

# Crusader ... It's Not Your Dad's Combat Vehicle

NDIA Firepower Symposium

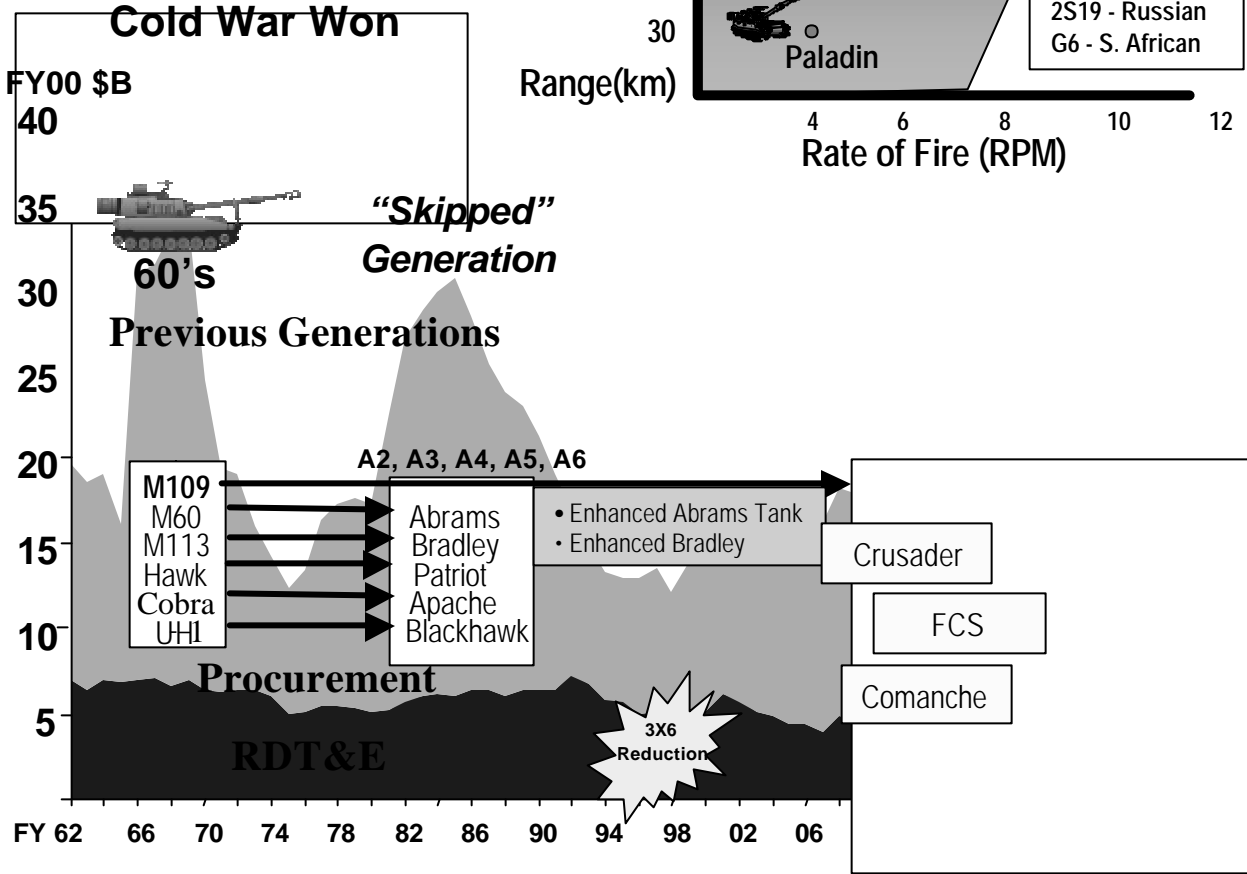
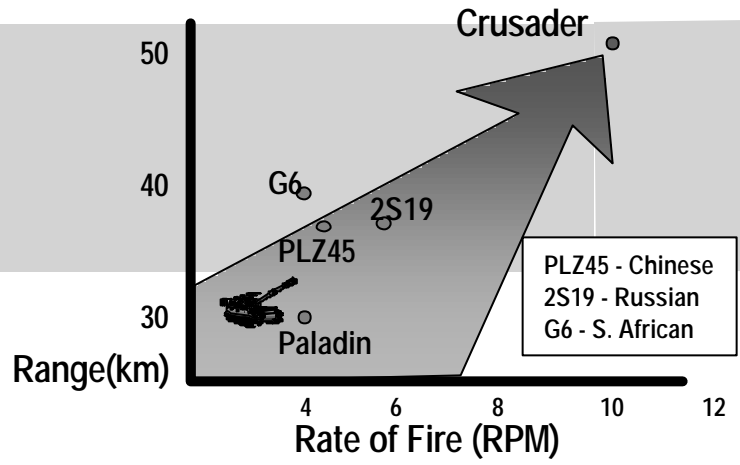
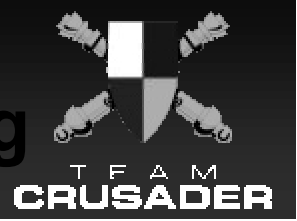
June 2001

## Report Documentation Page

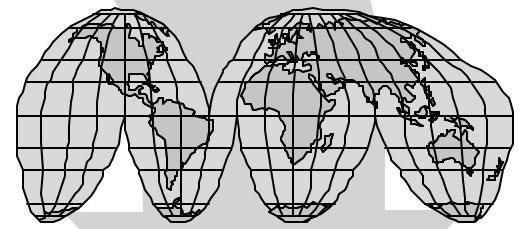
<b>Report Date</b> 18JUN2001	<b>Report Type</b> N/A	<b>Dates Covered (from... to)</b> -
<b>Title and Subtitle</b> Crusader Its Not Your Dads Combat Vehicle	<b>Contract Number</b>	
	<b>Grant Number</b>	
	<b>Program Element Number</b>	
<b>Author(s)</b>	<b>Project Number</b>	
	<b>Task Number</b>	
	<b>Work Unit Number</b>	
<b>Performing Organization Name(s) and Address(es)</b> Unknown	<b>Performing Organization Report Number</b>	
<b>Sponsoring/Monitoring Agency Name(s) and Address(es)</b> NDIA (National Defense Industrial Association 2111 Wilson Blvd., Ste. 400 Arlington, VA 22201-3061	<b>Sponsor/Monitor's Acronym(s)</b>	
	<b>Sponsor/Monitor's Report Number(s)</b>	
<b>Distribution/Availability Statement</b> Approved for public release, distribution unlimited		
<b>Supplementary Notes</b> Proceedings from Armaments for the Army Transformation Conference, 18-20 June 2001 sponsored by NDIA		
<b>Abstract</b>		
<b>Subject Terms</b>		
<b>Report Classification</b> unclassified	<b>Classification of this page</b> unclassified	
<b>Classification of Abstract</b> unclassified	<b>Limitation of Abstract</b> UU	
<b>Number of Pages</b> 15		



