6 FAH-4 H-500 RECORDKEEPING

(TL:FCLH-1; 06-16-1997)

6 FAH-4 H-501 RECORDKEEPING IS IMPORTANT TO GOOD MAINTENANCE MANAGEMENT

(TL:FCLH-1; 06-16-1997)

- a. Written records provide a basis for the maintenance manager to:
 - Manage work flow
 - Plan
 - Budget
 - Help new maintenance managers become acquainted with the facilities
- b. Records kept at the post are used to:
 - Track maintenance and repair history
 - Support budget submissions

c. Files contain much historical information that is not necessarily needed daily:

- The maintenance manager needs a handy source of current information on all aspects of post operations.
- As introduced earlier, the facility notebook summarizes information maintained in the facilities files but in no way substitutes for good facilities files.

6 FAH-4 H-502 DEVELOPING A FACILITY NOTEBOOK

(TL:FCLH-1; 06-16-1997)

a. The facility notebook contains documents that summarize facility information, such as:

- Maintenance organization and staff
- List of essential equipment
- Annual inspection summary (AIS)
- Plans and actions
- Current maintenance repair, construction, and alteration contracts summary
- Pending contracts summary
- Current facility maintenance budget
- Management's facility notes
- Maintenance manager's personal facility notes
- Standard Operating Procedures
- Instructions for ordering materials and supplies

b. Personally maintaining a facility notebook is a quick and simple way to stay on top of what is happening.

c. Seek staff help to collect information for the notebook.

6 FAH-4 H-502.1 Maintenance Organization and Staff

(TL:FCLH-1; 06-16-1997)

- a. Make a roster that includes each staff person's:
 - Name
 - Title(s)
 - Phone number (work)
 - Emergency and home phone numbers
- b. For the notebook:
 - Insert a photocopy of the roster and update as changed.
 - Insert a photocopy or summarize the position description and functional statements for maintenance staff.

6 FAH-4 H-502.2 List of Essential Equipment

(TL:FCLH-1; 06-16-1997)

For the notebook:, extract from the list of dynamic equipment items that are essential. List:

- Equipment name
- Manufacturer
- Age (year of manufacture)
- Condition (general)
- Qualified operator (if required)
- PM job number

6 FAH-4 H-502.3 Annual Inspection Summary (AIS)

(TL:FCLH-1; 06-16-1997)

For the notebook, insert a copy of the current AIS.

6 FAH-4 H-502.4 Plans and Actions

(TL:FCLH-1; 06-16-1997)

Post plans and actions are summaries of what has been done and what is going to be done. The maintenance manager needs this information handy to answer questions about work status, make decisions about future work, and study past trends.

6 FAH-4 H-502.5 Current Maintenance, Repair, Construction, and Alteration Contracts Summary

(TL:FCLH-1; 06-16-1997)

For the notebook, include:

- Contract number
- Description of work
- Contractor (name, phone number, contact person)
- Work location

- Award and expiration date
- Dollar amount at award
- Total dollar amounts of amendments
- AIS line items to which work applies (if applicable)
- Comments on contractor performance

6 FAH-4 H-502.6 Pending Contracts Summary

(TL:FCLH-1; 06-16-1997)

- a. List all contracts that are being written. Include:
 - Contract working number
 - Description of the work
 - Facility number(s)
 - Work order number
 - Specifications writer
 - Estimated contract amounts
 - AIS line item to which work applies (if applicable)
- b. For the notebook, insert a copy of the list.

6 FAH-4 H-502.7 Current Facility Maintenance Budget

(TL:FCLH-1; 06-16-1997)

For the notebook, insert a copy of the current post facility maintenance budget.

6 FAH-4 H-502.8 Management's Facility Notes

(TL:FCLH-1; 06-16-1997)

- a. To find the information:
 - Note items that management has expressed particular interest in having accomplished.

- b. For the notebook:
 - Write a brief summary of these notes and any additional input that might prove helpful in the future.

