



READY AT A MOMENT'S NOTICE



First response – how to be (or not to be) the
pointed end of the stick

Ian B. Anderson M.D.,C.M., F.R.C.S.C.



Ready at a moments notice:

DISCLAIMER

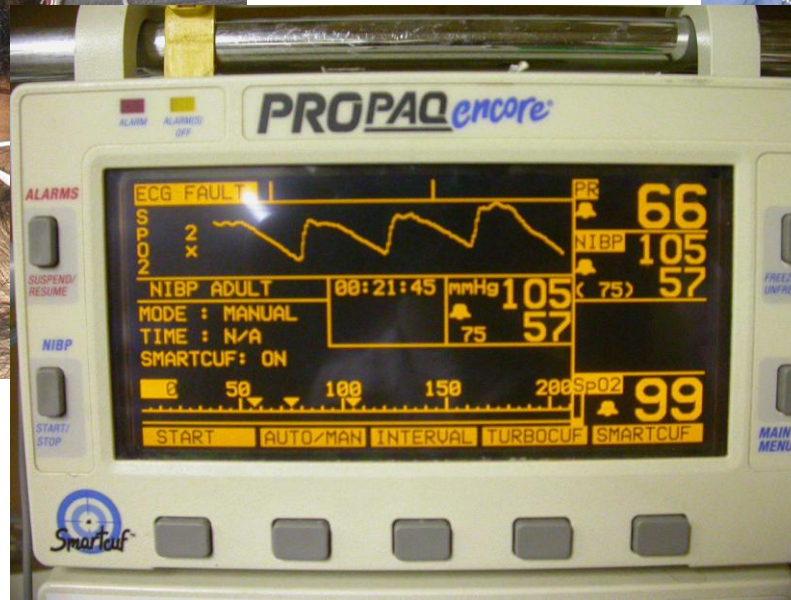
The opinions expressed are my own and do not represent the opinions or policies of the Government of Canada, NATO, or any organization

Conflicts of Interests:
consultant for DND and Biokinetics



Warning: I will not be responsible for ill effects from hearing (seeing) this talk

talk



November 1989: World War II finally ends!



The New Order of Things



New Insecurities

- Terrorism
- New rogue states
- International crime
- Environmental change
- Religious intolerance
- Regime change
- Recycling traditional alliances

