

# ENGINEERING, FACILITIES AND EQUIPMENT

---

## Biomedical Equipment Maintenance



---

### Medical Equipment Non-Standard Tracking and Operation Review (MENTOR) System Available on AFMLO Home Page

MENTOR Version 6.01 (compatible with MEDLOG release 96121) is available on the Engineering, Facilities and Equipment page of AFMLO's Internet site for downloading to your personal computer (PC).

*<http://www.amedd.army.mil/afmlo/>*

MENTOR is a DOS-based report generator that, when used properly, can be an effective management tool for the biomedical equipment repair office. MENTOR can create various reports regarding work orders and historical maintenance using data from the Medical Logistics System (MEDLOG). MENTOR also includes a generic report generator for building and saving custom reports.

Download the self-extracting executable file MENTOR6.EXE from the Home Page and save it to the directory of your choice on your hard drive or floppy disk. To install the MENTOR program, run the MENTOR6.EXE file which was downloaded. To start the program, run the MENTOR6.EXE file created during the installation. The first time you run MENTOR, the program starts at the Custom Setup screen. All subsequent times you run the program, it will start at the main menu. If you have questions regarding

the installation of MENTOR or require additional information, contact FOM-P. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

---

## Quality Assurance

---

### Food and Drug Administration (FDA) Recalls/Alert Notices

**Attachment 2**, paragraph 1, provides information on FDA medical equipment recalls and alerts. Personnel from clinical engineering, biomedical equipment maintenance, quality assurance, and safety should follow the guidance provided to ensure the effective maintenance and management of medical equipment. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

### **Safety Alert -- Defibrillator/Monitor/Pacemakers, MDC 17882, PD1400 Defib/Monitor/Pacemakers; 1600 and 2000 Series Automated External Defibrillator (AED); Model 4420 Battery Chargers, Zoll Medical Corp.**

Reference ECRI *Health Devices Alerts* Number 1996-A33, 16 August 1996, Accession No. A3098. ECRI has received reports of a reduction in battery capacity with the sealed lead acid (SLA) batteries used in the Zoll PD1400 defibrillator/monitor/pacemakers. The batteries produced a FAILED message when tested in the charger after only 3-6 months' use, rather than the 18-month expected life. On one occasion, the reduced capacity was not discovered until the unit produced a LOW BATTERY message and abruptly shut off during use. Zoll Medical replaced the failed batteries free of charge several times and modified the charger to increase the

charging current, but premature failures continued to occur. Zoll Medical has concluded facilities that report shorter-than-expected battery life often disregard at least one of the recommended battery maintenance practices. In some cases, the batteries were removed from the charger while the PARTIAL light was illuminated, before the full 16-hour charge was completed. In other cases, personnel were exercising the batteries, which is recommended for nickel cadmium (NiCd) batteries but can be detrimental to SLA batteries. As a result of these findings, Zoll distributed a Battery Management Program manual. In addition, in November 1995, Zoll made available a new four-compartment battery charger, the Base PowerCharger<sup>4x4</sup>, which does not have a PARTIAL light but can fully charge batteries in four hours or less. An optional PowerCharger is also available which attaches to the back of the defibrillator, allowing line power connection for operation or charging. No reports of premature battery failure have been received from hospitals using the new four-hour chargers.

ECRI recommends the following, specifically for users of Zoll defibrillator/monitor/pacemakers and AEDs:

(1) Implement the battery testing and maintenance recommendations described in Zoll's Battery Maintenance Program manual. Provide periodic reinforcement and retraining as needed to ensure compliance with the procedures.

(2) If your units experience premature battery failures, negotiate with Zoll to trade in your Model 4420 battery charger for the new Base PowerCharger<sup>4x4</sup>.

Regardless of what models you are using, ECRI recommends the following:

(1) Always carry a fully charged spare battery if using a unit with removable batteries.

(2) Take any steps needed to ensure that SLA batteries are fully charged between uses according

to the manufacturer's recommendation for charge times.

(3) Wherever possible, use crash-cart defibrillator/monitor/pacemakers on line power, rather than battery power.

(4) Do not purposely deep discharge, or "exercise," SLA batteries as you would NiCd batteries.

(5) Replace batteries at the manufacturer's recommended interval.

**Safety Alert --  
Hyperthermia Units, Forced-Air,  
MDC 17950, Bair Hugger Model 502  
Warming Units, Augustine Medical, Inc.**

Reference ECRI *Health Devices Alerts* Number 1996-A31, 2 August 1996, Accession No. A3089. ECRI reports that when units with *serial numbers 502A30001 through 502D31426* are operated with the original power fuses, the fuses may blow or the fuse covers may melt. The manufacturer changed the style of the fuses and initiated a field correction by sending out new fuses and fuse carriers to all affected customers with a letter dated 5 February 1996. All facilities should verify receipt of the 5 February 1996 letter, fuses, and instructions from the manufacturer. For further information, U.S. customers should contact Augustine Medical Customer Service at 1-800-733-7775; customers outside the U.S. should contact their local Bair Hugger distributor. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

**Type III Materiel Complaints -  
Information Exchange - Ultrasonic  
Therapy Unit, Furte U.S., Chattanooga  
Group, Inc.**

A summary of the most recent medical materiel complaints involving medical equipment is listed

below. This summary is provided for information only. Please note the complaints *are not validated*. They do not constitute a recall, nor do they require you to perform the sort of inspection and reporting associated with equipment hazards. If you have experienced a similar problem locally, please submit an SF 380 in accordance with AFMAN 23-110, Volume 5, Chapter 19. It is important that we receive documentation of equipment problems since severity and impact of a materiel defect is frequently judged by the number of separate complaints received.

