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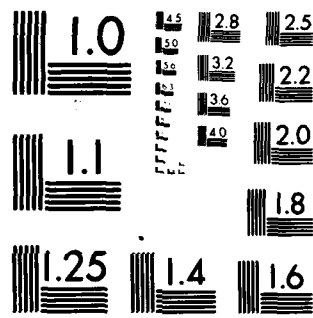
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OPERATIONS RESEARCH REPORT

14-ORR-79

COMPARATIVE COSTS OF BASE ADMINISTRATIVE TELEPHONE SERVICE PROVIDED BY COMMERCIAL AND GOVERNMENT TELEPHONE PLANTS

NOVEMBER 1979

PREPARED BY:

**STUDIES & ANALYSIS
HQ AIR FORCE COMMUNICATIONS
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ABSTRACT

Comparative Cost of Base Administrative Telephone Service

Provided by Commercial and Government Telephone Plants

Purpose of the study was to evaluate the comparative cost of AF base administrative telephone service provided by government and commercial telephone plants. Fiscal year 1979 costs were surveyed and compared for 10 commercial and 10 government telephone plants. Cost data was normalized by using annual cost per main station. Study revealed that for existing commercial and government plants, there was no statistical difference in the annual Operations and Maintenance cost per main station. When indirect and overhead costs are allocated to the telephone plants then the annual cost per main station for a government plant is significantly higher than like cost for commercial plants.

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1. PURPOSE. The purpose of this study was to evaluate the comparative costs of base administrative telephone service provided by government and commercial telephone plants.

2. BACKGROUND. AFCC is undertaking telephone modernization programs for government and commercial telephone plants. As a part of this modernization effort, various economic analyses and cost studies have been undertaken to compare the relative merit of alternatives for providing improved telephone service to a base. In no study, however, has there been a one-to-one comparison of government and commercial telephone plants to determine the relative costs of providing this service to the Air Force.

3. METHODOLOGY. The basic study methodology was planned from the start to be a survey of the costs involved as opposed to a rigorous cost analysis. The intent was to use the data available on short notice from existing data systems, to develop the key cost parameters, and to attempt to draw meaningful conclusions about the relative difference in costs for telephone service provided by commercial or government plants. Twenty bases were selected for the sample (10 commercial plants and 10 government plants), and costs were collected, where possible, from the FY-79 cost experience.

4. DATA. This section describes the various data elements and data sources used in the survey.

a. SAMPLE. Figure 1 shows the bases which formed the sample. The sample was not random because it was planned from the beginning to match, as closely as possible, the size and features of the telephone systems for the commercial and government bases. This sample, therefore, excludes the many small bases which are commercial plants and most of the large bases which have government owned and maintained telephone plants. The figures in the parentheses in Figure 1 depict the demographic data which describes plant size, main stations, switchboard positions and AUTOVON trunks. For purposes of this survey, plant size is defined as the number of separate telephone numbers a system is capable of handling with the installed equipment. Main stations are defined as the number of telephone numbers actually in use, the number of switchboard positions represent the number actually installed at a base and not necessarily those which are in use, and the number of AUTOVON trunks depict trunks in use without regard for type (incoming, outgoing, precedence, etc.). The sources for this demographic data were HQ AFCC/EPPB and DONV.

BASES IN SAMPLE

COMMERCIAL

GOVERNMENT

PEASE (1400/1087/24/5)
 MINOT (1600/1345/26/3)
 DOVER (1800/1114/29/3)
 SHAW (1800/1294/46/6)
 BERGSTROM (1800/1500/62/5)
 HOMESTEAD (2000/1622/33/6)
 McGUIRE (2600/1994/44/5)
 TRAVIS (2600/2364/46/4)
 HANSCOM (3600/2308/59/5)
 ROBINS (4500/4088/105/7)

BROOKS (1600/1143/29/6)
 MATHER (1700/1322/28/5)
 GEORGE (1800/1250/29/4)
 TYNDALL (1800/1473/27/7)
 CHANUTE (2000/1496/29/5)
 LACKLAND (2200/1851/37/4)
 KEESLER (2900/2399/46/6)
 GRIFFISS (4200/2544/54/8)
 LOWRY (3600/2796/94/6)
 SCOTT (3900/3266/167/14)

PLANT SIZE

SWITCHBOARD POSITION

MAIN STATIONS

AUTOVON TRUNKS

b. TOTAL COSTS. The survey was targeted at describing the total cost of providing telephone service to a base. The three major costs involved in the total cost picture are described below. The initial effort of the study was to collect annual base level O&M costs, determine from this data if meaningful conclusions could be drawn from the data, and to use the data as a gauge on whether or not additional collection of costs in the other categories would be required to draw meaningful and correct conclusions.

