

6 FAH-4 H-900 AUTOMATED MAINTENANCE MANAGEMENT CONTROL SYSTEMS

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

6 FAH-4 H-901 GENERAL

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

a. Currently, the only automated system assisting personnel in facility maintenance management is the Real Estate Management System (REMS). The Department of State supports only the Work Order Module (WOM) automated maintenance management system. All posts that have the system must use it. Currently, REMS WOM is a post system, although there are some constraints on post changes because of the standardization effort.

b. All posts using the Quality Building Inspection Corporation (QBIC) at selected New Office Buildings (NOB) are being converted to using REMS when version 4.0 is installed. The NOB system is REMS WOM.

6 FAH-4 H-902 REAL ESTATE MANAGEMENT SYSTEM (REMS)

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

a. The Real Estate Management System (REMS) is a set of computer programs and databases developed to assist in the management of all U.S. Government real property overseas under authority of the Department of State. The Office of Foreign Buildings Operations (A/FBO) in the Bureau of Administration administers REMS. Within A/FBO, REMS program planning and management is the responsibility of the Real Property Branch in the Real Estate Division (A/FBO/OPS/RE). REMS software development and systems maintenance is the responsibility of the Information Resource Management Division of the Resource Management Office (A/FBO/RMO/I), and the REMS Work Order Module is managed by the Facility Maintenance Division (A/FBO/OPS/FAC) manages the REMS Work Order Module.

b. In Washington, D.C., the principal users of the system are State Department and other agency managers responsible for leasing requirements, real estate acquisitions and disposals, and maintenance and fire/safety planning abroad. The primary Foreign Service post users are post administrative, general services officers, and facilities maintenance specialists. Foreign Service national employees that are responsible for real property management also use the system.

c. The REMS program encompasses two basic systems; each comprises several different modules. The two systems are generally identified as Washington (FBO) REMS and Post REMS.

d. Washington (FBO) REMS is maintained in Washington, D.C. and contains detailed information on all U.S. Government properties owned or leased worldwide that the Department of State manages under the Single Real Property Manager concept. This system currently has two modules:

- (1) Property Inventory Module; and
- (2) Non-Capital Projects Tracking System.

6 FAH-4 H-903 PROPERTY INVENTORY SYSTEM

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

a. The Property Inventory System maintains detailed information on all U.S. Government-owned and long- and short-term leased properties abroad. Less-detailed information is maintained on properties under construction by FBO and falls into three main categories:

(1) **Property**, which data lists all characteristics of the building or land, i.e., address, size (land size or building measurements), year of construction, year of acquisition, acquisition cost, current value, etc.

(2) **Lease**, which data contains pertinent facts relevant to each lease, i.e., lease number, lease start and end dates, renewal options, annual lease costs, currency of lease payment, purchase option, etc.

(3) **Unit information**, applicable for residential properties, which data provides information pertaining to the unit and the occupant, i.e., type of property (representational, nonrepresentational), number of bedrooms, occupant agency, number of occupants, etc.

b. With the detailed information maintained in the Washington database, A/FBO prepares various routine and special reports useful in managing the overseas properties program. For example, the A/FBO-issued quarterly "Property Book," details all properties abroad, sorted by geographic region and post. It provides a thumbnail sketch of each property and summary statistics for each post (total building counts, total rental costs, cost per square foot, etc.).

c. A/FBO prepares other special reports on the average age of U.S. Government-owned buildings worldwide, summary statistics of property holdings abroad, expiring leases for office or residential properties, etc. A Report Writer program enhances ad hoc reporting capability by providing the ability to access and prepare reports on all information maintained in the REMS database.

