

Amphibious Medical Support



CAPT JOHN P. LABANC, DC, USN
III Marine Expeditionary Force Surgeon

Amphibious Forward Resuscitative Capabilities (Role 2)

1. Fleet Surgical Team (FST)
2. Casualty Receiving and Treatment Ship (CRTS)
3. Marine Expeditionary Unit (MEU) Shock Trauma Platoon (STP)
4. Shipboard Surgical System (SSS)
5. Expeditionary Resuscitative Surgical System (ERSS)

Fleet Surgical Team (FST)

- 9 Fleet Surgical Teams
 - 4 San Diego (FST 1, 3, 5, 9)
 - 4 Norfolk (FST 2, 4, 6, 8)
 - 1 Okinawa (FST 7)
- Each FST is “attached” to an Amphibious Squadron (PHIBRON)
 - Commodore (= Line O6) is Commander, Amphibious Squadron
 - COMPHIBRON ‘owns’ three L-class ship;, LHA/LHD flagship
- COMPHIBRON traditionally deploys as an Amphibious Task Force (CATF)

**ARG + MEU + CG + DDG + Submarine + P-3 =
Expeditionary Strike Group (ESG)**

Commander amphibious squadron= COMPHIBRON
Amphibious ready group= ARG

FST Officer Core Manning

1. OIC/CATF Surgeon = O5/06 Clinician
2. Medical Regulating/Control Officer (MRCO)
3. General Surgeon
4. Primary Care Physician (FP/IM)
5. Nurse Anesthetist
6. Perioperative Nurse
7. Critical Care Nurse

FST HM Manning

1. LCPO
2. X-Ray Tech
3. Respiratory Tech
4. Lab Tech (2)
5. OR Tech (2)
6. Several General Duty HMs/0000

FST Command Structure

- OIC and MRCO on PHIBRON Staff
- FST core is under ship's SMO authority and control; the SMO is your boss, but the OIC writes your evals and fitreps.
- FST members may be ADDU to local MTF
 - FST duties and obligations always come first; no if's and's or but's
- OIC and MRCO only have ADCON over FST core when embarked on LHA/D; the SMO is your boss
- **ONLY** one medical staff--the ship's!!
 - NOT FST and Ship's medical

Other FST Duties

- TAV, MRI for ships in Strike Group
- Record reviews of providers on ships in Strike Group
- Technical assistance as requested by ships medical officers.
- We are at the beck and call of the medical departments 24/7

Technical Assist Visit= TAV
Medical Readiness Inspections= MRI

FST Mission

- Provide direct medical support to COMPHIBRON staff
- Enhance medical/surgical capabilities of LHA/LHD
- Provide medical readiness direction & assistance to all COMPHIBRON ships
- Medical 'augmentation pool' for deploying units with manning shortfalls with commodore's approval
- CATF Surgeon & MRCO directly participate in mission planning for ARG/ESG
- Direct/Regulate patient movement while afloat
- CATF Surgeon = Senior Medical Authority Afloat
- **FST is TAD to Tarawa SMO; SMO has OPCON**

Anticipated & Historical ARG Missions

- **Primarily MEU-driven**
- Direct combat support (Iraq)
- In-theater reserve force
- Peacekeeping Ops
- Tactical Recovery Aircraft/Personnel (TRAP)
- Non-combatant Evacuation Ops (NEO)
- Humanitarian Assistance Ops (HAO)
- Maritime Interdiction Ops (MIO)

COMPHIBRON Ships

- LHA/LHD = COMPHIBRON Flagship
- LPD
- LSD

COMPHIBRON ONE:

- USS TARAWA LHA-1
- USS CLEVELAND LPD-7
- USS GERMANTOWN LSD-42



USS TARAWA (LHA-1)



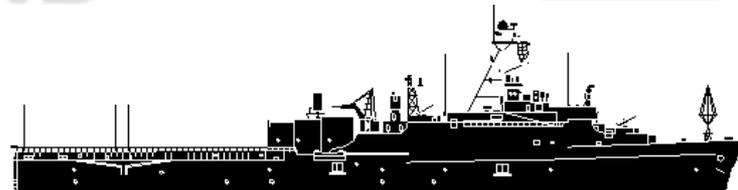
Most robust medical/surgical platform

- SMO, GMO, Dental Officer, MAO, IDC, PMT, Biomed Repair, Lab, Rad & Pharmacy Techs, HMs/0000
- 4 Operative Suites (6 x OR on LHD)
- 14 ICU beds
- 45 Ward beds
- Blood bank (10 U Fresh/400 Frozen/PRBC)
- Lab
- X-ray
- Pharmacy





USS CLEVELAND (LPD-7)

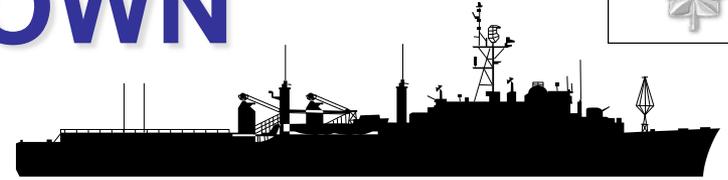


- Capable Medical Platform
 - GMO, Dental Officer, IDC, PMT, Lab, Rad Techs, HMs/0000
- 10 beds
- Basic lab
- X-ray
- No OR, ICU, or Blood Bank





USS GERMANTOWN (LSD-42)



- Capable Medical Platform
 - GMO, Dental Officer, IDC, PMT, Lab, Rad Techs, HMs/0000
- 6-8 beds
- Basic Lab
- X-ray
- No OR, ICU, or Blood Bank



Cruiser (CG) & Destroyer (DDG)



- PHIBRON + MEU + CG + DDG(s) = **ESG**
- Additional offensive strike, anti-submarine & anti-air/missile capabilities
- Limited medical assets:
 - IDC, HMs
 - Basic lab
 - No X-ray



Health Service Support Capability TARESG

TAR, CLE, GTN, 11 MEU, FST 3



LHA-1+ FST Embarked Capabilities

1. Basic General Surgery (FST)
2. Resuscitative and Damage Control Trauma Surgery (FST) (stabilize patients for transfer off the ship to a higher level of care within 24-48 hours for sustained operations)
3. Basic Radiology
4. Blood Bank (ISO surgical and trauma patients)
5. Triage (sorting and prioritizing casualties)
6. Morgue
7. Pharmacy
8. Treatment and exam rooms (sick call; routine examinations)
9. Battle Dressing Stations (Fighting the ship)
10. General Dentistry

Medical Augmentation Program (85 additional healthcare providers)

1. General Surgery, Orthopedic Surgery, Oral & Maxillofacial Surgery (one each)
2. 4, Staffed Operating Rooms
3. 45, Staffed Ward Beds
4. 14, Staffed Intensive Care Unit Beds
5. Maximum: 60 pts/day (45/15 surgical) for one day or...
6. 40 pts/day (30/10 surgical) for three days or...
7. 30 pts/day (20/10 surgical) sustained
8. Total: 200 DNBI and 100 Surgical patients

Medical Augmentation Program T/O

- Internists 2/2
- Psychiatrist 1/1
- Anesthesiologist 3/3
- CRNA 2/2
- Gen Surgeon 3/3
- *Orthopedic Surg 1/2*
- OMFS 1/1
- *Critical Care Nurse 5/7*
- ER Nurse 2/2
- OR Nurse 5/5
- Staff Nurse 6/6
- Medical Tech 1/1
- *Gen Duty HM 21/26*
- Adv X-ray Tech 2/2
- Biomed Repair 1/1
- *Pharmacy Tech 0/1*
- *Surg Tech 8/11*
- Neuropsych Tech 2/2
- Ortho Cast Tech 2/2
- Advance Lab Tech 1/1
- Resp Tech 3/3