(1) ANNUAL BASE LEVEL O&M COSTS. The annual base level O&M costs consist of costs budgeted and funded by AFCC and by the host activity. AFCC costs consist primarily of military and civilian personnel costs and some ownership costs for vehicles assigned to the local AFCC unit. The host activity budgets and funds for tolls, rentals, parts, and support equipment (tools and test equipment).

BASE LEVEL O&M COSTS

<u>COST</u>	<u>SOURCE</u>	<u>COMMENT</u>
- ADMIN SWITCHBOARD OPERATORS	FY 4/79 UMD	\$12000 PER SLOT AVERAGE
- BILLING & LEASE COMM	FY 4/79 UMD	\$15000 PER SLOT AVERAGE
- WIRE CHIEF FUNCTION	FY 4/79 UMD	\$18000 PER SLOT AVERAGE
- INSIDE PLANT MAINT		
- OUTSIDE PLANT MAINT	FY 4/79 UMD	GRADES AS SHOWN IN CSC COST STUDIES
- CABLE MAINT		
- ALLOCATED UNIT OVERHEAD	15% OF O&M SLOTS	\$15000 PER SLOT AVERAGE
- TELEPHONE RENTALS/LEASE	MAJCOM/DC/ACB	EEIC-492 FY 79 TARGETS
- TOLLS/TRUNK CHARGE	MAJCOM/DC/ACB	EEIC-495 FY 79 TARGETS
- WIRE & OTHER CHARGES	MAJCOM/DC/ACB	EEIC-494, 496, 497 TARGETS
- VEHICLES	AUTH/ASSET LISTING	BASED ON-HAND TELEPHONE TRUCKS
- PARTS, CABLE UPGRADE, SUPPORT EQUIP, ETC.	CSC COST STUDY	HIGHLY VARIABLE

FIGURE 2

Figure 2 shows the annual base level O&M costs by category and source. Comments are also provided on the special considerations given to each cost category. For example, the unit manpower document identifies only the category of authorizations (officer, enlisted, civilian). The cost figures shown in the comment column on the chart were calculated by taking the total personnel costs of the entire function for government bases as surveyed by the Computer Science Corporation (CSC) and dividing that total personnel cost figure by the total authorizations. When specific CSC data was available (e.g., at government bases) this data was considered superior and was used in the survey. The allocation of unit overhead was based on the fact that certain functions are authorized manpower based on the population of the subfunctions. The overhead figure of 15 percent was extracted from the Introspective Look at AFCS - Phase II (Operations and Maintenance Exhibit). Expenses for Element of Expense Investment Code (EEIC) 49X costs were collected from the various MAJCOM Communications and Budget Staff Offices. The costs included in EEIC 49X contained some expenses for non-telephone services because of the way some of the MAJCOMs record expenses in EEIC 49X. The amount of these expenses is considered small in comparison to overall 49X costs. In most cases, reports were not yet available showing the funds actually expended in FY79, and the expense targets as of August 1979 were, therefore, used. Consequently, there will probably be differences between the targeted expenses and the actual expenses incurred for the bases in question, but the error introduced is considered small. Vehicle costs represent only those vehicles authorized specifically because the unit has telephone plant maintenance responsibility. Some general purpose vehicle costs were not collectible because such vehicles were authorized on the basis of unit population and are shared by multiple work centers. Costs for such miscellaneous items as spare parts, cable upgrades, support equipment, electricity, etc., were extracted from the CSC cost studies of the bases with government-owned telephone plants. The accuracy of this data was highly variable and depended largely on the availability of the data to the units involved in the survey.

(2) ANNUAL ENGINEERING, INSTALLATION AND MOBILE DEPOT MAINTENANCE (MDM) COSTS. Government telephone plants consume engineering, installation and MDM man-hours while commercial telephone plants primarily consume only engineering man-hours in the category of technical assistance (primarily for Statement of Requirement (SOR) development). A data retrieval against the Engineering, Installation and Man-Hour System (EIMS) data base was obtained for FY79 to determine the man-hours spent at each base in the sample for E&I and MDM work. The retrieval was run against commodity class codes A, B, D, and E (inside and outside plant) against the B facility codes 011, 012, 013, 015, 017 (government plants), and codes 021, 022, 023, 025, and 027 (for commercial plants). Figure 3 shows the results of that retrieval. The installation and maintenance man-hours recorded at Robins AFB were excluded from the studies since they represent man-hours expended by the E&I activity in the Telephone Central Repair Activity (CRA). Robins is a commercial plant and the CRA performs a depot level maintenance function for government telephone plants.