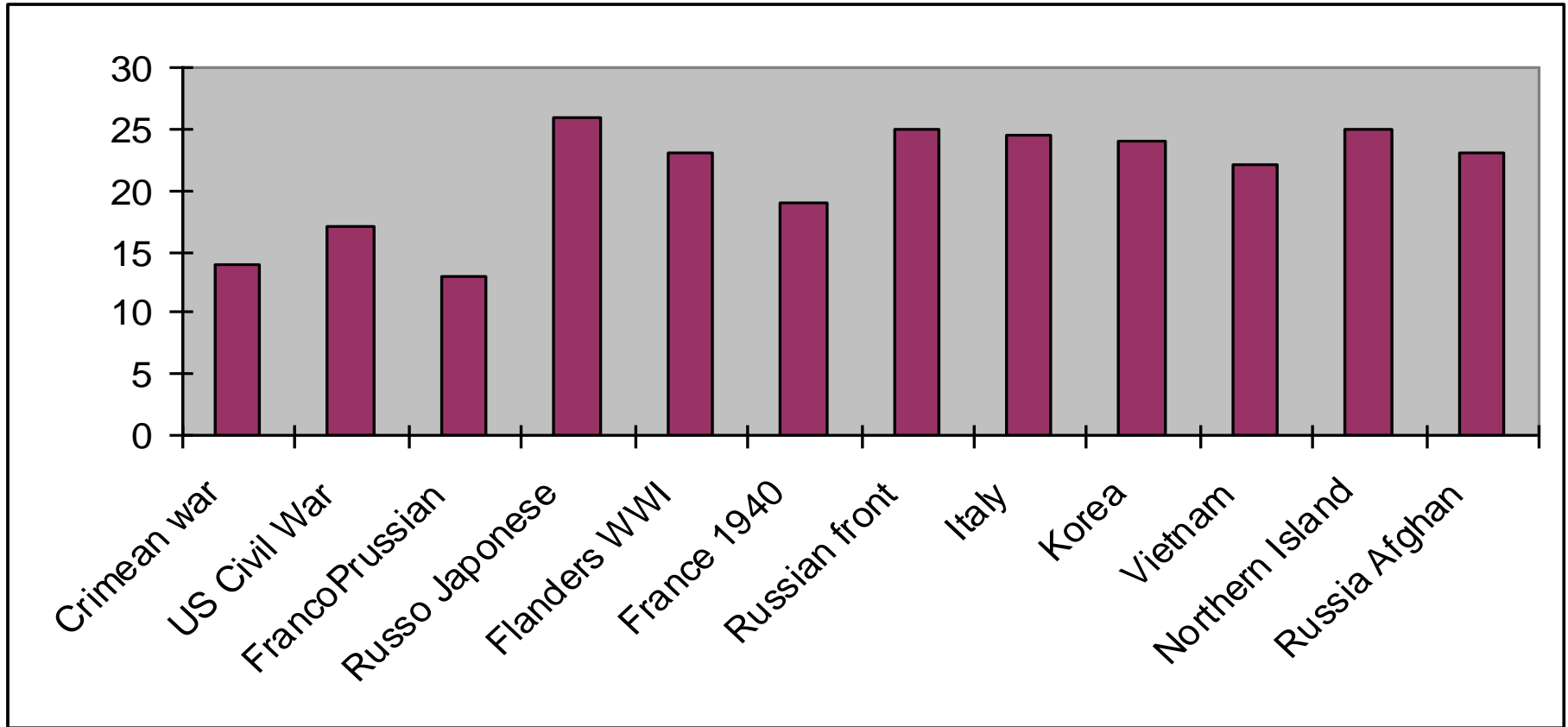


Paradox:
Talk about logistics

Talk about
consumption

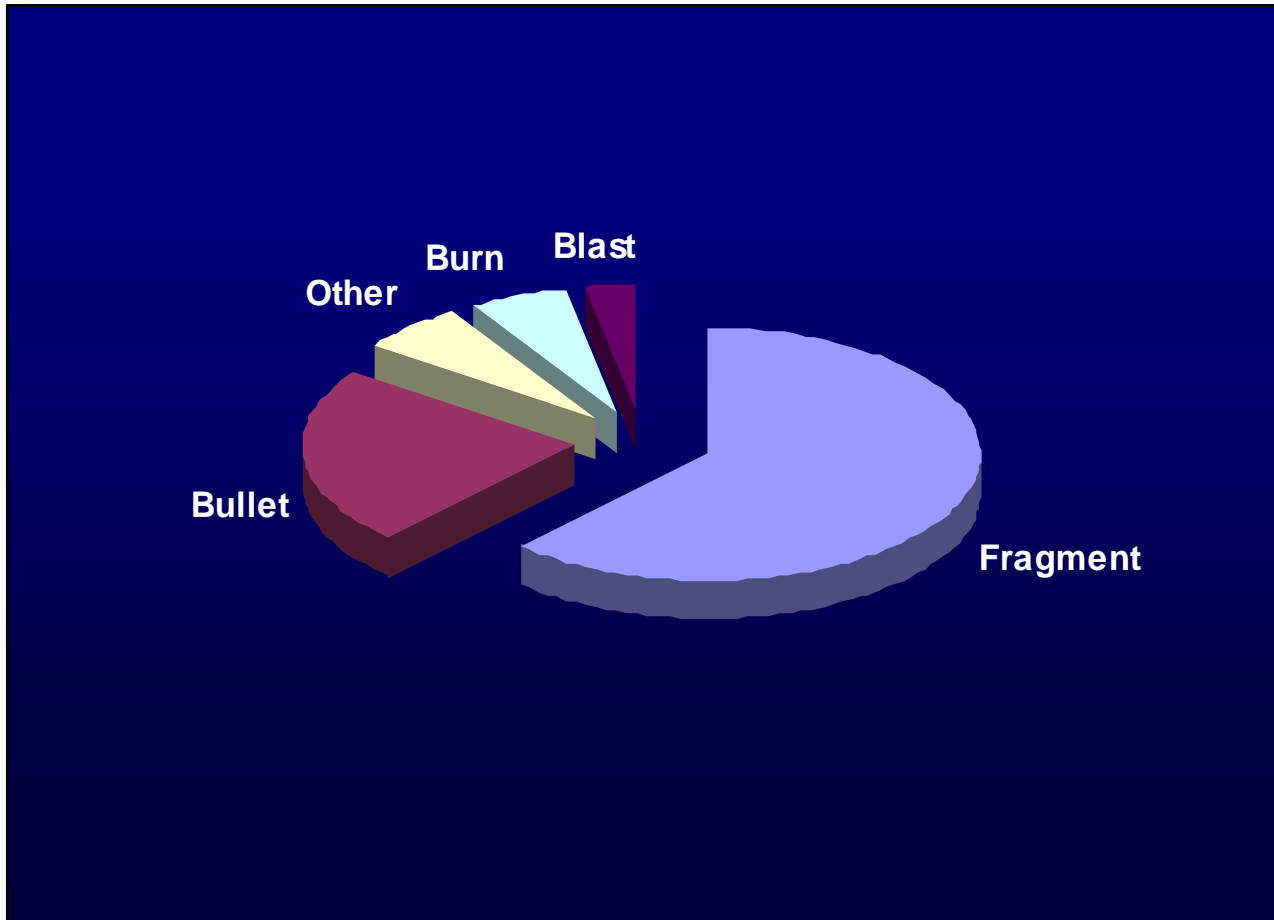


Percent Killed In Action 1854-1989 Combat Casualties



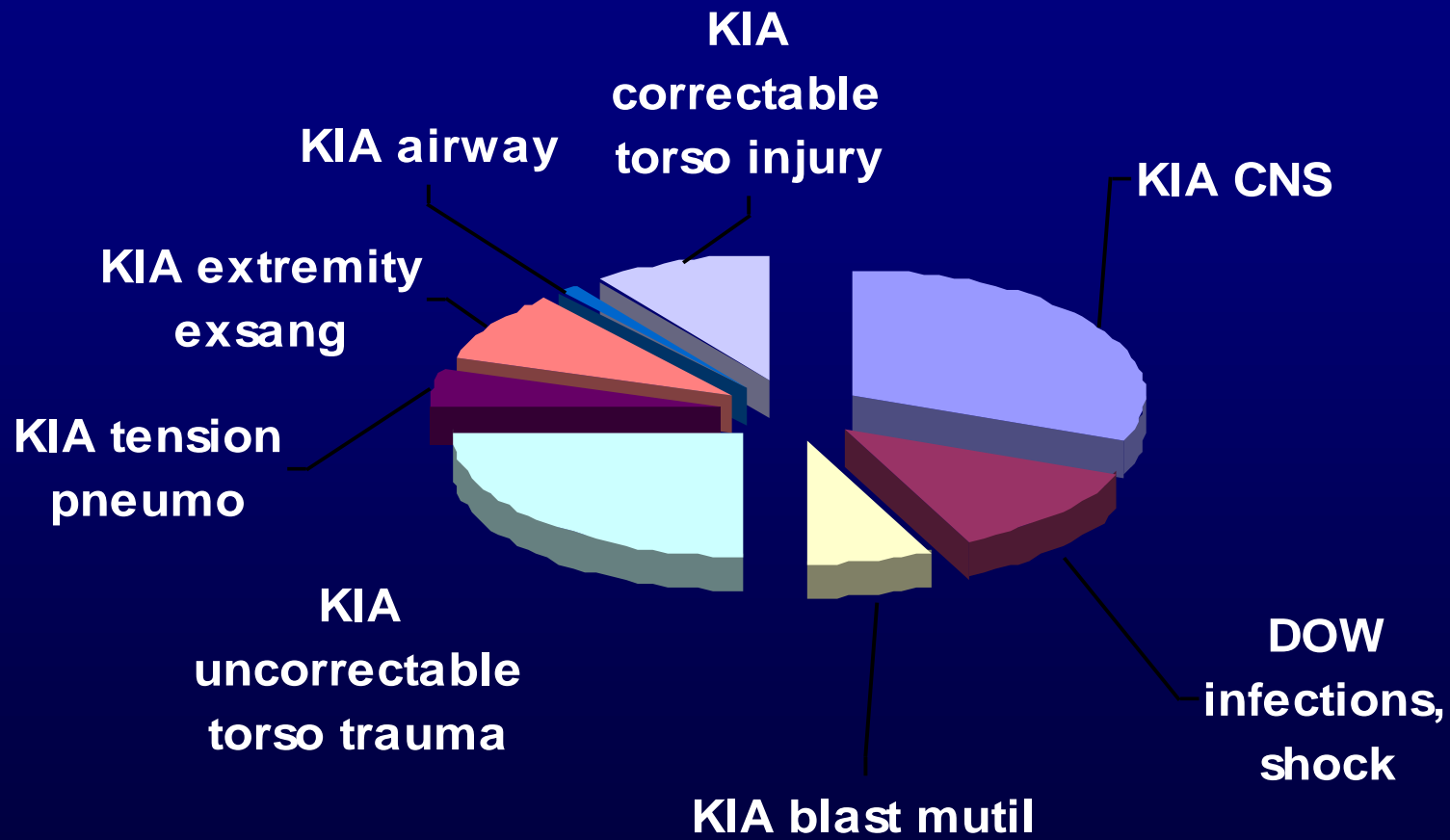
Bellamy RF, Combat trauma overview. In: Zajtcuk R, Grande CM, eds. Textbook of Military Medicine, Anaesthesia and Perioperative Care of the Combat Casualty. Office of the Surgeon General, United States Army, 1995: 1-42.

Mechanism of Wounding



Bellamy RF, Combat trauma overview. In: Zajtchuk R, Grande CM, eds. Textbook of Military Medicine, Anaesthesia and Perioperative Care of the Combat Casualty. Office of the Surgeon General, United States Army, 1995: 1-42.