FST vs. MAP Capabilities

	FST (16)	MAP (85)
Staffed ORs	1	4
Staffed Ward Beds	10	45
Staffed ICU Beds	2	14
DNBI/day max	7	45
DNBI/day/3 days	5	30
DNBI/day/sustained	5	20
Surgical/day max	6	15
Surgical/day/3 days	4	10
Surgical/day/sustained	4	10
Total Patient Capacity (Based on T/E)	200 DNBI 100 Surgical	200 DNBI 100 Surgical

Requirements met under baseline one-day evacuation policy

Marine Air Ground Task Force (MAGTF)

- Essentially all deployable USMC entities packaged in MAGTF (MEF, MEB, MEU)
 - Headquarters Element
 - GCE Ground Combat Element
 - ACE Air Combat Element
 - CSSE Combat Service Support Element
- ‘Self-sustaining’ offensive/defensive package for direct combat ops and logistics support
- MEU(SOC) ~2,200 including ‘organic’ Navy assets
 - Special Operations Capable
 - Headquarters Element / MEU Commander = O6
 - BLT Battalion Landing Team
 - ACE Composite Special Marine Air Squadron
 - CLB Combat Logistics Battalion

11th MEU Capabilities

- STP blocks 631, 632 (no T/O to support)
 - 10 casualties at a time; supplies for 48 casualties
 - 3, intubated at one time
 - RFF 1 Emergency med physician; 1 trauma nurse
- BAS blocks 699, 635, 636 (Battalion Aid Station)
 - 50-60 patients total
 - Sick call, IV fluids, simple airway, splint fx
- Mass Casualty Team
 - 1, IDC; 6, HMs
 - 15 casualties/ hour; 15 casualties total
 - Intubated patients= 5
 - Shock w/o hemorrhage control= 2 (non-compressible hemorrhage)

Fleet Surgical Team Three



- Deployment Report
- (WESTPAC 07 – 08)

SURGERY



92 TOTAL SURGERIES

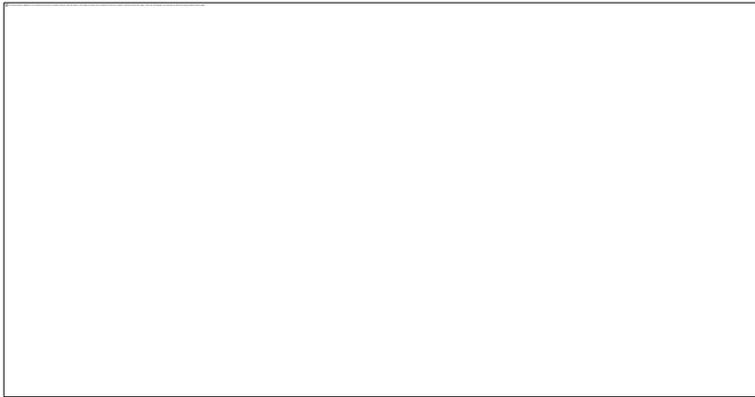
- Aug – 10 surgeries
- Sep – 8 surgeries
- Oct – 0 surgeries
- Nov – 14 surgeries
- Dec – 16 surgeries
- Jan – 7 surgeries
- Feb – 17 surgeries
- Mar – 13 surgeries
- Apr – 7 surgeries
- May



92 TOTAL SURGERIES

- 1 Urology patients
- 41 General Surgery
- 41 Dermatology patients
- 8 Orthopedic patients
- 1 ENT

Inpatient

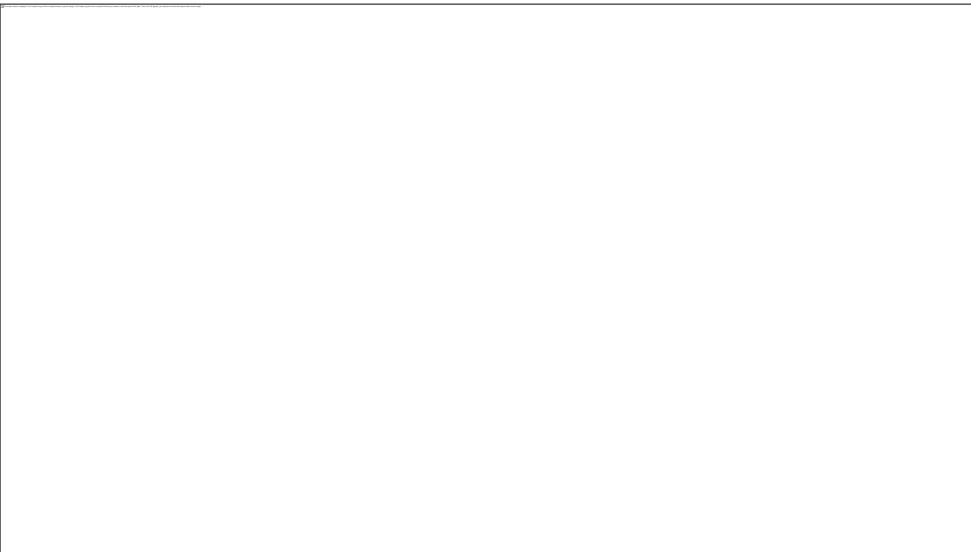


Total 119 admissions

- **62 patients admitted in the ward**
- **47 patients admitted in PACU**
- **10 patients admitted in ICU**

Total 62 ward admissions

- **7 Dermatology**
- **15 Ortho**
- **2 ENT**
- **28 General Surgery**
- **5 Internal Medicine**
- **2 Mental Health**
- **5 Urology**
- **1 Ophthalmology**

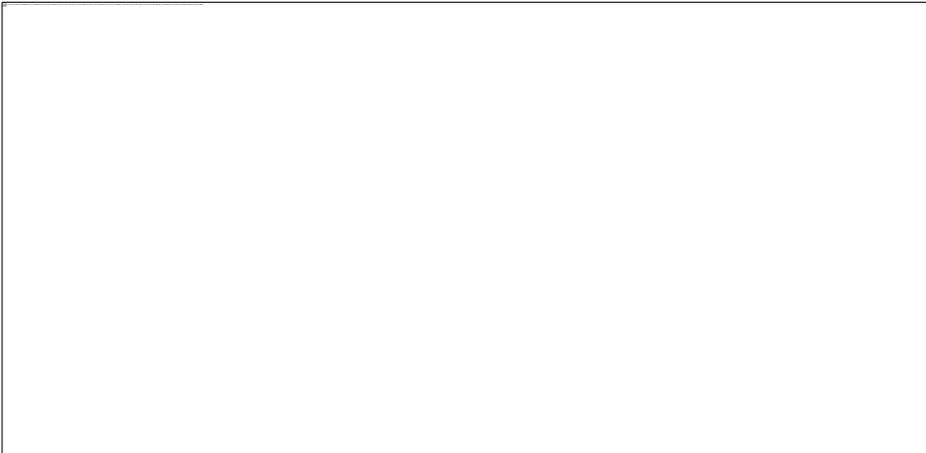


Inpatient (Cont.)



