MINISTÈRE
DES ARMÉES
Liberté
Égalité
Fraternité

Service de santé
des armées

Soutien chirurgical en OPEX :

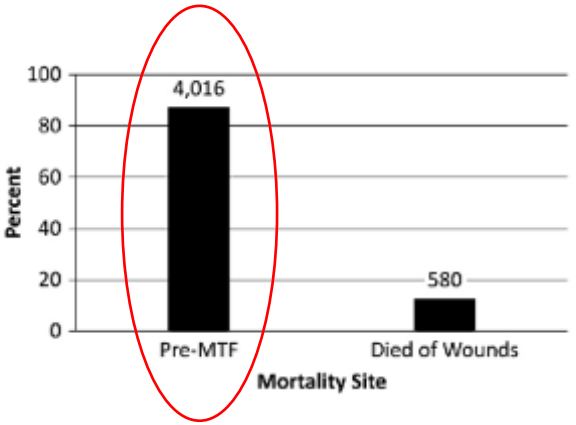
Un défi logistique

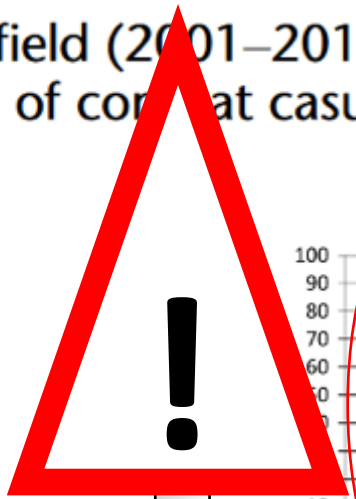
3 juin 2022

MP Henri de Lesquen

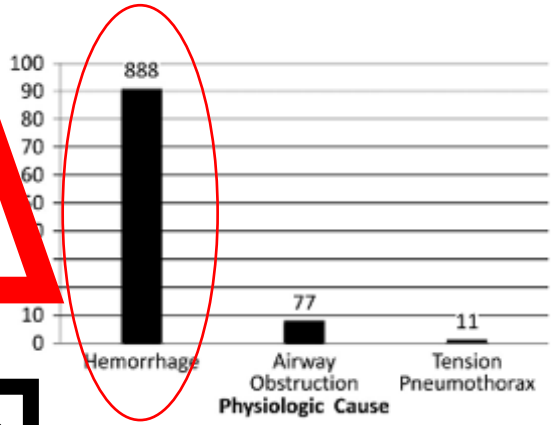
Chirurgie thoracique et
vasculaire
HIA Sainte Anne, Toulon

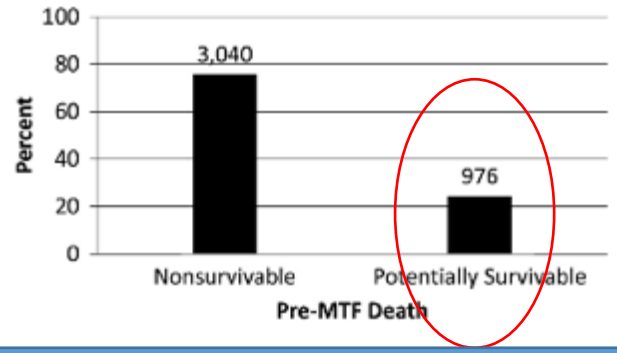
Death on the battlefield (2001–2011): Implications for the future of combat casualty care