Causes of death - combat



Champion HR et al A profile of combat injury, J Trauma, 54(5)2003: S13-S19.

Aims of this presentation:

- Personal and team preparation
- Relations between logistics, leadership, and operational components
- Influence on the scope of operations on training and logistics



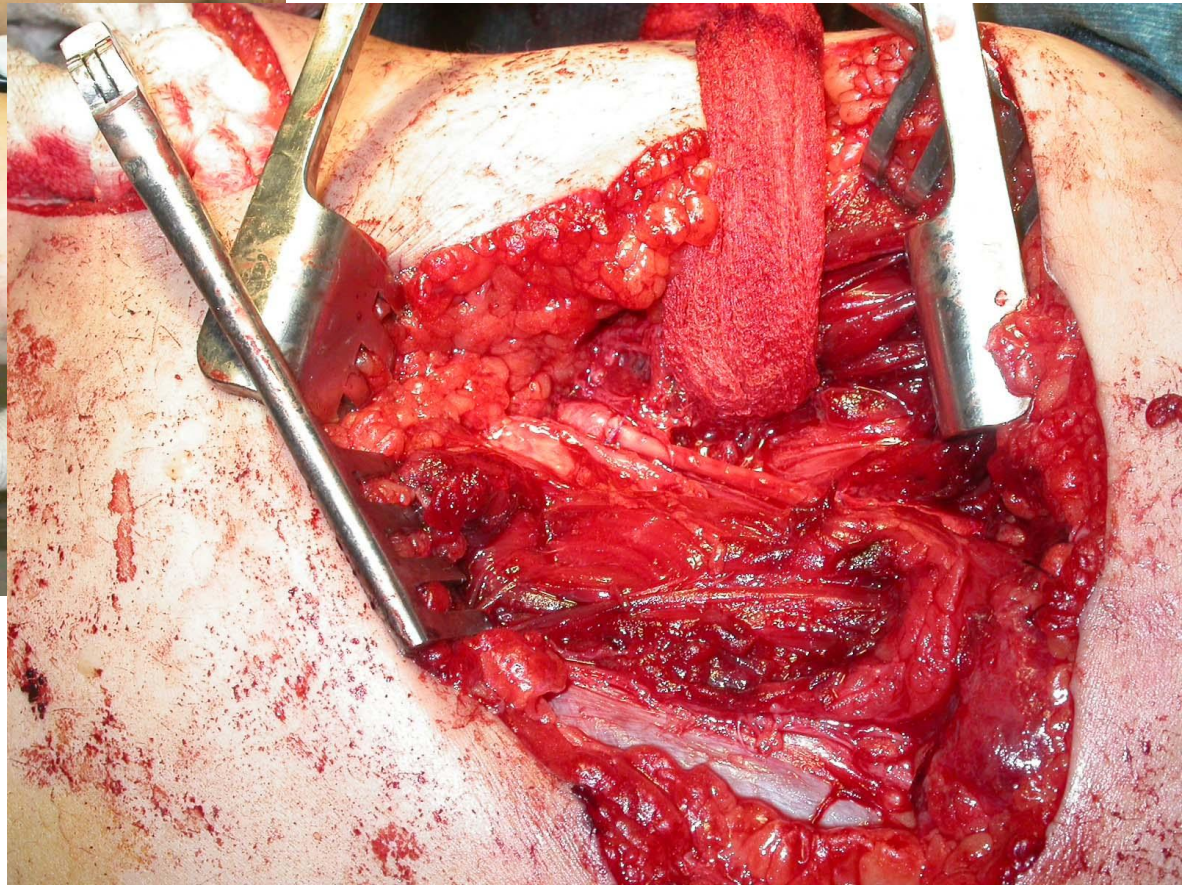
Personnel Preparedness

- Team consists of many backgrounds
- Working in the field is different
- People have normal jobs – extracting them have issues.
- CNN effect
- Logistics are part of the team



