

CENTRAL OFFICE ADMINISTRATION  
CENTRAL OFFICE FORECAST AND JOB CONTROL

1. GENERAL

- 1.01 This Section is reissued to adopt the use of Form E-5845, Plant Work Schedule Recurring Work Items, in lieu of Form SW-6487, Preventive Maintenance Schedule - Work Sheet. Revisions of Form SW-6498, Central Office Foreman's Report and Form SW-6486, Central Office Forecast have also been included in this Section.
- 1.02 This Section describes procedures which the central office supervisors shall use to control the central office job. This Section supplements the AT&T Company Standard Bell System Practice relating to controlled maintenance plans for various central office switching systems and furnishes forms to aid in the administration of central offices.
- 1.03 The second level supervisor is required to forecast the central office job hours for each of his central offices or to distribute equitably, on the basis of need, the hours available to him. In order to forecast and allocate central office job hours, the second level supervisor must carefully estimate the work load and the hours required for each of his central offices.
- 1.04 Forecasting of central office job hours requires estimates of the total upkeep hours ("R" Account), rearrangement and change hours ("M" Account), estimate and routine order work hours ("C" and "X" Accounts), training hour requirements, undistributed hour requirements, and other expenditure of hours required of the central office forces. Forecasts provide a plan of action for the future and form the basis for management decisions leading to an efficient and economical plant job.
- 1.05 The Upkeep Job Hours for forecasting purposes are defined as those corrective maintenance and preventive maintenance hours required to comply with the controlled maintenance plan concept of central office maintenance.
- 1.06 Preventive Maintenance Hours are those hours expended in the activities of finding, repairing and recording central office troubles found by tests and inspections applied in accordance with equipment test lists for the equipment system and other indications of need which result in program selective maintenance restoration work.
- 1.07 Corrective Maintenance Hours consist of the activity of logging reports, locating, repairing, and recording details of troubles reported by trouble recorders, indicators, customers, operators, testboards, alarms, other offices and other sources. (All hours chargeable to upkeep accounts - except preventive hours.)
- 1.08 Rearrangements and Changes Job Hours for forecasting purposes must include an estimate of work to be generated by all activities such as service orders and trunk orders, cable and traffic transfers, central office estimate and routine orders, and other measured or unmeasured rearrangement and change hours.
- 1.09 "C" and "X" Job Hours for forecasting purposes are defined as those hours chargeable to central office equipment estimates or routine orders involving addition or removal of equipment. Plant hours chargeable to central office equipment "C" and "X" accounts are defined in the Accounting Handbook Telephone Plant (V27.301, V27.301.2)

and are authorized in accordance with procedures of Joint Practice 46. BSP 010-300-901SW, 010-300-903SW, and 010-300-904SW cover some plant responsibilities relating to central office equipment jobs.

1.10 Training Hours for forecasting purposes are those hours relating to formal classroom training as defined in the Accounting Handbook Telephone Plant (V27.112). On-the-job training hours (by foreman) are included as upkeep job hours.

1.11 Undistributed Hours for forecasting purposes are described in Plant Administration Practice V26.008.

1.12 Other Maintenance Hours for forecasting purposes are defined as those hours, authorized for central office employees, which are not included as part of measured predominate central office equipment upkeep accounts. Examples are: cable repair, building repair, accounts of other departments, etc.

1.13 Cost Objectives - The setting of cost objectives should be an integral part of the central office forecast. Objectives should be realistic, attainable, reflect the effects of technological improvement, the effect of planned improvement in the level of force competency, and the effects of programs for reducing equipment trouble rates. V61.100 and associated addendums cover the "Plant Cost Results Plan". V61.100 (Parts 100 to 105) discusses some factors which may influence setting of productivity objectives for the central office.

## 2. FORM E-5845, PLANT WORK SCHEDULE - RECURRING WORK ITEMS

2.01 Form E-5845 (Exhibit 1) shall be used to list and schedule recurring maintenance work as specified by the Equipment Test Lists. Form E-5845 will aid in arriving at

a realistic preventive work load balance throughout the year, considering other office and manpower factors.

2.02 A prerequisite to the use of Form E-5845 is a current and complete Equipment Test List file and an estimate of hours per job assignment as shown on Test and Inspection Summary Forms E-5453, E-5454 and E-5455.