Total 10 ICU admissions

- **3 Neurology**
- **5 Internal Medicine**
- **1 Urology**
- **1 Orthopedic**



Total 47 PACU admissions

- **40 General Surgery**
- **4 Orthopedic**
- **2 Dermatology**
- **1 Urology**

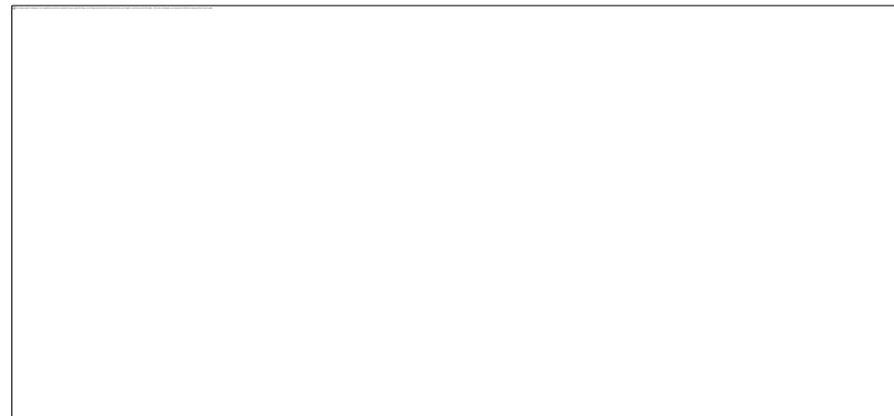
BED DAYs

(Ward/PACU/ICU)

162 Bed days utilization

- **Ward - 111 days**
- **PACU - 43 days**
- **ICU - 8 days**

Navy and Marines Mental Health patients



- Navy – 39 patients seen
- MEDEVAC – 14 patients referred for further treatment

- Marines – 9 patients seen
- MEDEVAC – 3 patients referred for further treatment

TARAWA ESG DNBI WESTPAC 2007 - 2008

DNBI

- November – 449
- December – 282
- January – 225
- February – 258

**Mass Casualty Response
Team (MCRT)
Standing Mission Brief**

Capabilities

1. Medically Triage

- Up to 15 Casualties

2. Stabilize

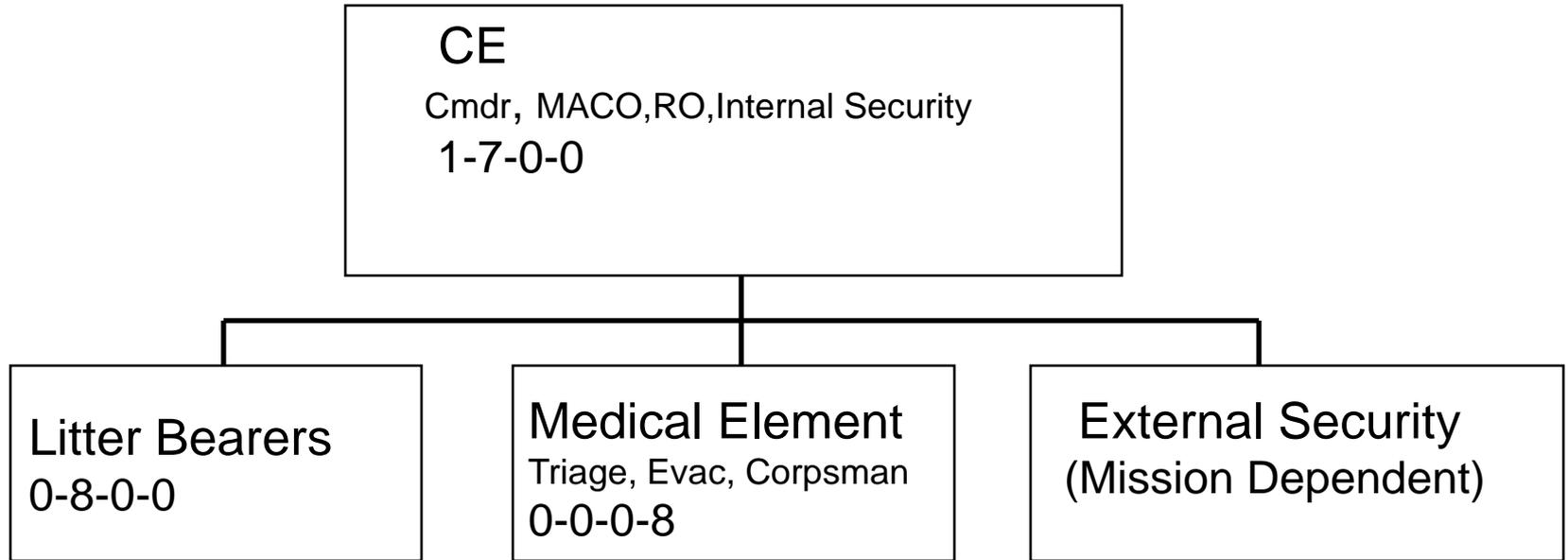
- Up to 2 hours
 1. Maintain airway
 2. Provide ventilation
 3. Apply Splints/battle dressings
 4. Pain relief for expectant casualties

3. Evacuation

- Move and track casualties from site to ship

The capability could be task organized to provide a medical emergency response team-enhanced MERT-E)

MCRT T/O

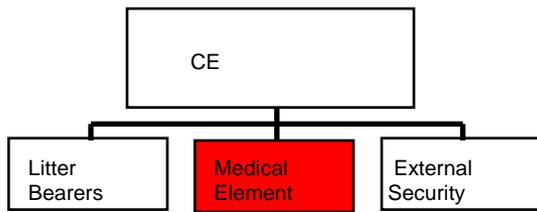


POSSIBLE AUGMENTS

- CHAPLAIN
- INTERPRETERS
- EOD
- COMBAT CAMERA
- NCIS
- JAG

TOTAL FORCE = 24

Table of organization= T/O
Marine officer-Marine enlisted-Navy officer-Navy enlisted



Medical Element

- **Medical Team Leader:** IDC or M.O. in charge of on site patient care. Directs treatment in staging areas and reports casualty status to MCRT OIC
- **Forward Corpsmen:** First on scene to make the initial assessment with the follow-on requirement to assist the Medical Team Leader in the treatment and stabilization at the collection point
- **Triage Corpsman:** Responsible for the identification, collection, tagging, and triage of casualties
- **Evac Corpsman:** Responsible for disposition and transportation of all casualties via the medical regulator status sheet, reports transport requirements to MCRT OIC, calls in 9 line MEDEVAC report

Independent duty corpsman= IDC
Medical officer= M.O.