Surgeons like to be busy: how to refine and learn skills

Example: GSW thigh – no pulse

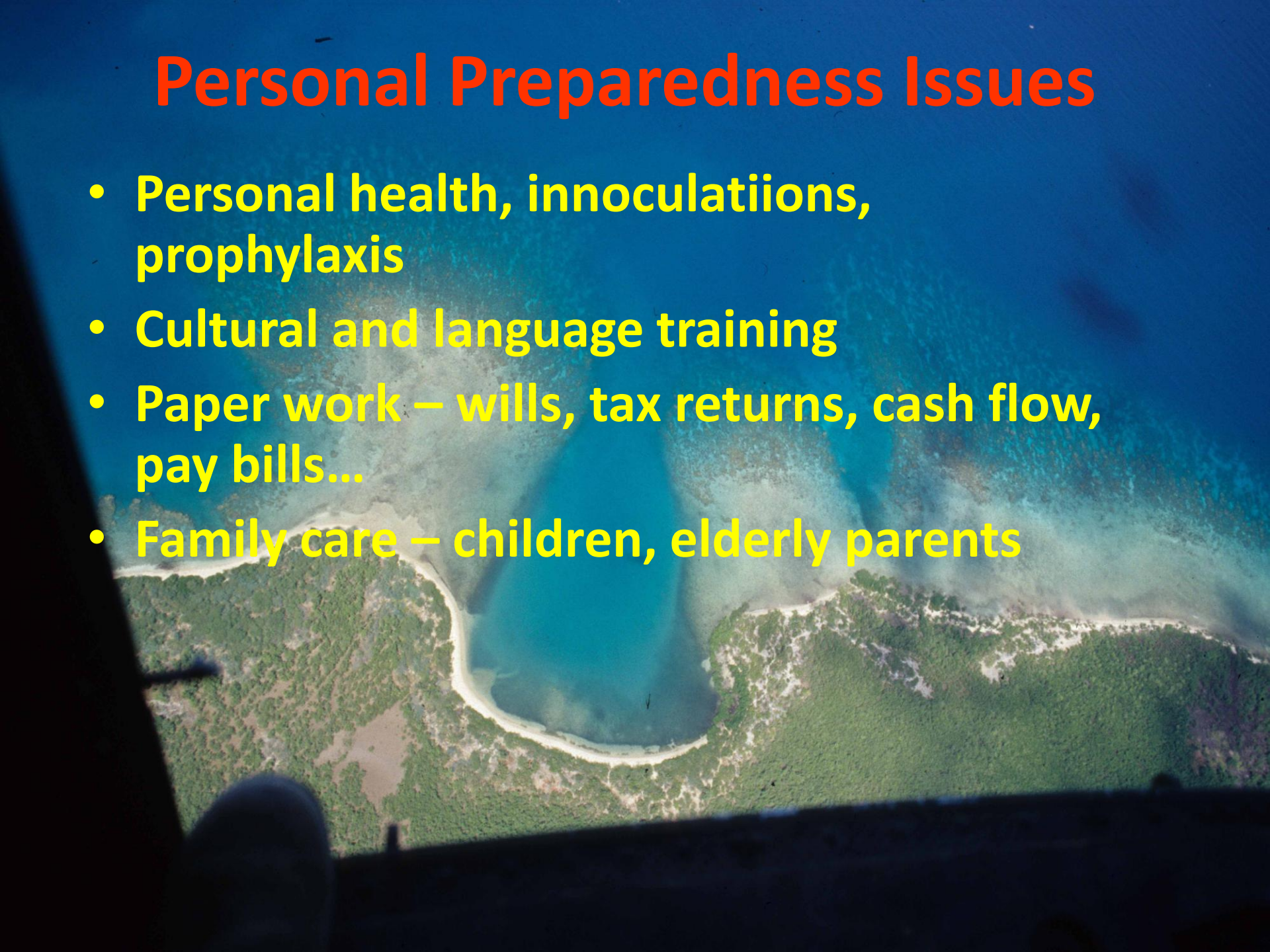


Deployments can be very disruptive:
personal life, family, business, patients,
professional relationships



Personal Preparedness Issues

- Personal health, inoculations, prophylaxis
- Cultural and language training
- Paper work – wills, tax returns, cash flow, pay bills...
- Family care – children, elderly parents

