #21

System Response – $$$ LINE EXCEEDS STORAGE SPACE

EADAS allots 4022 characters of storage for all 16 hourly report formats. If the entry of an additional line of print exceeds this storage capacity the above message will appear and the line will be ignored.

Corrective Action

1. Notify the EADAS administrator of the situation.
2. Provide copies of all formats if requested.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #22

System Response – $$$ DISK ERROR or $$$ SYSTEM ERROR

A combination of circumstances has occurred which forced EADAS to terminate processing the requested format.

Corrective Procedure

1. Try to re-enter the format from the beginning.
2. Go to corrective procedure #4.

CORRECTIVE PROCEDURE #23

System Response – NOT DEFINED–command ignored (Note: system still in EM:CA mode)

The entity name specified is not among those previously defined.

Corrective Action

1. If the entity name has been specified incorrectly, re-enter the command using the corrected entity name.
2. If the entity name has been specified correctly, notify the EADAS Administrator of the situation.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #24

System Response – INVALID CARD ASSIGNMENT SCALED REGS =

This error is a result of an invalid combination of registers assigned as SCALED, USAGE, PEG and/or DISCRETE, as follows.

1. Second register of span less than first, e.g., USAGE REGS = Ø-31, 96-64!.
2. Same register assigned in two places, e.g., USAGE REGS = Ø-31, 32-63! PEG REGS = 32-63, 64-95!
3. Registers not assigned in groups of 32, e.g., PEG REGS = 45-63, 64-95!
4. Discretes assigned with numbers (temporary restriction until Phase II, EADAS NM installation), e.g., INVALID DISCRETE INPUTS = 988-1023! valid DISCRETE INPUTS = ! (none)

Corrective Procedure

Return to Step 9 and re-enter corrected register assignments.

CORRECTIVE PROCEDURE #25

System Response – Other than USAGE? to confirmation of a calculation definition.

The system expects "!" alone as confirmation.

Corrective Procedure

Type "!"

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE #26

1. Read TTY Error Message and take corrective action as defined in the Statement Table below:

If teletype error message is:	Go to:
1. TAPE UNIT NOT READY	Corrective Procedure 26A
2. INVALID CODE	Corrective Procedure 26B
3. WRITE PROTECT ON	Corrective Procedure 26C
4. ERROR-HIT CONTINUE TO RESTART	Corrective Procedure 26D

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 26A

Correct "Tape Unit Not Ready" Message

1. Ensure that tape has been properly mounted.

2. Verify that Unit Select thumbwheel switch is set to Ø.

3. Press the CONT(inue) key to restart SYSBAK.

**If SYSBAK fails again notify the EADAS administrator of the problem and the corrective actions taken.

CORRECTIVE PROCEDURE 26B

Correct "Invalid Code" Message

1. Verify that switch register setting is octal Ø11111.

2. Press CONT(inue) key to restart SYSBAK.

**If SYSBAK fails again notify the EADAS administrator of the problem and the corrective actions taken.

CORRECTIVE PROCEDURE 26C

Correct "Write Protect On" Message

1. Open the front door of the fixed head disc unit.

2. Verify that all 16 switches on the lower right panel are in the right-hand positions.

3. Press CONT(inue) to restart SYSBAK.

**If SYSBAK fails again, notify the EADAS administrator of the problem and also of corrective actions taken.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 26D

Correct "Error-Hit Continue To Restart" Message

Press the CONT(inue) key to restart SYSBAK.	**If SYSBAK fails again, notify the EADAS administrator of the problem and also of corrective actions taken.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 27

Correct TTY Faulty indicator condition

1. Turn TTY switch from LOCAL to OFF.

2. Verify that TTY is plugged into AC outlet.

**If not, notify the person responsible for maintenance.

3. Verify that circuit breakers have been tripped (switch off).

4. Reset the circuit breakers to ON position.

**If you have previously reset the circuit breaker, and they have been tripped again, notify the person responsible for maintenance.

5. Return to Task 1A, Step 1.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 28

Replace Paper Supply in TTY

1. Turn TTY switch to OFF.
2. Raise top lid by pressing buttons on either side of lid.
3. Open the paper box holder and remove the old paper box.
4. Insert new box of paper.

   Note: The first fold should be facing toward the TTY.
5. Feed the paper through the paper feed slot in the upper back of the TTY.

   Note: The side of the paper to be typed on will be facing down at this point. If using carbons, make sure that they are facing in the right direction.
6. Catch any convenient sprocket hole with the paper hook in order to keep paper from sliding back into box.
7. Replace the lid (lower form accumulator) on the paper box holder.
8. Feed the paper from the rear paper feed slot as far forward as it will go.

   Make sure that it is positioned underneath the low paper and no paper sensors and is aligned as far to the left as possible.
9. Release the paper hook.
10. Move the lever marked PUSH back to release the paper guides.
11. Feed the paper underneath the platen by turning the platen hand wheel.
12. Ensure that the sprocket holes in the paper fit into the sprocket pins on the platen and that the paper is straight.
13. Feed 3-4 inches of paper under the paper guides and push the guides in to lock.