1

(3) INDIRECT COSTS. The following indirect costs were considered relevant to the study.

(a) Acquisition, Training and PCS of Military. Cost figures for the acquisition and training of military personnel were obtained from the Air Training Command Costs Analysis Directorate and represent the costs for recruiting, basic military training, PCS to the three-level school site, and costs of pay and training while in the three-level course. PCS costs were extracted from AFP 173-13. For the commercial bases operators and billing clerks were considered in this category and for the government bases the operators, billing clerks and maintenance personnel were considered.

(b) Allocation of Equipment Capital. The government equipment costs are considered Sunk Costs because the equipment has been installed for some time, and the capital is not retrievable, while the cost for the capital for commercial plants is essentially buried in the tariff structures and reflected in the lease rates and rentals in EEIC 492. No effort was attempted to specifically allocate equipment costs in this survey.

(c) Wholesale Logistic Support Costs. Commercial bases incur no wholesale logistic support costs while government plants incur significant amounts. The amount, however, could not be estimated because there were no figures immediately available on the cost of this support. AFLC uses in some of their logistic support cost studies a recurring item support cost of \$166.25 per year per nationally stock numbered item, but for purposes of the study the time and effort involved in collecting this data was not considered worth the added information it would provide. Therefore, wholesale logistic support costs, which would be significant, were not collected in this survey.

(d) Base Operating Support. Base operating support was calculated at 16.3 percent of the O&M manpower costs. The source of the BOS rate was HQ AFCS/ACI.

(e) Intermediate and MAJCOM Staffs. While it is difficult to accurately describe the staff level manpower resources devoted to telephone plants, the following procedure was used to allocate these costs. At commercial bases 75 percent of the contracting staff at North and South Comm Areas were considered as dedicated to telephone plants. For each commercial base the prorated share of the contracting manpower staff was calculated on the basis of the percent of all the total Air Force commercial main stations in use at each base in the survey. For the government maintained plants, all 362XX manpower on the CONUS area staffs were counted and allocated to the government plants. The allocation was based on the percent of all CONUS government main stations used by the base in question.

c. NORMALIZED COSTS. In order to compare the costs of telephone plants of different size, the study normalized the costs using the following procedure. The plant size, main stations, AUTOVON trunks, and switchboard positions were postulated as the cost drivers in the base level O&M cost equation. These variables were then statistically tested by way of a multiple regression analysis to verify the

correlation between these variables and the base level incurred annual O&M costs. Exhibit I contains the results of this analysis. There was a very high correlation between the above-mentioned variables and the annual O&M costs ($r^2 > .92$), while main stations alone demonstrated an $r^2 > .9$. Mainstations were, therefore, selected as a normalized variable for costs and were also used when appropriate to allocate some of the indirect costs to the telephone plants.

5. RESULTS. The results of the data collection effort for annual O&M costs are shown in Figure 4. To test the statistical difference between the mean base level annual O&M costs for government plants (mean equals \$485 per main station per year), and the mean for commercial plants (\$507 per main station per year), a two sample T-test was used. See Figure 5 for the summarized results. The test results revealed that there was no statistical difference between the annual base level O&M costs per main station per government and commercial plants. See Exhibit II for details on the T-tests. Since the annual O&M cost revealed no significant difference, it was necessary to develop a more complete cost picture to see if the conclusion would change. Engineering/installation and MDM, acquisition/training and PCS, base operating support and intermediate MAJCOM level staff costs were, therefore, allocated to each telephone plant. The cost detail is shown in Figure 6, and the summarized results are in Figure 7.

