Effectiveness of Technology for the Warfighter

A Global Approach

JB Burns, VP BAE  23 April
THE GOOD, THE BAD AND THE UGLY

Warfighter’s Issues Dealing with Technologies

• Time to Fielding
• Usability
• Training
• Robustness
• Cost
• Modeling and Simulation
• Requirements and “Creep”

1. TECHNOLOGICAL ADVANTAGE IS OUR STRENGTH, BUT TRANSITORY...
2. ASSYMETRIES – ROCK PAPER SCISSORS
CUSTOMERS COUNT…LISTEN

• Systems seldom work the way they were intended
• Warfighters change their minds….discover problems / improvements / new employments
• Technologist and warfighters talk different languages
• Classified data stands in the way of agility…protect the data or protect the war fighter?
• A relook of Depots and Arsenals and Govt R&D will probably render the same outcome

WE ARE WHERE WE ARE...............
WHEN IT WORKS RIGHT

MRAP

Mine Roller

Excalibur

Naval Guns

AGS, Mk 57, Mk 38
“About two weeks ago I was riding in the front passenger seat of the RG-31 when an I.E.D. went off right underneath my seat, it was anywhere between 2 - 4 Anti tank mines, the blast took out the whole road, and messed up the RG pretty good. When I came to, I grabbed all my vital parts. Once I knew I was intact I yelled out “This Fu@#*%! Sh*# Worked.” I was so happy to be alive, surely it would be a different story if I was in a hummve”

Corporal Benjamin (Ben) Wasson
Crewmember
Protecting Those Who Serve: Canadian RG31 in Afghanistan

Crew survived with minor injuries
Protecting Those Who Serve: 
Afghanistan 27 September 2006

Canadian RG31 Mk5 APC attacked by a suicide bomber in a pick-up

Scoreboard
RG31: 1  Bomber: 0
What’s Next?

• The Future of Guns and Missle Technology in the Hands of the Warfighter
• Defense Industrial Base…WHAT DID WE LEARN FROM A WAR TIME SURGE
• A Global Economy, with Dependencies on Foreign suppliers and the like
• Off the Shelf….Transferrence of Risk to the Provider

AND THE IMMUTABLES………. 
THE WORLD IS A DANGEROUS PLACE
FOCUS ON THE CUSTOMER

Value Chain Architecture → Value → Customer
DEFENSE ACQUISITION IS GONNA CHANGE ............... (AGAIN)

Rapid Acquisition
Off the shelf/short development
Quick response
COCOM centric

Install “black boxes” in existing equipment to improve and plug into network

Long cycle acquisition
Tech development
Platform oriented, limited production
Service centric

Large, horizontal networks
Leveraging of IT revolution
Jointness

END TO END? PRECISION?

Source: CSIS
WAR FARE & THE FOE ARE CHANGING

MULTI DIVISIONAL, MULTI SERVICE ATTACK IN FALLUJAH
THE WAR FIGHTING CUSTOMER IS CHANGING
The definition of insanity is doing the same thing over and over and expecting different results.

• Benjamin Franklin
INNOVATION IS KEY

Source: Pascale
ADAPT TO PRESSURE ON COSTS

"In the year 2054, the entire defense budget will purchase just one aircraft"

Source: Norm Augustine
BE ALERT to Innovation AND Cost Savings
A CLEAR VISION IS HARD TO COME BY

“We will put a man on the moon and bring him back before the end of this decade.”

John F. Kennedy
THINK AND ACT AND BE GLOBAL
GO WHERE THE CUSTOMER GOES
Leadership Challenges

- Too much focus on short-term performance
- Strong silo mentality
- Lack of a climate for risk taking
- Not embedding innovation as an organizational capability
- Lack of a global mindset
Steve Jobs and The Must-Have Music Player Everyone Is Talking About

iPod, Therefore iAm
BACK UPS
BAE Systems – A leading defense company with a commanding breadth of capabilities
Army and Marine Corps are receiving greater attention than other services due to dominant warfighting roles in Iraq and Afghanistan

- **Army**
  - THE GLOBAL WAR ON TERROR
  - AND MODERNIZATION WITH BIG TICKET ITEMS
    - FCS
    - HBCT
    - STRYKER
    - TRUCKS
    - RESET
    - BRAC

- **Marine Corps**
  - THE GLOBAL WAR ON TERROR
  - AND MODERNIZATION WITH BIG TICKET ITEMS
    - EFV
    - OSPREY
    - TRUCKS
    - RESET
BAE Systems, Inc. – our global presence
Global War and Business Models
The Top 10 Things You Can Do With a Dead Horse

10. Whip the horse a little harder.

9. Change the rider.

8. Harness several dead horses together for increased speed.

7. Emulate the best practices of companies riding dead horses.

6. Proclaim that it’s cheaper to feed a dead horse.

SOURCE: Net Ready, Hartman & Sifonis with Kador
5. Affirm that “This is the way we have always ridden this horse.”

4. Declare that “This horse is not dead.”

3. Have the lawyers bring suit against the horse manufacturer.

2. Engage a consultant to study the dead horse.

1. Promote the dead horse to a senior management position.

SOURCE: Net Ready, Hartman & Sifonis with Kador
Where I’m Coming From

- Pertinent USA Career
  - 34 years in Joint and Army commands
  - JTF commands in two fights
- Position / Responsibilities @ BAE
  - 4 years with ARMY NAVY and MARINE Programs
  - Global company
    ....with insights in supporting a Nation, and an Industry at war
- Recent Interchange with Warfighter
  - Two Trips to IRAQ and KUWAIT and JORDAN
  - Frequent interface with MODs in four countries