

Tele: 25683476

Central Organisation ECHS  
Integrated HQ of MoD (Army)  
Adjutant General's Branch  
Thimayya Marg  
Near Gopinath Circle  
Delhi Cantt-110010

B/49761/AG/ECHS/2022

07 Jul 2022

All Regional Centres

**SOP ON REPAIR AND MAINTENANCE OF MEDICAL  
EQUIPMENT HELD AT ECHS POLYCLINIC**

1. Please refer the following :-
  - (a) CO ECHS letter No B/49761/AG/ECHS dt 11 Mar 2008 (copy att).
  - (b) DG of EME (Ops & Plans) letter No A/35697/ECHS/EME OPS-3 dt 05 Oct 2018 (copy att).
  - (c) DGAFMS letter No 34906/ECHS/DGAFMS/DG-2(Plg) dt 09 Jul 2019 (copy att).
  - (d) CO ECHS letter No B/49762/AG/ECHS/2021 dt 23 Mar 2021 (copy att).
2. After closure of large number of Nodal EME Wksp and creation of repair increments (RI) with certain medical units, a complete list of existing Command Repair Cell (CRCs) and Nodal EME Wksp alongwith categories of medical eqpt and responsible maintenance agencies are given in O/o DGAFMS letter No 3505/4/Policy/DGAFMS/DG-2D/Army Order/2021 dated 16 Jun 2021 is forwarded herewith.
3. You are requested to disseminate the same to all ECHS PCs under your AOR.

**Encls** : As above.

  
(Panchal Kalpeshkumar S)  
Lt Col  
Jt Dir (Med & Eqpt)  
For Dir (Med)

**FWD OF SOP ON REPAIR AND MAINTENANCE OF MEDICAL  
EQUIPMENT HELD AT ECHS POLYCLINIC**

1. SOP on repair and maint of medical eqpt held at ECHS polyclinic is fwd herewith for your further necessary action.
2. You are requested to disseminate the same to all concerned under your jurisdiction.

Jt Dir (Med)  
for MD

**Authority-** B/49761/AG/ECHS dated 11 Mar 2008

**STANDARD OPERATING PROCEDURE  
REPAIR AND MAINTENANCE OF MEDICAL EQUIPMENT HELD AT  
ECHS POLYCLINIC**

1. **References:-**
  - (a) Govt of India, Min of Def letter No. 3505/4/DGAFMS/DG-2D/2861/99/D(Med) dt 23 Sep 99.
  - (b) Part VI of Govt of India, Min of Def letter No. 24 (3) /03/US (WE)/ D(Res) (ii) dated 09 Sep 2003.
  - (c) AO 5/99 & 12/2004
  - (d) Various instructions on equipment repair and maintenance from this HQ fwd from time to time.

(e) Recent ECHS Regional Directors Conference 07

2. This SOP lays down the repair, maintenance and sentencing of all medical equipment held at ECHS Polyclinics.

**General Categorisation and responsibility of repair and maintenance**

3. All equipment used in the ECHS Polyclinics has been divided into three categories (Appx 'A' - 'C') and category wise repair/ maintenance responsibilities in Mil and Non Mil Stations are given as under :

Ser No.	Category of equipments	Responsibility of repair/ maintenance		Remarks
		Mil Station	Non-Mil Stations	
(a)	Non-electro medical equipment	Local EME workshop / command repair cell under 363/01 except for minor urgent petty repair	Local EME workshop / comm	Minor urgent /patty repair in Non Mil Stn may be carried out from local civil firm and paid from Non Mil Polyclinic LP find under code Head under code Head 363/01 duly vetted by SEMO
(b)	Electro medical equipment	Nodal EME worsshop ( Appx 'D' ) / Command Repair call (CRC) / civil firm under financial power of SEMO/AFMSD/ DGAFMS under code Head 363/01.	Same as for Mil Stations	
(c)	Sophisticated electro medical equipment	Original equipment manufacturer (OEM)/ civil firm under financial power of SEMO /AFMSD/ DGFMS under code Head 363/01.	Same for Mil Station	

**REPAIR AND MAINTENANCE FROM CIVIL SOURCES.**

4. Conventional system of echelon of repair shall not be applicable in case of medical and dental equipment as their repair and maintenance will be carried out by concerned repair agencies through Local purchase (LP) of spares, Local Repair Contract (LRC) or directly by the Original Equipment Manufacturer (OEMs) or the civil firm. No Non availability certificate (NAC) should be required by the workshop / Polyclinics for under taken LP of spares for medical and dental equipment. Repair and servicing of medical /Dental equipment from civil sources will be carried out under the circumstance and upto the prescribed financial limit of concerned CFAs as laid down in Govt of India letter quoted above (Para 1a).

5. The repair and servicing / maintenance facilities civil sources have been instituted with the aim to keep the medical equipment held by ECHS Polyclinic in a function state at all time in Mil and Non Mil Station, if local EME workshop repair facilities are inadequate and also to reduce avoidable back loading of equipment under BLR/ BER certificate, normal procedure will be adopted while processing the case for repair / servicing / maintenances of medical /dental equipment through civil firms.

6. When cost of repair and servicing / maintenance exceeds the financial powers of SEMO and SITU civil repairs and servicing / maintenance is considered essential, quotation from the firm alongwith statement of case with full justification duly recommended by Jt Dir Med, Regional Centre ECHS will be forwarded to dependent SEMO/ Store holding installation alongwith relevant information as per Para 7 below for their necessary action. Under no circumstance, repairs and servicing / maintenance from civil sources will be undertaken without prior sanction / approval of the concerned CFA. However, in exceptional cases telephone approval be obtained from the concerned CFA and EX-post facto sanction be obtained within one month from the date of repair of the Equipment.

7. While submitting the cases to SEMO / AFMSDs/ Stores holding installation for their sanction or to DGAFMS / DG-2D through dependent SEMO / Depots, the information asked vide Appx 'E' to this SOP will invariably be furnished.

8. Once repair and servicing / maintenance sanction of the CFA is accorded, it is the responsibility of concerned SEMO/ Depot / Polyclinic to progress the case and ensure that equipment is repaired / maintained on priority and payment is made to the firm through concerned SEMO / AFMSDs /Stores holding installation. In case of delay or difficulties encountered, the same will be intimated to concerned Regional centre, SEMO / Depot or DGAFMS / DG-2D for information and action.

9. Necessary guarantee / warranty certificate will be obtained by concerned Polyclinic from the civil firm that equipment repaired / serviced by them, will render trouble free service for a period of at least 6 month or as agreed by the concerned Polyclinic or SEMO/ depot and in the event of breakdown within the guarantee period, the same will be repaired free of cost.

10. It may however, be ensured that while exercising the powers, now vested with the various authorities, total cost of repair should include cost of spares also, though individual cost will be shown separately. Generally cost of repair including spares is 10% of the actual cost of the equipment and in exceptional cases same should be allowed maximum upto 25 %.

11. It may also be noted that while procuring sophisticated Electro Medical equipment by DGAFMS offices a clause for entering into service / maintenance contract after expiry of the guarantee /warranty period is

incorporated. Consignee ECHS Clinic of such equipments should ensure that action is intimated as per Para 6 and 7 above to enter into initial service contract immediately on expiry of guarantee / warranty period and subsequent timely renewal of such contracts at the sanctioned rate in AT/ SO (Acceptance of Tender / Supply order).