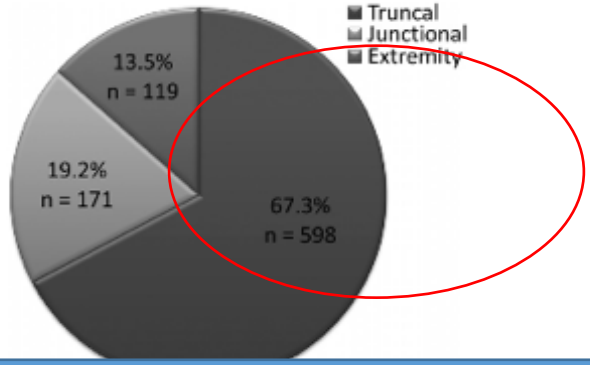




Severe NCTH*





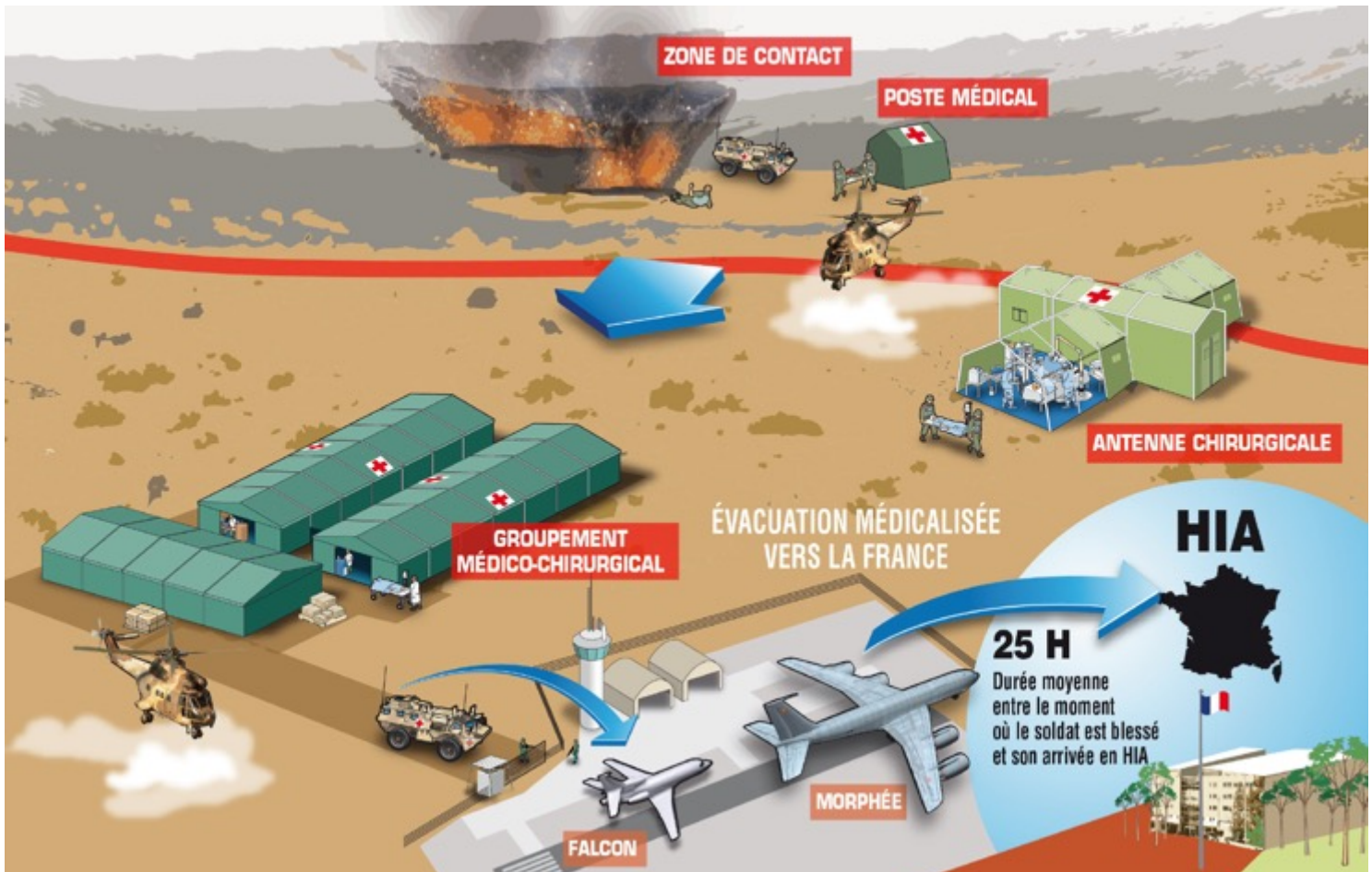


*NCTH = NON COMPRESSIBLE TORSO HEMORRHAGE

Original Investigation

The Effect of a Golden Hour Policy on the Morbidity and Mortality of Combat Casualties

