



S&T Impact on Urban and Counter-Insurgency Operations

- A Medical Perspective -

By

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Report Documentation Page

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FACT

90% of soldiers wounded in Iraq survive their injuries (up from 76% in the Vietnam War).

- Faster is better (fast evacuation of casualties)
- Better PPE (body armor)
- Improved medical techniques
- New field medical tools



RDECOM-FAST Science and Technology Assistance Team (STAT)

**U.S. Army Materiel
Command and
U.S. Army Medical
Research and
Materiel Command**

LTC JOSE M. ANDUJAR
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“Making Technology Work for the Soldier”

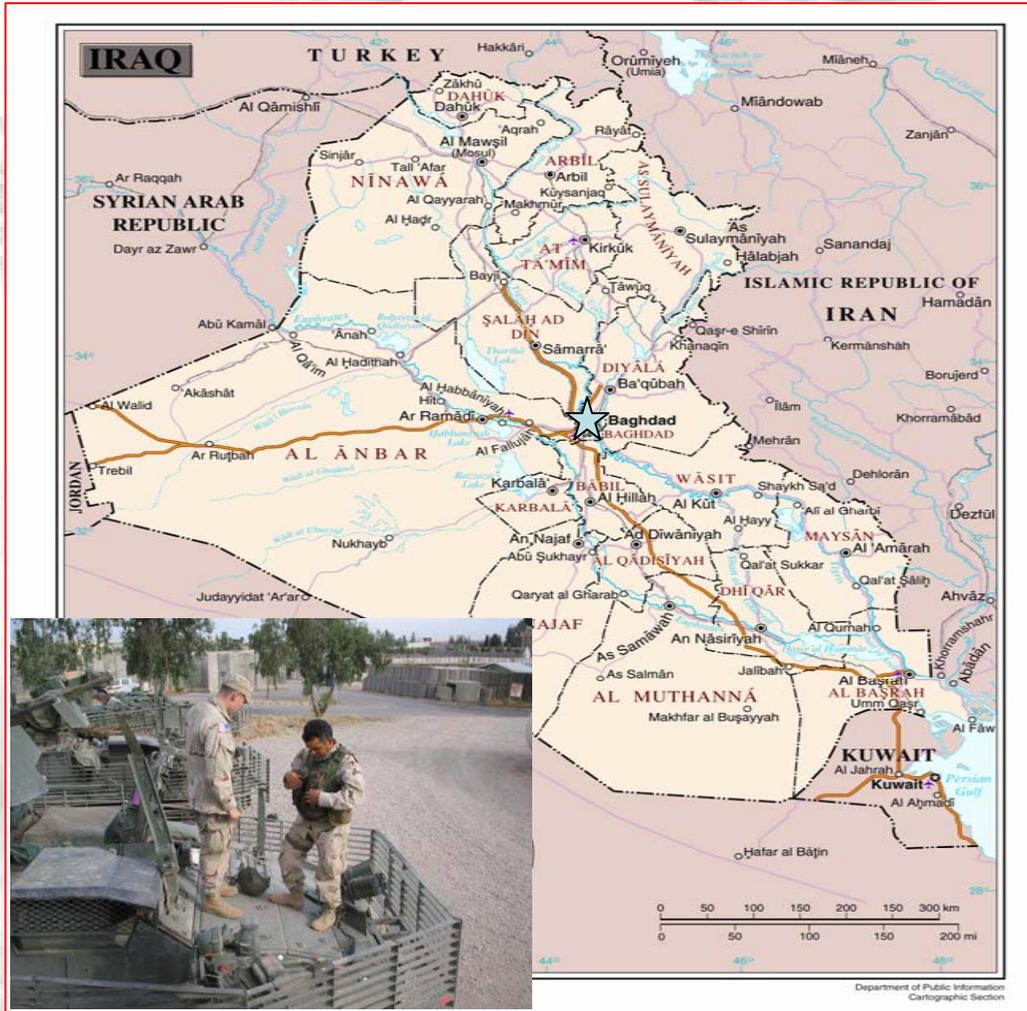


Mission

- Provide expert technical advice and support to commanders and their staff.
- Query OIF operational units on Science & Technology **capability gaps at the user level** for both current and future Combat and SASO Operations
- Provide Operational Commanders **immediate access** to the development centers within RDECOM and USAMEDCOM
- **Expedite** technology solutions to the Warfighter and act as RDECOM/AMEDD forward element to evaluate solutions



Science & Technology Assistance Team



- Science & Technology Assistance Teams (STAT) have been deployed since Apr 03.