## 12. Repair of Gift items/Items on loan

All gifted equipments will be taken on ledger charge that will form part of authorized load. Necessary maintenance support including annual maintenance contract will be catered for such equipments. The ECHS Polyclinic using some equipments that are taken on loan will be responsible to maintain these too. A separate record of all items on loan will be prepared. Projection for maintenance support will be made to the dependent Workshop after taking approval of Stn Cdr. Further in addition to the above policy / procedure, the ECHS Polyclinic must follow the following guidelines while negotiating the terms and conditions pertaining to annual service/ maintenance contract in respect of sophisticated equipment held by them with the supplier / authorized Indian agents :-

- (a) The supplier / Indian agents should have the expertise technical know how, test tools, equipment and should be able to provide imported spares and accessories in Indian rupees at the shortest possible time.
- (b) To provide schedule preventive maintenance (including cleaning , lubrication, adjustment, calibration and testing) at least 3-4 times during contract period and attend breakdown calls as on required basis mutually agreed on the request of users for the smooth and un-interrupted functioning of the equipment.
- (c) The date of entering into service contract will commence from the date of signing the service contract by both parties on court paper at firm's expense but subsequent to the date of issue of sanction letter.
- (d) The annual service contract charges should invariably not exceed 5% and 2.5% of the total cost of equipment for comprehensive and comprehensive contract respectively. In case of repair only max cost permissible is 25% of the cost of equipment (including cost of spares). OIC Polyclinic will personally ensure that the charges paid are reasonable.
- (e) The inflation cost limited to maximum 10% of the previous service contract charges can be added for each subsequent years during renewal of the contract if this clause will also be applicable to the contracts earlier sanctioned.
- (f) 50% payment of service contract charges can be made in advance if insisted upon or otherwise on half yearly basis. The final payment will, however, be made after successful completion of the contractual period as per the terms and conditions of the contract. Where 50% advance payment is made, necessary undertaking to provide satisfactory and timely service should be obtained.
- (g) The costly and imported spares if required will be on chargeable basis. However, low cost indigenously available electronic components will be replaced free of cost, to a maximum value of Rs. 1000/- by the firm. The costly parts if required to be replaced by the firm will be authenticated by users

specialist or Assistant Technical Evaluating Officer (ATEO) for proper accounting subsequently. The Performa invoice for imported and costly parts quoted in Indian Rupees will be obtained from the firm in triplicate by the users for procurement of the same through office of the DGAFMS / DG-2C.

(h) All parts / items utilized during maintenance repair will be reflected in service reports which will be countersigned by the users specialists / Medical officers.

(j) The repairs and servicing will be carried out 'in-situ' by the firm. However, in exceptional cases when repairs on the part assembly / Part Circuit Board (PCB) of the equipment are considered to be attempted at factory premises, the temporary replacement shall be the firm.

(k) In case of breakdown of the equipment, the same will be attended by the firm's engineer within 24 hours, if it located in the same station and in case of out station, firm will ensure to complete repairs of the defective equipment on top priority.

(l) The service / repair and replacement of parts / spares details will be recorded by the firm engineer and user specialist in the History Sheet and Log book maintained for each equipment by the users. The History Sheet and Log book shall be prepared locally as per Appx 'F'.

(m) Clauses pertaining to 100% advance payment, separate expenses, transportations charges, daily allowance, over time allowance, if reflected in the terms and conditions are to be deleted in to.

(n) The annual service contract is required to be signed only after expiry of Guarantee/Warranty period and duly sanctioned by the CFAs. But procedure for AMC to be initiated three months prior to expiry of Warranty / guarantee period.

13. After finalization of the terms and conditions (given below) with the firms, the consignee Polyclinic will forward the proposal for entering into annual maintenance contract of sophisticated equipment to dependent SEMO / AFMSDs as per provisions laid down in succeeding paras:-

(a) Particulars of the equipment as per Para 7 of above quoted letter.

(b) Statement of Case duly recommended by the OIC ECHS Polyclinic, Jt Dir (Med) and will be approved by SEMO / Comdt AFMSD/CFA.

(c) Original quotation of the firm with terms and conditions as negotiated with the supplies / authorized agents on the lines as per Para 3 above alongwith two Photostat copies of the same.

(d) OIC Polyclinic, Jt Dir (Med) and stores holding installations will ensure that the service rates in respect of equipment which have been standardized with the firm and come under their financial power will remain enforced and will not be revised upwards except as Para (e) below.

(e) In case of renewal of maintenance contract, the rates of previous contract will be completed before according sanction by the CFAs at every level. The inflation cost limited to maximum 10% of the previous service contract charges can be added for each subsequent year.

(f) Where the clause of AMC has been accepted by TPC in A/T and Supply Orders, the rates approved there in only be acceptable. No alternation will be allowed on any terms without the prior approval of O/o DGAFMS.

14. On receipt of proposal beyond CFA limit, dependent SEMO / AFMSDs will forward the same to the office of the DGAFMS /DG-2D duly vetted technically for obtaining necessary CFA sanction as shown in Govt of India, Ministry of Defence letter No. 3505/4/DGAFMS/DG-2D and 23 Sep 99.

15. The contract will be signed by users with the firm only after receipt of CFA sanction and the Photostat copy of the contract will be forwarded by the units to the office of DGAFMS / DG-2D and dependent SEMO / AFMSDs for reference and records.

16. The consignee OIC ECHS Polyclinic will forward the bill duly receipted to the concerned SEMO/ AFMSD for payment to the firm as per the terms and conditions agreed upon.

17. It will be ensured by all Regional Centers that all sophisticated medical equipments which require 'Annual Maintenance' should be covered under AMC. The same will be reflected in quarterly return being forwarded to this office. The copy of Army Order No. 05/99 &12/2004 on the subject will be made available to all ECHS Polyclinics.

18. In case of difficulties with vendors / firm regarding compliance to AMC / Repairs Polyclinics should be proactive and forward advance intimation to civil firm for planned preventive maintenance laid down in AMC. In case of breakdown / Urgent repair Polyclinics should contact the firm through telephone / Telegram/ letter with copy to this HQ and O/o DGAFMS. In case the civil firm is not attending the calls even after two reminders, Polyclinic to approach Regional Centre / SEMO. Simultaneously Regional Centre will also approach O/o DGAFMS for similar action. However telephonic / personal contacts with firm to be made for early action. Finally if a particular firm is repeatedly failing to respond on time, a case may be taken up for appropriate actions against that firm through Regional Centre.

#### **Allotment of funds:**

19. DGAFMS will allot adequate funds from ECHS allotment under Code Head 363/01 every year to EME for undertaking repair of the equipment through LP of spares/LRC. Annual requirement of funds is to be projected by EME (Fin) to O/o DGAFMS every year. Demand for Annual Maintenance Contract, repair and spres by SEMOs / AFMSD, will be made from DGLP (ECHS). Annual requirement will be projected along with the projection of DGLP.

#### **Reports and Returns**

20. In addition to existing Medical Equipment return policy ECHS Polyclinic will submit addl annual return to followings through SEMO:

(a) Non Electro Medical Equipment : To dependent workshop

(b) Electro Medical Equipment: To dependent Nodal Workshop & CRC

(C) Sophisticated Medical equipment under AMC: To O/o DGAFMS (DG-2D)

### **Sentencing of ECHS Medical Equipment**

21. Since no procurement of spares on any equipment is contemplated and repairs and maintenance are to be carried out through LP of spares or by civil firms under local repair contract / AMC, the equipment will not be sentenced Eqpt of Action (EOA). However these may be sentenced BLR/BER/UNSV as given below (Appx 'G').

(a) **Non Electro medical Equipment:** These equipments will not be sentenced BLR and all efforts will be made by the dependent workshop to repair and maintain these through LP of spares / LRC till they become BER.certificate. Retrieval of serviceable components / accessories may be done at Wksp level to repair other eqpt. Such spares will however be properly accounted. Units will dispose off these equipment to local salvage depot under intimation to dependent / SEMO / Regional Centre / AFMSD for provisioning action.