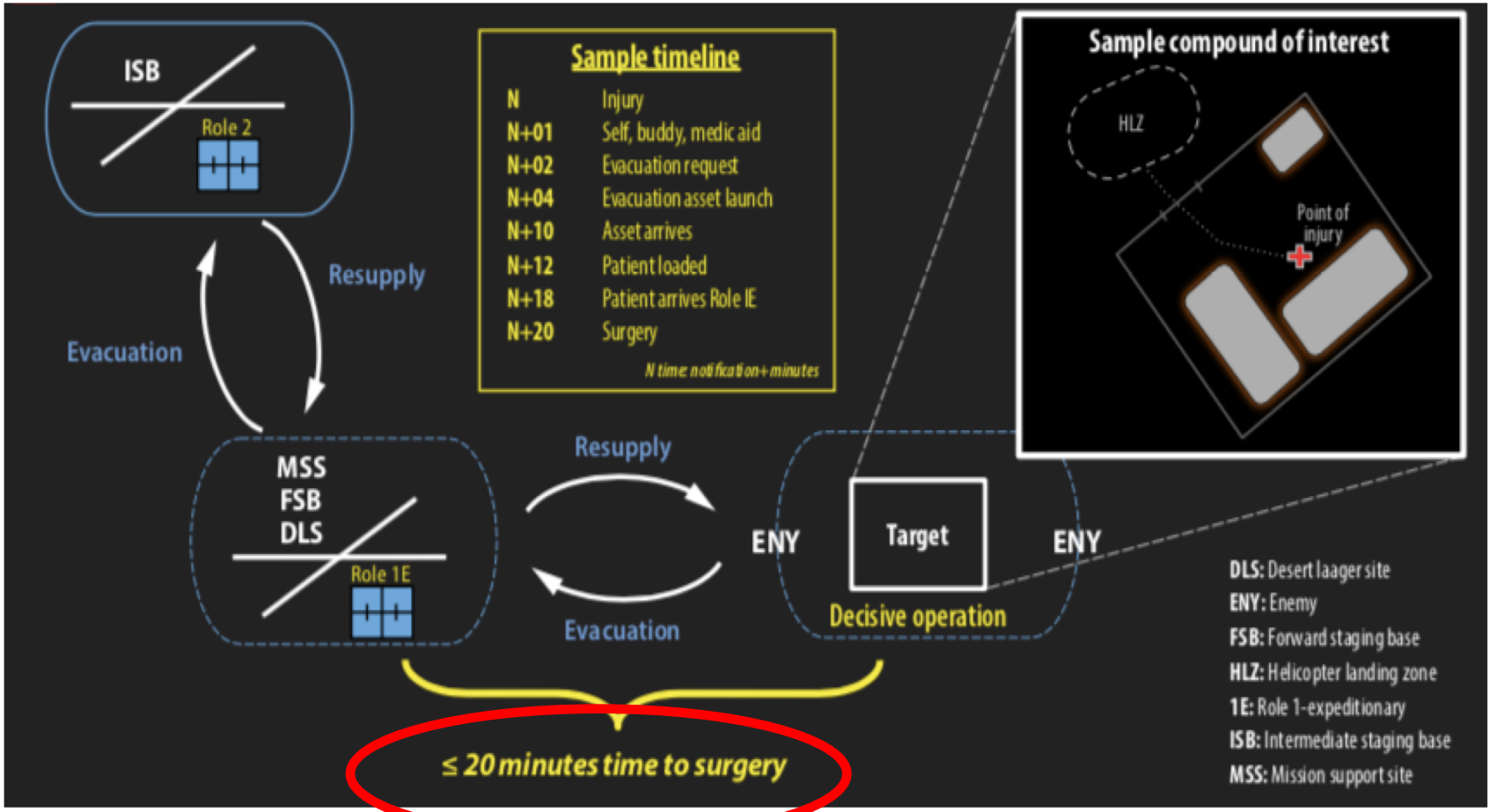
Principes fondamentaux du soutien



Chirurgicalisation de l'avant

Évacuation précoce

Evolution doctrinale



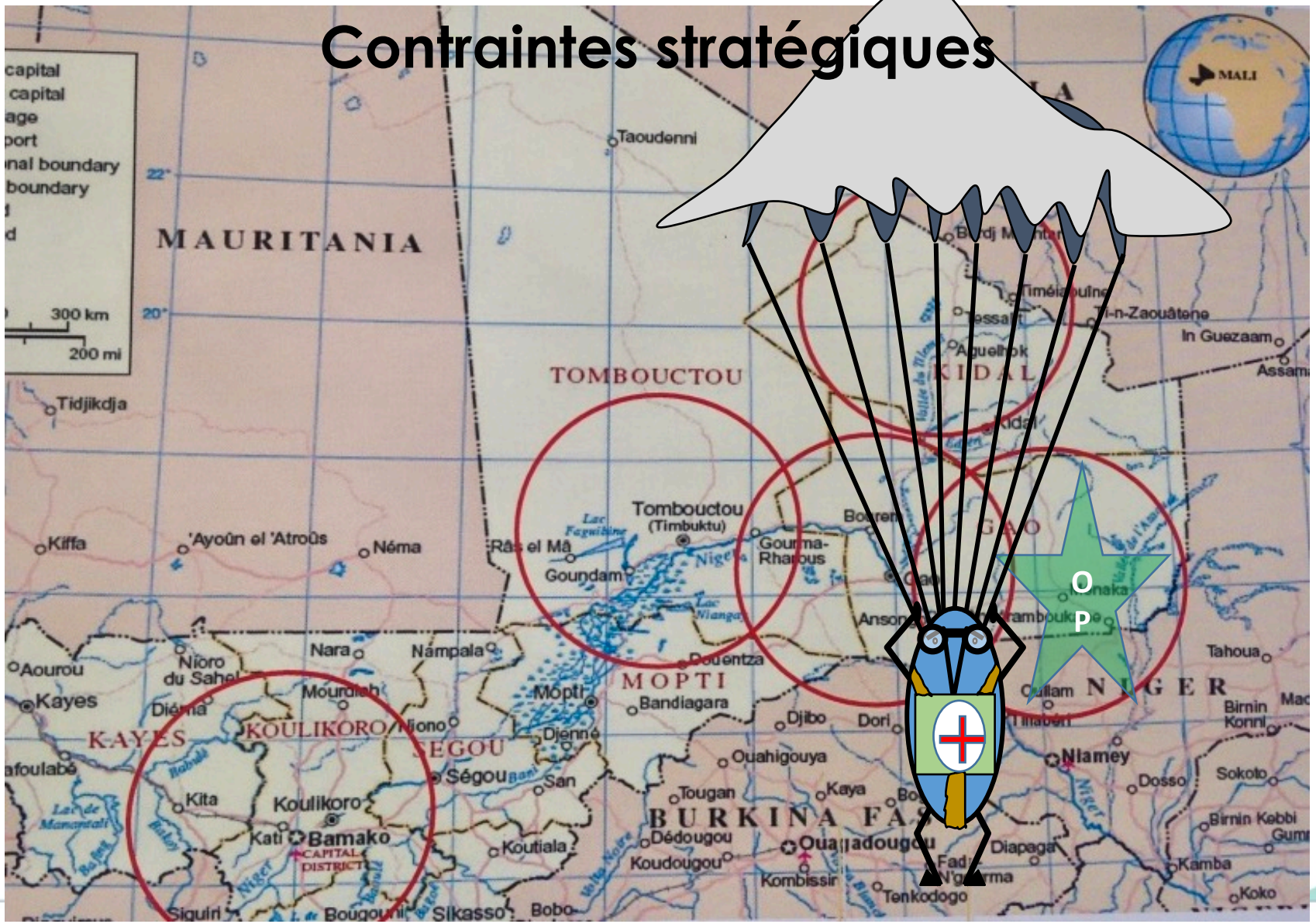
Death Ignores the Golden Hour

The Argument for Mobile, Farther-Forward Surgery

Lt. Col. Brian C. Beldowicz, MD, U.S. Army
Maj. Michael Bellamy, DO, U.S. Army

MILITARY REVIEW March-April 2020

Contraintes stratégiques



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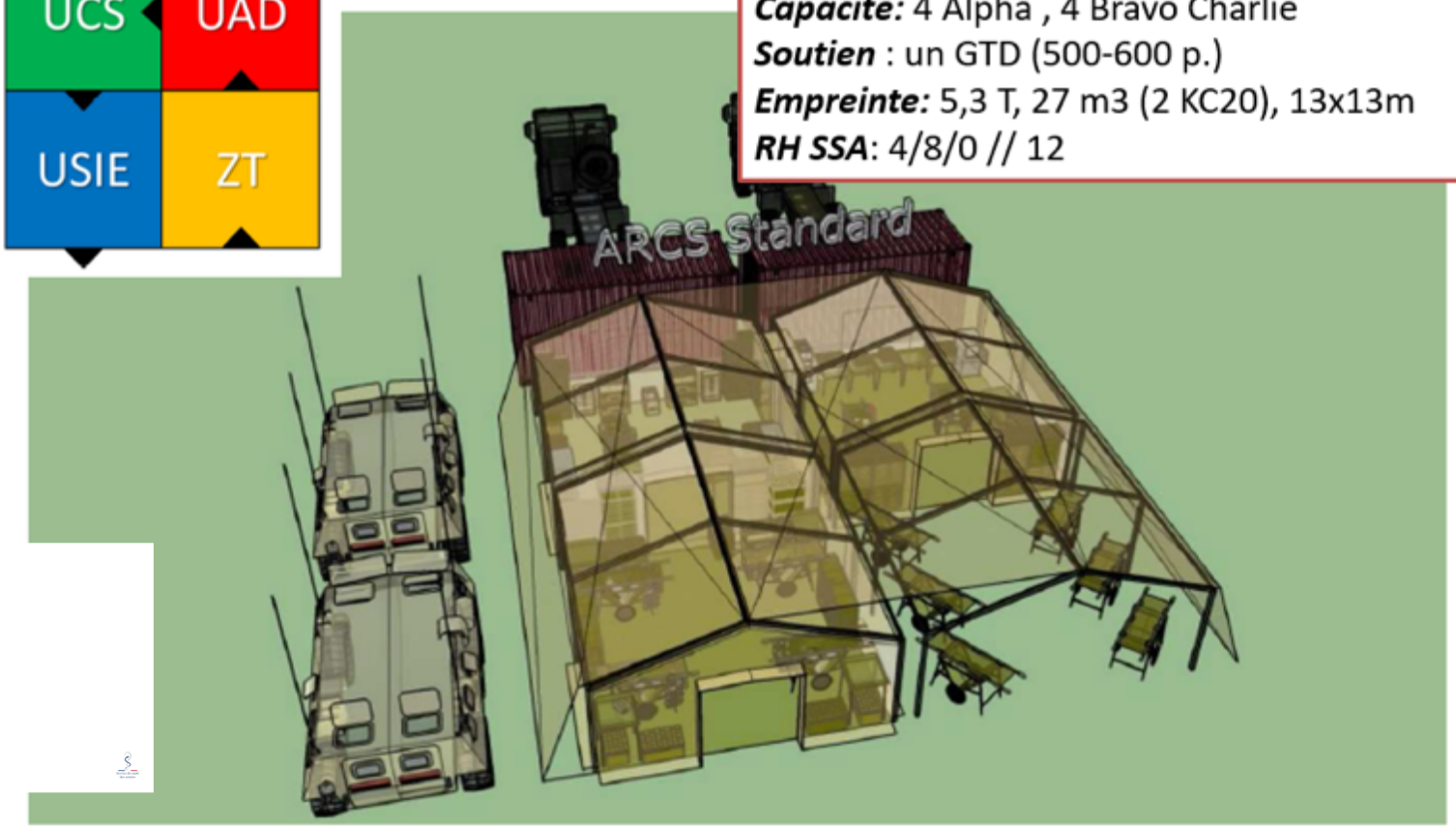
Antenne de Réanimation et de Chirurgie de Sauvetage