- Each Team is Deployed for 120 Days and is located @ Camp Victory, Baghdad

- 4 member teams consisting of:

- 04/05 Tm Ldr
- GS13/15 Civilian Scientist
- E6-E9 Sr Tm NCO
- 04/05 Medical Member

STAT #14 (Nov 06- Mar 07)
LTC Margo Sosinski *On The Ground*
SFC Craig Parker
Mr. Thomas D'Agostino
LTC Rex Berggren (Medical)

STAT #15 (Mar 07- Jul 07)
LTC Karen Walters *On Deck*
SFC Santos Martell
Mr. Karl Tebeau
MAJ Kelly Halverson (Medical)



S&T LNO (Afghanistan)



- Science & Technology Liaison Office (S&T LNO) has been deployed since May 06.

- Each S&T LNO is Deployed for 179 Days and is located with TF Paladin @ Bagram

- S&T LNO is MAJ/LTC

LTC CHUCK MARR
XVIII Abn Corps
Uniformed Army S&E
OCT 06- MAR 2007

*On The
Ground*

TBD

MAR - August 2007

On Deck



So what? Over 18 months and four iterations...



Ground and Air Travel

From Basrah to Mosul

From Tikrit to Balad

60+ Medical Units
47+ Reported Issues
37+ Projects Initiated

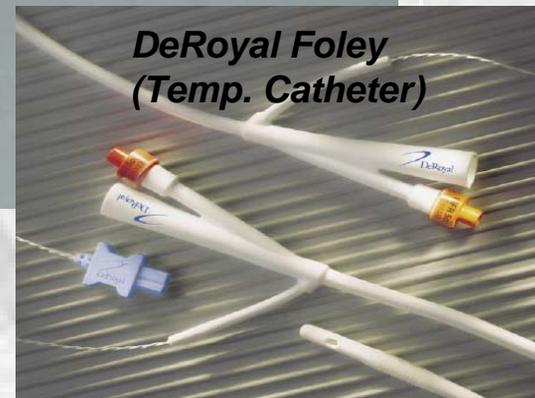


New Fielded Items in Theater

*Hypothermia Prevention
and Management Kit™*



*DeRoyal Foley
(Temp. Catheter)*





New Fielded Items in Theater

Patient Controlled Analgesia (PCA)





Hextend®

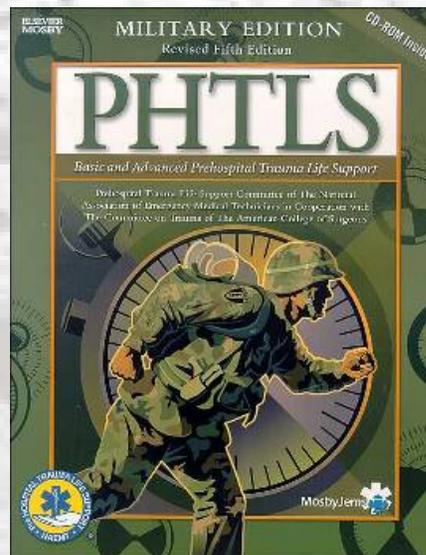


Capability Gap: Combat Casualty Care

Issue in Theater: FAST team member found that BN Surgeons were reluctant to issue Hextend to CLS and were not recommending its use in theater.

System Description/CONOPS: Resuscitation fluids are necessary for the treatment of injured Soldiers who have lost so much blood that their blood pressure is low. Currently, lactated Ringer's and Hextend are available in the field for use.