(b) **Electro medical Equipment:** These equipment will be sentenced 'BER' by dependent Nodal workshop / CRC and a certificate issued to the ECHS Polyclinic, sentencing of equipment as BER may be done by BOO as per advise of workshop/ CRCs based on it's life &usage vide Appx 'B' &'G'.

(c) **Sophisticated Equipment under AMC:** These equipment will be sentenced BER only. ECHS Polyclinic will initiate action for sentencing the eqpt as BER by convening a board of officers consisting of specialists concerned and Assistant Technical Evaluating Officer (ATEO) as members. The service engineer of the firm if available is to be associated to give his opinion on the equipment. The board proceedings in triplicate, duly approved by SEMO will be forwarded to Central Organisation for issue of disposal instruction and subsequent initiation of procurement action. Feasibility of retrieval of components / assemblies will be ascertained in consultation with ATEO, at Command Repair Cell (CRC), so that they can be utilized for repair of similar equipment. Retrieval of components will be properly accounted for by CRC.

22. Policy and procedure for procurement, and installation of Medical Equipment for ECHS Polyclinic has already been dealt in various Govt letters and fwd by this HQ, hence same is not included in this SOP.

Dy MD  
For MD



Appendix ' A '

**EQPT UNDER ANNUAL MAINT CONTRACT**

**SOPHISTICATED EQUIPMENT**

Ser No	Equipment	Probable life
1.	Fibre optic Gastrology / Colonoscopic Equipment	06 Yrs
2.	Bronchoscopic / Laproscopic Equipment	06 Yrs

3.	Volume Controlled Respirators (Computerised)	07 Yrs
4.	Whole Body CT Scanner	10 Yrs
5.	Cobalt Therapy Units	10 Yrs
6.	Image Intensifier (Surgical & Medical)	10 Yrs
7.	Cardiac Cath Lab Equipment	10 Yrs
8.	Heart Lung Machine	08 Yrs
9.	Haemo Dialysis machine	08 Yrs
10.	Gamma Camera	10 Yrs
11.	Diagnostic Instruments (Nuclear Medicine)	10 Yrs
12.	Ultrasound Imaging & Colour Doppler	08 Yrs
13.	Trade mill Computerised with monitoring system	08 Yrs
14.	Dental X-Ray Units (imported)	10 Yrs
15.	Spectrophotometers Computerised	08 Yrs
16.	Central Monitoring Station	08 Yrs
17.	Evoked Potential cum EMG machine	08 Yrs
18.	Pulmonary test system computerized	08 Yrs
19.	Fast Medical Scanners	08 Yrs
20.	M R I	10 Yrs
21.	Mamography Unit	10 Yrs
22.	Laser Therapy / Surgical Eqpt	08 Yrs
23.	Ventillator (imported)	10 Yrs
24.	Elisa Readers	10 Yrs
25.	Microscope (Electronic)	10 Yrs
26.	Anesthetic Appratus (Microprocessor Based)	10 Yrs
27.	Fibre scope (ENT) Set	10 Yrs
28.	Dental Chair Unit (Microprocessor Based)	15 Yrs
29.	Anaesthesia System with Ventilator and Multi parameter	08 Yrs
30.	App. X-Ray Radiographic/Fluoroscopic 500 Ma & above (imported)	08 Yrs
31.	Ultrasound Aspirator	06 Yrs
32.	Ultrasound Scanner	10 Yrs
33.	Ultrasound portable	08 Yrs
34.	Camera and illumination system	08 Yrs
35.	Uretro Renoscope	10 Yrs
36.	Semi Auto Analyser	06 Yrs
37.	Digital ECG Machine	07 Yrs
38.	Fibre Optic Bronchoscope	08 Yrs
39.	Platelet Agitator	06 Yrs
40.	Cardiotocograph	08 Yrs
41.	App. Anaesthetic (Boyle) MK IV with vaporizer field	08 Yrs
42.	Electronic Weighing Machine	06 Yrs
43.	Automatic Film Processor	10 Yrs

---

Note : Various other models of above equipment and any other equipment which is considered to be maintained through trade will also be deemed to be covered under this list.

Appendix ' B'

**EQPT UNDER REPAIR RESPONSIBILITY OF EME / CRCs**  
**ELECTROMEDICAL EQUIPMENT**

Ser No	Equipment	Probable life
1.	X-Ray Portable / Mobile & Dental below 100 ma	10 Yrs / 1Lac exposures
2.	X-Ray Eqpt Static 100 Ma/200 Ma	09 Yrs / 1Lac exposures
3.	X-Ray Eqpt Static 100 mA & above (indigenous)	08 Yrs / 30,000 readings
4.	DC Defibriliators ( all types)	07 Yrs / 6,000 shots
5.	Bed Side Monitors	07 Yrs / 30,000 hours

6.	Micro Wave Diathermy Units	10 Yrs / 10,000 exposures
7.	Surgical Diathermy Units (All types)	10 Yrs / 15,000 exposures
8.	ECT (Electro Convulsion Treatment) machine	07 Yrs
9.	Stimulator and vibrators	07 Yrs
10.	Selective Treatment Unit (GSF)	10 Yrs / 8,000 hours
11.	ECG machine single channel	10 Yrs / 1 Lac readings
12.	Infra Red Lamps	10 Yrs / 15,000 cases
13.	Ultrasonic Therapy Units	06 Yrs / 8,000 exposures
14.	Flame Photometers	10 Yrs / 9,000 hours
15.	Photo Electric Colorimeters	10 Yrs / 9,000 hours
16.	Ph Meters	06 Yrs
17.	Electrophoresis Power Supply Units	08 Yrs
18.	Photo Therapy Units	06 Yrs / 30,000 hours
19.	Baby Incubator Microprocessor based (Indigenous)	07 Yrs / 50,000 hours
20.	Ventilator & Respirators (Indigenous)	08 Yrs / 2 Lac hours
21.	Audiometers	10 Yrs
22.	Shadowless OT Lamps	10 Yrs
23.	Therapeutic Short Wave Diathemy	10 Yrs / 9,000 exposures
24.	Oxygen Concentrator	07 Yrs
25.	Aspiration Unit (Indigenous)	06 Yrs
26.	Nebuliser	06 Yrs
27.	Glucometers	07 Yrs
28.	Computerised ECG machine	10 Yrs
29.	Foetal Heart Rate Monitor (Doppler)	07 Yrs
30.	Auto NIBP Monitor	07 Yrs
31.	Portable Cardiac Monitor	08 Yrs
32.	Infusion Pump (All Types)	07 Yrs
33.	Pulse Oxymeter	07 Yrs
34.	Lamp Electric Field	08 Yrs

Note : Various other models of above equipment will also be deemed to be covered under this list.

Appendix ' C'

**EQPT UNDER REPAIR RESPONSIBILITY OF EME**  
**ELECTROMEDICAL EQUIPMENT**

Ser No	Equipment	Probable life
1.	Anaesthetic Apparatus (Indigenous)	08 Yrs
2.	Suction Apparatus	08 Yrs
3.	Steriliser all types	10 Yrs
4.	Autoclaves	06 Yrs
5.	OT Lamps (Wall Mounted)	10 Yrs

6.	Operation Tables	10 Yrs
7.	Air circulation equipment	10 Yrs
8.	Sphygmomanometers	08 Yrs
9.	Laryngoscopes	05 Yrs
10.	Ophthalmoscopes	06 Yrs
11.	Still Automatic	06 Yrs
12.	Comprators	06 Yrs
13.	Microscope (Optical types)	10 Yrs
14.	Ovens	06 Yrs
15.	Centrifuges	06 Yrs
16.	Wheel Chairs	06 Yrs
17.	Dental Chair (Indigenous)	15 Yrs
18.	Micrometers	08 Yrs
19.	Portable Electric Generators	08 Yrs
20.	Blood Storage Cabinate / Refrigerators	10 Yrs
21.	Incubator Electric	06 Yrs
22.	Bull Nose complete	06 Yrs
23.	Examination Table	10 Yrs
24.	Recovery Trolley	06 Yrs
25.	Spot light for examination	10 Yrs
26.	Weighing machine	06 Yrs
27.	Han and wrist exerciser	08 Yrs
28.	Portable Resuscitator	08 Yrs
29.	Exam spot light (Cold)	10 Yrs
30.	Strecher Trolleys folding type	06 Yrs
31.	Fluid warmer	08 Yrs
32.	Vet endoscope	06 Yrs

---

Note : Various other models of above equipment will also be deemed to be covered under this list.