UCS | UAD | USIE | ZT

Capacité: 4 Alpha , 4 Bravo Charlie
Soutien : un GTD (500-600 p.)
Empreinte: 5,3 T, 27 m3 (2 KC20), 13x13m
RH SSA: 4/8/0 // 12



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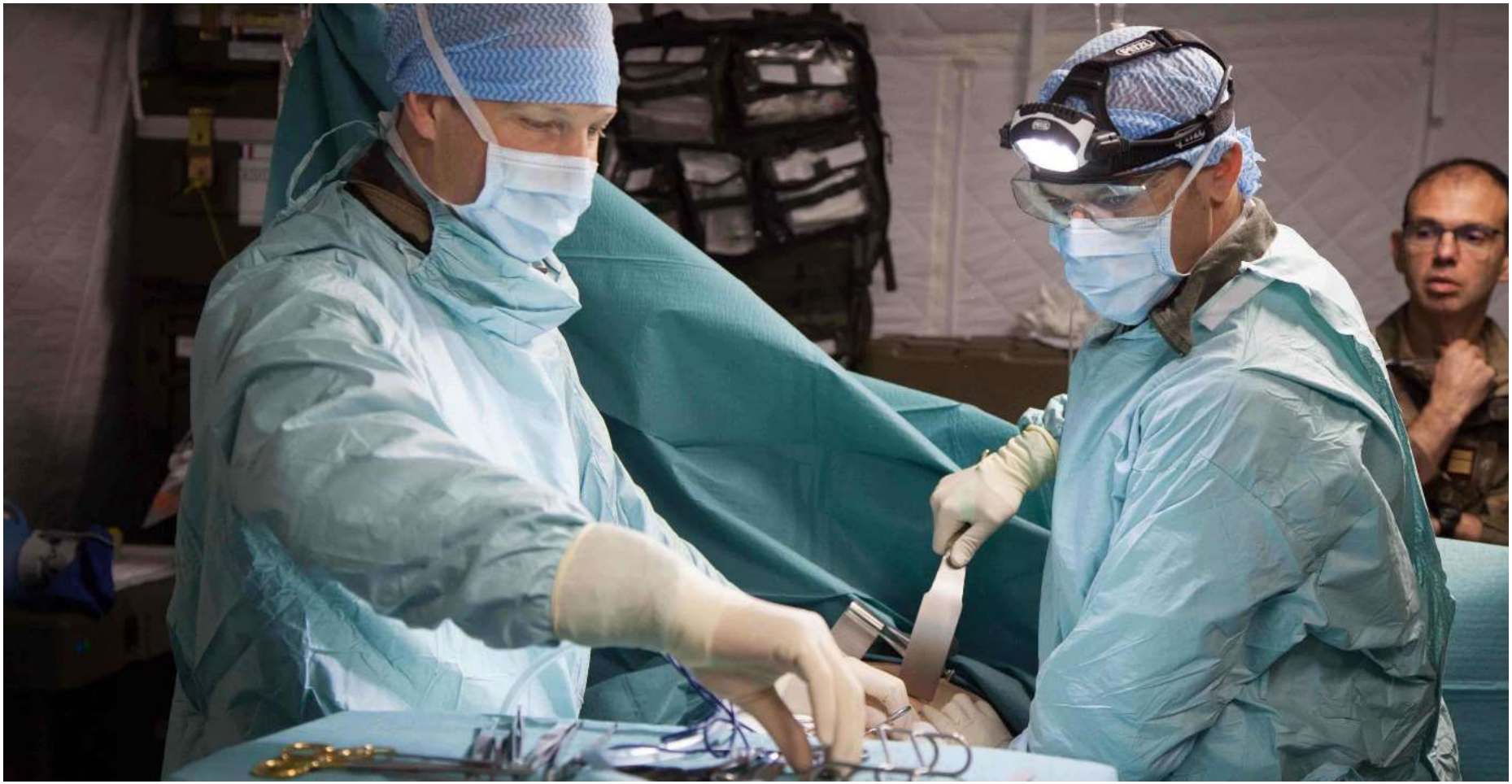
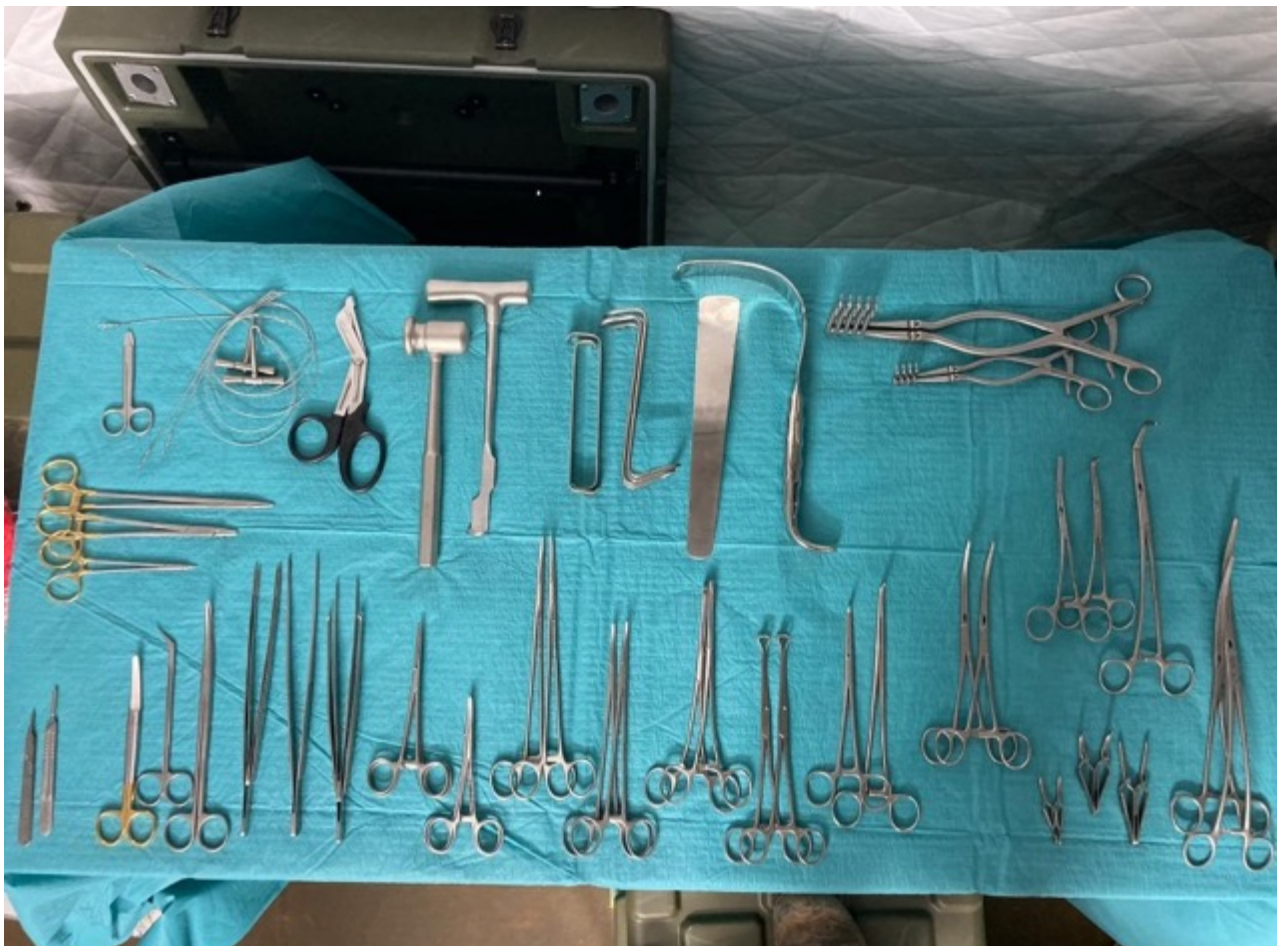
Capacités chirurgicales

