

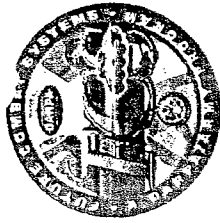
# **FCS IS**

an integrated program of  
innovations with  
revolutionary requirements for:

- **C4I**
- **Interoperability**
- **Lethality**
- **Survivability**
- **Mobility**
- **Deployability**
- **Manprint**
- **Supportability**

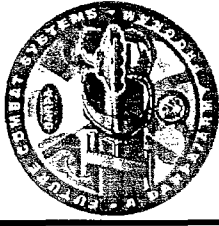
DISTRIBUTION STATEMENT A:  
Approved for Public Release  
Distribution Unlimited

**20060929055**



# SYSTEM GOALS

- C-130 transportable (<20 tons) (not tradable)
- 33-50% Decrease in logistics sustainment requirements
- 50% Decrease in fuel consumption
- 96 hours rapid response
- 5 days OPTEMPO operation without resupply
- 100 KPH burst speeds
- 60 KPH cross country speed-sustained



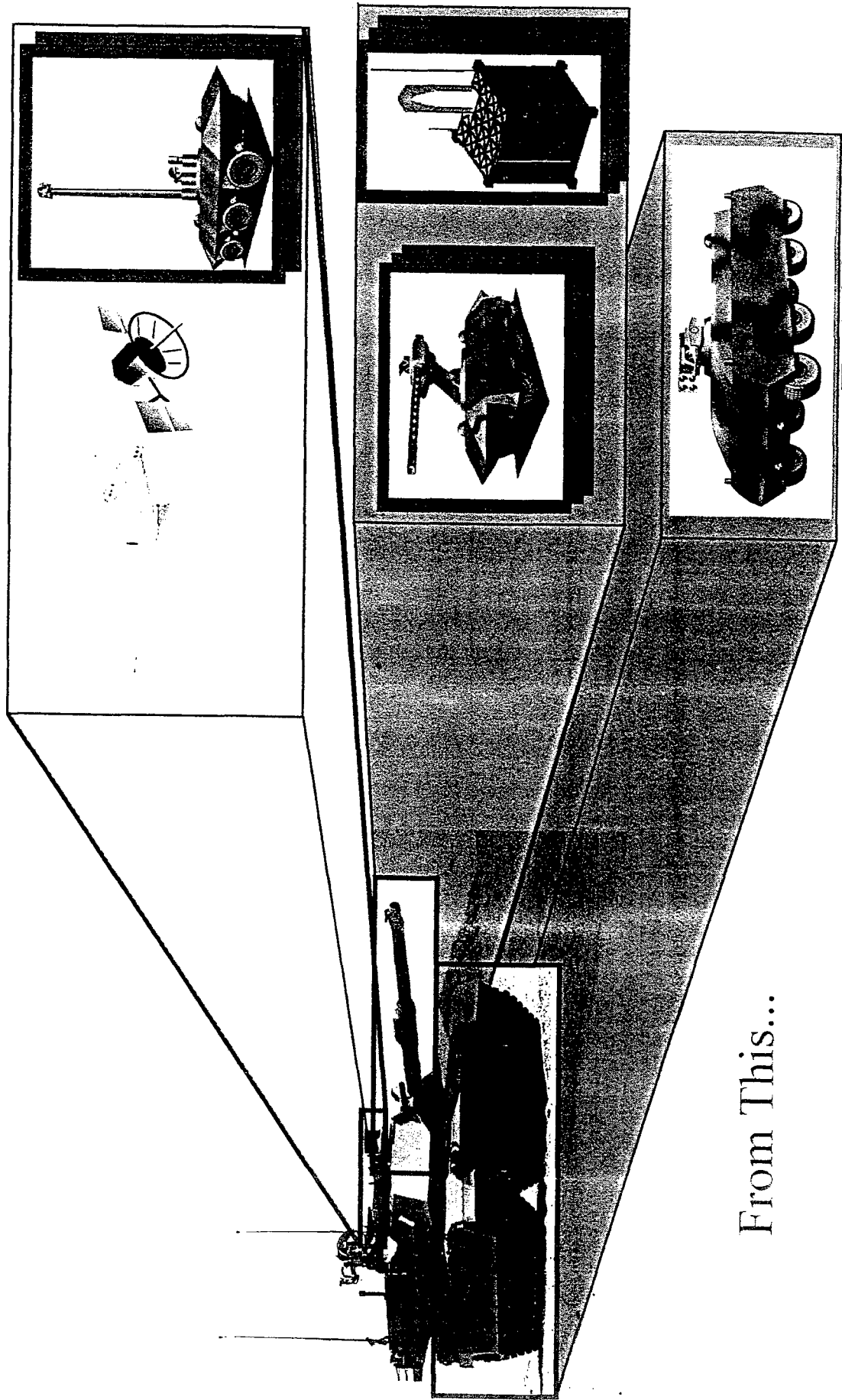
## ***AND IN ADDITION....***

- **FCS should:**
  - **Have capability of surviving first round engagement**
  - **Be affordable**
  - **Maximize commonality**
  - **Have joint & international interoperability**
  - **Utilize embedded training & human factors considerations**