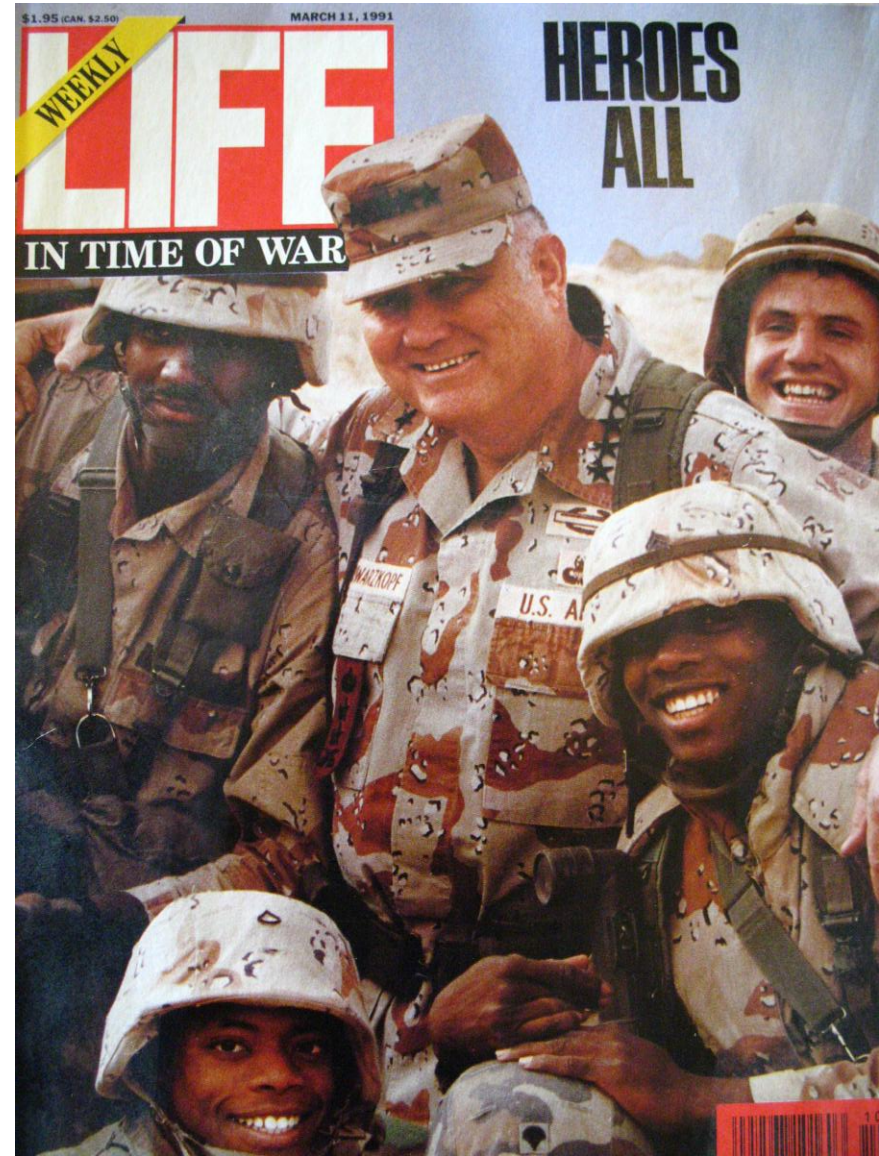


Team work is fundamental: building it can be difficult



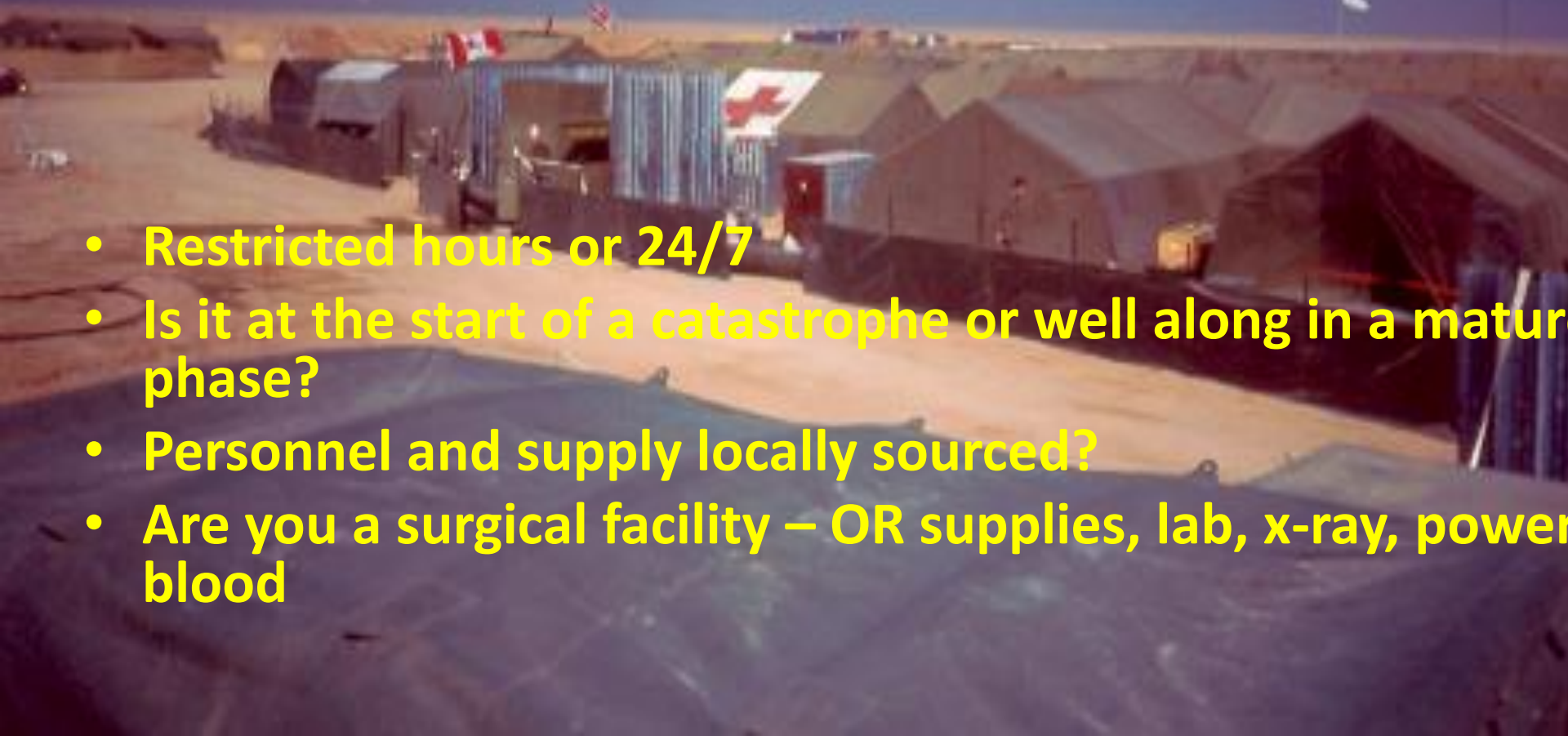
Logistics and operational roles

- Schwarzkopf's Rule: amateurs think tactics, professionals think logistics
- How long is the tail?
- Who is back at the base?
- Is there a supply base?
- Mobility
- Storage?
- Local sources of supply?
- Funding: amount, flexibility



