Office of the Command Surgeon

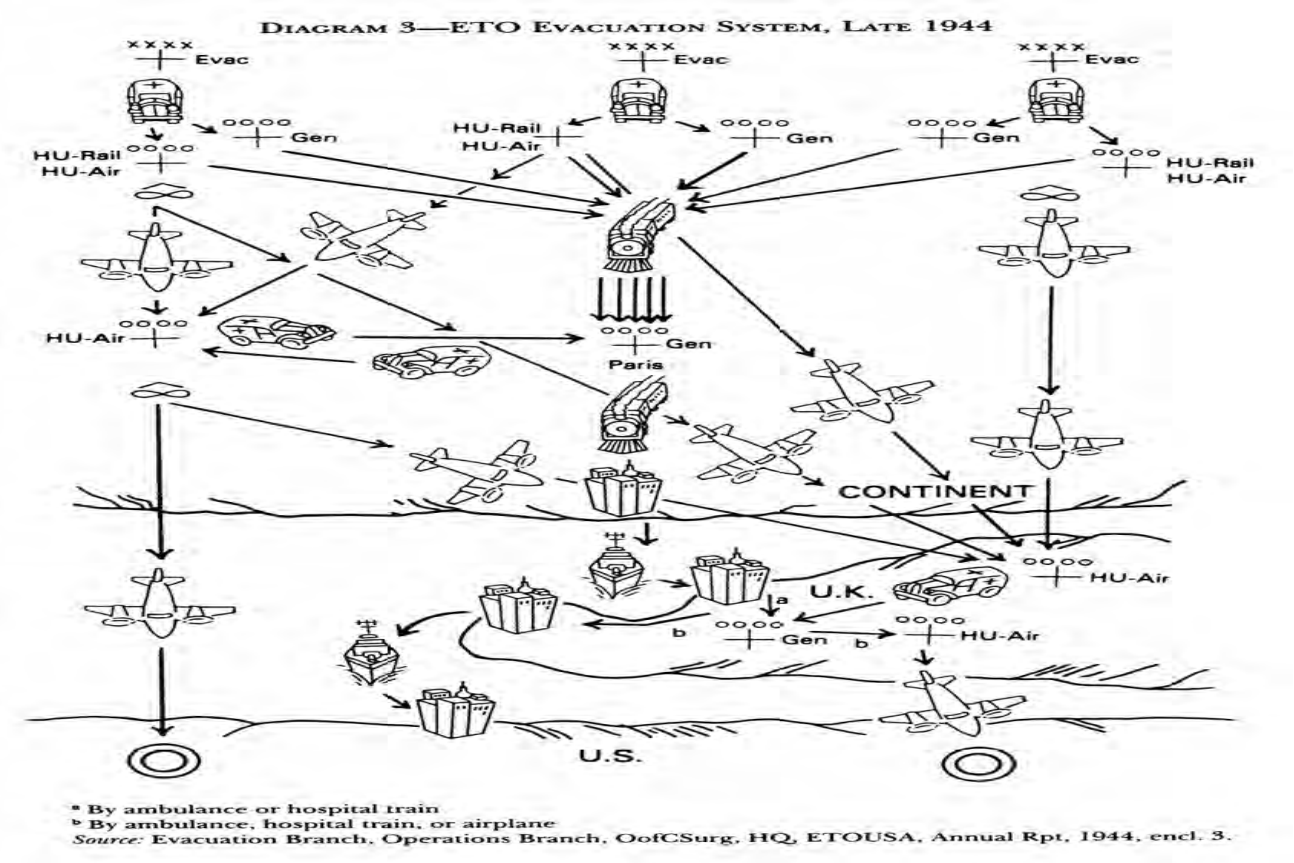
USTRANSCOM

UNITED STATES TRANSPORTATION COMMAND

Col Paul A Friedrichs
Command Surgeon

Military Patient Movement

WWII Multi-Modal Patient Movement



Together, we deliver.

Global Patient Movement Today

Together, we deliver.