    The handle marked PUSH will pop forward.

5. CORRECTIVE PROCEDURES (Continued)

14. Close the grey part of the cover, holding in the side button.

15. Feed the paper between the grey upper cover and the clear plastic dome.

Return to Task 1A, Step 4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 29

Change Type Unit Ribbon

1. Turn TTY switch to OFF.
2. Raise top lid by pressing buttons on either side of lid.
3. Remove both ribbon spools by lifting spool locks and release the ribbon from the guides.
4. Unwind and remove ribbon from one spool.
5. Hook the end of the new ribbon to the hub of the empty spool and wind until the reversing eyelit in the ribbon is wound on the spool.
6. Replace the spools on the spool shafts.

   Ensure that the ribbon feeds from outside of the spools.
7. Thread the ribbon forward around the rollers, through the slots in the ribbon reverse levers and guides.
8. Take up the slack by turning the free spool.
9. Push spool locks against the spools.
10. Lower the cover, making sure that the paper feeds between the grey upper cover and the clear plastic dome.

Return to Task 1A, Step. 4.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 30

Clean Print Hammer Assembly

1. Turn TTY switch to OFF.	
2. Raise top lid by pressing buttons on either side of lid.	
3. Release the curved clip on the right side of the print hammer assembly by pulling it to the right.	Clip will slip out of place.
4. Remove print hammer assembly.	Raise gently and pull it to the right. Note: The left side of the assembly has a slightly curved notch which fits over a pin. Note the position of the pin.
5. Clean print hammers.	Use typewriter cleaning fluid.
6. Replace the assembly.	Fit left notch onto pin. Press assembly down and to the left.
7. Replace the curved clip.	Press curved section to lift.
8. Verify that ribbon is in front of print hammers.	

Return to Task 2, Step 5.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 31

Correct Faulty Indicators on Line Printer

1. Check the AC plug and main circuit breakers.

2. Plug in AC and/or reset circuit breakers as appropriate.

**If procedure fails notify person responsible for maintenance. Then repeat corrective procedure 31.
**If it fails again, go to step 3.
**If procedure is successful return to Task 1B, step 2.

3. Depress main AC switches to OFF.

4. Turn the line printer off through EADAS (Command, OF:LP:!)

When problem is resolved, return to Task 1B, step 2.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 32

Load Paper in Line Printer

1. Open drum gate latch and swing gate open.

   Drum gate light will come on.

2. Hit TOP OF FORM button while holding the master clear switch up.

   Note: During this procedure, various lights will be activated. If a light fails to come on or go off as scheduled, repeat step. Press the "master clear" switch. If the condition persists, note it down but keep going. If the printer fails to operate upon completion of the procedure, notify the appropriate person.

3. Push main AC down to OFF position.

4. Release the clips (tractors) which hold the paper over the sprocket pins.

5. Place new paper smoothly between tractor pins.

   Make sure paper depresses the paper fault sensor.

   **If paper doesn't lay smoothly adjust the right tractor by loosening the set screw, repositioning the tractor and tightening the screw.

   Do not attempt to adjust the left tractor.

6. Align the paper so that a page perforation is positioned opposite the red pointer on the left paper boundary.

7. Close the tractors.

8. Close the drum gate and lock with gear-shift levers.

9. Open front door panel

   **If the READY light does not come on, follow the actions described in the table below:

5. CORRECTIVE PROCEDURES (Continued)

TABLE A

1.	Ready Light On	No	No	No
2.	Drum gate Light On	Yes		
3.	Paper Fault Light On		Yes	
4.	Print Inhibit Light On			Yes
1.	Relatch drum gate	X		
2.	Test sensor by pushing it in		X	
3.	Check for proper paper loading		X	
4.	Put Print Inhibit switch off			X
5.	Push "master clear" switch			X

**If all above procedures fail, notify the person responsible for maintenance.

10. Lift main AC switches to ON.

**If the paper jams frequently, follow the procedures to take the printer off-line: CP 31, steps 3 and 4.

11. Verify that the power light and fans have come on.

**If the READY light comes on: Return to Task 1B, step 5.

**If the READY light does not come on notify the EADAS Administrator

12. Position printing between lines by adjusting the vertical paper adjustment knob, as appropriate.

5. CORRECTIVE PROCEDURES (Continued)

CORRECTIVE PROCEDURE 33

Change the Line Printer Ribbon

1. Open the drum gate latch.	Gearshift knob on left side under front door panel.
2. Swing drum gate open.	DRUM GATE light will come on.
3. Turn AC power to printer OFF.	
4. Unlatch drum gate faceplate.	
5. Replace old red rollers with new rollers from kit.	Wear gloves contained in ribbon replacement kit and roll up sleeves.
6. Relatch the drum gate faceplate.	
7. Close the drum gate and latch it.	Use gearshift type knob.
	Return to Task 1B, step 2.

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