Service de santé
des armées



Capacités chirurgicales

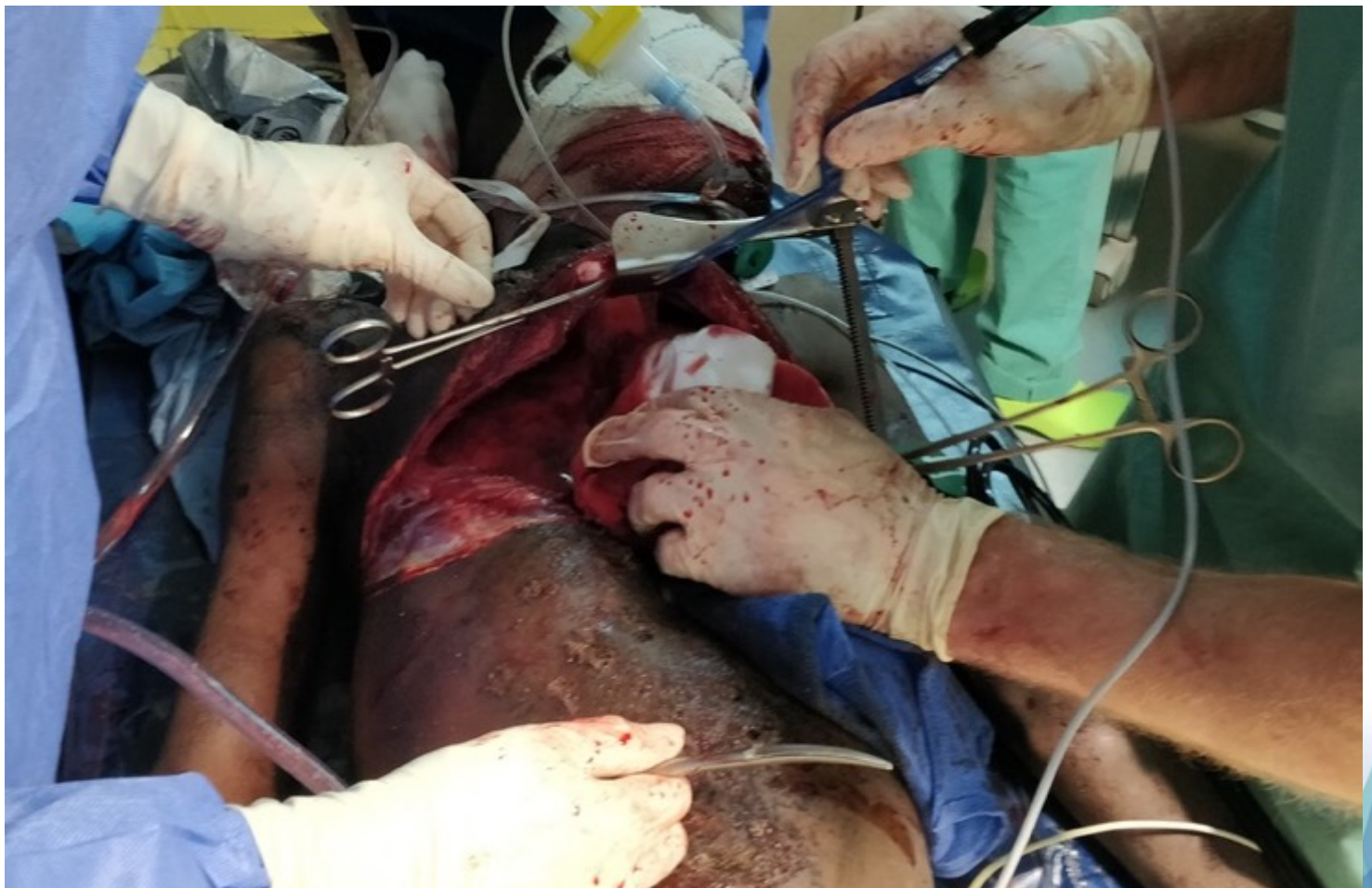
Abdominal/vascular procedures
Aortic cross-clamping during resuscitative laparotomy (thoracic or abdominal)
Simple ligation of any major vessel tear
Liver laceration packing
Small intestinal perforation stapling
Colonic perforation control with terylene tape
Arterial injuries shunted/ligated + fasciotomy/cooling
Venous injury ligation or repair
Bladder ruptures catheterized and drained
Pancreatic bed leaks multiply drained
Peritoneal soilage copiously irrigated and contained
Abdomen temporarily and/or rapidly closed
Visceral compartment syndrome treated with plastic sheet or iv-fluid bag closure (Bogota bag)