Appendix' C'

**NOMINATED NODAL EME WORKSHOPS FOR REPAIR  
OF ELECTROMEDICAL EQUIPMENT**

Ser No	Name of Nodal Workshop	CRC
<b>Southern Command</b>		
1.	Station Workshop, Mumbai	CRC, C/o CH (AF) Bangalore
2.	Station Workshop, Secunderabad	
3.	Station Workshop, Chennai	

---

- |    |                            |                          |
|----|----------------------------|--------------------------|
| 4. | 12 Corps Zone Workshop     | CRC and AFMSD Wksp, Pune |
| 5. | Station Workshop, Pune     |                          |
| 6. | Station Workshop, Bambolim |                          |
| 7. | Station Workshop, Baroda   |                          |

### **Eastern Command**

- |    |                           |                         |
|----|---------------------------|-------------------------|
| 1. | 862 Fd Wksp Coy           | CRC, C/O CH(EC) Kolkata |
| 2. | 3 Corps Zonal Wksp        |                         |
| 3. | 4 Corps Zonal Wksp        |                         |
| 4. | 33 Corps Zonal Wksp       |                         |
| 5. | Station Workshop, Kolkata |                         |
| 6. | 306 Station Workshop, EME |                         |
| 7. | 307 Station Workshop, EME |                         |
| 8. | 311 Station Workshop, EME |                         |

### **Western Command**

- |    |                                  |                        |
|----|----------------------------------|------------------------|
| 1. | Station Workshop, Jabalpur       | CRC, C/o AFMSD Lucknow |
| 2. | Station Workshop, Chandimandir   |                        |
| 3. | 11 Corps Zone Workshop           |                        |
| 4. | 7002 EME Bn                      |                        |
| 5. | AHQ Static Workshop, Delhi Cantt |                        |
| 6. | 7010 EME Bn                      |                        |

### **Central Command**

- |    |                            |                        |
|----|----------------------------|------------------------|
| 1. | Station Workshop, Jabalpur | CRC, C/o AFMSD Lucknow |
| 2. | Station Workshop, Lucknow  |                        |
| 3. | 7001 EME Bn                |                        |
| 4. | Station Workshop Dehradun  |                        |
| 5. | Station Workshop Allahabad |                        |
| 6. | Station Workshop Bareilly  |                        |
| 7. | Station Workshop Roorkee   |                        |
| 8. | Station Workshop Kanpur    |                        |
| 9. | 196 (I) Fd Wksp Coy        |                        |

### **Northern Command**

- |    |                             |                           |
|----|-----------------------------|---------------------------|
| 1. | 193 Fd Workshop (14 EME Bn) | CRC, C/o CH (NC) Udhampur |
| 2. | 7015 EME Bn                 |                           |
| 3. | 14 Corps Zonal Workshop     |                           |
| 4. | 626 EME Bn                  |                           |
| 5. | 304 Station Workshop        |                           |

---

Note :AFMSD Workshop Pune is responsible for major repair of electro medical eqpt.

Appendix 'E'

**CHECKLIST**

- (a) PVMS / NIV No.
- (b) Full Nomenclature
- (c) A/U
- (d) Quantity
- (e) Source of receipt indicating A/T  
Supply Order No. Depot IV No. & dated.

- (f) Quantity held with their condition i.e. Ser / Rep / Unsv.
- (g) Quantity required to be repaired.
- (h) Nature of repair including -----, if any, required.
- (j) Cost of equipment
- (k) Comparative statement of quotations received for repairs and basis of selection / recommendation of particular quotation.
- (l) Reasons for recommending civil repairs and Servicing/ maintenance, whether local station workshop/ Command Repair Cell expressed their inability to repair and servicing / maintenance of the equipment.
- (m) BLR/BER certificate from dependent EME Workshop / Command Repair Cell where Applicable.
- (n) Breakdown of repair charges indicating service charges, cost of components and other misc charges.
- (o) Reasonableness of cost repair and servicing/maintenance considering cost of original equipment.
- (p) Number of times equipment went out of order and repaired through civil firm/CRC/EME sources.
- (q) Cost of repair and servicing/maintenance each time.
- (r) Cost of repair / AMC entered last time.

Appendix 'F'

**Maintenance of History sheet and Equipment Log Book.** For maintaining a chronological, equence of incidents occurring during the life cycle of an equipment, it has become imperative to maintain Equipment History sheet and Logbook for all sophisticated and expensive equipments. The suggested contents of both the docus are as follows:-

(a) **Equipment History Sheet**

- (i) Name of equipment
- (ii) Date of purchase



- (iii) Cost of Equipment
- (iv) Name & Address of Supplier
- (v) Date of Manufacture
- (vi) Date of Intallation
- (vii) Environmental requirements in terms of temperature, Lighting, ventilation and electrical load
- (viii) Spare parts Inventory
- (ix) Technical Manual & Circuit Diagrams
- (x) Guarantee/warranty period
- (xi) Use co-efficient
- (xii) Life of the equipment
- (xiii) Down-time/up-time
- (xiv) Any other Remarks.

(b) **Equipment Logbook** ( for all equipment costing more than Rs. 10,000)  
Auth: DGAFMS Memorandum No-159

- (i) Nomenclature and source
- (ii) PVMS No/NIV No
- (iii) Cost of the equipment
- (iv) Date of acquisition
- (v) AMC with validity
- (vi) Name of Manufacture & Supplier
- (vii) Date of defect/cession of function
- (viii) Nature of Defect
- (ix) Date of call for Repair

- (x) Date of completion of Repair
- (xi) Signature of NCO/C ward/Dept

Appendix 'G'

**Sentence of Equipment**

- (a) Non – electro medical equipment :

(Appx 'C')

ECHS Polyclinics → Dependent local EME workshop



BER



(ECHS Polyclinic ) ( Deposit in salvage as per direction of BOO)

(b) Electro medical equipment :

( Appx 'B')

ECHS Polyclinic → Nodal EME workshop / CRC



BER



(ECHS Polyclinic ) Local board of officer with ATEP as member)



Disposal as per BOO

(c) Sophisticated electrometrical equipment :

(Appx 'A')

ECHS Polyclinic → Local Board of officer with ATEO as a member)



BER



Disposal as per BOO

RESTRICTED

Tele: 35384

15 FEB 2018

Dir Gen of EME (Ops & Plans)  
MGO's Branch  
Integrated HQ of MoD (Army)  
DHQ PO, New Delhi - 110011

A35697/ECHS/EME OPS 3

05 Oct 2018

Central Organisation ECHS  
Adjutant General's Branch  
HQ of MoD (Army)  
Maude Lines  
Delhi Cantt-110010

13.8.18  
11.08.18  
11.08.18  
11.08.18

POLICY ON REPAIR AND MAINT OF VEHs EQPT AUTH TO ECHS AND  
CENTRAL ORGANISATION, REGIONAL CENTRES AND POLYCLINICS

1. Ref:-

- (a) EML (Ops & Plans) letter No A35697/ECHS/EME Ops 3 dt 05 Jun 2018.
- (b) Your letter No B/49782/Gen/AG/ECHS dt 25 Jul 2018

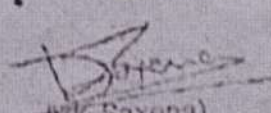
2. EME (Ops & Plans) vide letter u/r at Para 1 (a) above, had recommended changes in the existing Engg Sp Policy due to Impl of 'R' of CoE. Subsequently, Central Org. ECHS vide letter mentioned at Para 1 (b) above, has requested twg:-

(a) Repair of Electro and Non Electro Med Eqpt. All polyclinics of ECHS are mapped to a SEMO/ SEDO through a command and control matrix vide letter No B/49705 C&G/AG/ECHS/2018 dt 09 Mar 2018. The SEMO/ SEDO is responsible for provision of medicine/ consumables to the polyclinics. The SEMO/ SEDO is allotted funds under code head 363/01 for procurement of medicine and consumables. Repair and maint of med eqpt is also to be carried out from the same code head.