Authorities, Doctrine & Strategy

Unified Command Plan - CDRUSTRANSCOM is the DOD single manager for patient movement, providing DOD global patient movement, through the Defense Transportation System, in coordination with the geographic Combatant Commanders

DODD 4500.57, Transportation and Traffic Management, 18 Mar 2008, - Amplifies the United States

Transportation Command (USTRANSCOM) responsibilities contained in DoD Directive 5158.04

DODI 4515.13, Air Transportation Eligibility, 22 Jan 2016

DODI 6000.11, Patient Movement, 4 May 2012, - Implements policy established in DoDDs 4500.09E and 5158.04 (References (c) and (d)) governing the management and use of DoD conveyances for PM

SECDEF memo 3 Nov 11 – USTRANSCOM assumes responsibility for planning and executing CONUS redistribution of patients returning from overseas contingencies

DODI 5154.06, Armed Services Medical Regulating, 20 Oct 2011 - Establish policy, assign responsibilities, and prescribe procedures for the implementation of Armed Services medical regulating during peacetime and contingency operations (both military and Defense Support of Civil Authorities (DSCA)

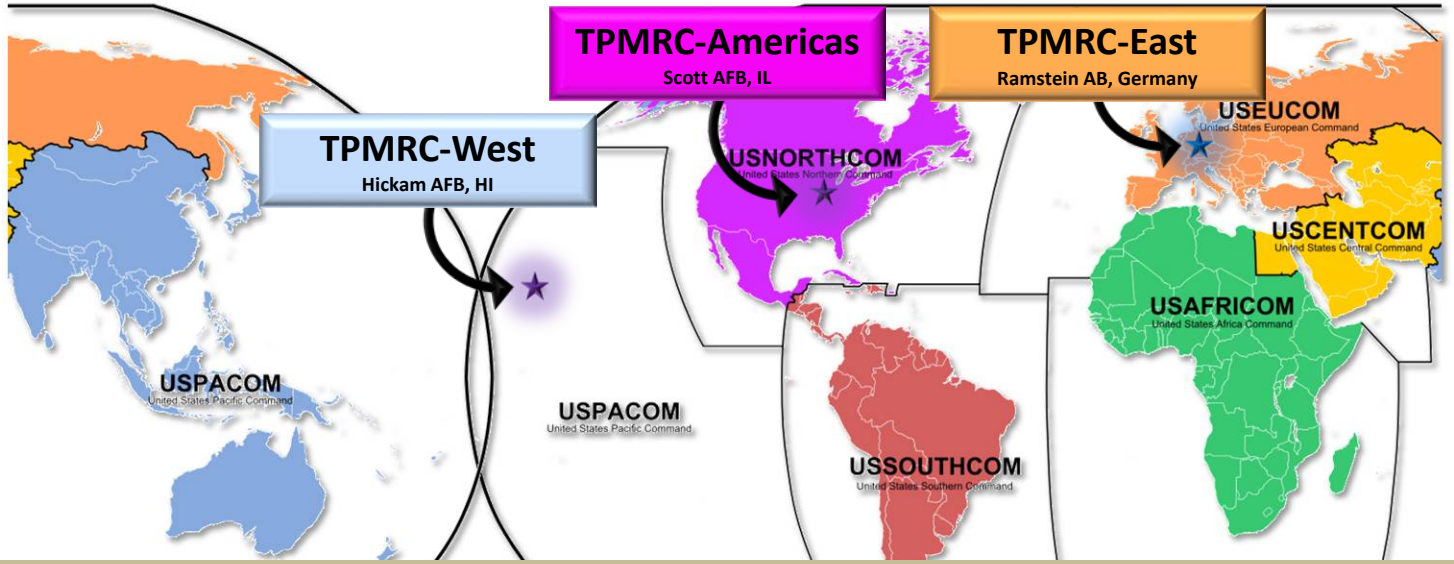
DODI 5158.06, Distribution Process Owner (DPO), 11 Sep 2007 - Implements policy for overseeing, coordinating, and synchronizing the DoD-wide distribution processes, including force projection, sustainment, and redeployment/retrograde operations