Rotondo et al., *J Trauma*, 1993
Ramasamy et al., *Int J Care Injured*, 2010

Capacités chirurgicales

Thoracic procedures
Pulmonary tractotomy
Circum-hilar rotation for lung haemorrhage control
En-masse lobectomy
Skin staple closure of cardiac wounds
En-masse closure of chest wall muscles
Patch closure of thoracic wounds (using an iv fluid bag)
Rapid emergency thoracotomy
Non-anatomically stapled lung resection



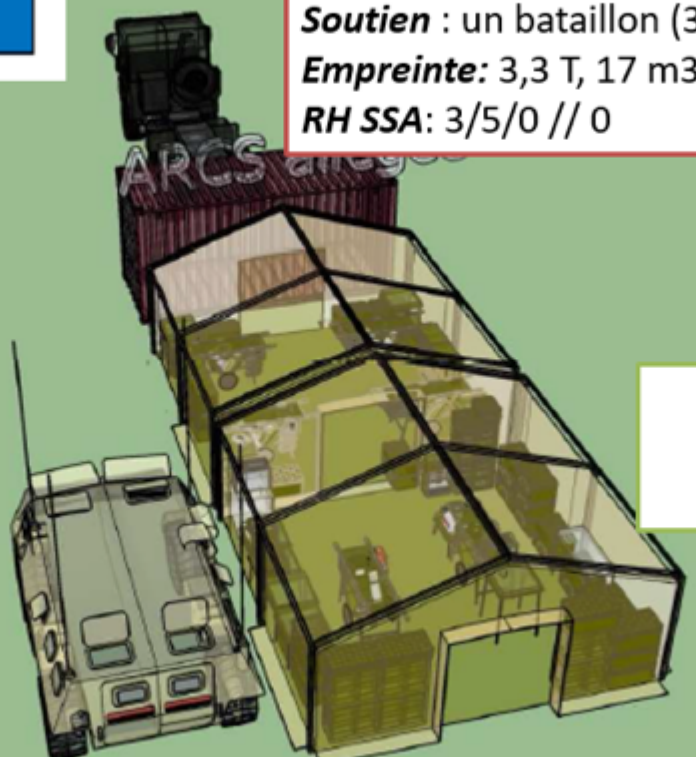
Rotondo et al., *J Trauma*, 1993

Ramasamy et al., *Int J Care Injured,* 2010

Antenne de Chirurgie de Sauvetage

UAD → UCS → USIE

Capacité: 2 Alpha , 2 Bravo Charlie
Soutien : un bataillon (300-400 p.)
Empreinte: 3,3 T, 17 m3 (1 KC20), 6,5x13m
RH SSA: 3/5/0 // 0