# World Changed ... Army Transforming



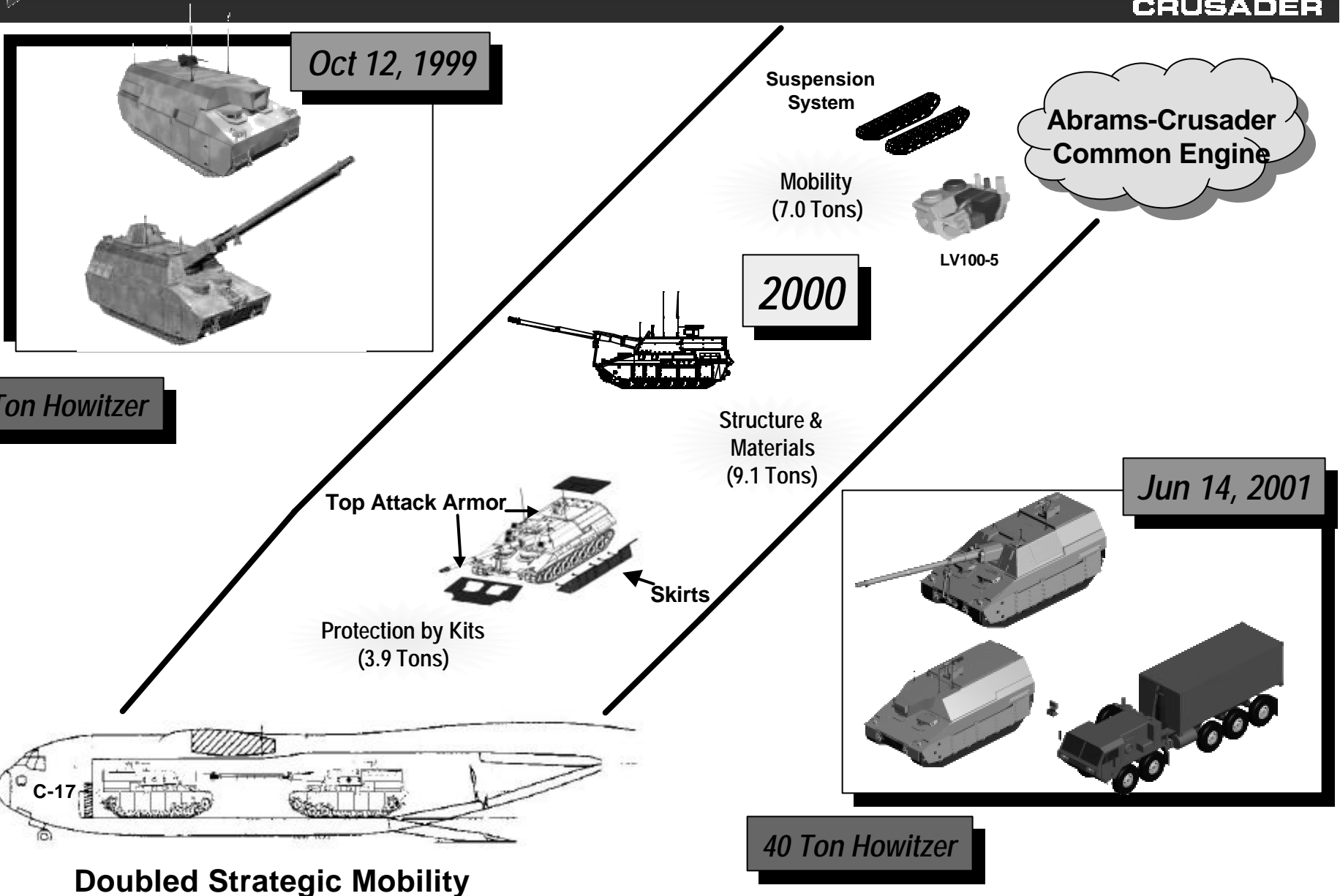
## Technology & World Changing



- ❖ Revolution in Military Affairs
- ❖ Regional Instability
- ❖ Threat Sophistication