# Future Combat System Concept

(Exploit Battlefield Non-linearities using Technology to Reduce the Size of Platforms and the Force)

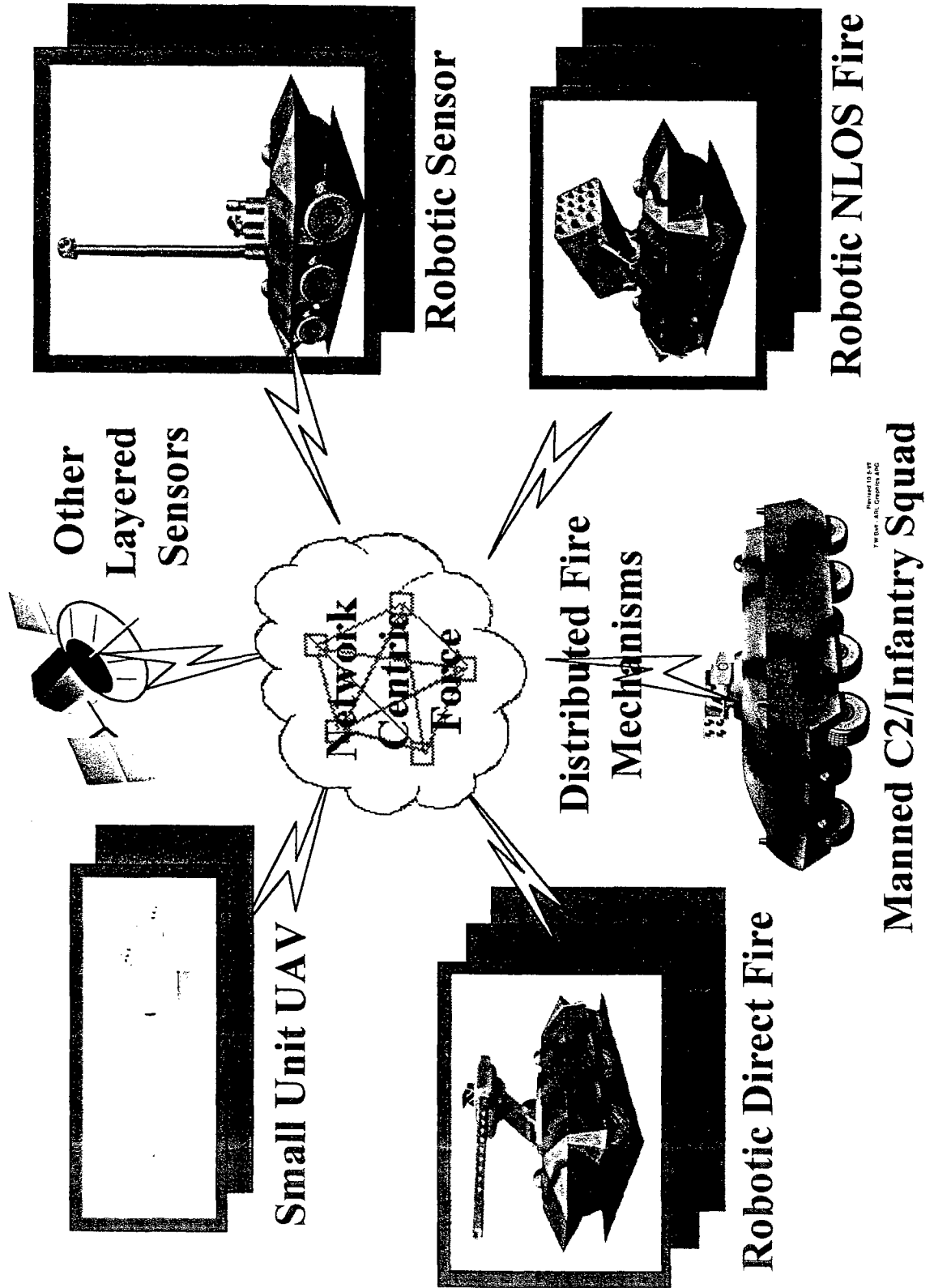


From This...

To This...