Scope of operations is the driver of logistics

- Is it focused on one injury or disease?
- Is it supported or with local medical facilities?
- Restricted hours or 24/7
- Is it at the start of a catastrophe or well along in a mature phase?
- Personnel and supply locally sourced?
- Are you a surgical facility – OR supplies, lab, x-ray, power, blood



Military Deployments

- Funded –well equipped
- Team building and leadership built into the plan
- Security less an issue for military personnel
- Family plans and personal preparedness built into the plan
- Fixed periods of rotations should prevent burn outs
- Many members will be inexperienced – first mission
- Conflicts – surgeon – family doctor, nurses – med tech
- Larger bureaucracy



NGO

- More variety in size, focus, funding
- Duplication and competition
- Funding and raising cash – the CNN effect
- Personnel are committed and experienced but some not there yet
- Recruiting the right workers when you want them can be a problem
- Less requirement for home government approval – faster response possible



Military Deployments

Anderson's paradox: in modern operations, medical services lead and combat arms follow in support



Medical units not first in

- Security: get the bad guys
- Transport – once you get there – you have to get there



Civilian Disasters:

Water, food, public health



Photos with permission of Major Paul Charlebois

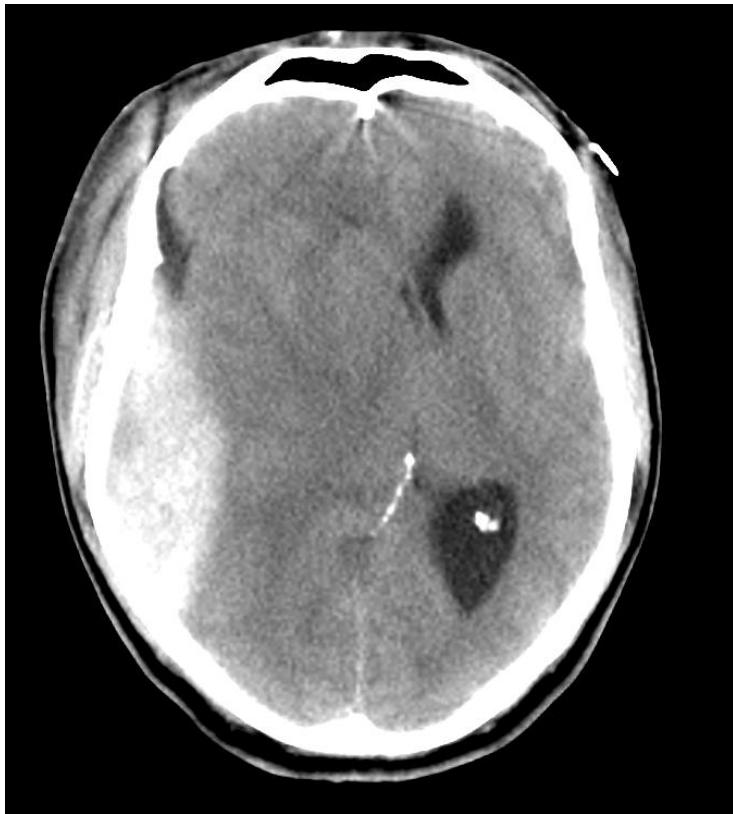
Surgical diseases are resource intense.