# Army Transformation

# Transformation In Design



## *Howitzer*

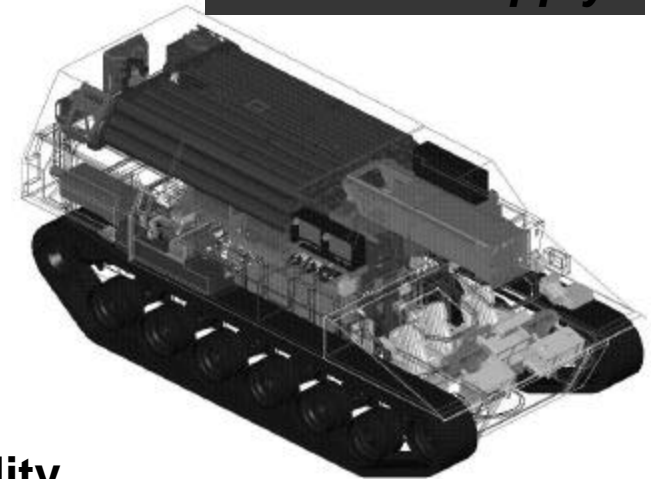


**Unprecedented Attack System**

**State of the Art Cockpit**

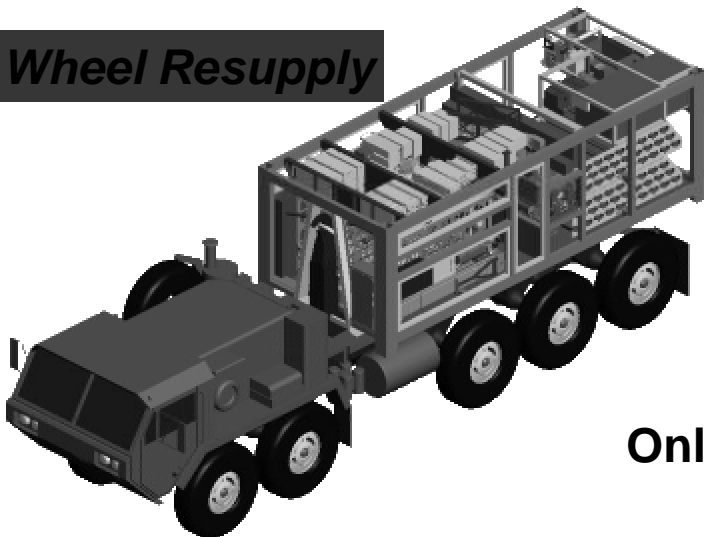
**Unmatched Soldier/System Survivability**

## *Track Resupply*



**Unparalleled Mobility**

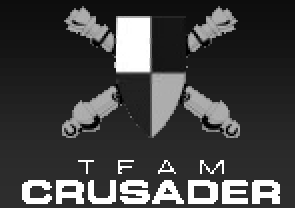
## *Wheel Resupply*



**Only Robotic Firing & Resupply Systems in the World**



# Why Crusader?

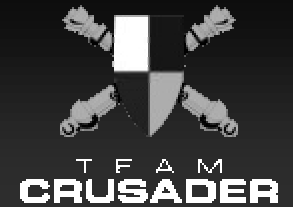


# **Crusader - Paladin Rate Of Fire Comparison**

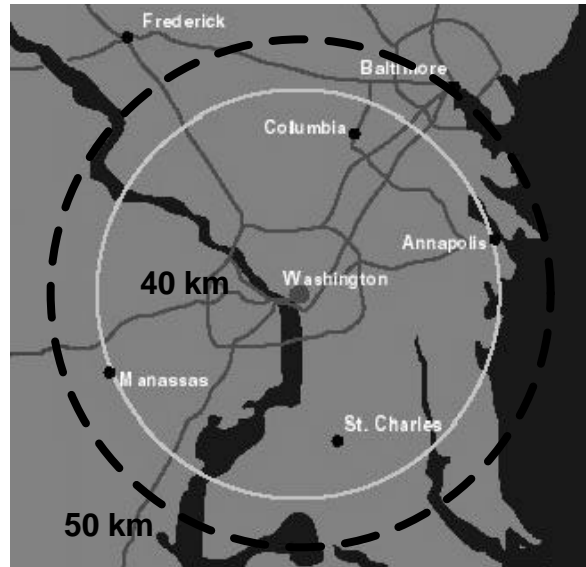




# Point Man for Change

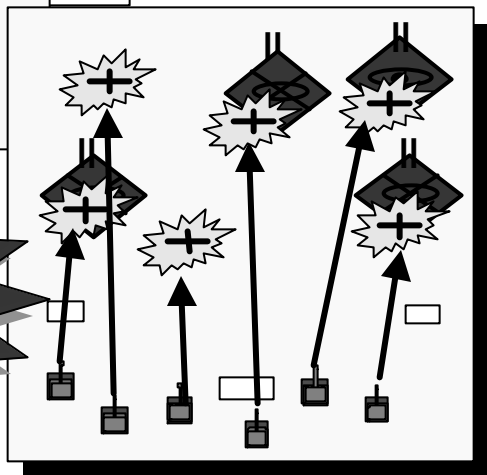
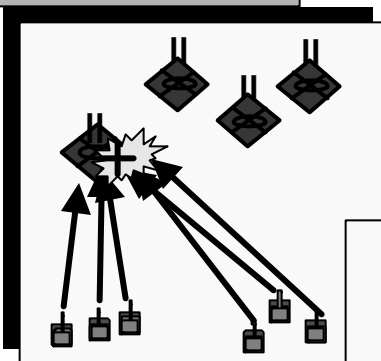


**A Crusader Kills 48 Targets in 4 min Over 7850 Sq Km ...**



- Crusader Firing Excalibur**
- Precision Strike .. 50+ KM
  - 178% + Area Coverage
  - Redskins to Ravens Reach