BASE	UNIT	PLANT SIZE	LINES IN USE	AUTOVON TRUNKS	SWOB POSN	ADMIN OPRS	TELEPHONE BILLING & LEASE COMM	VEH	WIRE CHIEF	IN PLANT	OUT PLANT	CABLE REPAIR	DIST OVID	RENT 492	TOLLS 495	OTH WIRER LEASE	EQUIP & PARTS	ANNUAL TOTAL
PEASE BOOKS	1916CS Det 3 1923	1400 1600	1087 1143	24 29	5/5 6/3	156 ⁽⁷⁾ 78 ⁽⁷⁾	30 ⁽²⁾ 0	0 3	0 18 ⁽¹⁾	0 66 ⁽⁴⁾	0 ⁽⁵⁾ 83 ⁽⁵⁾	0 ⁽¹⁾ 16 ⁽¹⁾	30 ⁽²⁾ 45 ⁽²⁾	181 98	29 12	70 0	0 63	496 482
WELCH WATNER	2150CS 2034CS	1600 1700	1345 1322	26 28	3/3 5/3	132 ⁽¹¹⁾ 122 ⁽¹¹⁾	30 ⁽²⁾ 15	0 5	0 36 ⁽²⁾	0 99 ⁽⁶⁾	0 ⁽¹⁰⁾ 167 ⁽¹⁰⁾	0 ⁽²⁾ 35 ⁽²⁾	30 ⁽²⁾ 75 ⁽²⁾	259 36	33 67	33 10	0 95	517 762
DOVER GEORGE	2016CS 2067CS	1800 1000	1114 1250	29 29	3/3 4/4	180 ⁽¹⁵⁾ 85 ⁽⁶⁾	30 ⁽¹⁾ 15	0 9	0 36 ⁽²⁾	0 98 ⁽⁶⁾	0 ⁽⁹⁾ 142 ⁽⁹⁾	0 ⁽²⁾ 35 ⁽²⁾	45 ⁽³⁾ 60 ⁽⁴⁾	359 24	37 16	24 33	0 126	675 679
SUN TYNALL	2020CS 2021CS	1800 1800	1294 1473	46 27	6/4 7/7	156 ⁽¹³⁾ 141 ⁽¹²⁾	30 ⁽²⁾ 0	0 5	0 36 ⁽²⁾	0 98 ⁽⁶⁾	0 ⁽⁷⁾ 125 ⁽⁷⁾	0 ⁽⁵⁾ 81 ⁽⁵⁾	30 ⁽²⁾ 75 ⁽²⁾	412 15	46 8	137 10	0 198	811 792
WEDSTROM CHARITE	1882CS 1963CS	1800 2000	1500 1496	62 29	5/5 5/5	180 ⁽¹⁵⁾ 135 ⁽¹²⁾	30 ⁽²⁾ 15 ⁽¹⁾	0 4	0 18 ⁽¹⁾	0 99 ⁽⁶⁾	0 ⁽⁶⁾ 97 ⁽⁶⁾	0 ⁽²⁾ 32 ⁽²⁾	45 ⁽³⁾ 60 ⁽⁴⁾	460 30	55 27	37 6	0 97	807 620
HUNSTEAD LACKLAND	1942CS Det 2 1923	2000 2200	1622 1851	33 37	6/5 4/4	156 ⁽¹³⁾ 138 ⁽¹³⁾	52 ⁽³⁾ 15 ⁽¹⁾	0 1	0 18 ⁽¹⁾	0 114 ⁽⁷⁾	0 ⁽⁸⁾ 131 ⁽⁸⁾	0 ⁽³⁾ 49 ⁽³⁾	30 ⁽²⁾ 75 ⁽²⁾	517 74	20 8	65 1	0 180	810 803
MEGUIRE KEESLER	1998CS 2052CS	2600 2900	1994 2399	44 46	5/5 6/5	204 ⁽¹⁷⁾ 185 ⁽¹⁷⁾	60 ⁽⁴⁾ 15 ⁽¹⁾	0 3	0 36 ⁽²⁾	0 169 ⁽¹⁰⁾	0 ⁽⁹⁾ 143 ⁽⁹⁾	0 ⁽³⁾ 52 ⁽³⁾	45 ⁽³⁾ 90 ⁽⁴⁾	436 107	106 17	111 5	0 221	962 1013
TRAVIS GRIFFISS	1901CS 485CIG	2600 4200	2364 2544	46 54	4/4 8/8	204 ⁽¹⁷⁾ 180 ⁽¹⁵⁾	45 ⁽³⁾ 15 ⁽¹⁾	0 9	0 36 ⁽²⁾	0 161 ⁽¹³⁾	0 ⁽¹⁰⁾ 236 ⁽¹⁰⁾	0 58 ⁽³⁾	45 ⁽³⁾ 120 ⁽⁶⁾	518 57	40 24	100 14	0 227	952 1137
HASCOM LOHRY	2014CS 1987CS	3600 3600	2308 2796	59 94	5/5 6/6	180 ⁽¹⁵⁾ 195 ⁽¹⁶⁾	30 ⁽²⁾ 15 ⁽¹⁾	0 6	0 36 ⁽²⁾	0 203 ⁽¹²⁾	0 ⁽¹²⁾ 375 ⁽¹²⁾	0 ⁽⁴⁾ 110 ⁽⁴⁾	45 ⁽³⁾ 135 ⁽⁶⁾	870 132	110 104	55 0	0 104	1200 1415
ROBINS SCOTT	1926CIG 1974CG	4500 3900	4088 3266	105 167	7/7 14	264 ⁽²²⁾ 339 ⁽³¹⁾	90 ⁽⁶⁾ 15 ⁽¹⁾	0 9	0 54 ⁽⁷⁾	0 257 ⁽¹⁴⁾	0 ⁽²⁷⁾ 456 ⁽²⁷⁾	0 ⁽³⁾ 52 ⁽³⁾	60 ⁽⁴⁾ 180 ⁽¹²⁾	1193 169	257 118	150 12	0 72	2014 1717