6 FAH-4 H-502.9 Maintenance Manager's Personal Facility Notes

(TL:FCLH-1; 06-16-1997)

- a. To find the information:
 - Note personal observations about facilities maintenance and management that may prove helpful in the future.
- b. For the notebook:
 - Summarize these observations for future reference.
 - Use them as personal reminders.

6 FAH-4 H-502.10 Standard Operating Procedures (SOP)

(TL:FCLH-1; 06-16-1997)

- a. To find the information:
 - Look in the post files for previous administrative notices issued.
- b. For the notebook:
 - Keep copies of all maintenance-related administrative notices in their entirety.

6 FAH-4 H-502.11 Instructions for Ordering Materials and Supplies

(TL:FCLH-1; 06-16-1997)

a. The Facilities Manager (FM) must approve all materials ordered.

b. Materials and supplies must be procured to accomplish maintenance tasks. A balance must be maintained between:

- Need to expedite the work
- Need for accountability

- Need to procure or fabricate
- Need to stock or buy local purchase (impacts petty cash control).

6 FAH-4 H-503 DEVELOPING POST FACILITY FILES—WHAT FILES TO KEEP AND HOW TO MAINTAIN THEM

(TL:FCLH-1; 06-16-1997)

a. Facility files are an important maintenance management tool and must be kept up to date.

b. Do not include classified or controlled documents in the files.

6 FAH-4 H-503.1 Annual Work Order Files

(TL:FCLH-1; 06-16-1997)

- a. Purpose:
 - Reference information
- b. Set up files:
 - Make a file for each facility.
 - Include the original work order document in the file.

6 FAH-4 H-503.2 Annual Completed Work Orders

(TL:FCLH-1; 06-16-1997)

To file:

• Record labor hours and material costs on original in file folder

- Record post information from copies of the work log
- Include information plans and sketches
- Include material requisition forms

6 FAH-4 H-503.3 Annual Contract Files

(TL:FCLH-1; 06-16-1997)

a. To file:

Make a file folder for each contract

- b. Put in folder all information pertinent to the contract:
 - Contract summary sheet:
 - Contractor name
 - Contractor phone number
 - Contractor contact person (and phone number)
 - Contracting officer
 - Contracting officer's representative (COR)
 - Contractor award amount
 - Contract modifications
 - Brief work description
 - Facility(ies) number(s)
 - Work location(s)
 - Progress payments
 - Contractor performance notes
 - Work generation document (work order or inspection reports)
 - Signed contract with plans, specifications, and pertinent drawings
 - Contract delivery orders (if applicable)
 - Contract payment vouchers

6 FAH-4 H-503.4 Facility History Files

(TL:FCLH-1; 06-16-1997)

a. Facility history files' purpose is to reference information for trend analysis

b. To file:

- Make a file jacket for each facility
- Include a summary form in the jacket:

Year facility was built

Date roof was last replaced

Date interior was last painted

Date exterior was last painted

List of Mission-essential equipment contained within or located near the facility

Equipment history record card (see 6 FAH-4 H-202 Exhibit H-202.2)

Date facility was last inspected and its condition

Date of last significant renovation or alteration

Date of last heating or cooling system overhaul

• Include a summary list of:

Unscheduled work accomplished to date

6 FAH-4 H-504 DEVELOPING AN ANNUAL WORK PLAN

(TL:FCLH-1; 06-16-1997)

- a. Numerous benefits derive from establishing annual work plans:
 - Improved facility condition
 - Increased work force productivity
 - Enhanced work planning and scheduling

- Improved resource management
- Better support of Mission and personnel
- More orderly contracting and material acquisition

b. Advantages of using the work plan is that post management can clearly see the impact of new projects.

c. The results of analyzing the deficiencies found in the annual inspection summary should consist of deficiency write-ups sorted as follows:

PROBABLE IN-HOUSE

PROBABLE CONTRACT

Current FY (minor or emergency items)