**Current FA Employment**



**18 Guns, 216 Targets, 1 Minute**

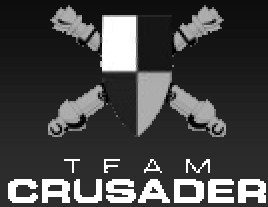
**Multi-Target Engagements**

**Sensor To Shooter**

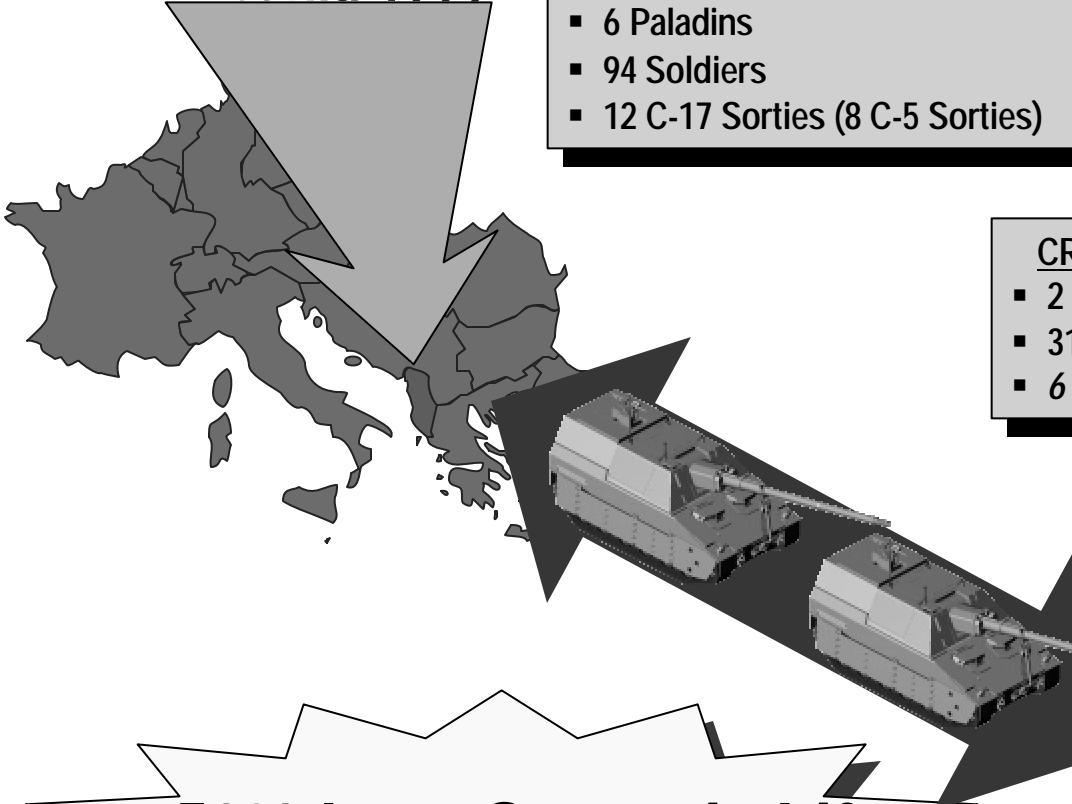
**One Minute from Request to Effects**



# Force Augmentation



## Albania 1999



- TF HAWK ARTILLERY PACKAGE (A/4-27 FA)
- 6 Paladins
  - 94 Soldiers
  - 12 C-17 Sorties (8 C-5 Sorties)

- CRUSADER ARTILLERY PACKAGE
- 2 Crusaders
  - 31 Soldiers
  - 6 C-17 Sorties (4 C-5 Sorties)

4 Crusaders Cover Kosovo



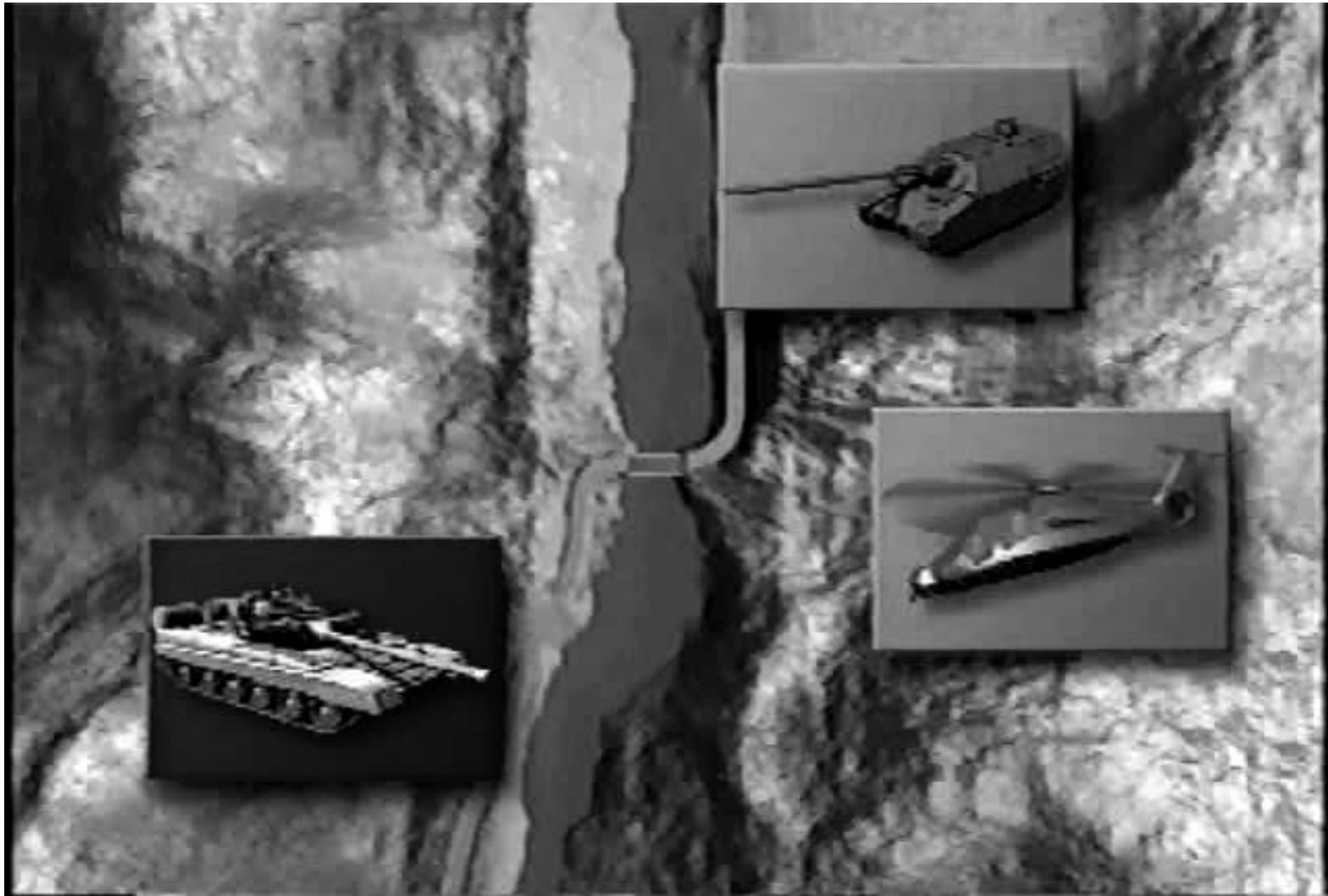
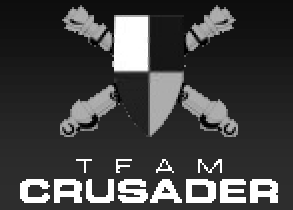
Asymmetrical Environment