O&N DATA*

*Numbers shown in brackets
represent authorized manpower.

Figure 4

ANNUAL O&M COST

<u>COMMERCIAL</u>		<u>GOVERNMENT</u>		<u>ANNUAL O&M COST PER MAIN STATION</u>		<u>ANNUAL O&M COST PER MAIN STATION</u>	
BASE	MAIN STATION	ANNUAL COST (000)	MAIN STATION	ANNUAL COST (000)	BASE	MAIN STATION	ANNUAL COST (000)
PEASE	1087	496	BROOKS	1143	482	422	
MINOT	1345	517	MATHER	1322	762	576	
DOVER	1114	675	GEORGE	1250	679	543	
SHAW	1294	811	TYNDALL	1473	792	538	
BERGSTROM	1500	807	CHANUTE	1496	620	414	
HOMESTEAD	1622	840	LACKLAND	1851	804	434	
McGUIRE	1994	962	KEESLER	2399	1043	435	
TRAVIS	2364	952	GRIFFISS	2544	1137	447	
HANSCOM	2308	1290	LOWRY	2796	1415	506	
ROBINS	4088	2014	SCOTT	3266	1733	531	

AVERAGE ANNUAL O&M COST PER

MAIN STATION PER YEAR

507

AVERAGE ANNUAL O&M COST PER

MAIN STATION PER YEAR

485

FIGURE 5

BASE	INDIRECT COSTS										EI & MDM COSTS									
	TOTAL		ACQ MIL	PCS COSTS	BOS COSTS	% MAIN STN	MAJCOM & AREA OH	INDIR TOTAL	ENGR COSTS (22.27)	MDM COSTS (15.13)	INSTALLER COSTS (15.13)	EI OH (3.75)	EI & MDM TOTAL	ADJ	TOTAL COSTS					
	AUTH	MIL																		
PEASE	17	12	15.0	21.0	35	.0131	8	79.0	3	0	0	0	3	0	578					
BROOKS	21	8	12.0	16.0	50	.0122	3	81.0	11	0	72	20	103	- 21	645					
MINOT	15	12	15.0	6.0	31	.0162	9	61.0	6	0	0	1	7	0	585					
WATNER	37	15	23.0	8.0	89	.0141	4	124.0	25	25	139	45	234	- 5	1115					
DOVER	20	1	1.3	.5	42	.0134	8	52.0	2	0	0	0	2	0	729					
GEORGE	32	17	26.0	9.0	77	.0133	3	115.0	27	1	52	17	97	- 40	851					
SHAW	17	1	1.3	.5	35	.0156	9	46.0	5	0	0	1	6	0	863					
TYRALL	37	16	25.0	8.0	91	.0157	4	128.0	37	119	620	189	965	- 79	1606					
BERGSTROM	20	1	1.3	.5	42	.0181	10	45.0	5	0	0	1	6	0	858					
CHAUDE	32	11	17.0	5.0	74	.0159	4	100.0	9	0	1	2	12	- 6	726					
HOMESTEAD	18	2	2.5	2.5	39	.0195	11	55.0	8	0	0	1	9	0	904					
LACLAND	38	11	17.0	5.0	88	.0197	5	115.0	32	0	340	89	461	-106	1274					
AGUIRE	24	2	2.5	2.5	50	.0240	14	69.0	4	0	0	1	6	0	1037					
KESLER	48	13	20.0	6.0	112	.0255	6	144.0	35	9	162	48	254	-117	1324					
TRAVIS	23	2	2.5	2.5	48	.0285	15	68.0	2	0	0	0	2	0	1022					
GRIFFISS	50	10	15.0	5.0	131	.0271	7	158.0	29	46	86	37	198	-209	1284					
HANCOM	20	2	2.5	2.9	42	.0278	16	63.4	6	0	0	1	7	0	1360					
LEARY	67	38	58.0	19.0	174	.0297	7	258.0	144	37	152	71	404	- 30	2047					
ROBINS	32	2	2.5	2.5	67	.0440	25	97.0	12	0	0	2	14	0	2125					
SCOTT	91	35	54.0	18.0	220	.0347	9	301.0	3	62	70	33	168	+ 2	2204					