2.03 Other preventive work hours such as program selective maintenance restoration items should be included on Form E-5845. These selective maintenance restoration items will normally utilize the test and inspection summary (multiple assignment) Form E-5455.

2.04 Other office and manpower factors to be considered in arriving at a reasonable and realistic preventive schedule shall include:

- (a) Schedule of equipment additions.
- (b) Schedule of formal training.
- (c) Schedule of vacation periods.
- (d) Need for performance of selected preventive jobs to correct adverse performance trends.
- (e) Skill of available manpower.

## 3. FORM SW-6498 - CENTRAL OFFICE FOREMAN'S REPORT

3.01 Form SW-6498, Central Office Foreman's Report, Exhibit 2, shall be used as an information and control record from the central office supervisor to the second level supervisor. Items under "service" are accumulated and entered on the basis of service results "report period". Items under "cost" are accumulated and entered on the basis of "calendar month".

3.02 Form SW-6498 provides for reporting office details which the second level supervisor will require for his central office forecast - Form SW-6486, Central Office Forecast. This practice intends that items under "cost" be gathered from Form SW-6817, Plant Daily Work Report, by the second level supervisor's clerical force. (By the central office - if central office clerical force is available). The central office supervisor shall maintain a file of completed SW-6498's covering the months of the previous year and months of the current year.

Preparation of Form SW-6498

3.03 "T" Tickets - Enter estimated and actual number of "T" Tickets (all report classifications described by the Controlled Maintenance Plan) which have been issued during the report period. Form E-5463, Trouble Summary, as provided by switching entities in the Controlled Maintenance Plan is a suggested source for the actual count.

3.04 "Memo" Tickets - Enter estimated and actual number of "Memo" Tickets which have been issued during the report period. Form E-5463 may also be used for actual count.

3.05 Frame Codes - Enter estimated and actual number of customer reports received during the report period which have been coded to Disposition Code 51-XX. The control record "special studies" column is suggested for those offices where the controlled maintenance plan control record form does not specifically cover Frame Codes.

3.06 Work Errors - Enter estimated and actual number of "T" tickets which have been "cause coded" to work error (as described by the Controlled Maintenance Plan) during the report period. The control record "special studies" column is suggested for accumulation of count and for aid in control of work errors.

3.07 Intercept Errors - Enter estimated and actual number of intercept errors which have been referred to the central office, for correction, during the report period. These reports should be handled on "T" tickets (normally "B" or "J" report classification). The control record "special studies" column is suggested for accumulation of count and for aid in control of intercept errors.

3.08 Work Evaluations - Enter scheduled and actual work evaluations conducted during the report period. Plant Administration Practice, V63.102 covers concept and recording of work evaluations.

3.09 Western Electric Company Caused Troubles - Enter actual number of troubles or reports which relate to activity of the Western Electric installation forces during the report period. Refer to Section 201-112-001 and related Bell System practices "Prevention of Service Interruptions". The control record is suggested for accumulation of count and for aid in control of Western Electric Company caused troubles.

3.10 Other Service Items which require control efforts may be added to Form SW-6498 as directed by the second level supervisor.

3.11 "T" Ticket Hours - Enter total number of hours expended on "T" tickets. The actual hours is the sum of hours shown as "work time" on "T" tickets during the calendar month or report period. (Report period if "T" Tickets Per Hour" is used as a measure of productivity.)

3.12 "Memo" Ticket Hours - Enter the total number of hours expended on "Memo" tickets. The actual hours will be the total number of hours shown as "work time" on "Memo" tickets during the calendar month or report period.