Concept of Operations

Phase I: Pre-Movement Preparations

Phase II: Movement

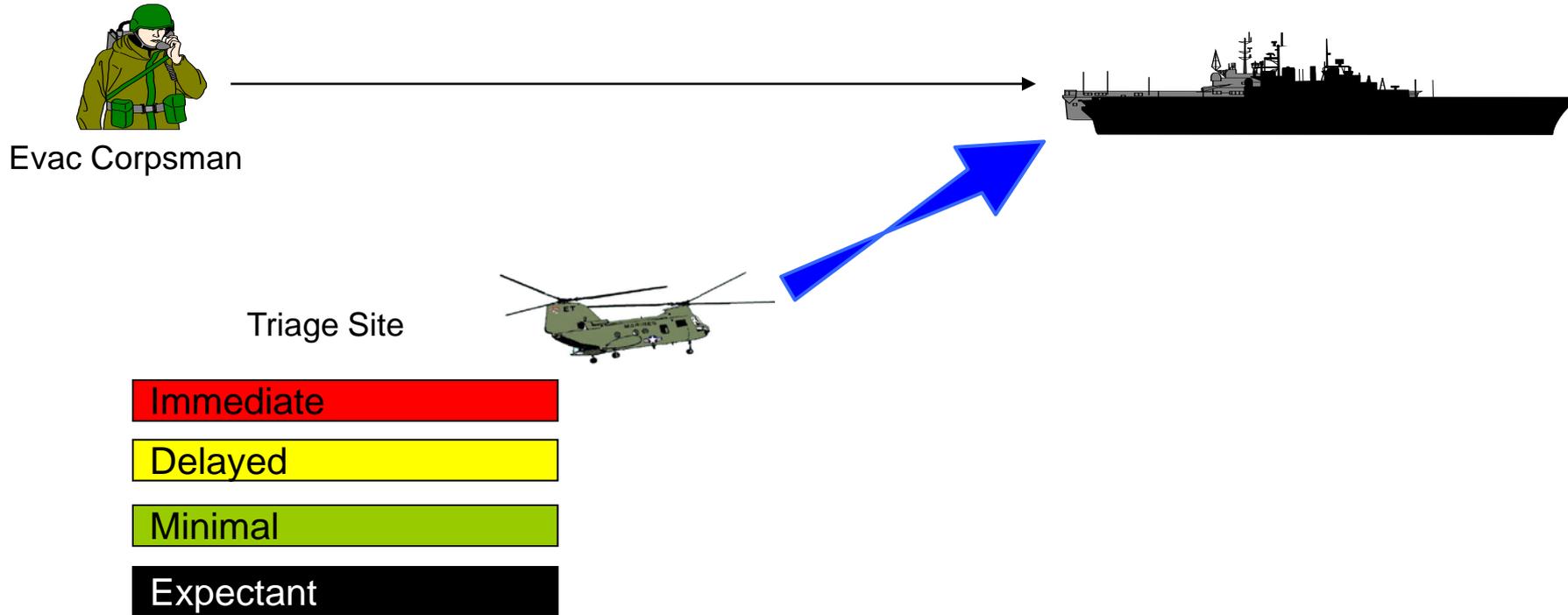
Phase III: Actions on the Objective

Phase IV: Withdrawal from Objective

IV a- Evacuation of casualties

IV b- Retrograde of MCRT

Phase IVa - Evacuation of Casualties



TASKS:

1. Evac Corpsman requests mvt of casualties to Casualty Receiving Treatment Ship
2. Casualties stabilized and staged for mvt
3. Evac casualties via available transportation

MEDEVAC Capabilities

Asset

Litter Patients

Ambulatory

(Walking Wounded)



CH-46

6

OR

12



4

OR

16



CH-53

12

OR

24



M997

4

OR

4

Tarawa

Casualty/Mass Casualty Response Standing Brief

October 2007



Readiness Condition III/IV Capability

1. With FST embarked, the ship is capable of acting as casualty/mass casualty receiving and treatment ship.
2. Role 2, with 1 operating room and 12 patient beds
 - 2 staffed ICU beds
 - 10 staffed intermediate care beds
3. Capable of receiving a maximum of 13 patients per day sustained. 33% are assumed to require operating room surgical care (damage control surgery)

Required operational
capability=ROC

Projected operational
environment=POE



Task Organization

	Patient Care	PAD	Ancillary Services	Operating Room	ICU	Ward
MO/DO/ RN	5			3	1	
HM	10	4	7	4	3	
MSC		2				



Capability/Capacity FST manning

SHIP	WARD	ICU	OR	BLOOD
TAR (PCRTS)	10 staffed /45 OH	2/14	1/3	Frozen PRBC: 75/400 FF PLASMA: 40/40 FRESH BLOOD: 0 FRESH PLASMA: 0
CLE (SCRTS)	4 staffed /10 OH	0	0	0
GTN (SCRTS)	5 staffed /5 OH	0	0	0

15/75 Walking Blood bank; (4, O Pos.; 30, O Neg.)
75 AS3 kits on hand (OH).
15 blood collections bags on hand (OH).

Tarawa Role 2: Phases of Care

1. **Casualty Receiving**

- Primary Survey and Resuscitation
- Triage, re-assess

2. **Casualty Treatment**

- Damage control surgery
- Wound care
- Prevent Infection; Minimize disability

3. **Stabilization**

- Postoperative care
- Prioritize patient movement up range
- Arrange transfer to definitive care
- RTD if possible

4. **Transfer to Definitive Care (Role 3 or 4)**

- Neurosurgery (TBI, stroke)
- Limb (nerve, vascular, re-attachment)
- Eye (open globe, RBH, retinal detachment, optic nerve entrapment)
- Ongoing or massive blood replacement need
- Any specialty care not available afloat

Phase IV

(Preparation for onward Movement)

TASKS:

1. MRCO advised of patients requiring transfer to definitive care
 - Physician at accepting MTF contacted and appraised of patient condition, treatment rendered
 - TACRON notified of patient, escort, destination IOT plan for movement
 - Prepares TAD orders, medical record and message
2. Casualties stabilized and staged for transfer to definitive care
 1. Fluid resuscitation
 2. Medications prepared
 3. Blood products prepared
 4. Equipment prepared
 5. Escorts identified



MEDEVAC Capabilities

<u>Asset</u>	<u>Litter</u> <u>Patients</u>	<u>Ambulatory</u>
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6

OR

12

MV-22 will have a similar capacity as the CH-43 and is now being configured
MV-22 cannot land on the hospital ships—yet.

Marine Corps HSS

1. BAS
2. Medical Battalion
3. Forward Surgical Company
4. STP
5. FRSS
6. Dental Battalion

Taxonomy of Care vs. Levels of Care

- First Responder (formerly Level I)
- Forward Resuscitative Care (formerly Level II) Role 2
- Theater Hospitalization (formerly Level III) Role 3
- Reconstruction and rehabilitation care (formerly Level IV)
- En Route Care

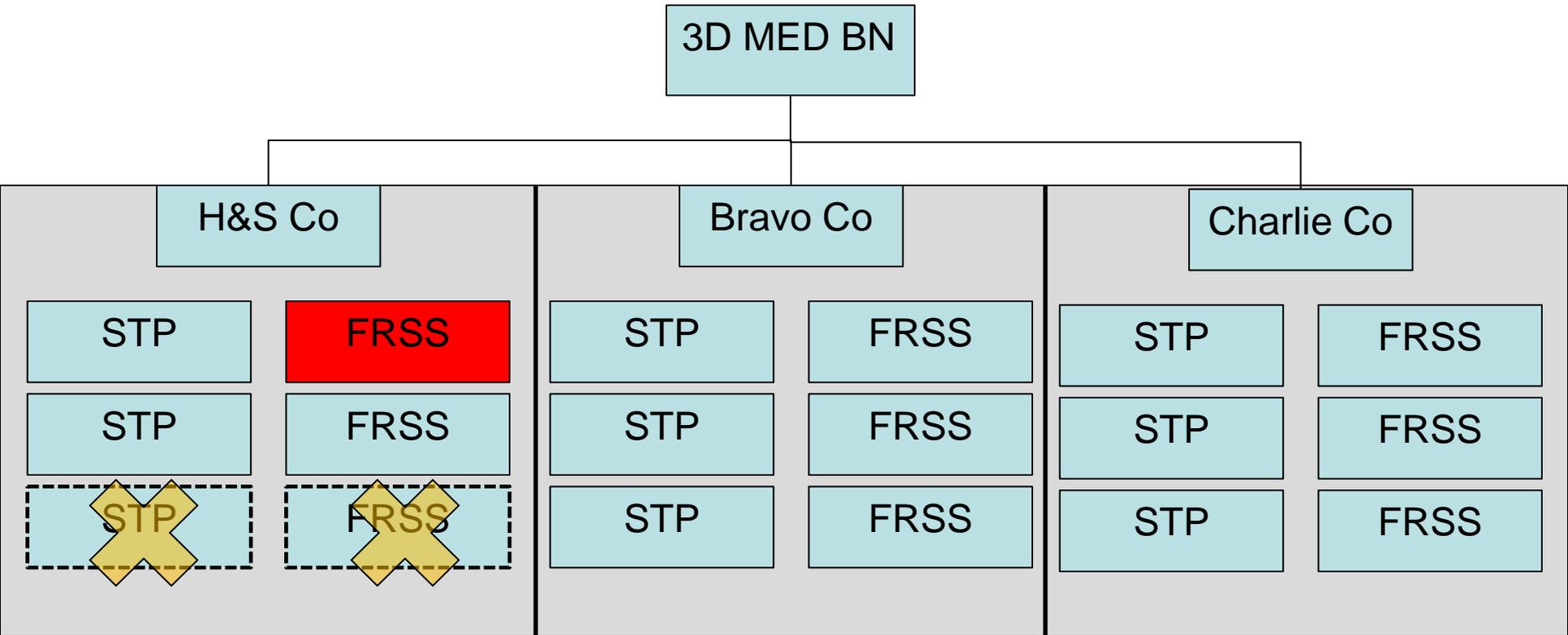
BAS capability/capacity

- Basic Primary Care and Advanced Trauma Resuscitation and Stabilization
- 50 trauma patients
- Trauma Resuscitation and Stabilization
 - Life-saving intervention based medical care
 - Anticipatory tx of traumatic coagulopathy (ATTaC)
 - Manage hemorrhagic shock
 - Definitive airway management and ventilation
 - Chest tube thoracostomy
 - Prevent secondary brain injury
 - Hypothermia mitigation
 - FAST
 - Splintage