(b) Vehs & Genrs. Can be maint Ex-Trade.

3. Based on above recom of Central Org. ECHS, a mapping of affected ECHS Polyclinics has been carried out for the purpose of change of dependency in respect of repair of Electro and Non Electro Med Eqpt for affected Sins from Stn Wksps on to Repair Increments provided to MH/BHs/CHs/SHs/AH/ R&R/AFC under the SEMO/ SEDO. Copy of mapping for Ph-I & Ph-II Stn Wksp is at Appx 'A' & 'B'.

4. It is requested that any addn/ deletion in Appx 'A' & 'B' may pl be intimated at the earliest for further promulgation of amdt policy at this end.

  
Lt Col  
GSO-1 EME (Ops 2)  
For DG EME

Encls: As above

RESTRICTED



Tele: 23092509

Office of the DGAFMS  
Ministry of Defence  
'M' Block, New Delhi-01


34906/ECHS/ DGAFMS/DG-2(Pig)

09 Jul 2019

✓ DGMS(Army)-3H  
 DGMS(Navy)/E&S Sec  
 DGMS(Air)/Med-2  
 Central Organization ECHS

REPAIR AND MAINTENANCE OF EQPT AUTH TO  
ECHS POLYCLINICS

1. Refer:
  - (a) O/o DGMS(Army)-3H Note No. B79720/DGMS\_3H/2019 dated 02 May 2019 (not added to all)
  - (b) Central Org ECHS letter No. B/49761/AG/ECHS/2019 dated 18 Apr 2019 (not added to all)
  - (c) DG EME letter No. A/35697/ECHS/EME OPS 3 dated 05 Oct 2018 (not added to all)
2. SEMOs who are receiving requirement for repair/maintenance of eqpt from ECHS Polyclinics in their AOR due to disbandment of EME Wksps, are advised to take following action:
  - (a) Repair and Maintenance can be done by the available Repair Increments (RI) of EME provided to the Hospitals except Veh & Gens which can be maintained ex-trade.
  - (b) Wherever, Repair Increments are not available, repair/maintenance can be arranged through a civil firm as per para 1(a) of Govt of India, MoD letter No 3505/4/DGAFMS.DG-2D/2861/99/D(Med) dt 23 Sep 1999 and para 9(a) of this Dte Gen letter No. PC-505/DGAFMS/DG-2D/AMC/Policy/2016 dated 01 Nov 2016 (Copy Enclosed).
  - (c) Addl Funds under ECHS code head 363/01 for the same, if required, may be projected to DG-2C.
3. This has the approval of DGAFMS

  
 (Vishal Sharma)  
 Col  
 Dir AFMS(Pig)

End: As Stated

Internal  
DG-2C



Tele: 25683476

Central Organisation ECHS  
Integrated HQ of MoD (Army)  
Adjutant General's Branch  
Thimayya Marg  
Near Gopinath Circle  
Delhi Cantt-110010

B/49761/AG/ECHS/2021

23 Mar 2021

IHQ of MoD (Navy)/Dir ECHS (N)  
Air HQ (VB)/DPS  
HQ Southern Command (Med)  
HQ Eastern Command (Med)  
HQ Western Command (Med)  
HQ Central Command (Med)  
HQ Northern Command (Med)  
HQ South Western Command (Med)  
HQ Andaman & Nicobar Command (Med)  
All Regional Centres

**SOP ON REPAIR AND MAINTENANCE OF MEDICAL EQUIPMENT  
HELD AT ECHS POLYCLINIC**

1. Please ref CO ECHS letter No B/49761/AG/ECHS dated 11 Mar 2008.
2. Fwg amdt may please be made in Para 12 of SOP on repair and maintenance of medical equipment held at ECHS Polyclinic fwd vide our letter under ref as under :-

**FOR**

All gifted equipments will be taken on ledger charge that will form part of authorized load.

**READ**

All gifted equipments / equipments purchased out of non public fund and regimental fund will be taken on ledger charge and that will form part of authorized load.

3. Rest no change.



(Panchal Kalpeshkumar S)  
Lt Col  
Jt Dir (Med)  
for MD ECHS

**Copy to :-**

O/o DGAFMS/DG-2 (Plg) }

DGMS (Army)/5B }

DGMS (Navy)/Health }

DGMS (Air)/Med-5 }

- for info please.

524

med

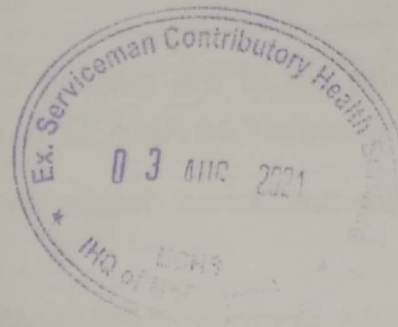
T: 23092509

Regd Post  
Office of the DGAFMS  
Min. of Def 'M' Block  
New Delhi-110001

3505/4/Policy /DGAFMS/DG-2D/Army order /2021

16 Jun 2021

DGMS (Army)  
DGMS (Navy)  
DGMS (Air)  
DG DS  
HQ IDS (Med)  
HQ SFC (Med)  
✓ Central Org ECHS  
DG BR  
DG RVS  
HQ Coast Guard



**REVISION APPENDICES 'A', 'B', 'C' TO ARMY ORDER 3/2010/DGMS:**  
**POLICY ON ENGINEERING SUPPORT TO MEDICAL, DENTAL AND**  
**VETERINARY EQUIPMENT TO THE ARMED FORCES**

1. Refer to:-
  - (a) O/o DGAFMS letter No 2741/Army order/DGAFMS/DG-2D dated 30 Mar 2016.
  - (b) AO 3/2010/DGMS.
2. As per provision of existing AO 3/2010/DGMS Appendices 'A', 'B', & 'C's are required to be updated from time to time on induction of new eqpt, amalgamation of the eqpt within the appendices and deletion of the eqpt as per obsolescence.
3. After closure of large number of Nodal EME Wksp and creation of repair increment (RI) with certain medical units it is an indeed requirement to revise the list of the medical, dental and vet eqpt.
4. Therefore, a list of the revised appendices as appx 'A', 'B', and 'C' in respect sophisticated eqpt, electro medical eqpt and non electro medical eqpt respectively are fwd herewith.

Cont---2



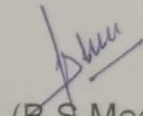
Details of the categories of eqpt and maintenance agencies are appended below:

S No	Type of the eqpt	Maint Agency	Remarks
(a)	Sophisticated eqpt	Supplying firm/Mfg firm	eqpt listed as appx 'A'
(b)	Electro medical eqpt	CRC/Nodal EME Wksp/RI	eqpt listed as appx 'B'
(c)	Non electro medical eqpt	Dependent EME Wksp/RI	eqpt listed as appx 'C'

5. A complete list of the existing Command Repair Cell (CRCs) and Nodal EME wksp are enclosed as Appx 'D' & Appx 'E'.

6. The above mentioned details are fwd for dissemination to the units under your AOR.

7. This has the approval of DGAFMS.

  
(B S Meena)  
TEO(Bio-Med)

Encls: (As above)

**Copy to:-**

AFMC, Pune  
AFMC (BTD) Pune  
AFMSDs Mumbai/Lucknow/Delhi Cantt/Pune  
Artificial Limb Centre, Pune  
AFTC Delhi Cantt.