> Budget FY (in-house work plan) (sorted by craft)

Current FY (minor emergency projects)

> Budget FY (contract work plan)

Future FYs

Future FYs

6 FAH-4 H-504.1 Annual In-House Work Plans

(TL:FCLH-1; 06-16-1997)

a. Concentrating first on those deficiencies that will probably be done by the in-house work force, any minor or urgent work should be extracted and assigned work orders for early accomplishment. Likewise, work intended for a future year should be filed for review during the next Annual Facilities Condition Survey.

b. Sort remaining in-house work by craft, and enter it on the annual work plan form (see see 6 FAH-4 H-504 Exhibit H-504.1A) in building number order.

c. At this stage of the development process, the only data available is the building number, location, a general work description, and a rough estimate of work scope. As the forms indicate, it would be highly desirable at this point to convert the rough scope description on each write-up to an estimate of labor hours and materials required. This would allow more definitive scheduling throughout the year and avoid under- or overloading as compared to the hours available within each craft. These estimates could be made on the basis of "gut feelings," past experience, or from available estimating handbooks. Within reason, post maintenance managers should strive for good "ballpark" estimates of each requirement to avoid later program shuffling and to ensure that sufficient funds are available. However, remember that the primary purpose at this stage is to lay out a reasonable work program for the year that

will identify the major maintenance and repair activities to be done. More detailed planning of individual work orders will be done later when materials are ordered. At that time, a work order number can be recorded, and labor hour estimates can be refined.

d. The remaining work can then be scheduled as fill-in workloads up to the total hours available in each month. One school of thought in work scheduling is to overload the first month by about 15 percent, so that if for any reason some work must be deferred (non-receipt of materials, changing requirements, etc.), other work orders will be ready to take up the slack. If all goes as planned, the overload then shifts to the following month as a bowwave effect.

e. In addition to deficiencies discovered during the Annual Facilities Condition Survey, other work can be added during the year as work orders are received, or as other preventive maintenance inspections identify maintenance and repair projects. Likewise, events that require support by maintenance workers, such as the annual Independence Day celebration, should be included in the work plan with labor hours reserved for that support.

f. Before scheduling work by month on the work plan form, estimate the hours available in each month. 6 FAH-4 H-504 Exhibit 504.1B shows that estimates should consider holidays, vacation periods, sick leave, and others factors.

g. In scheduling each work item for a particular month, schedule seasonally independent items first. For example, schedule exterior repairs for the summer dry season; air-conditioning maintenance after the cooling season; swimming pool maintenance 2-3 months before pool opening, etc. Keep a running total of labor hours for each month during monthly work scheduling so that hours stay within the hours available.

h. For part of the post's maintenance budget, total estimated material costs for all annual work plans. Depending on the source of supply and normal delivery lead-time, the In-House Work Plan schedule should also be used to schedule detailed work planning and material ordering during the year.

6 FAH-4 H-504.2 Annual Contract Work Plans

(TL:FCLH-1; 06-16-1997)

a. The contract work plan is used to manage and track the key events leading to the eventual completion of contract project work. (See 6 FAH-4 H-504 Exhibit H-504.2).

b. This plan covers special M & R projects. These requirements are generally identified during the Annual Facilities Condition Survey but could also result from tenant/occupant work orders. Justifications for considering an outside contractor include: the work may be hazardous, may require extraordinary skill, may require specialized equipment that cannot be rented, or the existing work force is too small to handle the workload. Typical contracts include work such as:

- Re-roofing
- Pavement repair and overlays
- Exterior painting or facade cleaning
- Boiler re-tubing
- Air-conditioning system overhaul or replacement.
- Electrical systems rehabilitation
- Major facility renovations

c. The post regional security officer and A/FBO must coordinate with the post on these projects.