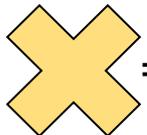
3d Medical Bn FY15



= Fully manned



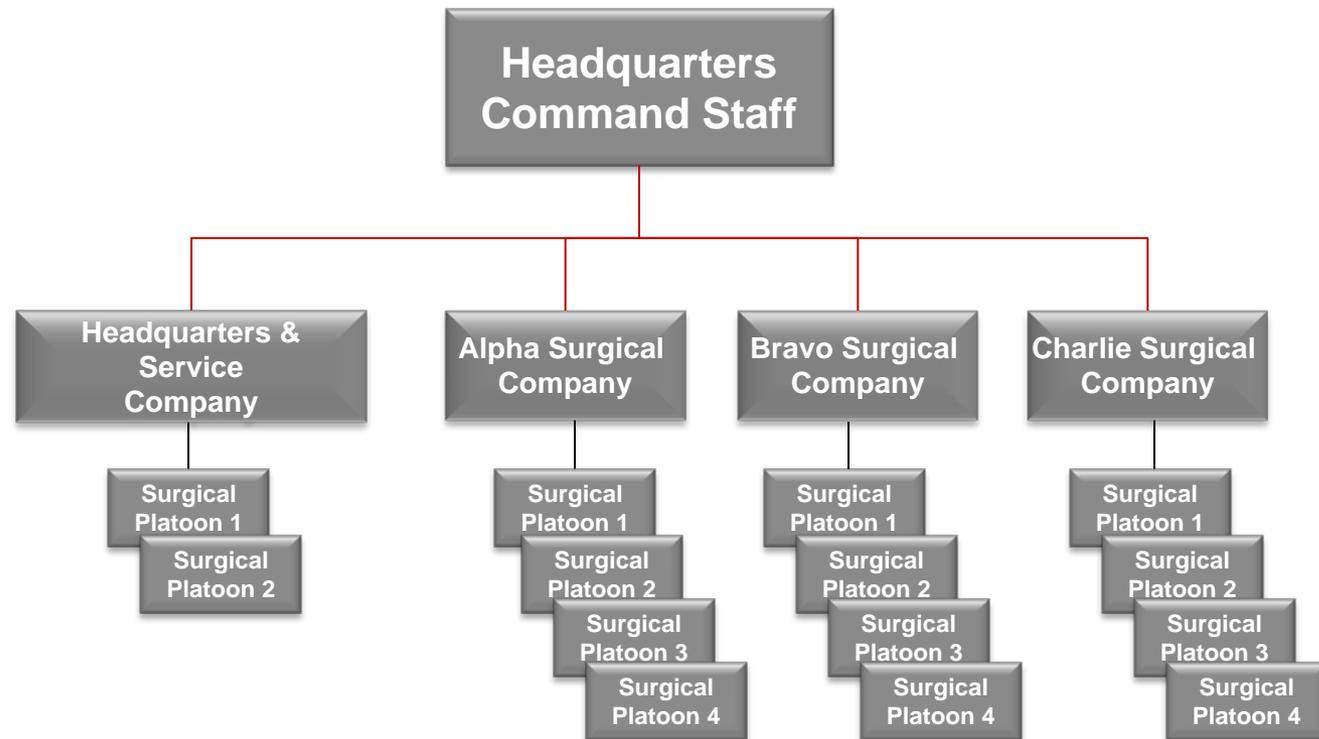
= Equipment sets only. Augmentation with Physicians, Surgeons, Anesthetists, Nurses, and Physician Assistants required to be FOC



= H&S Co reduced to 2 FRSS, 2 STPs



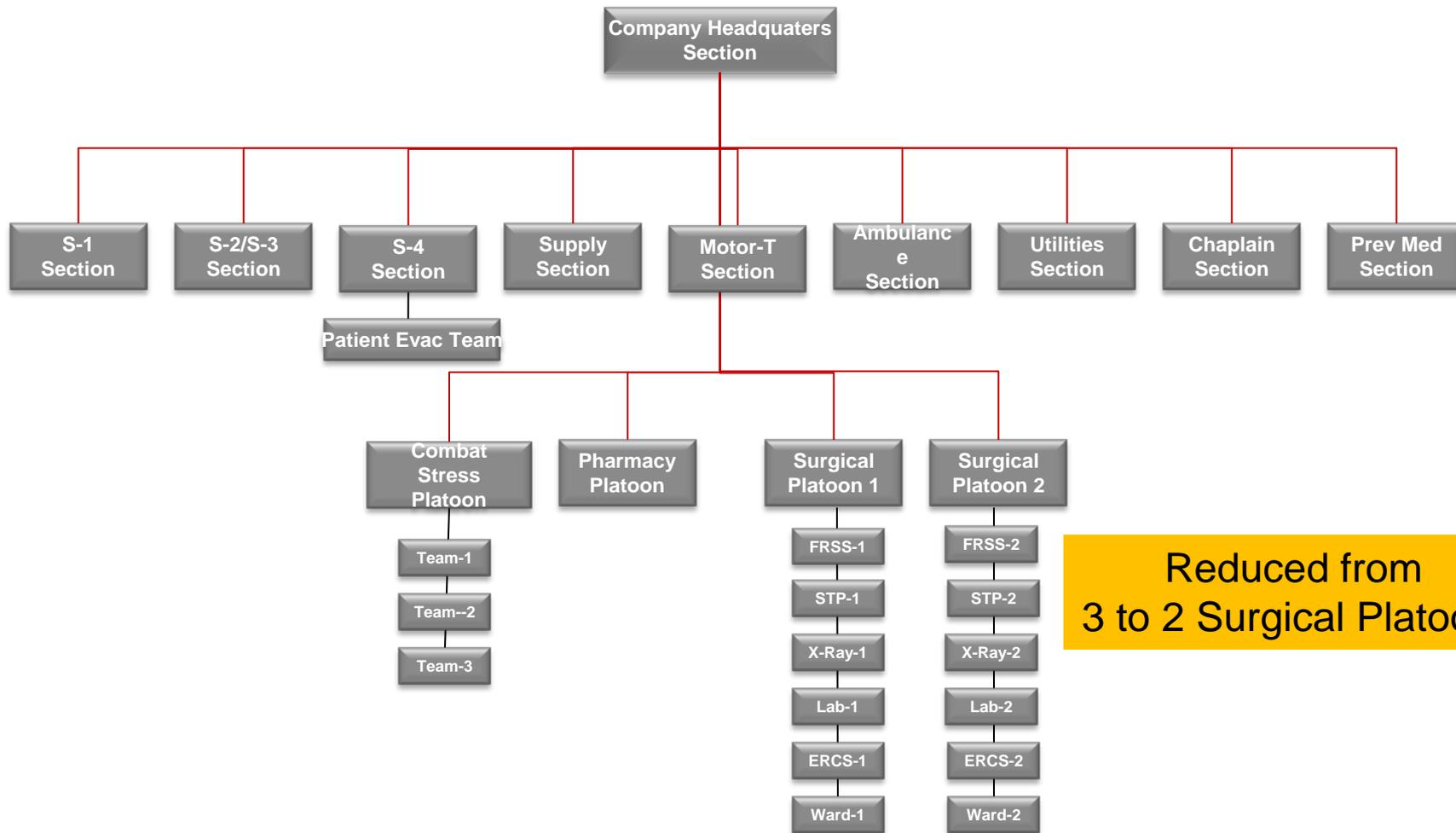
Medical Battalion Organization



*1st Med Bn - 3 Surgical Co; 2d Med Bn - 2 Surgical Co
; 3d Med Bn - 2 Surgical Co (3 Surg Plt)