JP 4-02, Health Service Support (HSS), 26 Jul 2012, - United States Transportation Command is the DOD's single manager for policy and standardization of procedures and information support systems for global patient movement

JP 3-17, Air Mobility Operations, 30 Sep 2013, - The air mobility network combines airlift, AR, aeromedical evacuation (AE), and air mobility support assets, processes, and procedures to support the transport of personnel and materiel

National Military Strategy, December 2016
"4+1…Transregional, multi-domain, contested environment"

Patient Movement Requirements Center



GAPS = GCC Allocated PM forces (everybody needs more)

SEAMS = Seams for PM exist between operations that are conducted and supported across GCC boundaries

USTRANSCOM coordinates PM across gaps and seams. (i.e, Syria, Turkey, Yemen, Djibouti)

Global Patient Movement Routing

Origination, Enroute Care and Final Destination Determined by:
POI, Patients' Medical Needs, Medical Capabilities and ERIMP

MOBILITY AIRLIFT FIXED WING OPTIONS

C130H/J

C17 Globemaster III

KC-135 Stratotanker

C-21A

KC-10: Using pt support pallets; C-5: difficult to load litters

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Aeromedical Evacuation Support Capabilities

AE Assets

- AE Crews
- Tactical Critical Care Evac Team (TCCET)
- Critical Care Air Transport Team (CCATT)
- CCATT – Acute Lung (ECMO)
- CCATT-NICU/PICU
- CCATT-Burn

Other AE Capabilities

- AE Control Team (AECT)
- AE Command Squadron (AECS)
- AE Liaison Team (AELT)
- Enroute Patient Staging System (ERPSS)
- AE Operations Team (AEOT)
- Patient Movement Item (PMI) teams

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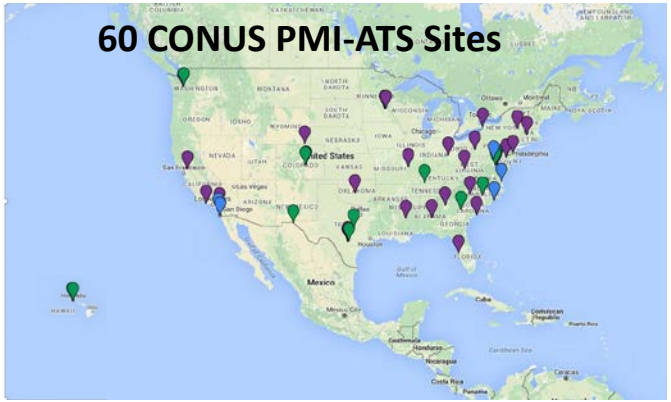
PMI RFID Asset Tracking System Sites

- 57 PMI Sites
- 12 Army Co-located PMI Sites
- 10 Navy Co-located PMI Sites
- 7 Formal Training Platforms (not shown)