- 50% Less Strategic Lift
- Smaller Logistical Tail
- Greater Firepower



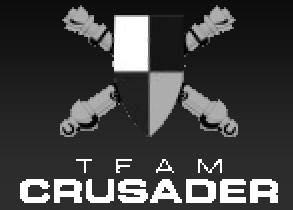


# Fire Mission Sequence (1)



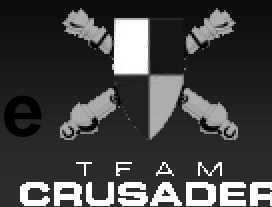


# Resupply Sequence





# First Installment of the Objective Force



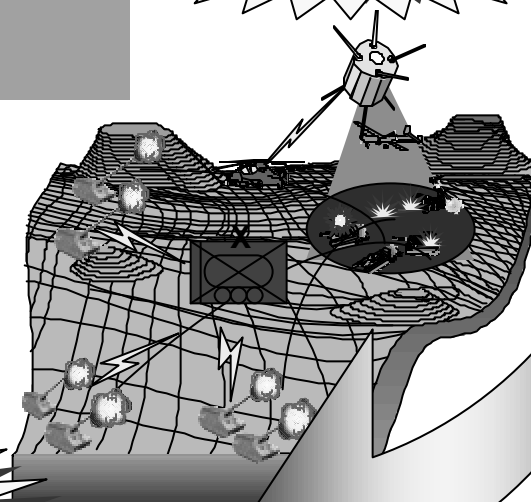
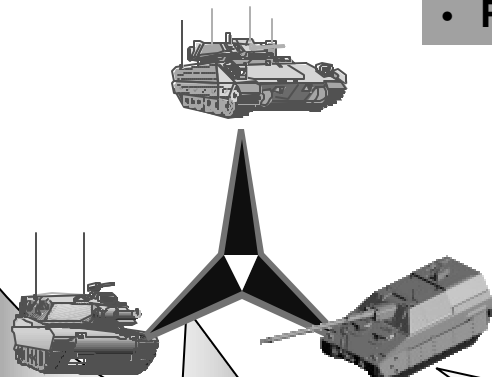
Major Theater Of War

Small Scale Contingencies

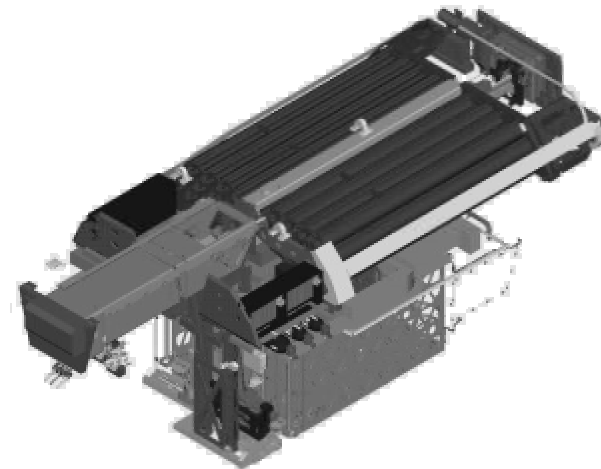
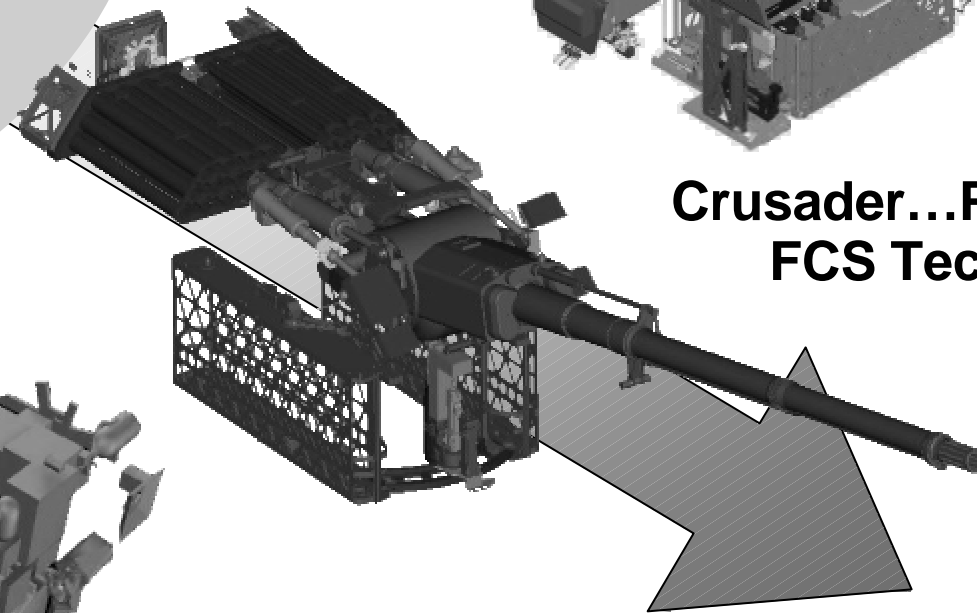
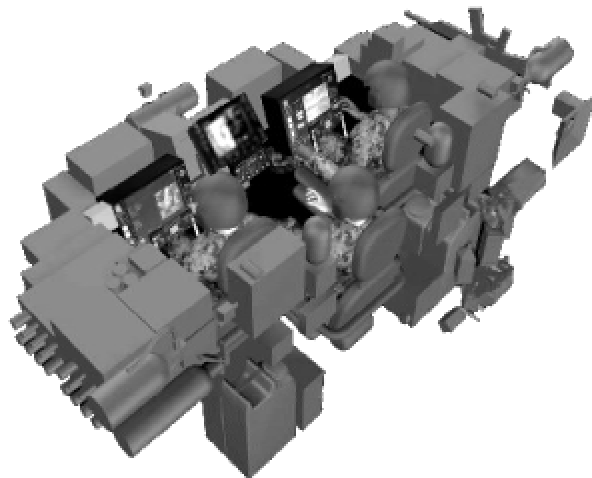
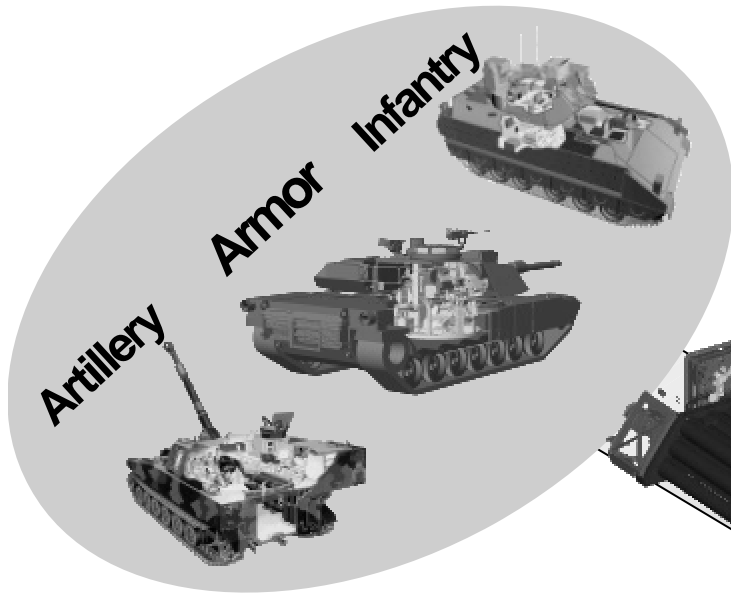
Strategic Hedge for the World's Premiere Armored Corps