- 3.13 Selective Maintenance Programable Hours - Enter the total number of hours expended on Selective Maintenance projects. This would include pressure cleaning of equipment, mass contact replacement programs and etc.
- 3.14 Total Upkeep (R) Hours - C.O. Accounts - Enter the total number of "R" hours expended for central office equipment maintenance during the calendar month. (Central office accounts - "R" as defined by Section V27.301.1)
- 3.15 Preventive Hours - Performed - Enter the total number of preventive maintenance hours expended during the calendar month. (The sum of all hours shown on test and inspection summary Forms E-5453, E-5454, E-5455 for the calendar month under report).
- 3.16 Corrective Maintenance Hours - Obtain hours by subtracting "Preventive Hours - Performed" from "Total Upkeep "R" Hours - C.O. Accounts".
- 3.17 Total "M" Hours - Enter the total number of "M" hours (include all "M" accounts) expended during the calendar month.
- 3.18 Estimate "M" Unmeasured Hours - Enter the total number of "M" hours charged to equipment estimates during the calendar month which will be charged by Accounting to the Unmeasured Accounts.
- 3.19 KCO "M" Unmeasured Hours - Enter the total number of "M" hours charged to the Keep Cost Order number during the calendar month which will be charged by Accounting to the Unmeasured Accounts.
- 3.20 Total "M" Measured Hours - Obtain these hours by subtracting the sum of the unmeasured "M" hours (Estimate "M" Hours and KCO "M" Hours) from the total "M" hours. These "M" hours generally relate to

the distributing frame service order jobs and may be used as a reasonable measure of frame cost per main telephone growth.

- 3.21 Total Other Maintenance Hours - Enter the total hours expended for testing, cable maintenance, and other account coded hours which are not specifically covered by preceding paragraphs 3.12 and 3.15. The hours should include cable equipment maintenance, building and building equipment, testing accounts, and authorized accounts of other departments or other Plant work groups. (Total "Other Maintenance Hours" should be the sum of hours covered by paragraphs 3.20, 3.21, and 3.22 below and may be obtained by this summation).

- 3.22 Testing Accounts - Enter the total number of 603-XX and 69 coded hours expended during the calendar month.

- 3.23 Cable Maintenance Accounts - Enter the total number of cable repair account hours expended during the calendar month.

- 3.24 All Other Accounts - Enter the total number of other maintenance account hours (building, building equipment, etc.) and hours chargeable to other department accounts during the calendar month.

- 3.25 Total "C", and "X" Account Hours - Enter the total number of hours expended on "C" and "X" accounts, authorized by estimates or routine orders, during the calendar month.

- 3.26 Total Training (-99) Hours - Enter the total number of hours expended during the calendar month on training which was charged to -99 account.

- 3.27 Total Undistributed Hours - Enter the total number of undistributed hours (V26.008) charged during the calendar month.
- 3.28 Total Hours Expended - Enter the sum of hours covered by the preceding paragraphs. This total should agree with the total of all hours shown on work reports (SW-6817) for the calendar month charged to this work location (Area number).
- 3.29 Overtime Hours - Enter the total number of overtime hours charged during the calendar month.
- 3.30 Per Overtime - Enter the total percent overtime by dividing the total hours expended by the total overtime hours worked for the calendar month or the report period.
- 3.31 Frame "M" Hours By Switchman - Enter the total number of "M" hours charged by switchman on the Form SW-6817 for the calendar month or report period.
- 3.32 Preventive Maintenance Hours - Deferred  
Enter the total number of hours which have been scheduled for the calendar month for jobs which have not been performed plus previous month(s) (of the calendar year) of deferred hours for jobs which were not performed. Form E-5845, or Test and Inspection summary forms may be used as aids to accumulate scheduled but not complete preventive maintenance hours deferred. In order to accomplish the "objective of the controlled maintenance plan, supervisory consideration of preventive deferred hours is extremely important. The preventive deferred hours shall be reviewed on a continuing monthly basis.
- 3.33 Hours Scheduled Current Month - Enter the total preventive maintenance hours scheduled for the current calendar month from Form E-5845.
- 3.34 Hours Deferred Current Month - Enter the total number of hours for jobs which were scheduled but not completed during the calendar month under report (See NOTE 1)
- 3.35 Hours Deferred Current Year - Enter the total number of hours for jobs which were scheduled for the current month but not completed, plus previous months deferred hours which were not completed. (See NOTE 2)
- 3.36 Hours To Be Current - Enter the total number of hours required to complete all scheduled routines that have been deferred for the current year.
- 3.37 Total Hours Scheduled Current Year - Enter the total number of hours, from Form E-5845, of preventive jobs scheduled for the current year.
- NOTE 1: For the purpose of this plan the term "Hours Deferred Current Month" is the estimated hours for all routines scheduled, monthly, quarterly, semi-annually and etc., which have not been completed during the current month.
- NOTE 2: The term "Hours Deferred Current Year", is the cumulative estimated hours for all routines scheduled and not completed for the year up to the current time.
- 3.38 Remarks - The remarks space on Form SW-6498 should be used to record planning notes by the central office first or second level supervisors.
4. FORM SW-6486 - CENTRAL OFFICE FORECAST
- 4.01 Form SW-6486, (Exhibit 3), will be used by the second level supervisor to aid in the forecast of work loads and costs for each of his central offices. The use of this form will allow projection of the type