6 FAH-4 H-904 NON-CAPITAL PROJECTS TRACKING SYSTEM

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

a. Rehabilitation, renovation, minor improvement, special maintenance, and other projects that are funded from Washington, D.C. through one of the FBO-administered functional programs are referred to as "non-capital projects. An automated system called the Non-Capital Projects Tracking System tracks these projects. It supports the planning, programming, execution, and general management requirements associated with rehabilitation and maintenance projects abroad. The system, embedded within the FBO REMS system, is available only at FBO Headquarters in Washington. The FBO office responsible for the Non-Capital Projects Tracking System is the Planning and Programming Division of the Office of Acquisition and Planning (A/FBO/AP/PPD).

b. The System enables FBO to record, update, and report on projects funded by FBO, DS, and IM (formerly OC). The functional programs included in the system are:

- Special Maintenance and Repair
- Minor Improvements
- Fire Systems
- Replacement Furniture and Furnishings:
- EMR, DCR, and CONGEN (when principal officer) residences
- Physical Security Upgrades
- PCC Renovations
- Energy Retrofits
- Generator Replacement
- Uninterrupted Power Supply (UPS)

- PCB Abatement
- Asbestos Abatement
- Seismic Retrofits

c. Non-capital projects are identified for entry into the system through several means. The post's annual budget request is one way in which FBO becomes aware of projects. Site visits by FBO personnel and the results of the Global Maintenance Survey are others. Special requests from posts is yet another. Projects are entered into the system by the FBO, DS, or the IM office most likely to fund the project. That office then maintains and updates the data. Keeping information current may require input from the post for such items as completion dates and estimated project costs. The Non-Capital Projects Tracking System generates the project number used by the budget office in tracking project costs. Once completed or canceled, projects are archived in historical files for future accessibility.

d. The System interfaces with the automated REMS. For example, when the building number for a project is entered into the "Non-Caps" System, the REMS database automatically generates the address and building type (Chancery, MSGR, etc.).

e. Due to the large number of M & R projects at posts, the following criteria have been established to determine which projects must be entered into the Non-Caps System:

(1) Projects in the Chancery, Chancery Annex, Consulate Office Building, Consulate Office Building Annex, Warehouse, Ambassador's residence, principal officer's residence, and Marine Security Guard Quarters anticipated to cost \$10,000 or more must be entered into the system.

(2) Projects in other facilities that are anticipated to cost \$25,000 or more also must be entered.

(3) Any project, regardless of value or location, that the action officer believes may be controversial, have questions raised about it, or significantly impact on the facility or other projects, must be entered.

(4) The action officer may enter any project, regardless of value or location, that he or she wishes to track.

f. Projects that involve separate funding for design and construction should be considered a single project, and the combined cost for both design and construction should be used to determine if the above criteria are met. Similarly, when funding comes from more than one office, the total project cost should be used to determine whether or not the project should be entered into the system.

g. The Non-Capital Projects Tracking System serves as an important management tool by providing information about proposed, ongoing, and completed projects. It allows offices an automated tracking system for projects and requirements. It facilitates office coordination. The system also generates routine and ad hoc reports. For more information, contact your area management officer within FBO (A/FBO/OPS/AM).

6 FAH-4 H-905 UNASSIGNED

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

6 FAH-4 H-906 POST REAL ESTATE MANAGEMENT SYSTEM (REMS)

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

Post REMS replicates all data maintained in FBO REMS, and includes additional, more detailed information to enable automated posts to manage their real property inventory. Post REMS includes Property Inventory Module, Property Payments, and Work Order Module.

6 FAH-4 H-907 POST PROPERTY INVENTORY MODULE

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

The Post Property Inventory Module stores and reports information about all post-managed land and buildings. This includes size, ownership, and location of buildings and residential and office unit information. It also records descriptive information on major building systems (e.g., heating, plumbing, electrical) and their planned replacement cycles. Post personnel can assign occupants to residential units based on occupant requirements and unit availability. Reports can be generated that contain the current occupant, future occupant, and residential unit profile data to support the residential assignment process. The Building Inventory System supports the post in managing its short- and long-term leases, property acquisitions and disposals, lease purchases and terminations, and building system acquisition and disposals.

6 FAH-4 H-908 PROPERTY PAYMENTS

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

a. The Property Payments function enables posts to create and maintain payment schedules for real property transactions, such as recurring rent payments; to create a voucher for one-time, nonrecurring real property payments; provides a confirmation function that produces a report of all upcoming payments to be reviewed together; and provides historical and projected cost data to help with planning and budgeting. The Property Payments module is available at a limited number of posts only.

b. All data maintained by the post is transmitted quarterly by tape to A/FBO for updating the central database.