- Provides 24 Hr All Weather Fires
- Immediately Available, Never Off Station
- Fires Available in Seconds
- Supports Offensive Operations
- Provides Fires for Total Force

Firepower Augmentation for the Interim Force



**Leads Development of Objective Force**

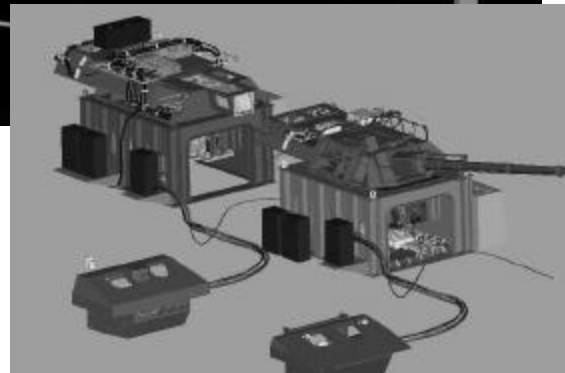
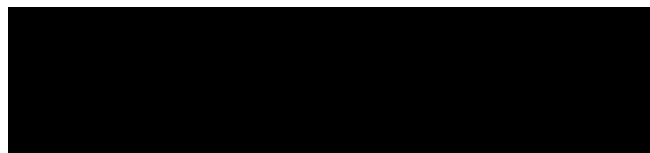
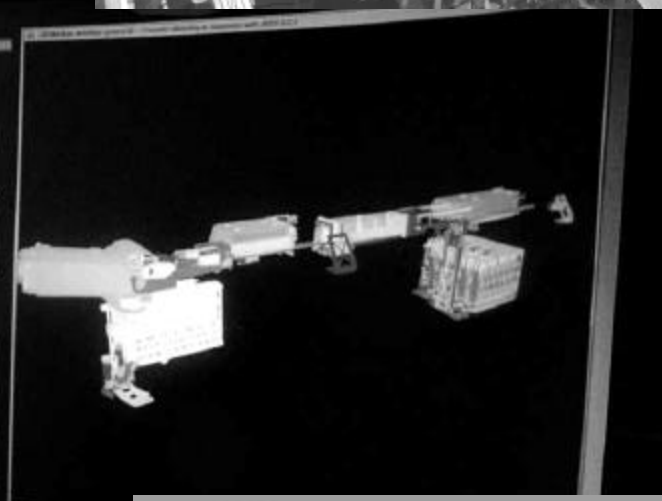
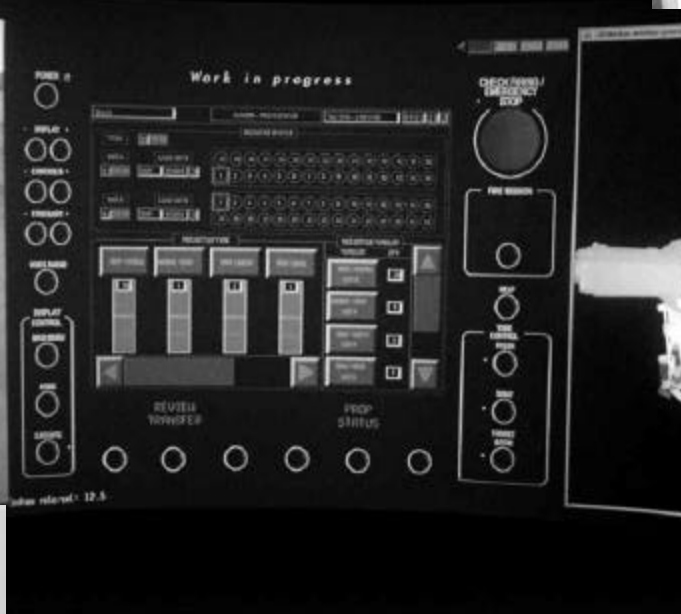
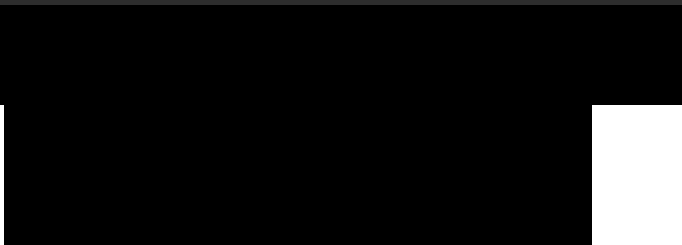
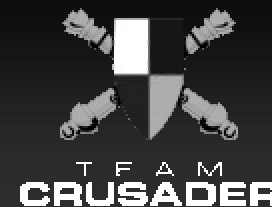


