

**OPERATING ROOM**

**STANDARD OPERATING PROCEDURE**

**500 BED FLEET HOSPITAL**

## TABLE OF CONTENTS

	<u>TOPIC</u>	<u>PAGE</u>
A.	MISSION	3
B.	FUNCTIONS	3
C.	PHYSICAL DESCRIPTION OF FUNCTIONAL AREA	3
D.	SPECIAL CONSIDERATIONS/HAZARDS	3
E.	DEPARTMENT ORGANIZATIONAL STRUCTURE	4
F.	JOB DESCRIPTIONS	4
	1. OR Supervisor	
	2. Staff Nurse	
	3. Technologist	
G.	WORKLOAD	4
H.	TASKS - UNIQUE TO FIELD ENVIRONMENT	6
I.	RESPONSE TO DEPLOYMENT HAZARDS	12
J.	ENEMY PRISIONERS OF WAR	15

**500 BED FLEET HOSPITAL**  
**STANDARD OPERATING PROCEDURES**  
**OPERATING ROOM**

A. **MISSION:** Render surgical care necessary to sustain life and limb.

B. **FUNCTIONS:**

Perform abdominal surgical procedures, general thoracic surgery, general orthopedic procedures, including arthroscopic surgery; limited vascular surgery, dental and neurosurgical surgeries.

Capabilities not included: Definitive surgical care, reconstruction and elective surgical procedures.

C. **PHYSICAL DESCRIPTION OF FUNCTIONAL AREA:**

1. Space is limited.
2. There are 3 OR modules, each with two operating tables.
3. CSR is located in one module with a sink and 2 sterilizers.

Instrument sets are stored in this space.

4. The tent area is used as an assessment/interview space for impending surgical cases and storage of consumable supplies.

D. **SPECIAL CONSIDERATIONS/HAZARDS:**

1. Since space is limited, only those supplies and instruments needed for the procedure should be placed in the module. Restock all supplies and equipment before the start of every procedure to prevent undue movement in and out of the module.

2. Instrumentation on hand will dictate the content of instrument trays. Individual surgeon requests for separate trays cannot be addressed. All trays will contain general instruments for type of procedure and are sufficient in number to meet the mission.

3. More than one specialty may be operating on the same patient at the same time i.e. thoracic/orthopedics, in the same module. In short, there will be many people working in a sterile environment that in a regular hospital setting would contain only a single OR table, one patient and one surgical team.

4. In a contingency, the OR continues surgery until all patients requiring surgical care have been served. There is NO published OR schedule. The surgical tracking team monitors all patients awaiting surgery or OR availability. As OR tables become available, Prep and Hold is notified and the patient is sent to the OR.

5. When all surgical patients in the Immediate category have been operated on, those in the Delayed category will be worked into the OR routine. When all patients in both of these categories have been served, patients in the Expectant category with injuries that may be corrected or lessened by surgery, will be worked into the OR routine.

6. Humidity and temperature control within each module will be difficult to maintain in the optimal ranges. Therefore, these should not be a major focus of the staff.

7. Between cases, the surgical technologists will transport all dirty and contaminated instruments to the appropriate CSR Module, remove gown and gloves, wash hands and pull instruments and supplies for the next procedure. It is at this time that the OR will notify Prep and Hold of available OR space and send for the next patient.

8. There will not be an extensive turn around time between cases. Personnel must develop the ability to clean, pull, open and set up cases in minimal time.

Note: Due to the unpredictable nature of any contingency and the multiplicity of surgical wounds, there is no accurate means available to predict OR utilization or surgical time for each or any category of patient. Turn around time will be affected by the complexity of the case, finished as well as pending, and the speed with which the surgical team can clean, pull and set up for the next case. Therefore, no effort will be made to define or predict time frames. The OR staff would be better served to simulate various scenarios to test and train the staff in operating in this diverse, complex environment.