and volume of the work load, manhour requirements under various categories, and total manhour requirements. The second level supervisor may use data on Form SW-6486 to exercise control and to build historical forecasting data.

Preparation of Form SW-6486

- 4.02 Line 1. "T" Tickets - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.03 Line 2. "Memo" Tickets - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.04 Line 3. Frame Codes - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.05 Line 4. Work Errors - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.06 Line 5. Intercept Errors - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.07 Line 6. W.E. CO. Caused Troubles - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.08 Line 7. Work Evaluations - Estimate on the basis of need for quality control - see V63.102. Post actual from SW-6498.
- 4.09 Line 8. Total Upkeep (R) Hours C.O. Accounts - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.10 Line 9. Preventive Maintenance Hours - Estimate on the basis of preventive work schedule (E-5845) furnished by the first line supervisor, for preventive maintenance hours scheduled by the months. Post actual

from SW-6498.

- 4.11 Line 10. Corrective Maintenance Hours - Estimate by Line 8 minus Line 9. Post actual from SW-6498 or by subtracting Line 9 from Line 8.
- 4.12 Line 11. "T" Ticket Hours - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.13 Line 12. Total "M" Hours - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.14 Line 13. Estimate "M" Hours (Unmeasured) - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.15 Line 14. K.C.O. "M" Hours (Unmeasured) - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.16 Line 15. Total "M" Measured Hours - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.17 Line 16. Total Other Maintenance Hours - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.18 Line 17. Testing Hours (603-XX, 69) - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.19 Line 18. Cable Maintenance Hours - Estimate on the basis of trend data and scheduled preventive hours per E-5845 furnished by the first line supervisor. Post actual from SW-6498.
- 4.20 Line 19. Other Accounts - Estimate on the basis of trend data. Post actual from SW-6498.

- 4.21 Line 20. Total "C" and "X" Hours - Estimate from SW-9315, "Schedule by Location" (Joint Practice 80), or secure estimate from Estimate Request Form SN-4C, Accounts Chargeable", (or equivalent form) per Joint Practice 46. Post actual from SW-6498.
- 4.22 Line 21. Total Training Hours (99-) - Estimate from E-5491, "Training Record". Post actual from SW-6498.
- 4.23 Line 22. Total Undistributed Hours - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.24 Line 23. Total Hours Expended - Estimate on the basis of trend data. Post actual from SW-6498.
- 4.25 Line 24. Hours Per Man Month - Estimate and post actual by calculating from calendar, by months, on the basis of an 8 hour day, 40 hour work week.
- 4.26 Line 25. Size of Force - Estimate of force required by dividing Line 23 by Line 24. Post actual from current actual number of employees on force.
- 4.27 Line 26. Hours Available - Estimate and post actual from Line 24 times Line 25.
- 4.28 Line 27. Overtime Hours - Estimate on the basis of Line 23 minus Line 26 plus Line 30 (considering efficiency of job scheduling and nature of deferred work). Post actual from SW-6498.
- 4.29 Line 28. Percent Overtime - Calculate and post actual.
- 4.30 Line 29. Hours Scheduled Current Month - Post actual from SW-6498.

- 4.31 Line 30. Hours Deferred Current Month - Post actual from SW-6498.
- 4.32 Line 31. Hours Deferred Current Year - Post actual from SW-6498.
- 4.33 Line 32. Hours Required to Become Current on Preventive Maintenance Work - Post actual from SW-6498.
- 4.34 Line 33. Total Hours Scheduled Current Year - Enter the total number of estimated hours to complete the current year's routine schedule. This information should be the same as the total hour figure on Form E-5845.