## Crusader...Pathfinder for FCS Technology

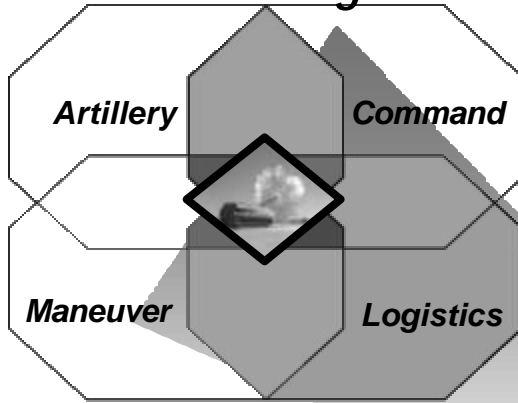
- ❖ Lethality
- ❖ Electrical
- ❖ Robotics
- ❖ Cockpit
- ❖ Mobility
- ❖ C4ISR
- ❖ Resupply
- ❖ Survivability



# Beyond Boeing 777 Development Era ...

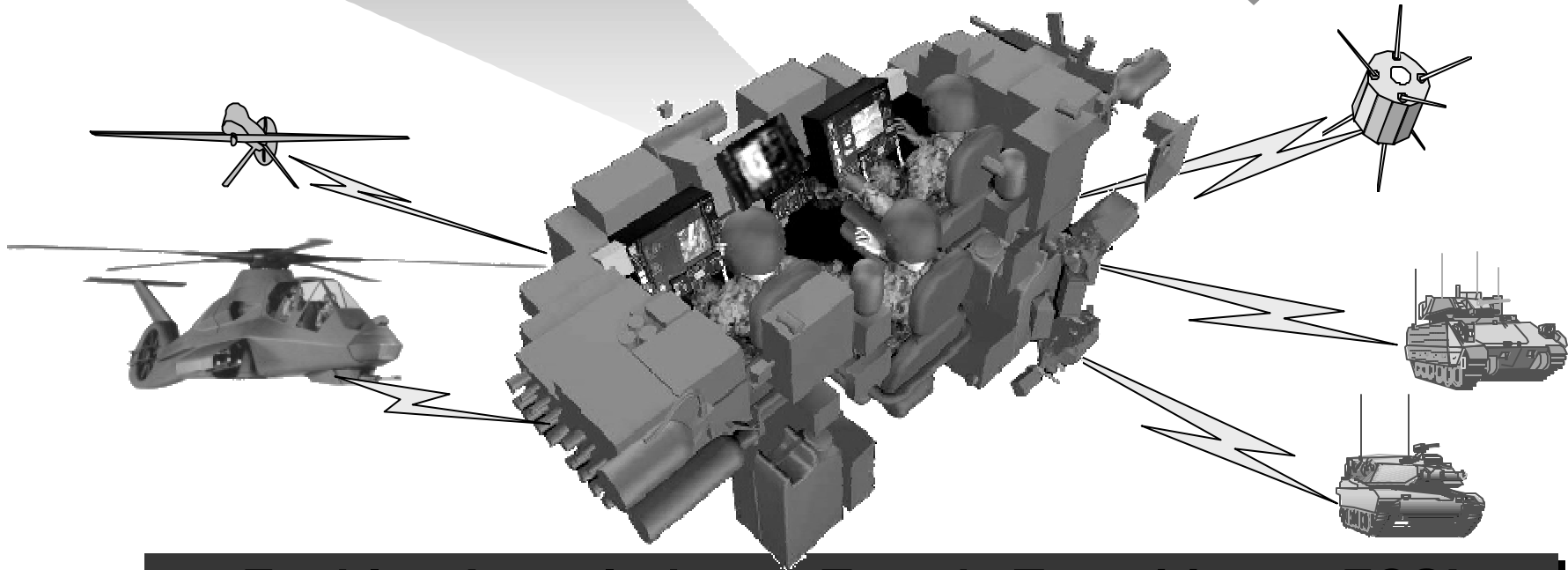


## Integration of combat knowledge



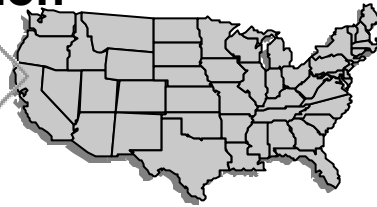
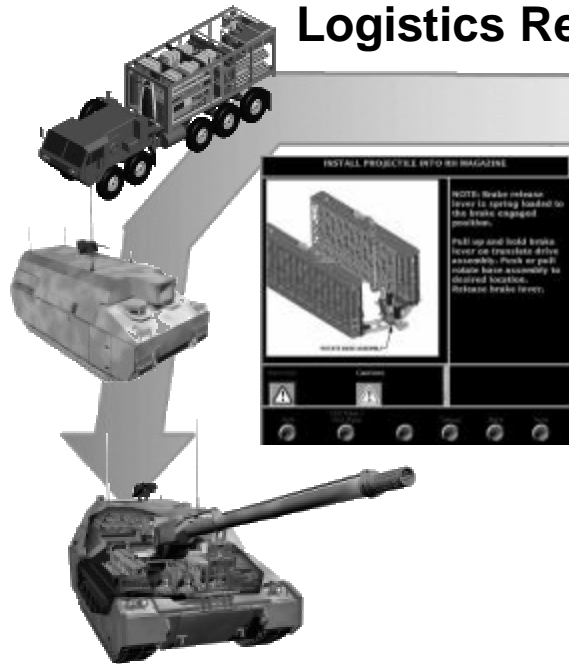
## System of Systems Development

- ❖ Tactical Decision Process
- ❖ Leader Development
- ❖ Soldier - Machine Interface
- ❖ Intellectual Capital



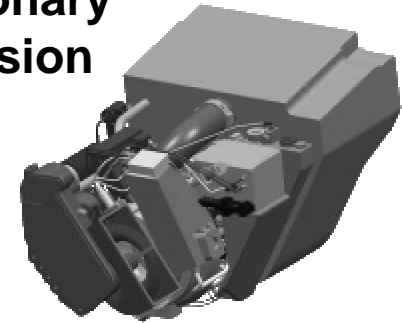
**Enables Army-Industry Team's Transition to FCS!**