Headquarters & Service Company, FY15

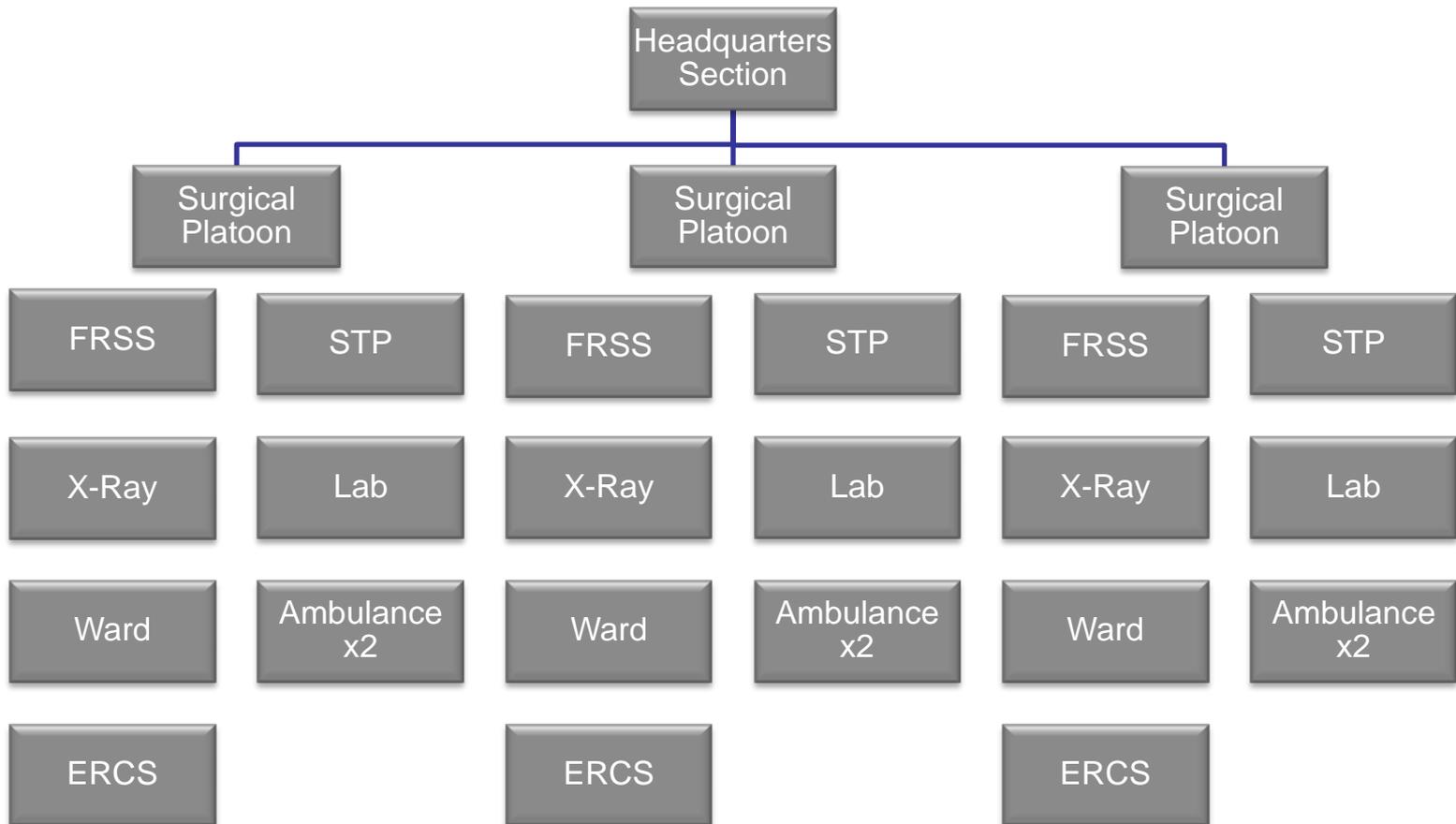


Reduced from
3 to 2 Surgical Platoons



Surgical Company

3d Med Bn, FY15



Shock Trauma Platoon (STP)

- MLG/CLR/CLB asset
- 48 patients; 10 patients surge
- Advanced Trauma Resuscitation (same as BAS)
- Pre- and Post-operative care
- 10 acute care beds for 8 hours
- En-route care team (ERCT)
- Ideally combined with FRSS or based out of field hospital
- Based at airfield to function as MASF-like asset

Mobile aeromedical staging facility= MASF

STP

- **T/O:** 25
- **T/E:**
 - Weight: 76,974 lbs (2,199.62 lbs)
 - Cube: 4,851(244.85)
 - Short-tons: 39
- **Footprint:** 50 sq yd
- **Cots:** 10
- **Set-up time:** 1 hr
- **AMALs:** 2
- **Capacity:** 50 casualties
- **Capability:** ATLS resuscitation and stabilization
- **Transportation:** M998 x1; generators on trailer x1; M997 ambulance x2; 7-ton truck x2; waterbull x1; M105 trailer x1
- **Requirements:** 3 hour casevac; CBRN decon

Forward Resuscitative Surgical System (FRSS)

- MLG/CLR/CLB asset
- 18 patients/48 hours; 5 patients surge
- Damage Control Surgery
 - Stop non-compressible, truncal hemorrhage
 - Isolate bowel perforations
 - Splint fractures
 - Wash out wounds
- One OR table; 2 hours per patient
- Requires robust, responsive back-door casualty evacuation

FRSS

- **T/O:** 25 (Alpha= 5 pax; 7 surgeries)
- **T/E:**
 - Weight: 78,000 lbs (1794.96 lbs)
 - Cube: 5,000 (156.21)
 - Short-tons: 40
- Footprint: xx
- Cots: 0
- Set-up time: 1 hour +
- **AMALs:** 645 and 646 resupply (1x 645/ 5x 646); 618 Lab equip.; 619 Lab con; 627 x-ray
- **Capacity:** 18 casualties
- **Capability:** damage control surgery;
- **Transportation:** 997 ambulance x2; 7-ton MTRV x2; 101 trailer x1; ISO container x1; Quad container x2; Floodlight trailer x1
- **Requirements:** NO holding capability;

QUESTIONS?

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Shipboard Surgical System (SSS) Overview

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DSN, RN**

Judy Dye, RN, MSN, APN

Kathleen Onofrio

Cheryl Reed, Ph.D.

Problem

Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and the Global War on Terrorism call on small ships staffed with Independent Duty Corpsmen (IDC) to perform a variety of missions---including maritime interdiction operations (MIOs).

Need not validated



The degree of potential lethality for our interdiction teams has increased, necessitating surgical support.