**Ultrasonic Therapy Unit, Furte U.S., Chattanooga Group, Inc.** An activity reports that during initial electrical safety inspection of the power module of a Furte U.S. ultrasonic therapy unit, it was discovered that the module did not meet NFPA 99 standards for Lead Leakage Current Tests. After further investigation, it was determined the power module was only approved for use under U.L. 544 (information processing and business equipment only). The manufacturer stated there is no U.S. law which requires manufacturers to comply with NFPA 99. The manufacturer eventually replaced the U.L. 544 compliant power module with an NFPA 99 compliant module. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

---

## Medical Equipment Management

---

### Department of Veterans Affairs (DVA) On-Site Contracting Officer Program Update

As of this week, the DVA On-Site Contracting Officer Program exceeded 200 requests at almost

\$17 million. Currently using the program are 29 bases, AFMLO/OL-2, MCLB, and AFMLO. Purchase requests were as small as \$300 and as large as \$2.3 million.

The contracting officer, Ms. Boyd, was able to effect same and next-day emergency procurements when required and justified. Ms. Boyd awarded an almost \$300,000 delivery order for an emergency replacement ICU central monitoring system in less than three weeks, and negotiated a shortened delivery schedule.

Updated guidelines for the program are as follows:

a. Bases can use the program as an alternative contracting source to procure expense and/or investment equipment, or systems and services. Furniture, including dental workstations, is excluded. Although the program is focused on buying equipment available on Federal Supply Schedules (FSSs), such as DVA and General Services Administration (GSA) contracts, Ms. Boyd can also negotiate Open Market contracts. *New surcharges, effective 1 Sep 96, are as follows:*

FSS

<\$15,000 fixed rate of \$150 per order

≥\$15,000 1%

O&M

<\$5,000 fixed rate of \$175 per order

≥\$5,000 3.5%

b. All requisitions must be submitted using AF Form 9. Ensure that the following information is provided on, or submitted with, all requests:

- (1) "Ship to" address
- (2) Accounting and Finance Office address for direct billing
- (3) Document number (use 3750 document block)

- (4) Item description
- (5) Quantity
- (6) Training and/or accessories required (listed and priced as separate line items). ***You do not need to assign each line item a document number.***
- (7) Name, phone number, and fax number of MEMO point of contact
- (8) DVA or GSA schedule number, if applicable
- (9) Current product literature and/or price quote
- (10) Brand name or sole source justification (signed by local competition advocate), if applicable
- (11) Emergency request justification and required delivery date, if applicable
- (12) List known shipping costs as a separate line item
- (13) Certified fund citation (ensure the surcharge and any shipping costs are included in the total cost)

c. All requests may be faxed to DSN 343-2958, or mailed to AFMLO/FOM at the following address:

AFMLO/FOM (DVA Special Services)  
Fort Detrick, Building 1423  
Frederick, MD 21702-5006

d. Upon receipt of the item(s), ***you must submit a receiving report to AFMLO/FOM.*** The receiving report is necessary to finalize the open requisition and prevent interest costs to the government.

e. For requisition services, contact Ms. Boyd at DSN 343-4033. Questions regarding policy and

procedures can be directed to AFMLO/FOM-P at the number below.

If you have comments or suggestions to enhance the program and the service we provide, please contact FOM-P. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

### **Shared Procurement Equipment Items Currently Available**

**Attachment 1**, pages 1 and 2, contains a list of all current Shared Procurement contracts and optional contracts available through the Defense Personnel Support Center (DPSC). If you plan to order any of these items for your facility, use the specific ordering instructions and overall program guidance contained in AFMLL 16-96, pages CE-2 and CE-3. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

## ***“Piggyback”* Contracts Currently Available**

AFMLL 16-96, Attachment 1, pages 4 and 5, contains a list of all current *“piggyback”* contracts currently available through DPSC. These contracts will allow facilities to *“piggyback”* requirements onto existing orders placed for specific quantities. Many of these contracts are designed to buy large quantities at reduced prices, and are written with the option of buying additional quantities at the same price. The list includes available quantities and “Order By” dates. To order, send your MILSTRIP requisitions to DPSC, and reference the contract number (from the listing) in the notes section. (AFMLO/FOM-P, Capt David Zemkosky, DSN 343-4028)

JEFFREY W. COOPER, Colonel, USAF, MSC  
Chief, Air Force Medical Logistics Office