Currently, 86 Total PMI-ATS sites

Note: Does not include deployable kits



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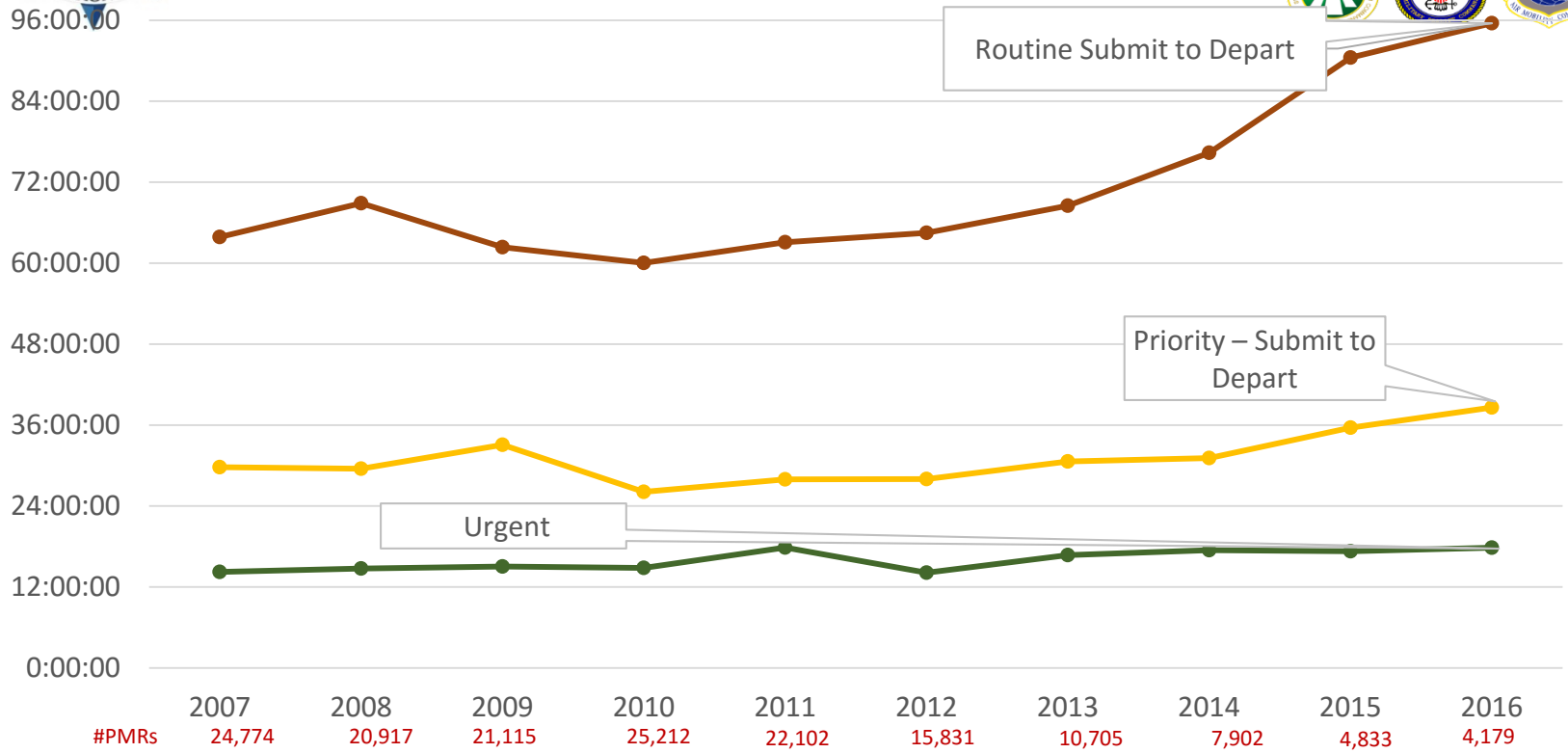
KEY MEDICAL TERMS

Evacuation Precedence	Definition and Movement Time
Urgent	Patients requiring emergency evacuation to save **life**, **limb**, **eyesight** or to **prevent serious complications** of injury or existing medical complications. **Moves ASAP. Goal is to move within 12 hours of PMR validation.**
Priority	Patients requiring prompt medical care not available locally. Used when medical condition could deteriorate and the patient cannot wait for routine evacuation. **Moves within 24 hours after PMR validation.**
Routine	Patients require medical evacuation, but their condition is not expected to deteriorate significantly. **Moves within 72 hours after PMR validation.**

TRAC2ES
(Patient Movement HIT)

- Address cyber vulnerabilities within our control
- Improve usability
- Leverage existing virtualization efforts
- “TRAC2ES-Next”
  - Cyber-resilient
  - Automated decision support using evidence-based algorithms/CPGs
  - In-transit visibility from as close to POI as possible

Patient Movement Timeliness (2007-16)