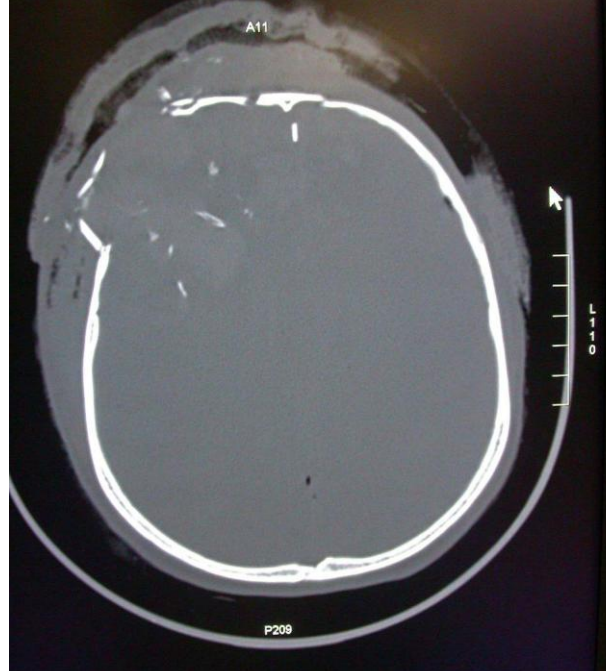
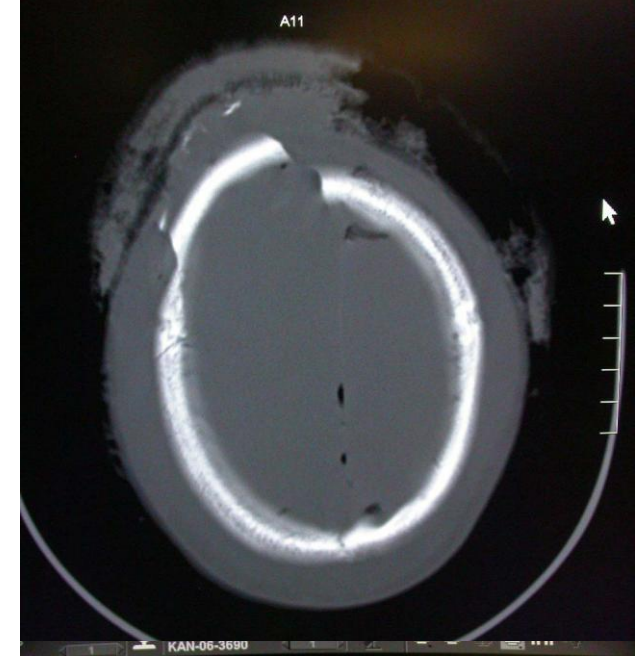
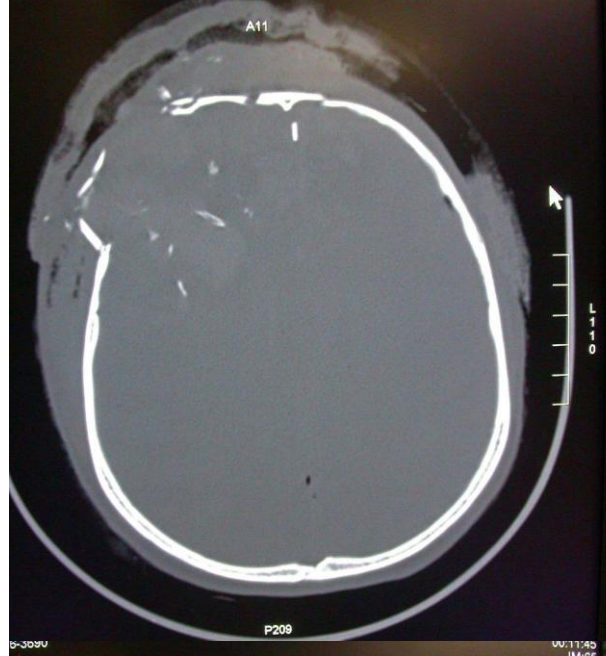
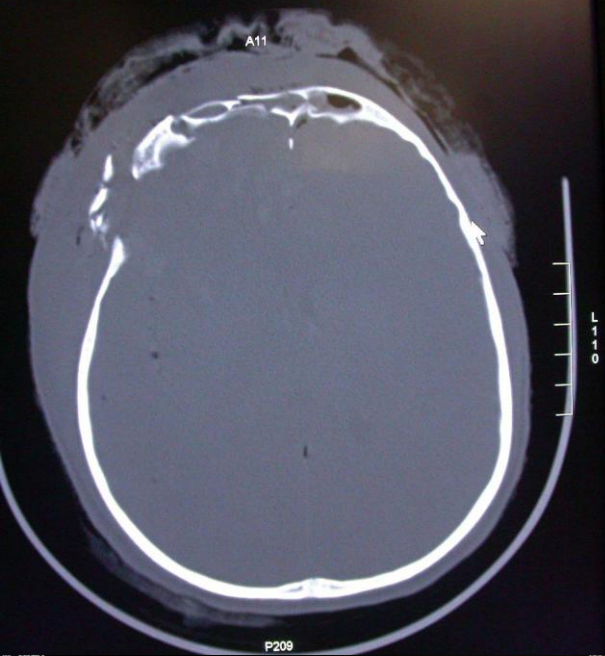


Types of Brain Injury

Extra-Dural Hematoma

Diffuse Axonal Injury





Supporting local support (when that is not the mission)



- Support of chain of command
- Support and request of local medical leaders
- No extra resources
- Not to interfere with overall mission
- Must be complete at end of mission