} For info and necessary action.

**Internal:** DG-2C, DG-2E, DG-2F, DG-2S, PCMC ,

MAG-22(Med)

: For info and necessary  
dissemination to the EME Wksp



Revised Appx 'A' to AO 3/2010/DGMS  
issued vide O/O DGAFMS letter No  
3505/4/policy/ DGAFMS /DG-2D/Army  
Order/2021 dated 16 Jun 2021

**SOPHISTICATED EQPT TO BE MAINTAINED BY THE  
SUPPLYING FIRM THROUGH (CAMC/AMC)**

<b><u>Anaesthesiology (OT &amp; ICU)</u></b>		
<b>S.No</b>	<b>Nomenclature</b>	<b>Probable life in(yr)</b>
1	ABG (transcutaneous/arterial) monitor/analyser	9
2	Air beds fluidized	8
3	Anaesthesia machine (basic)	8
4	Anaesthesia work station/machine (advance)	9
5	Central air compressor with piping and tubing	9
6	Central monitoring station with peripheral monitors	9
7	Ethylene oxide/hydrogen peroxide sterilizer	9
8	High end ICU beds	9
9	Hyperbaric chamber	9
10	Hypothermia/hyperthermia units	8
11	ICU ventilator(high end) with compressor	9
12	Intracranial pressure monitor(ICP)	8
13	Microprocessor controlled fluid management system	9
14	Nitric oxide delivery system	9
15	Operation table (except folding type)	9
16	Oxygen generating plant	9
17	Plasma sterilizer	9
18	Total temp management system	8
19	Transport ventilator	8
<b><u>Cardiology &amp; Cardiac Surgery</u></b>		
20	Angiography system(including DSA)	9
21	Cardiac cath lab	9
22	Colour doppler machine	9
23	Coblation system	8
24	Echocardiography system/cardiovascular ultrasound system	9
25	ECMO extra corporeal life support system	9
26	Graft potency meter	9
27	Heart Lung( bypass) machine	9
28	Holter ECG/EEG	8
29	Optical coherence tomography	9
30	Pacemaker,cardiac (all types) external/noninvasive/invasive	8
31	Single balloon enteroscope	8
32	TMT machine	8

Cont .....2/

<u>Dental</u>		
33	Binocular dental microscope	9
34	Compact Computer aided designing and milling machine ( CAD-CAM) including CAD CAM scanner & sintering furnace for dental applications	8
35	Cone beam CT(CBCT)	10
36	Dental chair- all types	9
37	Dental chair compact complete	8
38	Dental laser (hard & soft tissue)	8
39	Dental laser for hard 2 graft	8
40	Digital OPG with cephalogram	9
41	Digital cephalometry	8
42	Extra oral suction machine	8
43	Flexible denture fabrication system	8
44	Florida probe	9
45	Front loading table top (autoclave) all types	9
46	Functional lab autonomy	9
47	High end surgical microscope for maxillofacial surgery	9
48	Induction casting machine	8
49	Portable mobile dental kit complete with accs lab	8
50	Radio vigiography (RVG) unit complete	8
51	Send blaster with pencil nozzles 50&250 micron send blasting material	7
52	Surgical micro-motor	7
53	Thermal root canal obturation system	7
54	Vaccum pressure casting machine	8
<u>Dermatology</u>		
55	Q switched ND YAG laser	9
56	Whole body phototherapy system	9
<u>Endocrinology</u>		
57	Autonomic functional lab	9
58	Bone densitometer	9
59	RIA analyser	9
<u>ENT</u>		
60	Audiometers ( all types)	9
61	Advance ENT and neurology microscope	9
62	Basic FESS set/advanced FESS set	8
63	Bionic Ear operation theatre with eqpt	10
64	Brain stem evoked response audiometry (BERA)	8

Cont .....3/

65	CCD camera (1 chip/ 3 chip), monitor, recorder with xenon light source for flexible fibroscope	7
66	Cochlear implant eqpt/instruments	7
67	ENT endoscopy set	8
68	Endoscopic sinus surgery set	8
69	ENT (treatment & diagnostic unit)	9
70	Eqpts for otoscopic & endoscopic surgery set	9
71	Microscopes high end (diagnostic/operating)	8
72	Micro-debrider	8
73	OAE scanner with laptop & printer	8
74	Sound localization laboratory eqpt	7
75	Surgical motor system	8
76	Temporal bone dissection lab and eqpt	8
77	Viscera 4k ultra high definition endo-vision system	8
78	Ventilating bronchoscope-pediatric	7
79	Wall mounted ENT diagnostic set	
<b><u>Gastro Enterology</u></b>		
80	Electronic upper GI & ERCP video endoscopy system	8
81	Mobile video endoscopy system	8
82	Non invasive transient elasto-graphy	8
83	Single balloon endoscope	9
84	Spy glass direct visualization system	9
85	Tumor ablation system	
<b><u>Haematology</u></b>		
86	Automated slide strainer H & E (haemat/histology)	9
<b><u>Nephrology</u></b>		
87	Continuous renal replacement therapy ( CRRT) machine	8
88	Dialysis machine(haemo/peritoneal dialysis)	8
89	Molecular Adsorbant Re-circulating System (MARS) complete	9
90	Reverse osmosis water treatment plant	9
91	Water purification system for type I ultra pure water/de-ionised water system	9
<b><u>Neurology</u></b>		
92	Ambulatory EEG system	9
93	Brain function therapy	9
94	Cerebral function monitor	8
95	EMG/NCV/EP/EEG machine	9
96	Instruments and eqpt for skull surgery	9
97	Intra operative neuro-physiological monitoring system	9
98	Multi channel EEG machine	8

Cont .....4/



99	Neuro surgery operating microscope	9
100	Neuro otological lab system	9
101	Neuro endoscope system	9
102	O-Arm complete	9
103	Radio frequency ablation system	8
104	Robotic surgical system	9
105	Ultrasonic aspirator	9
106	Wincosin card shorting system	9
<b><u>Nuclear Medicine and Radiotherapy</u></b>		
107	Automatic high pressure contrast injector	9
108	Brachy therapy unit ( HDR brachy therapy with TPS)	9
109	Check source	9
110	Cobalt therapy unit ( telecobalt 60 teletherapy machine with MLC)	10
111	Contamination monitor, Digital/Hand held	9
112	Conventional simulator (radiotherapy eqpt)	10
113	CT simulator with wide bore	9
114	Fast medical scanner	9
115	Fully automatic nucleic acid extraction/purification system	9
116	Gamma camera/ gamma knife	9
117	IGRT&IMRT machine	9
118	Isotop calibrator(well type for HDR brachy therapy)	9
119	Linear accelerator with IGRT/IMRT	9
120	Medical cyclotron	9
121	Mould room accessories with computerized styroform cutter & alloy shielding with oven	10
122	Radio isotope dose calibrator	9
123	Radio therapy planning system (treatment planning system)	9
124	Positron emission tomography (PET)scanner with multi detector	9
125	Self shielded automated synthesis module	8
<b><u>Obs &amp; Gynaecology</u></b>		
126	Cardiotocography(CTG)/NST machine	9
127	Color Doppler with TVS & linear probe	9
128	Office hysteroscopy set	8
129	In vitro fertilization work station	8
<b><u>Ophthalmology</u></b>		
130	Anterior segment digital imaging system	9
131	A-Scan/ B-scan system	9
132	Automated perimeter visual field analyser	9
133	Auto refracto-kerato meter	9