9. Personnel from OR may be tasked to remove unexploded ordinances from a casualty, at the discretion of the Commanding Officer. An explosive ordinance team should include one surgeon, one OR tech and one anesthesia staff member. The team will perform ordinance removal in an area away from the OR and must wear protective clothing (flack jacket/helmet). Once the ordinance has been removed and transferred to the proper Ordinance Disposal Team, the patient will be transported to the OR module for completion of the procedure(s).

10. All tissue, body parts, etc., must be handled in accordance with Command Policy. Consideration should be given to the social customs of the area.

11. All personnel assigned duty in the OR must be thoroughly familiar with equipment used in the course of a duty day. This training should occur pre-deployment as the demands placed on the OR in theater may not enable the department to train personnel "as they go". Training in theater may be limited to orientation only. It is recommended that the department obtain descriptions of OR equipment and supplies during pre-deployment to provide familiarization.

12. Tracking of OR backlog time is critical. Estimated times projected for specific casualty conditions or multiple wound situations are found in the DEPMEDS Clinical Guidelines and Treatment Briefs. These guidelines may be obtained from the Universal Data Repository (UDR) which Command Management Information Department (MID) should have. Actual times may vary, but projecting backlog using the DEPMED information provides a guide of anticipated workload and OR time.

13. If accidentally punctured or cut with contaminated sharp:

(a) Notify Circulating Nurse or OR Supervisor.

(b) Seek first aid.

(c) Complete incident report on NAVMED 6010/14.

E. **DEPARTMENT ORGANIZATIONAL STRUCTURE:**

1. Responsibility.

(a) The Director of Surgical Services is responsible to the Commanding Officer for all surgical assets.

(b) The Surgeon designated as Head of Surgical Department (Chief of Surgery) provides the overall policy implementation and establishes procedures utilized in the Operating Room.

(c) The Operating Room Supervisor is responsible for the management and supervision of the Operating Room and Central Sterile Processing, equipment and personnel assigned duty therein.

(d) The Anesthesiologist designated as Head, Anesthesia Department is responsible for all anesthesia personnel assigned to the Fleet Hospital and for anesthesia policy and utilization throughout the hospital.

2. Staffing.

(a) Nurse Corps Officers with the subspecialty code of 1950.

(b) Surgical Technologists with the NEC of 8483.

3. Watch Bill. In developing the watch bills for the Operating Room, Central Sterile Processing and Anesthesia, the following apply:

(a) The OR does not provide staff for Prep and Hold.

(b) Surgery is a 24 hour a day, seven day a week operation that is open and working until all surgical cases have been completed.

(c) It is not necessary for the entire staff of the CSR to be OR qualified but the Nurse in charge must be.

(d) Off duty OR personnel are always on call.

4. Special Watches. It will be necessary to appoint and train selected OR personnel to accomplish surgical triage and OR backlog/surgical patient tracking. These personnel should stand OR watch in these functions so that these processes continue 24 hours a day, 7 days a week.

F. **JOB DESCRIPTIONS:**

1. OR Supervisor=accountable for all nursing care activities, unit operation, and staff functions in accordance with Fleet Hospital Policy. Must demonstrate administrative, leadership and teaching abilities with effective interpersonal and intradepartmental relationship.

2. Staff Nurse=responsible for the nursing care of assigned patients during a given period of time. Also, the direction and supervision of personnel assigned to him/her.

3. Technologist=anticipates and plans for assigned surgical procedures. Ensures all standard equipment is in the room and in working order. Under the direction of the RN, will scrub or circulate for assigned procedures. Knowledge of sterilization practices.

G. **WORKLOAD:** Variable.

H. **TASKS - UNIQUE TO FIELD ENVIRONMENT:**

1. Maintain Operating Room readiness.

(a) Cleaning routine in the OR module will depend on the case load for that module. Ideally, cleaning will occur daily with at least a wipe down of the tables and a damp mop of the floor around the OR table between cases with a germicidal solution. However, caution must be exercised when surgery is in progress on the adjacent table. At least once a week, the entire module should be cleaned and disinfected.