INDIRECT, EI & MDM COSTS

Figure 6

TOTAL ANNUAL COST

<u>COMMERCIAL</u>				<u>GOVERNMENT</u>			
BASE	MAIN STATION	ANNUAL COST (000)	TOTAL COST PER MAIN STATION	BASE	MAIN STATION	ANNUAL COST (000)	TOTAL COST PER MAIN STATION
PEASE	1087	496	532	BROOKS	1143	482	564
MINOT	1345	517	435	MATHER	1322	762	843
DOVER	1114	675	654	GEORGE	1250	679	681
SHAW	1294	811	667	TYNDALL	1473	792	1226
BERGSTROM	1500	807	572	CHANUTE	1496	620	485
HOMESTEAD	1622	840	557	LACKLAND	1851	804	688
MCGUIRE	1994	962	520	KEESLER	2399	1043	552
TRAVIS	2364	952	432	GRIFFISS	2544	1137	505
HANSCOM	2308	1290	589	LOWRY	2796	1415	732
ROBINS	4088	2014	520	SCOTT	3266	1733	675

AVERAGE ANNUAL COST PER

MAIN STATION PER YEAR

548

AVERAGE ANNUAL COST PER

MAIN STATION PER YEAR

695

FIGURE 7

Again, a two sample T-test was conducted to test the statistical difference in the means of the total cost per main station for government and commercial plants. Test results show that there was a significant statistical difference between the government costs and the commercial costs. The total annual cost per main station for a government plant (\$695 per main station per year) was significantly higher (at the 3% significance level) than the total annual costs per main station for a commercial plant (\$548 per main station per year). See Exhibit III for the test results.

6. CONCLUSIONS. For the electro-mechanical telephone plants currently installed at Air Force bases, there is no statistical difference in the annual base level incurred O&M cost per main station. However, when all costs are allocated to the telephone plants (base level O&M, Engineering, Installation and MDM, and indirect costs) the cost per main station for government plants is significantly higher. The reason for this difference is that base level O&M costs for commercial plants represent a fairly complete description of the total cost picture (significantly more costs can be allocated to the government plant than the commercial plant under a full cost approach). It is also important to point out that with the new telephone systems currently available from the commercial market place, there is significant possibility for savings in annual O&M costs. In fact, this is the principle justification for the Scope Dial program, and the O&M savings alone allow the program to offer a return on investment of three to six years, depending on the base. While the costs to the commercial telephone companies for providing telephone service is decreasing (as companies install new equipment and thus reduce their O&M cost), it is not necessarily reflected in reduced tariff rates, and it is uncertain exactly how much change there will be in the future for the annual O&M costs for commercial telephone plants in so much as these costs are driven by the tariff rates which are controlled by the various regulatory commissions. In fact, commercial O&M costs could even increase if telephone service with additional features (all at added costs) is acquired at those bases serviced by commercial telephone plants.

7. RECOMMENDATIONS. Recommend the development of a base level administrative telephone model which will serve two predominant functions. First, it will serve as a productivity measure which allows management and staff to determine how well a telephone plant is being managed and to determine what is the cost of telephone service to the base. This will be particularly useful in determining if the Scope Dial program does, in fact, result in reduced O&M costs and would also be useful in providing various cost data needed for the comparative cost analyses conducted in accordance with OMB Circular A-76. HQ AFCS/ACI has agreed to take the lead in developing a base level admin telephone model which will serve the purposes described above. There is also the need, however, to evaluate such issues as responsiveness of service and responsiveness to customer requirements for commercial and government plants. During the survey some information was obtained which indicates that the telephone companies in some locations cannot be paid enough money, within the existing tariff structure, to cause them to perform emergency or overtime work to meet base level mission and service requirements. The constraining factor has been the unions and the employees unwillingness to accept the overtime work needed to accomplish these emergency priority jobs which require overtime.