OPR: TCSG

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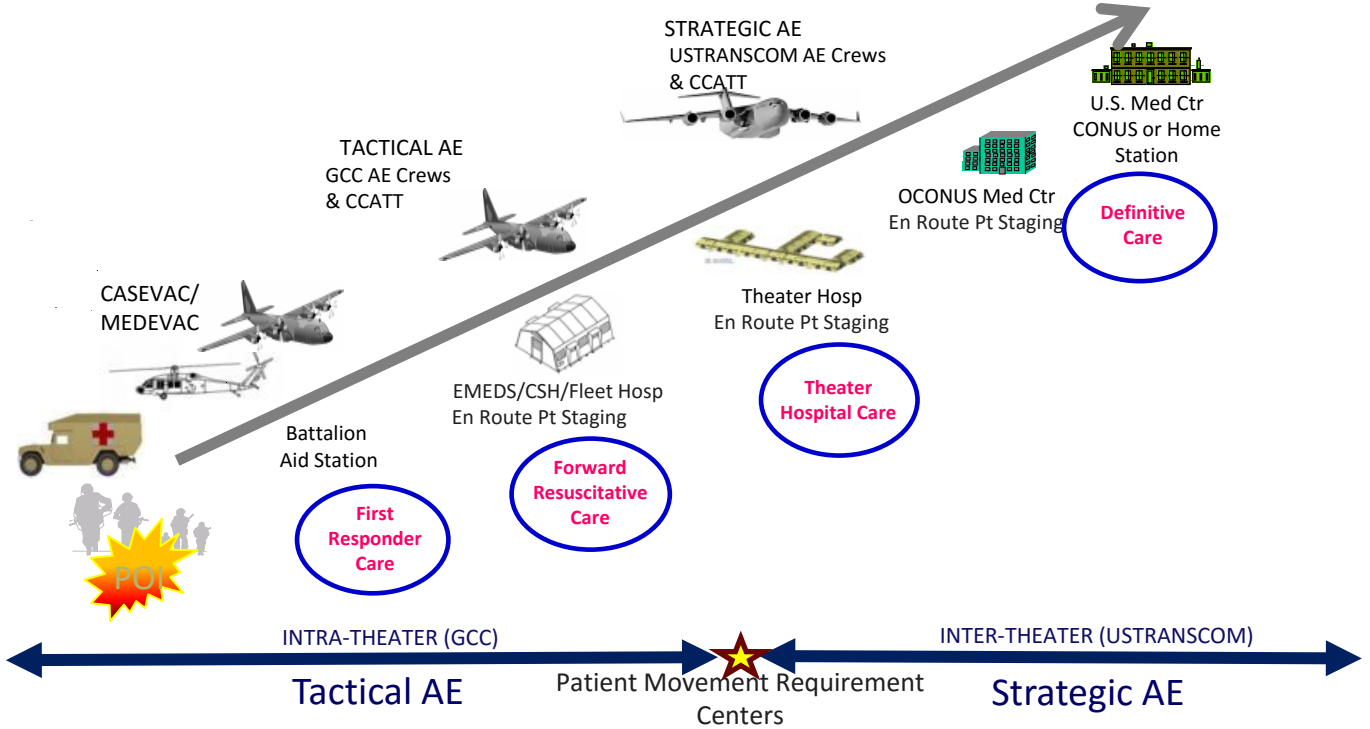
AFRICOM

- Grey Tail
- ISOS
- Other Agencies
- ATARES

Other Operational PM Opportunities

- Defense Support of Civil Authorities
- Patients Exposed to/infected with HCID
- Joint Port Opening

Current Global Patient Movement Processes



The New National Military Strategy

Yesterday	Today	Tomorrow
USSR	VEOs	Russia
Regional/global	Cyber	China
Survivability	Regional/local	Iran
	Increased efficiency	North Korea
		VEOs
		Trans-regional, multi-domain
		Resiliency & Effectiveness

"Our traditional approach where we are either at peace or at war is insufficient…The current reality is more an adversarial competition with a military dimension short of armed conflict."