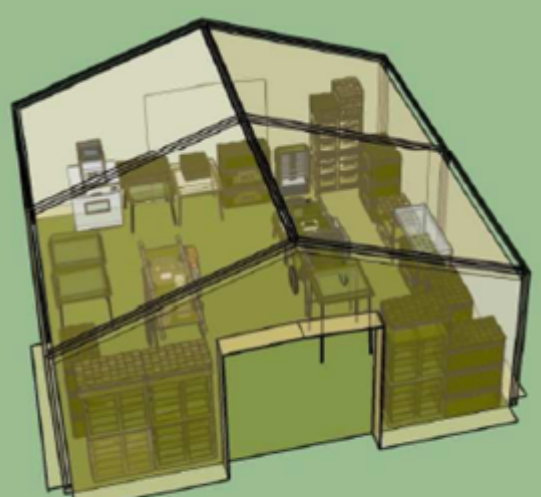
= ACV

Module de Chirurgie de Sauvetage

UAD UCS

ARCS Ultra-

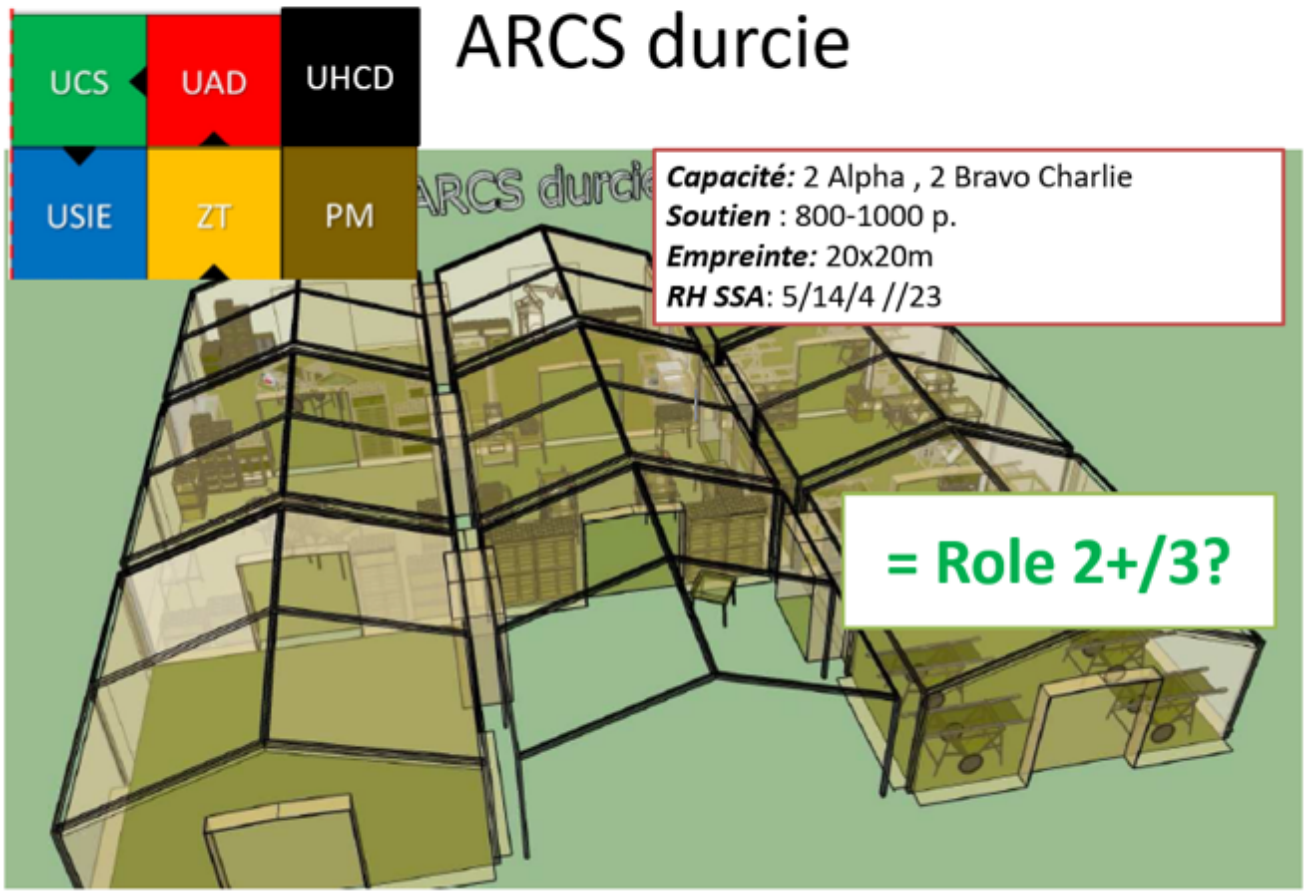
Capacité: 2 Alpha , 2 Bravo Charlie
Soutien : un détachement 80-100 p.)
Empreinte: 1,9 T, 10 m3, 6x6 m
RH SSA: 3/2/0 //5



= LCV

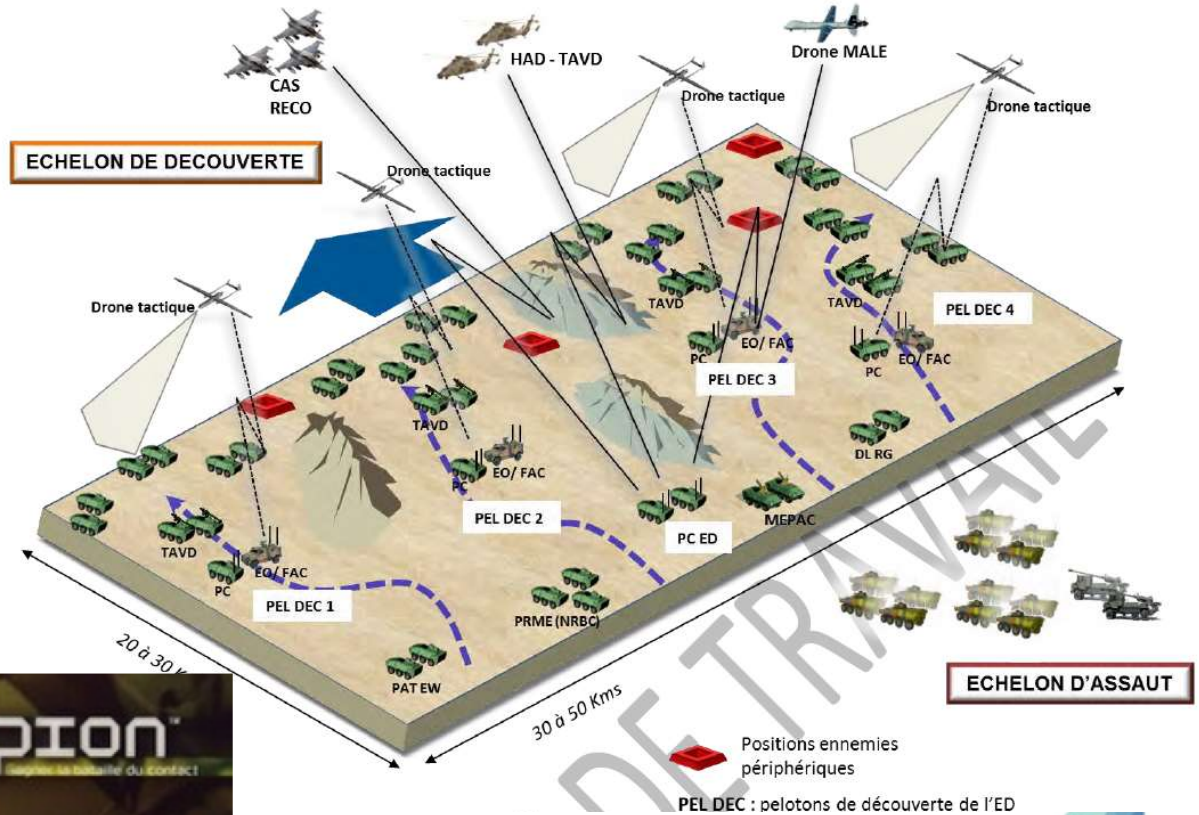
Groupement Médico-chirurgical

ARCS durcie



Perspectives stratégiques 2030 : SCORPION

- Programme SCORPION
  - Décentralisation du système
    - Autonomie des unités
  - Extrême vélocité des unités
    - Mobilité
  - Info-valorisation du théâtre
    - Flux de données