(c) Per case cleaning schedule:

- (1) Roll up contaminated linens and double bag.
- (2) Place other linens in regular laundry bag.
- (3) Place trash in plastic bags.
- (4) Empty drainage bottles into a covered container in the CSR area.
- (5) Rinse all used instruments in cold water.
- (6) Disengage all sharps and place in sharps container.
- (7) Return instruments and basins to appropriate CSR module.

(d) When cleaning the module:

- (1) Place all equipment to one side if possible.
- (2) Allow surfaces to air-dry as long as possible before setting up next case.

(e) Surgical Support Space cleaning:

- (1) Swab decks with germicidal solutions and wet-vacuum.
- (2) Wash scrub sinks.
- (3) Damp dust shelves.
- (4) Allow surfaces to air dry.
- (5) Wash down ISO container bulkheads with germicidal solution weekly when OR caseload permits.
- (6) Change vent covers to ISO containers weekly.

(e) Log all cleaning in the OR daily log maintained in the Chief of Surgery office.

(f) Daily checking of all equipment within each module will be accomplished before start of surgery for the day. If the OR operates for the entire 24-hour period, equipment will be checked while operated. Equipment requiring maintenance or repair will be removed from service immediately and sent to Medical Repair. Surgical equipment should be given the highest priority for medical repair attention and returned to service.

2. Inspect equipment.

(a) Check emergency equipment for proper function each watch or as caseload permits.

(b) Report major equipment malfunction to OR supervisor.

3. Obtain blood products.

(a) Call the Blood Bank (laboratory) for blood products needed for a procedure. Store in refrigerator located in OR support module.

4. Nursing care of the patient in surgery.

(a) Immediately pre-op, efforts are made to provide a calm, professional atmosphere and to promote confidence on the part of the patient.

(b) Ensure completeness of two copies of the Operation Report (SF 516) including time anesthesia began, time surgery started and ended, as well as time patient transferred to PACU. Place the original in patient's record and the copy in the control desk basket in OR support area.

(c) Complete intra-operative nursing notes form. Specifically note:

(1) Estimated blood loss

(2) I&O

(3) Sponge and needle counts

(4) Drains inserted

(5) Dressing applied

(d) Label all specimens, record in OR log and get runner to deliver specimens to lab.

(e) If a cardiac arrest occurs, Circulating Nurse will record time of arrest on Operative Record and on Cardiac Arrest Flow Sheet.

(1) If the patient expires, follow the hospital procedure for postmortem care.

(2) Prepare notice of Death (NAVMED 6320/5)

(3) Record in Nursing Notes, the time of death, surgeon making the pronouncement and the name of individual contacted to secure the deceased's personal effects.

4. Release of Information.

(a) OR personnel will not discuss the status of any patient or procedure with personnel outside of the OR area unless specifically directed to do so.

(b) Release of information is governed by Command policy.

6. Universal Precautions.

(a) Each patient will be regarded as infectious and OR personnel Will employ universal precautions throughout contact with patient.

7. Prisoners of War. In the event that there are prisoners requiring surgical care, the following will be adhered to:

(a) The guard accompanying the patient to the OR will remain in the Module until the patient is under anesthesia (general) and in the OR Support Area during the procedure. The guard will accompany the patient to the PACU.

8. Fire Protection.

(a) Sound the alarm

(b) Notify:

(1) Public Works

(2) Officer of the Day

(3) Department Heads

(c) Describe:

(1) Exact location

(2) Type of fire

a. CLASS A – Rubbish, paper, wood, etc. Fire extinguisher  
Water.

b. CLASS B – Flammable liquids, gas, oil, etc. Fire  
extinguisher – Carbon Dioxide (CO<sub>2</sub>) and/or Dry Chemical.

c. CLASS C – Electrical. Fire Extinguisher – Special agent  
(powder).