6 FAH-4 H-909 WORK ORDER MODULE

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

a. The principal users of the REMS Work Order Module (WOM) are posts facility maintenance managers. However, the Facility Maintenance Division (A/FBO/OPS/FAC) uses the post data transmitted by tape to FBO to assist posts with maintenance management.

b. REMS Work Order Module has several different configurations and applications. The VS versions are 3.08 and 4.0. The upgrade of all posts to 4.0 is underway and will take several years. PC versions are 3.06 and 4.0. Posts without a VS or LAN will receive the PC version. The LAN version is 4.0 and is under development. Post using LAN systems will be provided the LAN version.

c. The REMS WOM is designed to support posts in its planning, accomplishing, and reporting property and administrative work. It provides the capability to plan preventive maintenance tasks and routine maintenance (Preventive Maintenance work orders (PM)) for real property and equipment, emergency (unscheduled work orders) maintenance tasks for real property and equipment, and recurring or one-time administrative tasks. The Module uses a work unit as the basic element. Work orders are prepared for work units such as buildings/land (real property), residential units, office units, ancillary structures, and building equipment. A work unit must be on the REMS inventory before any work orders can be prepared for it. Work units are entered into the system at installation and additions and changes can be made by the post property management office. Building equipment is entered into the system by the post maintenance office. The inventory information reduces the amount of work in preparing a work order. For example, when a generator is added to the REMS building inventory, its location, size, name of manufacturer, and other identifying information is added. Each time a work

order is prepared for the generator, the system automatically prints the generator information on the work order. Workers, shops, contractors, and material are identified for each work order, either PM or unscheduled. In this way, the amount of time, labor costs, contractor costs, material used, and material costs can be accumulated by work order, equipment, property, etc.

6 FAH-4 H-910 PREVENTIVE MAINTENANCE WORK ORDERS (PM)

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

PM work orders require a comprehensive inventory of equipment and the identification of specific parts of a building that require PM, e.g., roof, etc. Equipment will be entered into the module as a single piece of equipment or as a group of like equipment depending on how the PM will be performed. The PM is scheduled by assigning a frequency, PM task lists, and the shop required to perform the PM. PM checklists are maintained in a word processing document provided at installation. The PM Checklist is found at Appendix C, Facility Maintenance Guide also. The WOM calculates and stores the preventive maintenance schedule for each piece of equipment. PM work orders are generated monthly. REMS WOM automatically selects the work orders to be used for the time period, i.e., monthly, etc., when prompted by an operator.

6 FAH-4 H-911 UNSCHEDULED WORK ORDERS (VERSION 4.0)

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

a. An unscheduled work order is used for all unplanned maintenance activities. When a building occupant has a problem, a system must exist so that the occupant can identify the problem to the proper maintenance sections. A completed work order form and/or, if an emergency, a telephone call may be the system in use. In either case, the work order must be entered into REMS so that a REMS work order can be printed. The Distributed Work Orders system allows designated persons at post to enter their work orders electronically.

b. The process used to enter the data for a particular problem includes entering the organization code, building number, residential unit, office unit, ancillary structure, or equipment group ID. REMS automatically adds the occupant's name, residential or office unit, or ancillary structure. Other administrative data is then added. A task description field is used to describe the problem, e.g., leaking water faucet, no heat, etc. REMS automatically assigns a work order number and the status of "outstanding." The facilities manager approves the work order on screen and with the approved status, the work order can be printed in the facility manager's office or at the shop.

c. A blank work order can be printed for customer use or when a worker sees a problem that needs to be corrected. All work must be recorded on a work order. The completed form is entered into REMS.

d. When the work, either unscheduled or scheduled is accomplished, record the completion. The information is tabulated, and a permanent record of the action is made. Stored information includes work, waiting and travel hours (regular and overtime), labor costs, contract costs, and materials and material costs.

6 FAH-4 H-911.1 Distributed Work Orders

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

With the distributed work order system, all persons that have access to VS REMS can enter work orders electronically. A work-order number is given to the user immediately. This eliminates sending the work order through the distribution system and reduces the possibility of misplaced work orders. Once prepared, the customer can check work-order status, at their convenience. The work order is sent for approval, and after approval, to the worker for performing the requested task. Distributed work orders is an optional feature of REMS WOM.