134	Corneal Topograph	8
135	Digital Fundus Camera	9
136	High end vitrectomy machine	9
137	IOL Master	8
138	Laser ophthalmic/ Laser lasik	9
139	Non Contact Tonometer(NCT)	9
140	Optical Coherence Tomography(OCT)	9
141	Phaco emulsification unit	9
142	Retinal angiography/Nerve fibre analyzer	9
143	Retinoscope	8
144	Rectam for retinopathy	9
145	Refractive surgery workstation	9
146	Refraction unit	9
147	Specular microscope	9
148	SLC DSAEK system for lamellar corneal surgery	9
149	Slit lamp	9
150	Tonopen	9
151	UBM	
<b><u>Orthopaedics</u></b>		
152	Arthroscopy set	9
153	Musculoskeletal /endoscopic USG	9
154	Orthopedic operation table	9
155	Robotic surgical system	9
156	TMJ Arthroscope	8
157	Total Hip replacement system	
<b><u>Paediatrics</u></b>		
158	Combined radiant warmer / Infant care radiant warmer with trolley (imported)	8
159	Cystoscopic pediatric set	9
160	Neonatal and paediatric OT table with patient warming system	9
161	Neonatal Ventilator with high frequency oscillatory ventilation facilities	9
162	Transcutaneous Oxymeter	8
<b><u>Pathology</u></b>		
163	Assay system	9
164	Automated ANA	9
165	Automated bacteriological culture/identification/sensitivity testing system	9
166	Automatic blood component processing system	9
167	Automated cover slipper	8



168	Automated cytogenetics workstation with FISH	8
169	Automated DNA	9
170	Automated electrolyte/blood /bio chemistry analyser	9
171	Automatic Immunohisto chemistry staining station	9
172	Automated rapid TB culture & drug sensitivity system	9
173	Automatic slide strainer	9
174	Automatic tissue processor	9
175	Blood donors couch	7
176	Cell saver/ separator machine	9
177	CD 4 /CD 8 Flow cytometer	8
178	CO2 Incubator	9
179	Computerized medical spectrometer	9
180	Cryostat	8
181	Cryotherapy unit complete	9
182	Digital imaging system for grossing station	8
183	Disinfectant generating system	8
184	DNA sequencer/extractor	9
185	Drug/Substance testing machine	9
186	ELISA Machine complete (washer/ reader)	9
187	Embalming machine	8
188	Freezing microtome	9
189	Fourier transform infra red spectrometer	9
190	Fully automated blood bank NAT	9
191	Fully automated column agglutination technology based Immuno hematology analyzer	9
192	Fully automated identification and antibiotic sensitivity testing machine	9
193	Fully automated haematology analyser	9
194	Floctometer	8
195	Gamma Cell Blood Irradiator	9
196	Gel Electrophoresis horizontal	9
197	Gel station for automatic blood grouping, cross matching and immuno haematology	9
198	Gradient PCR thermal cycler/RT-PCR machine	9
199	Grossing table	8
200	Incubator(all types)	9
201	Liquid based cytology system	9
202	Malditof system ( matrix assisted lanex)	9
203	Micro albuminometer and Hb analyzer	8
204	Micro-centrifuge	9
205	Microscopic digital imaging system( all types)	9
206	Microtome rotary and all types	8
207	Microwave disinfection system (bio medical waste)	9
208	Mortuary cabinet (all types)	8

209	MTB/RIF System for tuberculosis(CBNAAT)	8
210	Penta head microscope with digital camera	9
211	Operating microscope	9
212	Platelet agitator/incubator	9
213	Refrigerated centrifuge	9
214	Semi auto analyser	8
215	Transmission electron microscope	8
216	VDRL shaker	8
217	Whole body coagulation analyser	8
<b><u>Physio Therapy and Rehabilitation</u></b>		
218	Body composition analyzer	9
219	Computerized rehabilitation treadmill	8
220	Computerized Isokine system	9
221	Hot magnifier	8
222	Laser Therapeutic	9
223	Movement Therapy System	9
224	Phonological lab-diagnostic &therapeutic treatment unit	8
225	Physiotherapy eqpt (high end)	9
<b><u>Psychiatric</u></b>		
226	Biofeedback machine	9
227	Minnesota multiphasic personality inventory system	9
228	Photoc simulator with EEG	8
229	Repetitive trans cranial magnetic stimulator	8
<b><u>Radiology</u></b>		
230	App X-Ray mobile radiographic high frequency 60 mA/100mA/200mA/300mA	8
231	App X-Ray radiographic and fluoroscopic high frequency 100mA/160mA(6-10kw)	9
232	App X-Ray radiographic and fluoroscopic high frequency 200/300mA(> 10 kw)	9
233	App X-Ray radiographic and fluoroscopic 500mA & above	9
234	Computerized tomography (portable/ mobile )	8
235	Computerized tomography turnkey basis	9
236	CR(computerized radiography system)	8
237	DSA(digital subtraction angiography)-single/biplane	10
238	Dosimeters	9
239	High end radiation survey meter	9
240	Magnetic Resonance Imaging system	10
241	Mammography unit	9

Cont .....8/



242	Radiation field analyser	9
243	Secondary Standard Dosimeter(SSD)with water phantom	9
244	TLD Dosimeter with TLD reader	9
245	Transcranial doppler	8
<b><u>Reconstructive Surgery</u></b>		
246	Electro dermatomes	9
247	Intra-operative nerve monitoring system 16 channel with accessories	8
248	Liposuction Machine	9
<b><u>Respiratory</u></b>		
249	BIPAP/CPAP( non invasive ventilation system)	7
250	Cryo surgical unit	8
251	High End bronchial ultrasound system	8
252	Medical Thoracoscope ( semi rigid thoracoscope)	8
253	Polysomnography system with blue tooth	8
254	Pulmonary function test(PFT) machine/analyser portable/table top model with/without printer	9
255	Sleep Lab system	8
256	Storage plethysmograph system with diffusion study	9
<b><u>Urology</u></b>		
257	Extra Corporeal shock wave therapy/ lithotripter	9
258	MR fusion for biopsy for prostate	9
259	Pneumatic lithoclast	9
260	Resectoscope set complete	7
261	Uro perc mentor	9
262	Uterine Balloon therapy system	7
263	Ultrasonic Harmonic scalpel	9
264	Urodynamic System	9
<b><u>Veterinary eqpt</u></b>		
265	Hydraulic power large animal table	9
266	Small and large animal critical care respiratory ventilator	9
<b><u>Misc Dept</u></b>		
267	Automatic shredder	9
268	Breathe analyser, alcohol etc	8
269	Cameras/recorder/monitors/video/imaging systems	8
270	C Arm (with/without) Image intensifier	9
271	Cabinet blood storage refrigerator	9
272	Cold light source (with LED bulb)	8
273	Continuous Glucose monitoring system (CGMS)/real time blood glucose monitors, portable	9



274	Data archiving system compatible with scopes	8
275	Deep freezer (all types)	9
276	Endo venous laser system/ endo vision system	9
277	Fibrotic scope -(flexible/rigid) urethro /cyto /uretero /renoscope / laryngo /phyrango/ tracheo/ broncho/ colonoscope/ duodenoscope/ oesophagoscopes /gastroscope	7
278	Excimer lamp	7
279	Hard/soft tissue laser	9
280	Headlight - LED/fibre optic	8
281	Intense pulsed light	9
282	Integrated mono-polar bipolar machine	9
283	Laser neodymium YAG/holmium YAG/carbon dioxide/Argon/krypton	9
284	Laser unit for soft tissue surgery with accessories	8
285	Laposcopic surgical system/ surgical set	9
286	Lab portable vascular	8
287	Micro vascular surgery instruments set	9
288	Microscopes high end (diagnostic/operating)	9
289	Motorized Hi Low bed (Indigenous/imported)	9
290	Multichannel invasive monitors	9
291	Mobile air ascepticiser	9
292	Peripheral nerve stimulator system	9
293	Reflux monitoring system	7
294	Ultrasonic piezo surgical unit	7
295	Ultrasound machine (all types)	9
296	Video imaging system	8
297	Vessel sealing system	7
298	Wireless sentinel lymph node detection system	8

**Note:-** Various other models of the above mentioned eqpt and/or any other eqpt which is considered to be maintained through trade will be deemed to be covered under this list.