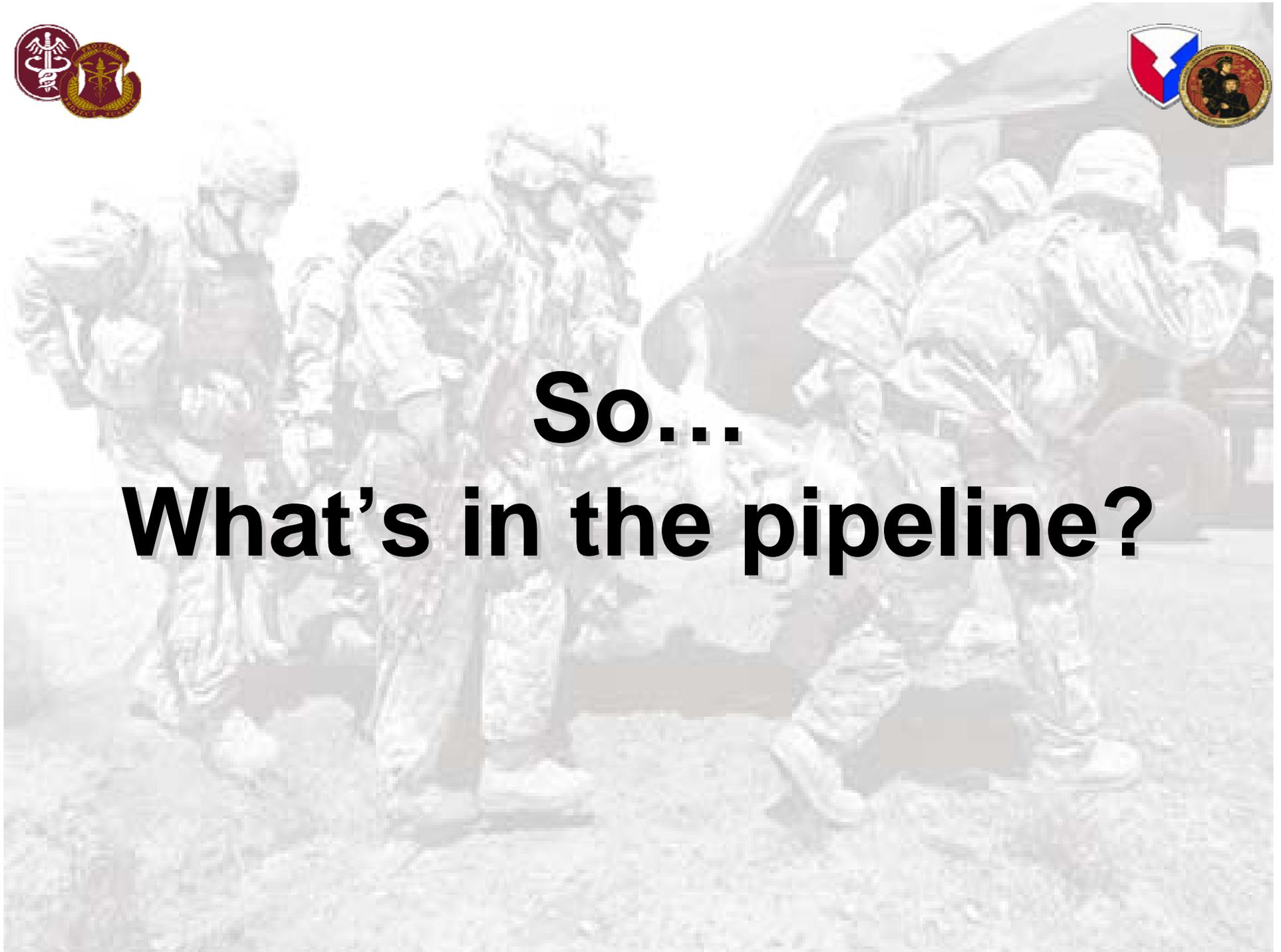
Solution: USARIEM and USAISR compiled medical literature providing clinical information that Hextend is safe for use and more effective than Lactate Ringer as a resuscitation fluid. Information paper was distributed to medical theater leadership and today Hextend is the resuscitation fluid of choice.





So...

What's in the pipeline?