Note: Combustible metals react violently if water is applied. Use Metal-X  
compound or dry graphite agent.

(d) Evacuate patients from the immediate area following the Posted  
Evacuation Flow Chart.

(e) If unable to evacuate patient or others:

(1) Close doors to module or tent/flaps to confine fumes and  
prevent drafts.

(2) Secure utilities in the immediate area: oxygen, gas, etc.

(3) Obtain and use the nearest correct extinguisher on the  
fire.

(4) Direct firefighters to the scene of the fire.

(f) Muster all hands (staff and patients) according to fire bill.

## 9. Power Shedding.

(a) Occasionally it will be necessary to energize/de-energize  
circuits in the event full power is not available.

(b) OR staff must be fully aware of mission essential equipment.  
Pieces of equipment must be clearly marked that must have power available at  
all times.

(c) Each power distribution panel serving the OR must have circuits  
prioritized should power shedding be required. The Senior Technologist will  
assure this is done.

(d) A list of critical circuits and equipment will be identified and provided to Public Works upon initiation of theater operations.

(e) Critical circuits and equipment will be clearly marked with the number (1) to avoid disrupting power.

(f) The OR Supervisor will provide a copy of this information to the DSS.

## I. RESPONSE TO DEPLOYMENT HAZARDS

### 1. FIRE PROCEEDURES

- **Initially, attempt to extinguish a fire with a portable fire extinguisher ONLY IF THE FIRE IS CONTAINED.**
- Simultaneously, the Functional Area (FA) needs to **IMMEDIATELY** contact ADMIN either by phone or runner/messenger. **ADMIN WILL SOUND THE ALARM FOR FIRE.**
- Smoke boundaries need to be set by the FA staff by dropping the TEMPER liner flaps leading to the FA and vestibules(s). All flaps throughout the hospital need to be dropped to control the possible flow of smoke.
- The FA Leader will decide to evacuate the space if the fire is determined to be out of control.
- All O2 cylinders (on a cart) positioned in each appropriate FA need to be removed when the space is evacuated.
- A FA staff member should be assigned in each area to secure the electrical (C-panel) and HVAC units.
- A muster of all staff and patients within the affected FA needs to be taken immediately and sent to ADMIN by runner.
- The FA Leader needs to wait at the FA access point for the Fire Marshall and Fire Team to arrive in order to report: type of fire, volatile items in the space (O2 cylinders, HAZMAT) and any casualties known to be in the space.
- When assessing the intensity of the fire, the Fire Marshall WILL DECIDE WHETHER OR NOT THE ADJACENT FUNCTIONAL AREA (S) WILL EVACUATE. Therefore, **the FA on either side of the area of fire will wait for the word from the Fire Marshall before evacuating.**
- Once the fire is out, there will be an inspection of the damaged area by the Fire Marshall, FA Leader and other key personnel.
- The Fire Marshall will give an assessment report to the Commanding Officer describing damages sustained by the FA. Depending on the outcome of the fire, the FA may need to relocate somewhere else until it is

fully functional again. The FA Leader needs to await orders from the Command Staff before reentering the FA and returning to duty.

## 2. CHEMICAL/ BIOLOGICAL ATTACK

- The hospital ADMIN department will notify the hospital compound, via 1MC, if there is a possibility of a biological/chemical attack.
- **All areas of the compound must respond appropriately**
- Once the alarm has been sounded for biological/chemical attack, **THE INITIAL ACTION TAKEN IS TO DON AND CLEAR YOUR GAS MASK.** Since the fleet hospital is operational, sleeves should always be down. The donning and clearing of the gas mask should be accomplished in a total of **8 seconds**.
- If a MOPP level is required, the ADMIN department will announce that accordingly and everyone will proceed to MOPP Level 4. This task must be accomplished within **8 minutes**.
- Once Personal MOPP gear is on, place gas masks on your patients.
- One person from each FA should be assigned to secure the HVAC unit (to prevent gas from entering FA). **DO NOT DROP THE FLAPS IN THE HOSPITAL!** The designated person should NOT reenter the hospital but should proceed to the EOD/Decontamination bunker.
- **A muster of all FA staff and patients needs to be taken immediately and sent to ADMIN.**
- **Drink water!! Hydration, hydration, hydration.**
- The **ALL CLEAR** will be announced by ADMIN over the 1MC.