Synergie du **C**ontact **R**enforcée par la **P**olyvalence et l'**I**nfovalorisation

Infovalorisation et chirurgie : e - triage

évènement

Soldat capteur

Le militaire : autodéclaration, autosoins

t 0 | t+20min | t+60min | t+120min

MEDEVAC en-route care

Anticipation = « **e-triage** »
Téléconsultation chirurgicale

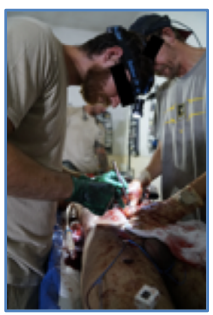
Chirurgicalisation de l'extrême-avant

évènement

Soldat capteur

Le militaire : autodéclaration, autosoins

ECM : élément chirurgical mobile – extrême avant



Damage control
REBOA - ECMO

t 0 | t+20min | t+60min | t+120min

MEDEVAC en-route care

Rôle 2 augmenté

évènement

Soldat capteur

Le militaire : autodéclaration, autosoins

ECM : élément chirurgical mobile – extrême avant

Damage control REBOA - ECMO

PMM : poste médico-chirurgical mobile GTIA

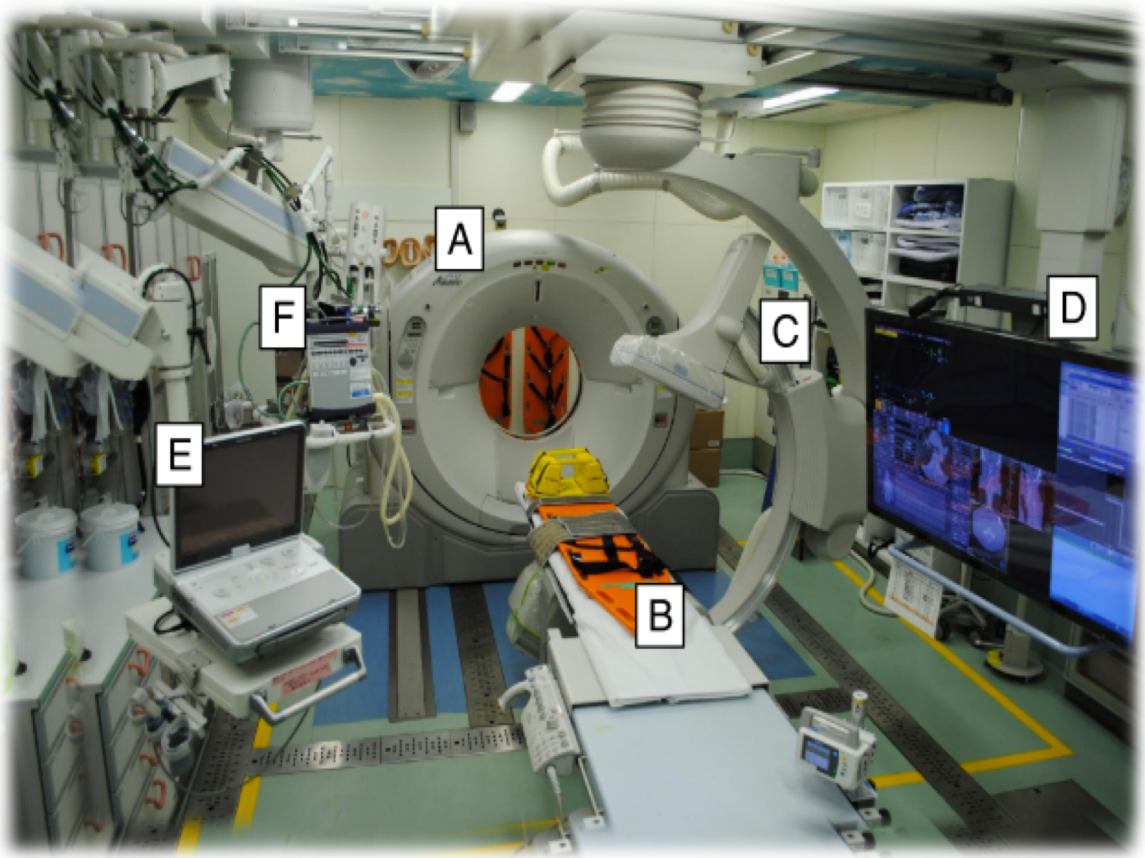
Damage control endovasculaire

t 0 | t+20min | t+60min | t+120min

MEDEVAC en-route care

Rôle 2 augmenté

Salle HYBRIDE « tout en 1 »
- salle de déchocage
- Scanner
- table opératoire
- système de radio-interventionnel.

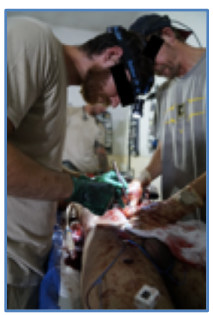


Du relevage à la réhabilitation

évènement

Soldat capteur

ECM : élément chirurgical mobile – extrême avant



PMM : poste médico-chirurgical mobile GTIA

GMC-A

HMC

Le militaire : autodéclaration, autosoins

Damage control REBOA - ECMO

Damage control endovasculaire

Hémostase définitive Réhabilitaiton

t 0 — t+20min — t+60min — t+120min

MEDEVAC en-route care

Téléchirurgie