## Logistics Revolution

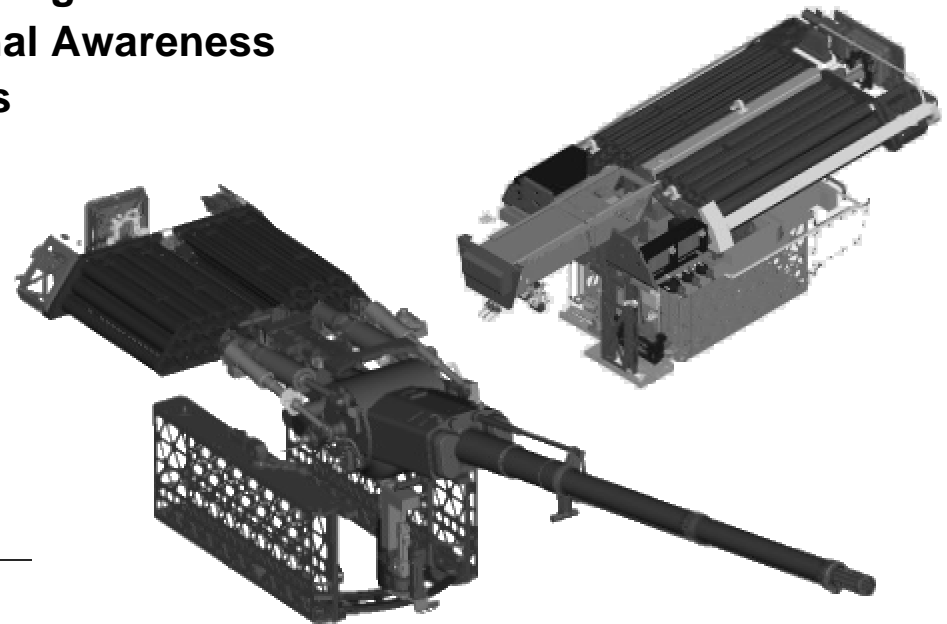
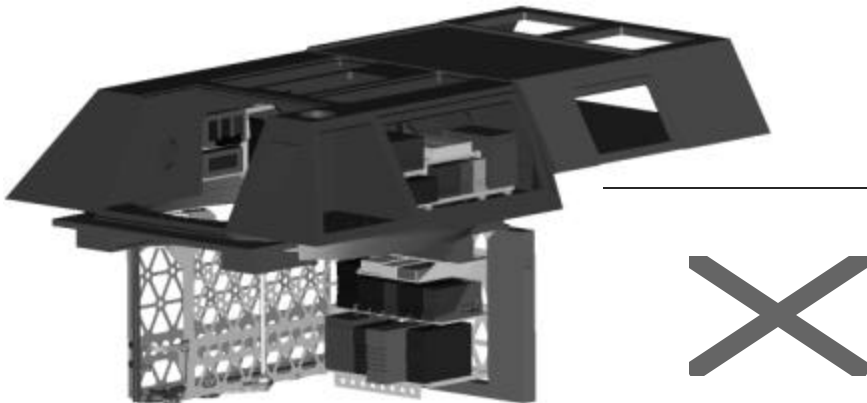


- ❖ Interactive Electronic Technical Manual (IETM)
- ❖ Robotic Fault Mgmt
- ❖ Log Situational Awareness
- ❖ Decision Aids

## Evolutionary Propulsion



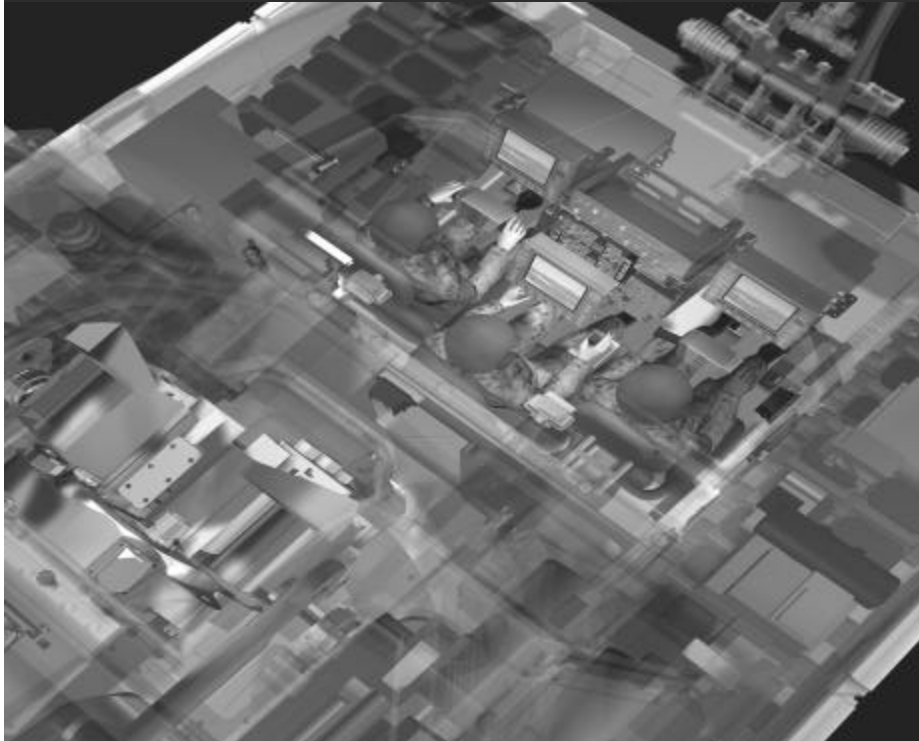
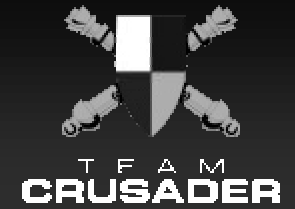
## Advanced Materials & Production



## Robotic Firing and Resupply



## In Summary . . .



- **Unique Design . . . Breaks Paradigm**
- **Technology Carrier . . . Design to Objective**
- **Transformation . . . Strategic Mobility**
- **Gain Overmatch . . . Tactical Agility**
- **Force Protection . . . Responsive Firepower**
- **Warfighting System . . . Keeps Soldiers Alive**
- **Program . . . On Cost, Schedule, Performance**

**With Crusader, the Army's Force Wins  
Decisively ....**

**First Installment of the Objective Force**