6 FAH-4 H-505 THROUGH H-599 UNASSIGNED

6 FAH-4 H-504 Exhibit H-504.1A IN-HOUSE WORK PLAN FORMAT

(TL:FCLH-1; 06-16-1997)

CRAFT : ELECTRICIANS

WORK ESTIMATED ESTIMATED

BLDG. NO.	WORK DESCRIPTION/LOCATION	ORDR NO.	MAN-HOURS	MATERIAL	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
XXXX	Total Hrs Available/Month	XXXX	XXXXXX	XXXXXXXX	203	152	169	221	155	200	162	99	236	259	259	127
ALL	Monthly Generator Run-Up	5003	288		24	24	24	24	24	24	24	24	24	24	24	24
1001	Install Grounded Outlets	5012	200	450	179	21										
2002	Install Grounded Outlets	5013	120	200		107	13									
6006	Require Community Cntr	5020	375	1,400			132	197	46							
1001	Replace A/C Controls Mech Rm2	5007	75	385					75							
6007	Change outpool filter Pumps	5022	32	225						32						
2004	New Split A/C & Require Panel	5132	80	850						80						
ALL	Relamp Patrol	5004	160	600						80						120
1001	Check Charge outbed Wind A/CS	5030		3,000							120					
ALL Resid	Check Charge outbed Wind A/CS	5031		6,000							18	75	147			
2004	Occupant Eltct Rehab- Change	5133		310									65	15		
12 Res	Heating System Controls	5085		1,800										220	220	
1001		5010		300												32
Page totals			2,242	\$15,520	203	152	169	221	145	216	162	99	236	259	244	136
Craft Totals			2,242			152	169	221	145			99			244	
	Over (Under) Sch	neduled			•											

6 FAH-4 H-504 Exhibit H-504.1B ESTIMATING AVAILABLE HOURS

(TL:FCLH-1; 06-16-1997)

SKILL: ELECTRICAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Number of Workers	3	3	3	3	3	4	4	4	4	3	3	3
X Workdays in Month (Excluding Holidays)	21	20	21	19	19	21	22	22	19	22	19	10
X 8 Hours/day =Labor Hours/Month	504	480	504	456	456	672	704	704	456	528	456	480
- Scheduled Vacations/Sick Leave (Hours)	-10	-180	-40	-10	-100	-120	-120	-120	-60	-60	-60	-60
X Productivity (See Note)	<u>494</u> .7	<u>400</u> .7	<u>464</u> .7	<u>446</u> .7	<u>356</u> .7	<u>552</u> .7	<u>584</u> .7	<u>584</u> .7	<u>396</u> .7	<u>468</u> .7	<u>396</u> .7	<u>420</u> .7
= Net Labor Hours	346	280	325	312	249	386	409	409	277	328	277	294
- Hours Reserved for PM	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50
- Hours Reserved for Emergencies	-75	-75	-75	-100	-100	-100	-100	-100	-75	-75	-75	-75
= Available Labor Hours/Month	221	155	200	162	99	236	259	259	127	203	152	169

NOTE: The productivity factor recognizes that in an average 8-hour day, any where from 30-60% of available time will be lost in nonproductive activity, such as travel, awaiting transportation, searching for parts, awaiting assignments, getting instructions, getting set up to work, cleaning up after work, personal allowances, etc. Managers should strive for 70% productive effort; if much lower, try to determine cause and correct.

6 FAH-4 H-504 Exhibit H-504.2 ANNUAL CONTRACT WORK PLAN FORMAT

(TL:FCLH-1; 06-16-1997)

FY 19____

BLDG. NO.	PROJECT TITLE	ESTIMATED COST	REQUEST DATE (APPR. DATE)	ALLOTMENT NO.	FUNDED AMOUNT	CONTRACT AMOUNT	START (% COMPL.)
3003	Replace LEEC Feeder & Panel	\$7,000	1-15-96				
6066	Re-Rock community	\$4,000	3-21-96				
6007 6008 6009 6010 6011	Gutter Downspouts	\$7,500	4-10-96				