Future Force—Medical



Combat Casualty Care



Improved Treatment for Head Injuries



Regenerative Therapies



Far-Forward Resuscitation & Hemorrhage Control



Semi-Autonomous Intensive Care & Transport System

Infectious Diseases



Malaria Treatment Drugs

Malaria Prevention Vaccines



Dengue Prevention Vaccines



Malaria Rapid Diagnostic Device

Operational Medicine

Remote Monitoring of Warfighter Health and Performance



Performance Test for Future Lightweight Body Armor Systems



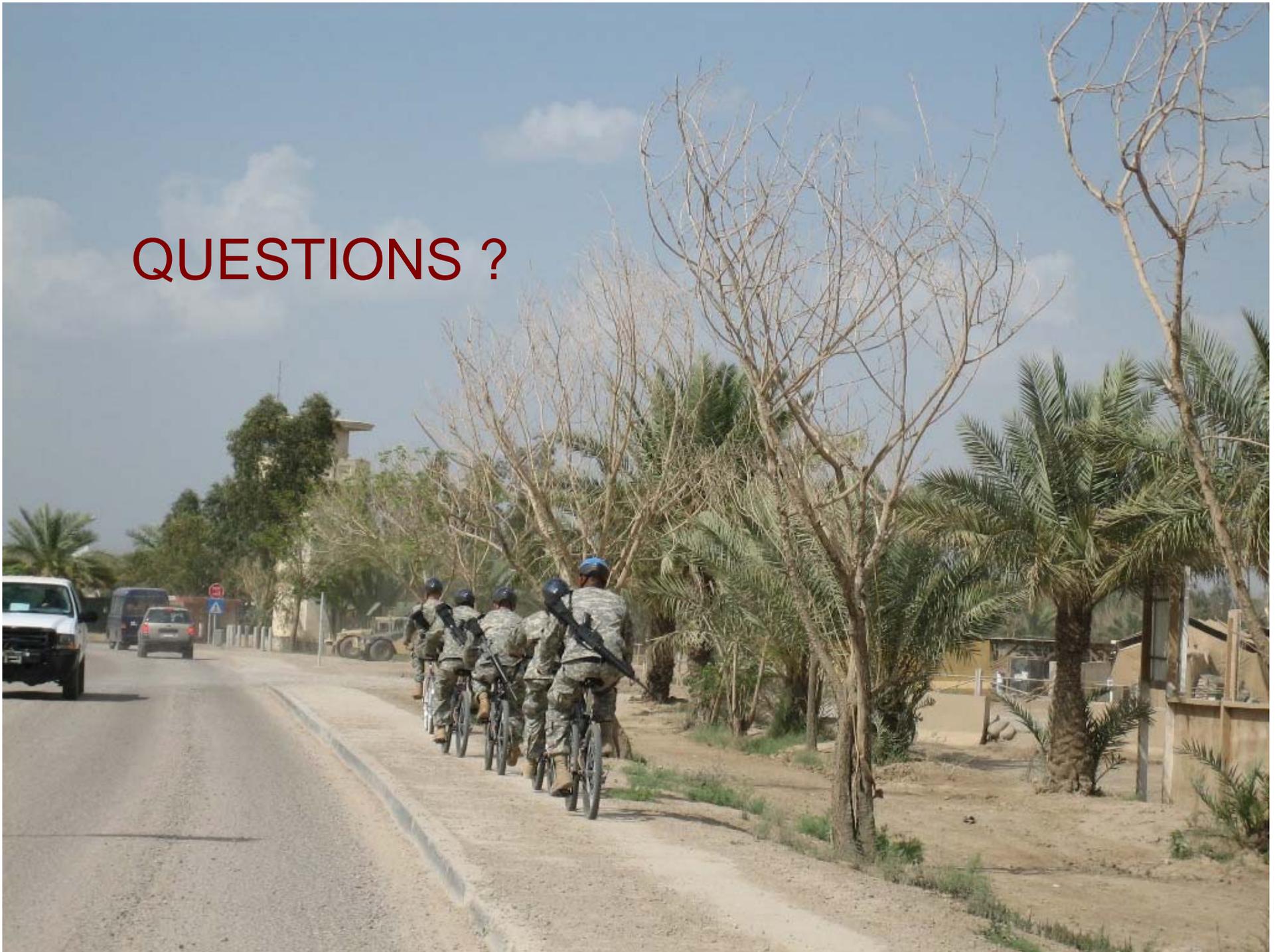


THANKS

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QUESTIONS ?





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References

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- www.nationalgeographic.com
- <http://icasualties.org/oif>





REF Works with MEDCOM to Equip OEF CSHs with Operating Room Lights



- FSH surgeons in OEF were attaching penlights to their headgear while conducting surgical procedures.
- The REF team in Afghanistan submitted a purchase request for OR lights to improve the inadequate lighting.
- Through coordination with MEDCOM, the REF purchased 6ea OR lights as a stopgap solution until MEDCOM's new prototype is ready for distribution – which is not expected for at least 6-8 months.

6 JUN 06: 6ea Arrived in Theater; Put into operation within 5 days.

12 JUN 06: Above picture submitted to demonstrate use at a CS on FOB Salerno

Dash Mounted Controller



New Fielded Items in Theater

Operational Concept: To increase survivability of severe injured soldiers by decreasing time to start plasma infusion at the Forward Surgical Teams (+, which means with freezer capability and both Combat Support Hospitals).

Organizational Concept: CSH(-) and FSTs are strategically in theater to provide level 2 and 3 of care to current offensive operations in OEF. Casualties will arrive by MEDEVAC in critical condition at these medical units where they receive better treatment with increased changes of survivability.

Procurement Objective: Fill current OEF medical capability gap of delayed availability to utilize frozen plasma in severely injured soldiers.

Support Requirements: TFMED will work in partnership with REF to provide system maintenance support, distribution and user's feedback report directly to REF-Afghanistan

QuickTaw