Revised Appx 'B' to AO 3/2010/DGMS  
issued vide O/O DGAFMS letter No  
3505/4/policy/ DGAFMS /DG-2D/Army  
Order/2021 dated 16 Jun 2021

Eqpt under repair responsibility of CRC/Nodal EME Wksp/RI

<u>Anaesthesiology (OT &amp; ICU)</u>		
S.No	Nomenclature	Probable Life(yr)
1	HF electrosurgical unit/diathermy monopolar & bi polar	8
2	Infusion pump (all types)	7
3	Tourniquet system( electronic/pneumatic)	8
<u>Cardiology &amp; Cardiac Surgery</u>		
4	Defibrillator cum monitor all types ( with/without pacemaker) and AED	9
5	ECG machine single channel	7
6	ECG machine multi channel	8
<u>Dental</u>		
7	App X-Ray Dental complete 7/8mA @70-80KVP	7
8	App X-Ray Dental (DC Operated )	8
9	Automatic developer and processor (dental)	7
10	Light Cure unit LED/ cordless	7
<u>Dermatology</u>		
11	Radiofrequency skin cautery for dermatology	7
12	Magnifying loop ( fibreoptic only)	7
<u>Obs &amp; Gynaecology</u>		
13	Doppler(for gynaecology)-portable/hand held	7
14	Fetal monitor	7
<u>Pathology</u>		
15	Apparatus electrophoresis power supply	7
16	Bio-mixer	7
17	Blood bag tube sealer	7
18	Colorimeter photo electric 220 volt	7
19	Duplicating unit, microprocessor controlled with agar agar gel	7
20	PH meter digital	7
<u>Physiotherapy &amp; Rehabilitation</u>		
21	Advanced electrotherapy and electro-diagnostic units with interferential therapy and TENS & TENS only	8

Cont .....2/

22	App Selective treatment (galvanic/faradic) complete (all types) for operation on 220V, 50 cycles	7
23	Electronically controlled combined traction unit	8
24	Exercisers, Continuous passive Motion machine (CPM)	9
25	Long wave/ short wave therapy machine	9
26	Microwave therapy unit ( continuous/pulse)	9
27	Thermal magnetic and vibration combination therapy unit	7
28	Ultrasonic therapy unit	8
<b><u>Radiology</u></b>		
29	App X-Ray Mobile radiographic 2 pulse 60 mA/100mA/300mA	8
30	App X-Ray Radiographic/Fluoroscopic 2 Pulse 100mA/125KV	9
31	App X-Ray Radiographic/Fluoroscopic 2 Pulse 200/300mA	9
32	App X-ray self rectified portable 2 pulse 15/20mA/85 KV	7
33	Automatic film processor	9
<b><u>Misc Dept</u></b>		
34	Bed side monitors	9
35	Blood pressure monitor ( non invasive) except mercurial type	7
36	Cold light source (operated with Xenon bulb)	7
37	Drill micro motor/saw system	8
38	ECG/NIBP/SPO2/TEMP monitor	9
39	ECT Machine	8
40	Halogen mobile light	7
41	Low noise suction machine	8
42	Ophthalmoscope, direct/Indirect	8
43	Oxygen concentrators	8
44	Pulse Oxymeter- hand held/table top	7
45	Rhinoplasty instruments set	8
46	Self illuminating retractors with light source	8
47	Trolley Infant care with radiant warmer (Indigenous)	8
48	Ultrasonic cleaners	8
49	Vet: Muscle stimulator	7

Note: Various other models of the above mentioned eqpt and/or any other eqpt will also be deemed to be covered under this list.



Revised Appx 'C' to AO 3/2010/DGMS  
issued vide O/O DGAFMS letter No  
3505/4/policy/ DGAFMS /DG-2D/Army  
Order/2021 dated 16 Jun 2021

Eqpt under repair responsibility of dependent EME Wksp/RI

<u>Anaesthesia (OT &amp; ICU)</u>		
S.No	Nomenclature	Probable Life in(Yr)
1	Alpha bed	6
2	Autoclave/Sterilizer (1ph/3ph) vertical electrically operated (non microprocessor based)	8
3	Autoclave/Sterilizer (1ph/3ph) horizontal electrically operated (non microprocessor based)	9
4	Ceiling OT light- Indian make	8
5	Fluid warmer	9
6	Operating chair/stool	9
7	Operating table (light weight folding type)	9
<u>Dental</u>		
8	Acrylyzer	7
9	Amalgamators	7
10	Apex locator	7
11	Articulator semi adjustable with face bow	8
12	Automixing unit for rubber-base impression materials	8
13	Electro polishing unit	7
14	Grinder of high speed alloy	7
15	Hydro soldering unit	7
16	Intra oral welder	7
17	Micro motors	7
18	Pressable ceramic system	8
19	Water distiller	7
<u>Physiotherapy &amp; Rehabilitation</u>		
20	Ergometer cycle ,cycle static,exerciser bicycle	8
21	Hand and wrist exerciser	8
22	Lamp infra red (all types)	7
<u>Pathology</u>		
23	Centrifuge	7
24	Incubator electric	7
25	Microscope (optical type only)	8
26	Still Automatic	7

Cont .....2/

**Veterinary**

27	Vet: Ultrasonic dental scalar	8
28	Vet: endoscope	7
29	Vet : electric horse tooth raspatory	7
30	Vet : Oroscope with torch lamp	7
31	Vet : Transquilising gun	7

**Misc Dept**

32	Air circulation eqpt	7
33	Comparator	7
34	CVT, Stabiliser & UPS (0.5/1/2/5/ 10) KVA	7
35	Disinfectors/ fumigation system/fogging machine	7
36	Examination table	9
37	Gynae examination couch/ obstetric chair/bed hydraulic with height adjustment and leg support	9
38	Hand dynamometer electronic	7
39	Lamp electric field 12V with step down transformer/(bty operated)	8
40	Lamp operating shadow less with halogen light 230VAC	8
41	Mobile video cart compatible with laparoscopy set	9
42	Multi roller stretcher trolley	8
43	Oven drying	8
44	Portable electric generators	9
45	Printer all types	7
46	Recovery trolley	7
47	Shower trolleys for burns	8
48	Sphygmomanometers (mercurial type)	7
49	Spot light for examination	7
50	Stretcher fourfold air base/ stretcher trolley folding type	7
51	Suction machine - foot/electrically operated	7
52	Water bath/paraffin bath/serological bath/fluido therapy	8
53	Weighing machine ( platform type)	7
54	Wheel chair ( all type)	7

Note: Various other models of the above mentioned eqpt and/or any other eqpt will also be deemed to be covered under this list.

Appx 'D'

**LIST OF COMMAND REPAIR CELL (CRCs)**

S.No	Name of CRC	Remarks
1.	CRC C/o Air Force Hospital, Bangalore	
2.	CRC C/o AFMSD Pune	
3.	CRC C/o Comd Hosp, Kolkata	
4.	CRC C/o AFMSD Delhi Cantt	
5.	CRC C/o AFMSD Lucknow	
6.	CRC C/o Comd Hosp Udhampur	Non Functional