6 FAH-4 H-912 REPORTS

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

a. The reports described herein are post-specific, and not a part of the Department's regular reporting schedule. However, they provide useful information for facilities maintenance.

b. WOM's reporting system is called Report Writer. The capability exists to develop a report from almost all information contained within the module. It can tabulate cost, labor hours, and/or contractor. The two sections of Report Writer in the WOM are Work Orders and PM. With the Work Order section, all work order information, unscheduled and PM, can be tabulated. Inventory information and PM scheduling can be acquired using the PM section.

c. There are several standard reports that can be used. These reports can be modified if required and new reports can be created.

6 FAH-4 H-912.1 Work Order Module (Version 3.08)

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

a. Version 4.0 will replace Version 3.08. Several differences exist between the two versions. Among them is the use of Action Units in 3.08 to identify who accomplished the work order. Action Units are groupings of workers either by skill or function. When a work order is created, an Action Unit must be assigned. Once the work order has been processed, it cannot be changed.

b. PM work orders are called scheduled work orders in 3.08. Equipment is classified as either systems or machines. The PM checklist is maintained within REMS. Many posts use the internal checklist for scheduling and performing PM. When the PM work orders are generated, the checklist is also generated and printed as part of the work order. Some posts have created tasks that identify the checklist to be used and the frequency of the PM. The actual checklists are in a word processing document and used in the same manner as the PM Checklists in version 4.0.

c. Reports within 3.08 are standard reports. Some flexibility is provided by the use of Sort/Select Reports. Two reports that are useful for tracking work orders are the *Unscheduled Work Order Activity Report* and the *Outstanding Work Order Sort/Select Report*. The *Scheduled Task Sort/Select Report* provides all the information required about the PM program and the *Historical Work Order Sort/Select Report* provides a list of all completed or canceled work orders. Additional reports include the following:

6 FAH-4 H-912.1-1 Management Reports

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

a. **Monthly work status**—provides the status of work scheduled for each Action Unit:

- (1) The number and percentage of work orders completed;
- (2) The number of labor hours reported for completed work orders[
- (3) The average time spent per work order; and
- (4) The percentage of available time open by the Action Unit.

b. **Monthly Workload Statistics**—provides a report similar to the monthly work status report but can be prepared for a range of months so that trends can be determined, among other things.

c. **Annual Workload Statistics**—reports historical data for the fiscal year.

d. **Outstanding Work Order Summary**—provides the total number of outstanding work orders for each action unit, then breaks out the total in an aging summary. The Action Unit performance and work distribution can be specified.

e. **Canceled Work Order Reports**—focuses on how much work is being canceled and why it is being cancelled. It identifies, by work-order type and/or Action Unit, what kind of work is being canceled.

6 FAH-4 H-912.1-2 Historical Reports

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

Historical Work Order Sort Select Report—provides details on all work orders completed and canceled. Other historical reports provide the work-order summary by agency, function, property, system, and machine.

6 FAH-4 H-913 HARDWARE CONFIGURATION

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

Washington REMS is installed on FBO's existing Wang VS-7310 system. Post REMS is available for the VS system. The VS version runs on a VS-65 and larger machines. A minimum of 20 mb hard disk space is required for PC REMS (software and data for a small post occupies approximately 10 mb), and a streaming tape drive is optional but recommended. At least one printer, preferably laser, is required to print work orders and various reports.

6 FAH-4 H-914 INSTALLATION

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

REMS 4.0 VS, PC and LAN is the current system, and is being installed at posts.

6 FAH-4 H-915 DOCUMENTATION

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

a. The following five guide documents support VS REMS 3.08. All are contained in white, three-ring binders and are entitled:

- *Post Real Estate Management System (REMS), VS System*
- Volume I—Overview
- Volume II—Post REMS 3.08, Maintain Property Inventory Users Manual
- Volume III—Work Orders
- Volume IV—Property Payments
- *REMS VS System Administrator's Guide*

New VS documentation will be provided when the REMS release 3.08 is installed.

b. Five documents support VS REMS 4.0. Three are contained in white three-ring binders, and two are half-page size spiral binders.

- *Property Inventory Guide*
- *Report Writer Guide*
- *Property Inventory Module Data Element Dictionary*
- *Work Order User Guide*
- *Work Order Module Data Element Dictionary*
- *System Administrator's Guide*

6 FAH-4 H-916 THROUGH H-999 UNASSIGNED