"I personally don't believe the current planning and organizational construct or command and control are optimized for the current fight…What really is required is global integration."

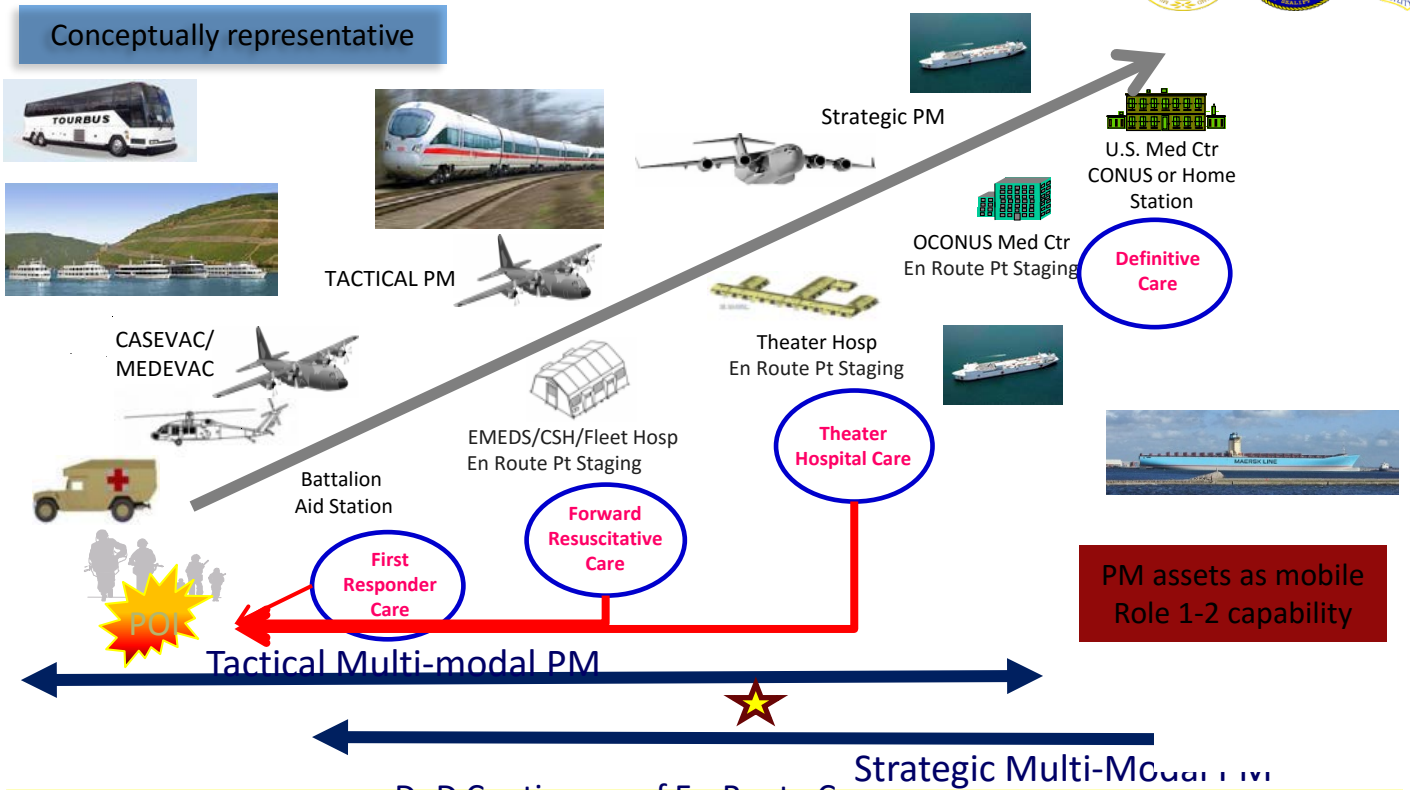
CJCS Gen Joe Dunford

Casualty Generators

Yesterday	Today	Tomorrow
CBRN	IED	Precision-guided munitions
Ballistic Missiles	RPG	CBRN
+/- SOF	Grenade	Cyber
Artillery	Suicide bombers	Ballistic Missiles
		SOF
		HCID
		Genomics?