Need not validated

Objective

To develop a surgical system with a rapid set up and break-down capability by a team of 6 to 8 people, that functions semi-independently once inserted aboard a ship without organic surgical support assets.

Design

To maximize system capability and minimize footprint, the NHRC research team utilized a medical supply estimation model, ESP, to link the projected Triple S patient stream with the tasks and supplies necessary to provide appropriate care.

Estimation of supply program= ESP

Medical Supply Estimation Model

PC 005 Cerebral contusion, closed, with intracranial hemotoma and non-depressed linear skull fracture

PC Code	Level of Care	Functional Area	Task Profile	% Patients	Equipment/Supplies
001	1A	Triage/Pre-op	Assign Priority	100	Water De-Mineralizer
002		X-Ray	Assess Patient	100	Rotary Chair
003	1B	Op Room	Insert Endo-Trach	30	Biological Refrigerator
004		Ward-ICU	Neurological Asses	100	Scrub Sink
005	2	Ward-Gen.	Apply C-Collar	100	Ruler 12-in
006		Lab	Oxygen Set-up	60	Folding Table
007		Pharmacy	Oxygen-Admin	60	Surgical Sterilizer
008			Cardiac Monitor	20	Biohazard Bag
.			Cardiac Resus	20	Ion Exchange Cartridge
.			Set-Up Pulse Oximeter	20	Record Book
.			Arterial Puncture	100	Incubator-Dry Heat
			Control Hemorrhage	100	Test Tube Rack
350			Blood T & C	80	
			Order Blood Gas	100	
			Order Electrolytes	100	

Design

The Triple S was configured to use backup supplies (mostly IV fluids) available from the IDC's replenishable AMMAL aboard the host ship. SSS will not deplete the ship's medical AMMAL below 50%.

Key Components

One of the most unique characteristics of the Triple S is its packing and packaging. Task-organized supplies in color-coded drop down bags were adopted from the FRSS.

The system's overall packing is organized by function.

Hardigg Mobile Medical Cases



- Color coded by function
- Press & pull latches
- Inset wheels
- Vented to protect contents
- Number coded for resupply

Key Components

Other key components are designed to allow the SSS to function semi-independently once inserted aboard a ship without organic surgical support assets.

ISOS Air Transport

- Air evacs in the absence of dedicated air assets
- ICU equipped Air Ambulances
- Complete bed-to bed air medical transport service
- Physicians on duty 24/7

Charlie's Horse Portable OR Table

- Packs in 3 bags
- Intuitive assembly
- Uses table of opportunity



Conclusions

By establishing clinical requirements and clearly identifying parameters of care, the mobility of surgical assets can be greatly enhanced and inserted on ships that do not have inherent surgical capabilities.

Conclusions

The SSS, structured and packaged for easy portability and flexibility, may find utility as a shipboard surgical augmentation pack in addition to providing initial surgical capability.

Never became a program of record; funding liability for Amphibious Group 1

Expeditionary Resuscitative Surgical System (ERSS)



Interesting concept, but like the SSS the need was never validated

Shaping the Battlespace

ARG commander's key medical resource during engagements in an unstable or hostile environment

- Provides JFMCC Force Package capability
- Inherent COCOM/DOS resource
- Reshapes/Upgrades current FST capabilities
- **Aligns medical capabilities to warfighter mission**
- Adaptive Maritime Force Packages at target center
- Must be prescriptively deployed

Amphibious ready group= ARG

Combatant command=COCOM

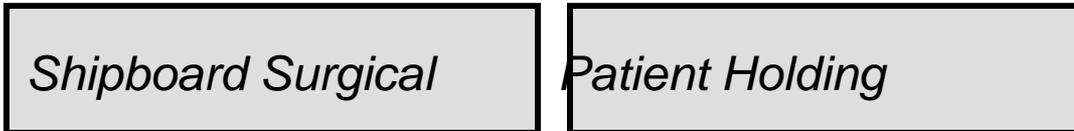
Department of State= DOS

Joint force maritime component command= JFMCC

Medical Capability Modules

Fleet Surgical Team

Current



ERSS

Proposed



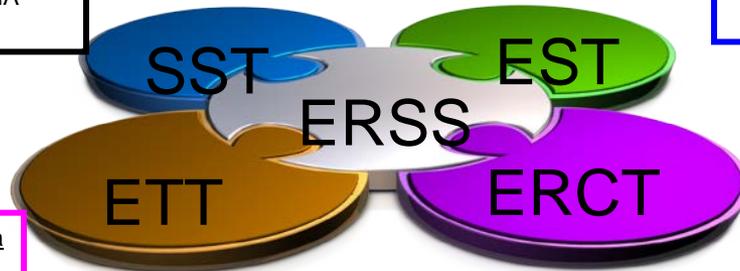
Expeditionary Resuscitative Surgical System

Shipboard Surgical Team (SST)

Uses the Fleet Surgical Team concept plus Medical Augmentation Program (MAP) manning to provide modular resuscitative surgery capability from the Expeditionary Strike Group, i.e. LHD / LHA

Expeditionary Surgical Team (EST)

Provides forward initial emergency resuscitative (damage control) surgery, capable of functioning from a small platform or from a shore based position.



Expeditionary Trauma Team (ETT)

Provides initial emergency life and limb saving actions, capable of functioning from a small platform or shore based position.

En Route Care Team (ECRT)

Provides treatment of patients during movement between capabilities in the continuum of care.

CONCEPT:

-The ERSS concept is designed to provide a tailored, mission-specific medical capability, close to the point of injury, that supports the range of military operations (ROMO), afloat and ashore.

CONOPS:

- Highly responsive trauma system focusing on immediate life and limb saving surgery, trauma care, and Medevac-enroute care, at or near combat operations.
- Provides modular expeditionary resuscitative capability that can be employed for short durations at or near the fleet operational platform or forward base of operation.
- Modular medical capabilities will allow the ESG to support fleet operations while not losing organic capability.

ERSS as a System

EMPLOYMENT

- Provides ARG commander multiple medical COA's
- Organic sea base asset
- Deployable to engagement site
- Light, easily moved via SH-60
- Set up less than 45 minutes
- Small sea base platform or ashore (Afloat Forward Staging Base/Forward Operating Base)
- Important to context is prescriptive deployment

Scenario One



Dispersed OPS

Expeditionary trauma team forward, ERC evacuates stabilized patient

Scenario Two



Scenario Three



Scenario Four



CVN OR

EST

ERC

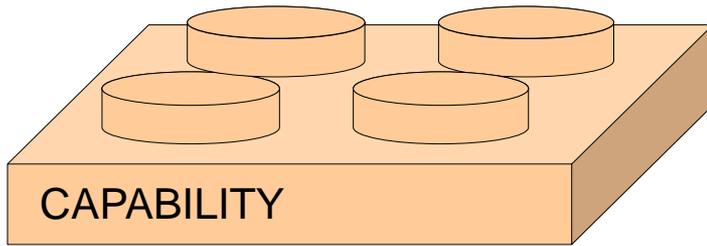
CSG Support

Scenario Five

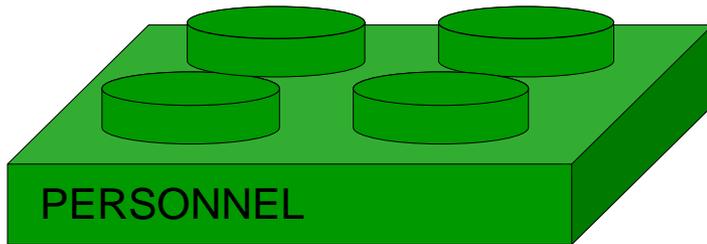


Split ESG OPS

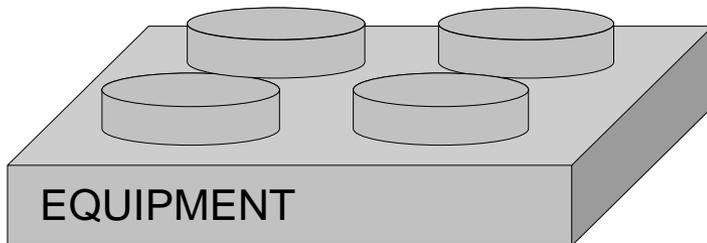
SST Component



Afloat platform specific (LHA / LHD), man 1 operating room and receive 13 patients per day. Staffs 3 ICU beds and 10 intermediate care ward beds.