### 3. AIR RAID PROCEDURES

- Once the alarm has been sounded for air attack, **THE INITIAL ACTION TAKEN IS TO EVACUATE ALL FA STAFF AND PATIENTS TO THE BUNKERS**. The entire compound must evacuate to appropriate bunkers including living spaces/GPL's and the COMMZ
- **Conduct an accurate muster of all staff personnel and patients immediately and submit it to the ADMIN bunker.**
- Be sure to bring all gear including canteens since mustering may require everyone to be standing outside for long periods of time.
- It's not necessary to secure C-panel or HVAC during an air raid drill. **Evacuate to bunkers ASAP.**
- When announced over the 1MC, each FA must send in two junior personnel to search and sweep high, medium and low on both sides of the FA to check for bombs. All other personnel will stay outside in bunkers until area is cleared. **The All Clear will be announced over the 1MC.**
- **MISCELLANEOUS ITEMS**
- Each FA should denote a supply petty officer who is responsible for equipment inventory/high-tech gear checkout. If supplies are needed, submit a request to the student SK's/supply department for issue. The student SK's will request supplies from FHOTC supply if NIS.
- If trouble arises with HVAC or C-panel (electrical power), submit a work request to the student Public Works department. Both the HVAC and C-panel operations remain off-limits to students other than Seabees.
- Rear doors to FA are to be used only as evacuation routes or for patient flow during peak flow ONLY. There are only two ways to enter the hospital...either on foot by the ADMIN temper or through CAS REC via litter.
- Each FA needs to have a logbook or similar system in order to keep track of all staff and patients within the compound. Each time a staff member or patient leaves the FA, he/she must be logged out (time, location) and then logged back in when he/she returns. This will assist with accuracy when conducting musters.

J. **PATIENT PROCEDURES FOR HANDLING ENEMY PRISONERS OF WAR**

A. **PURPOSE:** To detail patient handling procedures for enemy prisoners of war within the fleet hospital.

B. **DEFINITION:**

Enemy prisoners of war (EPW) – those who require treatment who are prisoners of U.S. or allied combat forces.

C. **EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:**

1. Restraints (theater command military police or hospital issue).
2. Others as specified in admission procedures (all forms will be marked with the words “Prisoner of War” or “EPW”).

D. **STEPS:**

1. Upon presentation of EPW to functional area, notify the Security Department and Patient Admin.
2. Upon admission to Casualty Receiving, Security will be responsible for the following notifications:
  - (a) **Theater command military police (MP) headquarters.**
  - (b) **Executive Officer.**
  - (c) **Director of Nursing.**
  - (d) **Director of Administration.**
3. Perform essential life saving care.
4. Inform MP that hospital staff will not assume custody of patient, and that MP will retain custody of EPW until relieved by appropriate MP headquarters staff or patient is transferred to EPW holding center (external to hospital).
5. After treatment, have corpsman or litter bearer escort MP and EPW to next functional area charge nurse. A correctly annotated admissions packet will be delivered by hand to the charge nurse.
6. During course of treatment, patient will be guarded by MP and/or restrained until treatment is terminated.

7. Movement to another functional area will be reported to Security.
8. EPW's will be fed either on the ward or in the general mess. If allowed to eat in the general mess, EPW's will be accompanied by MP guards.

E. RESONSIBILITY:

CMAA/Security.