**REAR AREA - FIELD
HOSPITAL**

**BEHIND COMBAT ZONE:
COLLECTION OF CASUALTIES**

**FRONT LINE COMBAT MEDICS
AND DOCTORS**

The true complexity of a surgical team is often misunderstood



**FORWARD
SURGICAL
TEAM**

**SMALL
UNIT**

**CENTRAL CORE -
ALL HOSPITALS,
MEDICAL UNITS
SUPPLY
HEADQUARTERS**

**PUBLIC
HEALTH
TEAM**

**MEDICAL
TEAM**

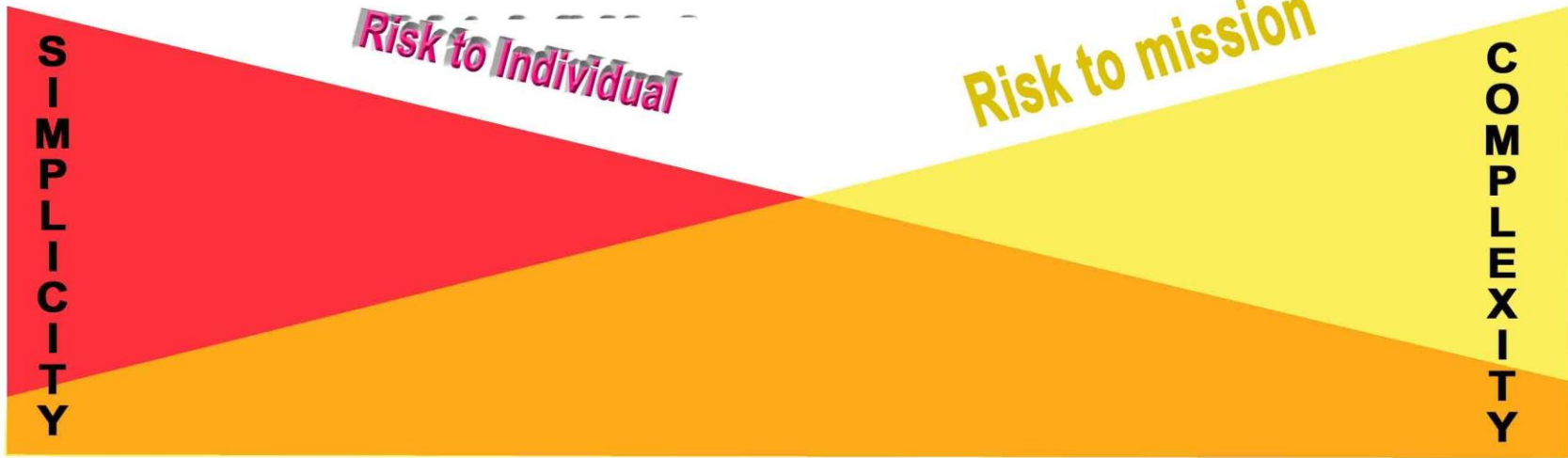


FIELD MEDICAL CARE STANDARDS MODEL

Austere

Inclusive

Comprehensive

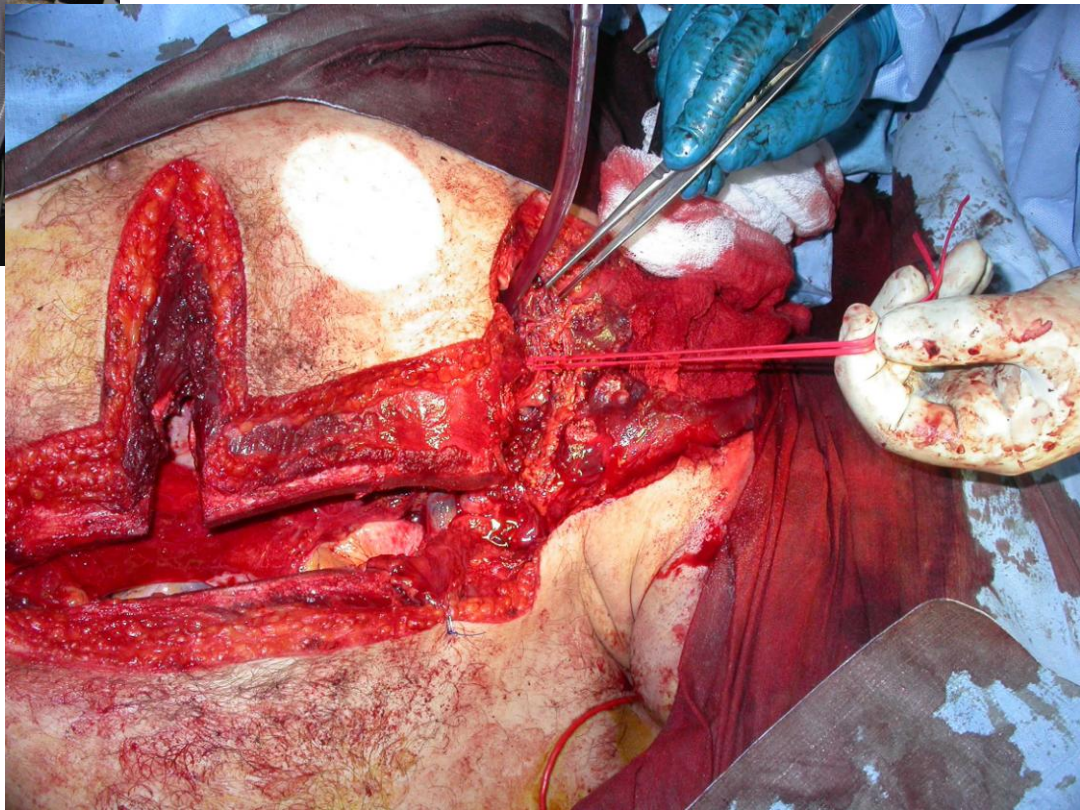


- Treatment and decisions made in missions' best interest
- Patients best interest not considered
- Focus on common injuries needing low tech or use limited resources
- Subspecialists not available
- Non-expert care given
- Limited or no diagnostic equipment
- Limited blood products
- Surge in casualties severely limited care to individuals
- Limited transport of casualties
- Transport may be limited and delayed with increase mortality in those not evacuated
- Core specialists may be limited in availability
- Expect increased death and disability in complex or serious casualties

- Patients interest primary but become temporarily low priority with surge of casualties

- Patients' best interest sole focus
- Military objectives may take secondary priority to supply, protect, and support hospital
- Diagnostic capabilities extensive reflecting availability of subspecialists
- Large surge capability
- Can reinforce other hospitals and still maintain capabilities
- Capable of holding, stabilizing, and treating complex patients
- Unusual patients or those exceeding capability, expertly evacuated
- Transport of complex intubated casualties
- Morbidity and disability reflects civilian standards

Limitations of blood







Wind down: all things come to an end

- End projects
- Say good by to friends you have made
- Get to leave your disasters behind
- Pack up or get rid of all your unused stuff
- Hazardous materials?
- Write reports.....
- Re – integrate back home – pick up all the pieces you left home
- This can cause anxiety!!**





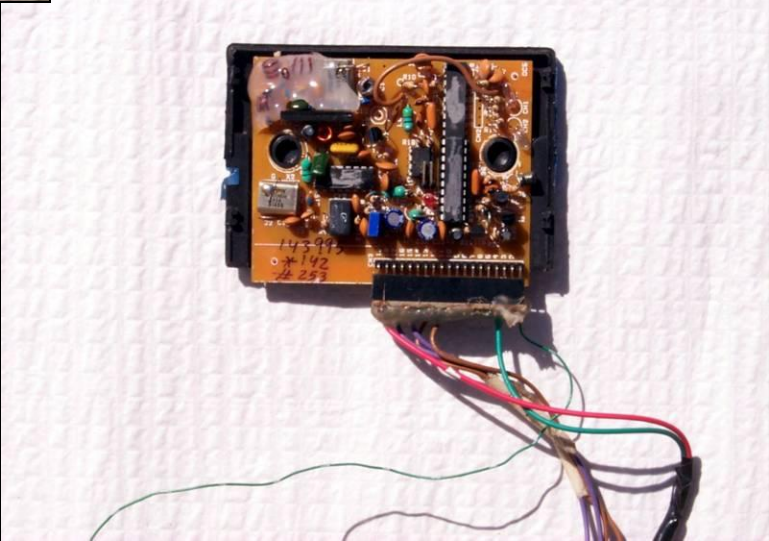
Questions?





04 Mar 03

Device consisted of two AT landmines connected to a complex electrical circuit



Elections



Chanchrum Orum