#### 5. REQUIREMENT FOR REPORTING

- 5.01 Form SW-6487 should be used for preparing Form E-5845 by all central office foremen. Form E-5845 shall be used in lieu of the SW-6487.
- 5.02 Form SW-6498 and Form SW-6486 shall be used by all central office second level supervisors (Equipment Chief) and such other second level supervisors as may be designated by the District Plant Manager.

#### 6. ORDERING INFORMATION

- 6.01 Forms are packaged as shown below. Forms should be ordered in multiples of the quantities shown. Requisitions should be worded as follows:

(Quantity) Form (Number)

<u>Form No.</u>	<u>Forms Per Package</u>
E-5845	25
SW-6486	25
SW-6498	25





EXHIBIT 2



CENTRAL OFFICE  
FOREMAN'S REPORT

Form SW-6498  
(Rev. 4-76)

FOREMAN \_\_\_\_\_ OFFICE \_\_\_\_\_ PERIOD \_\_\_\_\_

SERVICE	EST.	ACT.	COST	HOURS
"T" Tickets			"T" Ticket Hours	
"Memo" Tickets			"Memo" Ticket Hours	
Frame Codes			Selective Maintenance (Program) Hours	
Work Errors - Tele. Co.			Total Upkeep (R) C.O. Hours	
Intercept Errors			Preventive Maintenance Hours	
Work Evaluations			Corrective Maintenance Hours	
Number With Defects			Total "M" Hours	
Total Employees			Est. "M" (Unmeasured) Hours	
Employees Evaluated			KCO "M" (Unmeasured) Hours	
W.E. Co. Caused Troubles	X		Total "M" (Measured) Hours	
			Total Other Maintenance Hours	
			Testing Accounts	
			Cable Maintenance Accounts	
			Total "C" & "X" Account Hours	
			Total Training (-99) Hours	
			Total Undistributed Hours	
			Total Hours Expended	
			Overtime Hours	
			% Overtime	
			Frame "M" Hours (By Switchmen)	
			Preventive Maintenance Hours Deferred	X
			Hours Scheduled (Current Month)	
			Hours Deferred (Current Month)	
			Hours Deferred (Current Year)	
			Hours Required to be Current	
			Total Hours Scheduled (Current Year)	

EXPLANATION OF DEFERRED HOURS:

REMARKS:

CENTRAL OFFICE FORECAST

LINE	PREVIOUS YEAR		JAN		FEB		MAR		APR		MAY		JUNE		JULY		AUG		SEPT		OCT		NOV		DEC			
	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.	EST.	ACT.		
	SERVICE:																											
1	"T" TICKETS																											
2	"MEMO" TICKETS																											
3	FRAME CODES																											
4	WORK ERRORS																											
5	INTERCEPT ERRORS																											
6	W.E. CO. CAUSED TROUBLES																											
7	WORK EVALUATIONS																											
	COST:																											
8	TOTAL UPKEEP (R HOURS C.O. ACCT'S)																											
9	PREVENTIVE MTCE. HOURS																											
10	CORRECTIVE MTCE. HOURS																											
11	"T" TICKET HOURS																											
12	TOTAL "M" HOURS																											
13	ESTIMATE "M" HOURS (UNMEASURED)																											
14	KCO "M" HOURS (UNMEASURED)																											
15	TOTAL "M" MEASURED HOURS																											
16	TOTAL OTHER MTCE. HOURS																											
17	TESTING HOURS (603 & 69)																											
18	CABLE MTCE. HOURS																											
19	OTHER ACCOUNTS																											
20	TOTAL "C" + "K" HOURS																											
21	TOTAL TRAINING HOURS (99)																											
22	TOTAL UNDISTRIBUTED HOURS																											
23	TOTAL HOURS EXPENDED																											
24	HOURS PER MAN MONTH																											
25	SIZE OF FORCE																											
26	HOURS AVAILABLE																											
27	OVERTIME HOURS																											
28	% OVERTIME																											
29	HOURS SCHEDULED (CURRENT MONTH)																											
30	HOURS DEFERRED (CURRENT MONTH)																											
31	HOURS DEFERRED (CURRENT YEAR)																											
32	HOURS REQUIRED TO BE CURRENT																											
33	TOTAL HOURS SCHEDULED (CURRENT YEAR)																											
34																												
35																												
36																												

EXHIBIT 3