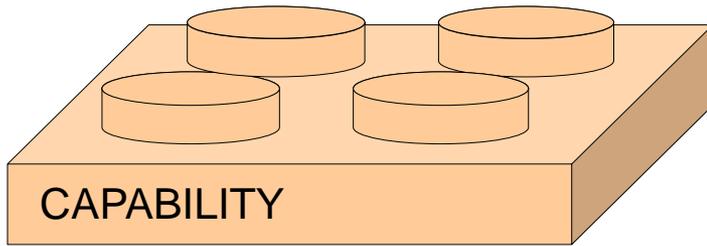
Ship's Company plus Fleet Surgical Team (SST)



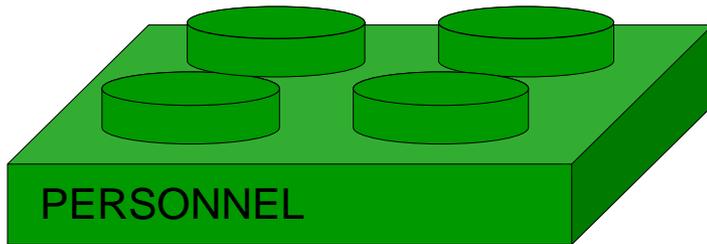
Shipboard AMAL

Fleet Surgical Team concept plus Medical Augmentation Program (MAP) manning to provide modular resuscitative surgery capability from the Expeditionary Strike Group, i.e. LHD / LHA.

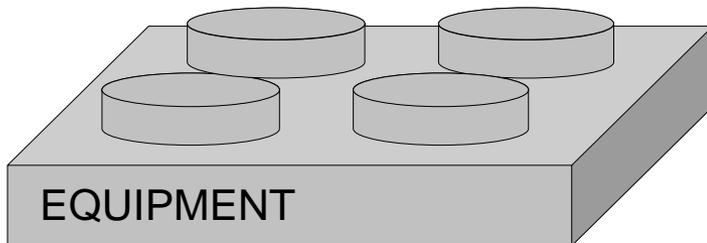
EST Component



Mobile afloat and ashore, set up within 45 minutes, up to 5 damage control cases, hold patients up to 48 hours



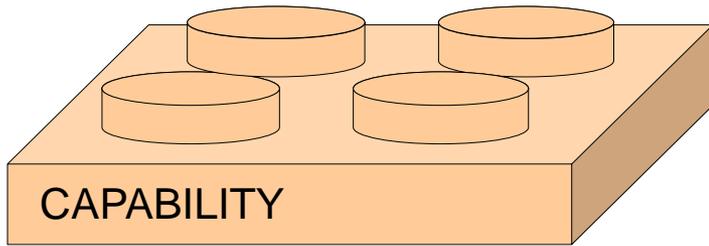
- 1 – General Surgeon
- 1 – Anesthesia Provider
- 1 – Critical Care RN
- 1 – Surgical Tech



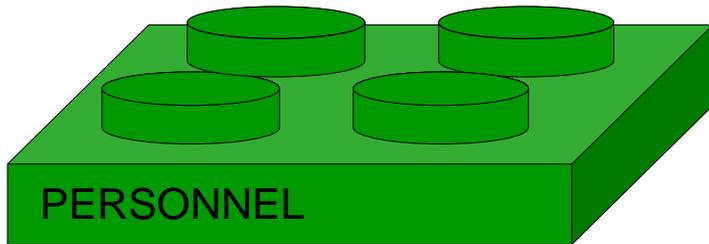
Prepacked in pelican cases or 3 wooden pallets - 1400 lbs or Highly mobile 2-3 rucksacks

Forward initial emergency resuscitative surgery, capable of functioning from a small platform or from a shore based position.

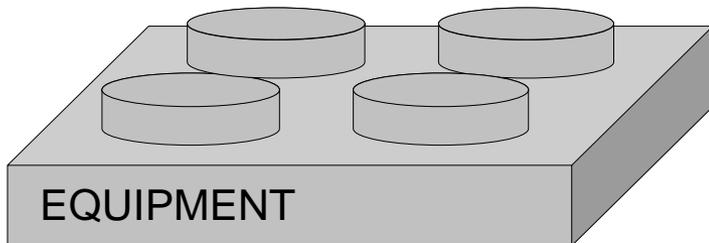
ETT Component



Mobile afloat and ashore, set up upon arrival on platform, 3-5 trauma stabilization cases, hold patients 6–12 hours



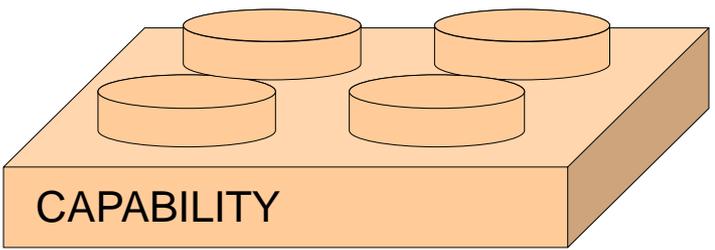
1 – Emergency Physician
1 – Physician Assistant
1 – Independent Duty HM



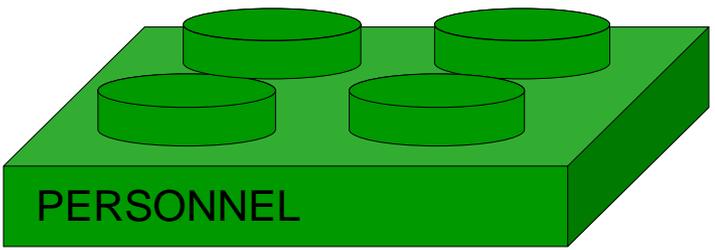
Prepacked highly mobile in 2-3 rucksacks

Provides initial emergency life and limb saving actions, capable of functioning from a small platform or shore based position.

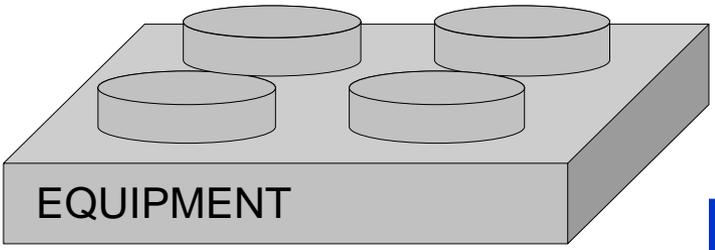
ERCT Component



Safely transport and provide critical/ required medical care of patients at risk of changes in clinical status during transport, medical management of 2 stabilized casualties for 2 hours transit. Setup time on 10 minutes on aircraft.



- 1 – Critical Care Nurse
- 1 – Flight HM



Prepacked highly mobile in 2-3 hanging bags

Provides treatment of patients during movement between capabilities in the continuum of care.

Staffing

Modify FST to reflect ERSS with SST, EST, ETT and ERC modules utilizing the CRTS shore based augmentees.

	<u>Current</u>	<u>Proposed</u>
– Ship’s Company	32	32
– FST = SST (name change)	16	16
– EST	0	4
– ETT	0	3
– ERC	0	2