For the first time since WWII, we cannot ensure air superiority

Current Global Patient Movement Plan (Contested/Non-Permissive)



Joint Expeditionary Multi-modal Patient Movement

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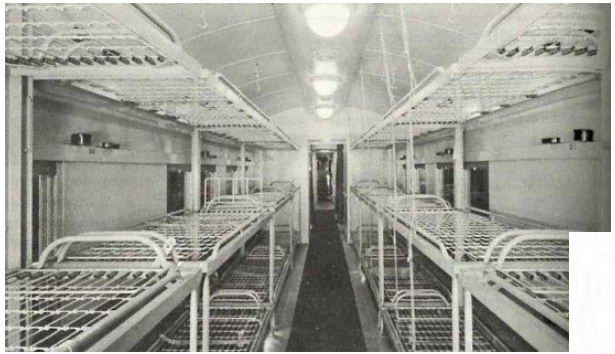
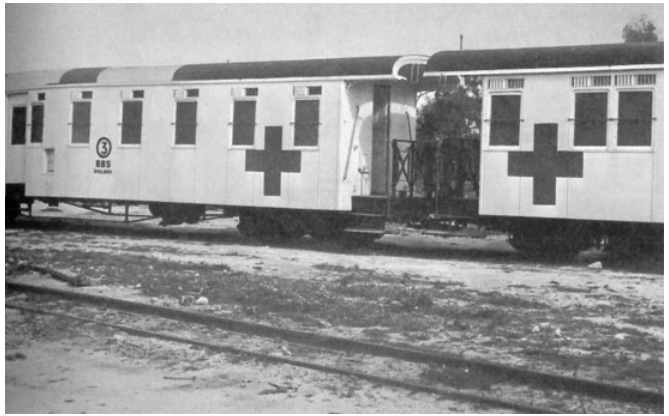
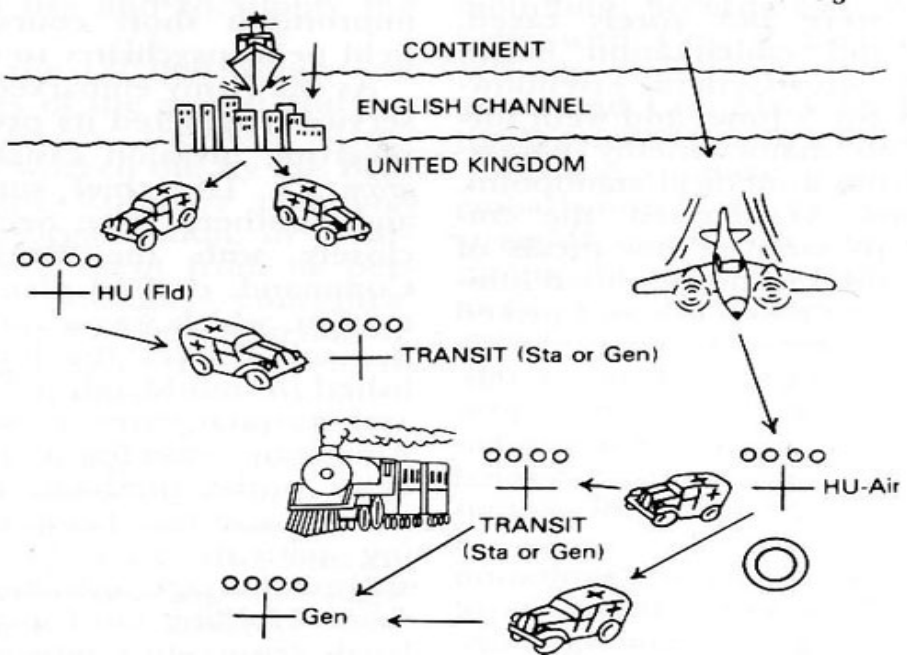
Back To The Future: Multimodal Patient Movement







PM 5-10 Yrs From Now…….

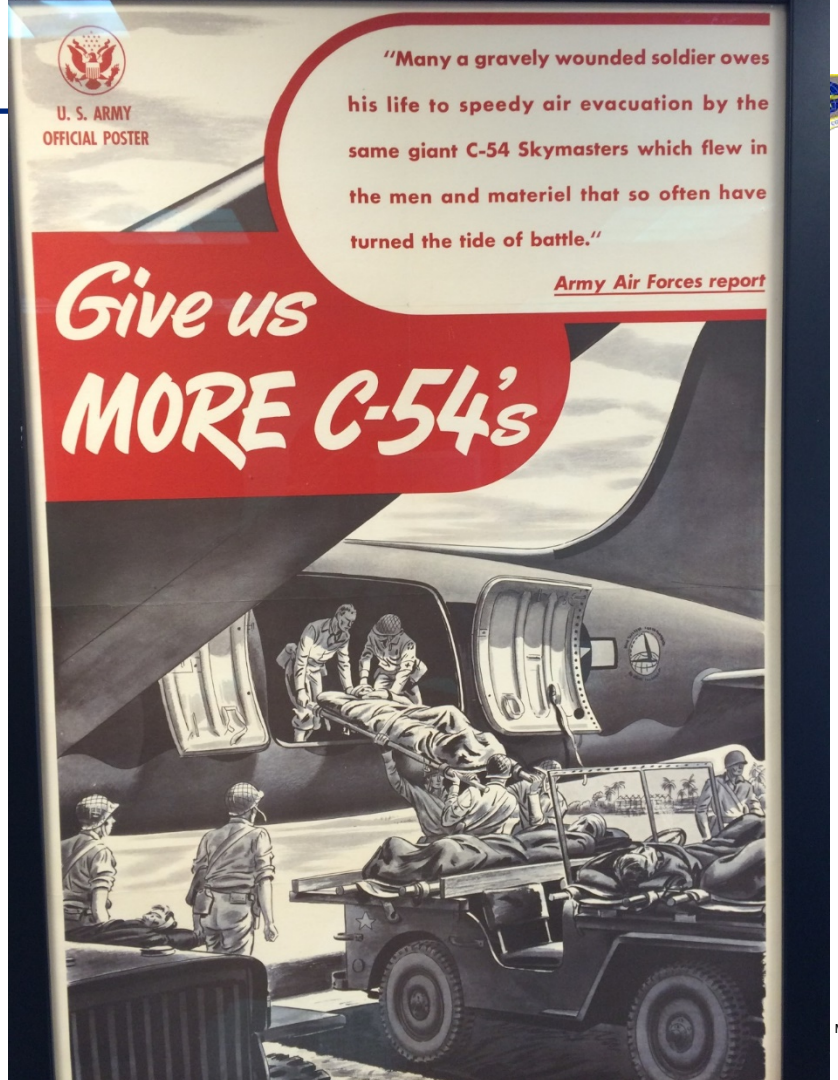
Medical drones poised to take off
Mayo Clinic 2015

Semi-Autonomous
CASEVAC

Opportunities:

- National Military Strategy: Patient movement in trans regional, multi domain and multi functional conflicts
- Way Ahead:
  - Evidenced-based EnRoute care
  - Tactics, techniques & procedures for cyber-compromised EnRoute Care
  - Automated decision support, new TRAC2ES
  - GPM for Attrition + CBRNE + NEO + HCID + ??
  - Development of joint, inter-operable, multi-modal PM capabilities…USTC patient movement Capabilities Based Assessment

Questions?


U. S. ARMY
OFFICIAL POSTER
"Many a gravely wounded soldier owes his life to speedy air evacuation by the same giant C-54 Skymasters which flew in the men and materiel that so often have turned the tide of battle."
Army Air Forces report
Give us
MORE C-54's