# The Transform... Network Centric Distributed "Tank"



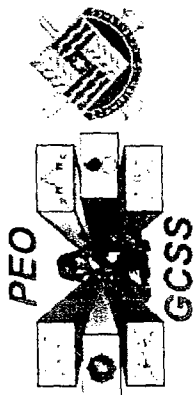
# ***IBCT Capabilities***

- Rapidly deployable**
- Joint & Coalition interoperable**
- Full spectrum**
- Combat capable on arrival**
- Precision, Internetted, Combined Arms fighting**
- Decisive action through deliberate maneuver & Infantry assault**
- Maintains freedom of maneuver**

**by:**

- ***High tactical mobility***
- ***Situational understanding***

- Force effectiveness in complex and urban terrain**
- Increased deployability and decreased sustainment footprint**
- Reach operations for Strategic, Joint, Combined intelligence, analysis, logistics as well as fires and effects**
- Operational mobility via C-130**

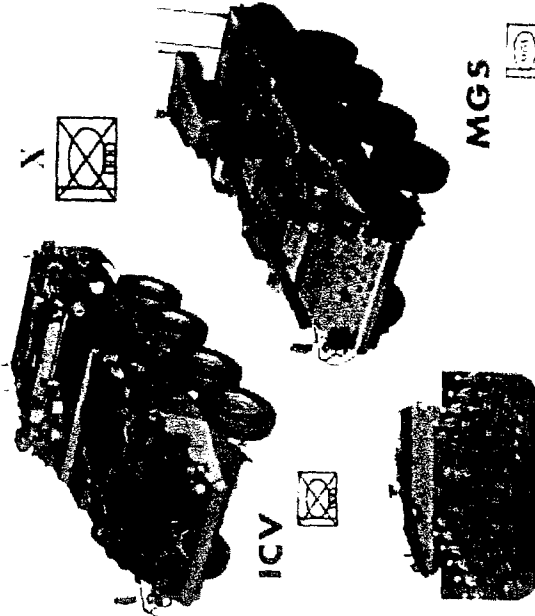


# The Interim Armored Vehicle Family



## Infantry Carrier Vehicle

(ICV)



- 8x8 Wheeled w/ Central Tire Inflation System & Run Flat
- High Hard Steel Structure
- Remote Weapon Station with cal .50 MG or MK19 40mm

## Mobile Gun System

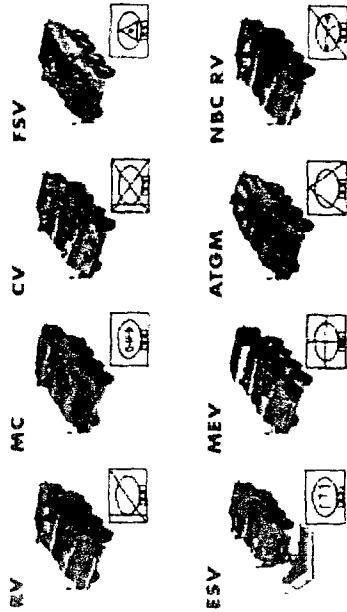
(MGS)

- Low Profile Turret
- M68A1 Cannon w/Autoloader
- Full Solution Fire Control

## Brigade Configuration

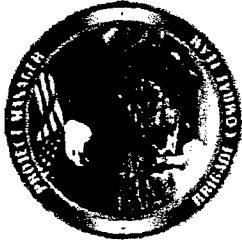
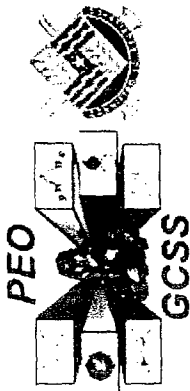
	Qty Ea Bde	ORF	TDA	TOTAL
INFANTRY CARRIER VEHICLE	108	6	30	714
ANTI-TANK GUIDED MISSILES	9	1	15	75
MORTAR CARRIER VEHICLE	36	2	13	241
RECONNAISSANCE VEHICLE	48	3	12	318
FIRE SUPPORT VEHICLE	13	1	15	99
ENGINEER SQUAD VEHICLE	9	1	13	73
COMMANDER'S VEHICLE	39	1	12	252
MEDICAL EVACUATION VEHICLE	17	1	10	118
NBC RECONNAISSANCE VEHICLE	3	1	13	37
MOBILE GUN SYSTEM	27	4	18	204
	309	21	151	
	X6	X6		
IBCTs	1854	126	151	2131
TOTAL IAV				

MGS



Vanguard For Army Transformation





# Infantry Carrier Vehicle Technical Characteristics

## Supportability

Integrated Electronic Technical Manual on Video Display Terminal For 3/2 ID and 1/25 ID  
 Embedded IETMs Block Improvement  
 Diagnostics Linked To Video Display Terminal Built-In Test  
 Built-In Test Equipment  
 Power Pack Display

## ICV



## Mission Capability

Carries 9 Man Infantry Squad And Crew of 2  
 Kongsberg Protech Remote Weapon Station With M2 .50 cal Machine Gun or MK19 40mm Grenade Launcher  
 2000 rounds .50 Cal or 448 rounds 40mm  
 2 Javelin Missiles

## Mobility

60 MPH Top Speed  
 9 Sec 50m Dash  
 78 in Gap Crossing  
 23 in Vertical Climb  
 330 Mile Cruising Range  
 53 Gal Fuel Capacity

## Survivability

14.5 mm Armor piercing Protection  
 High Hard Steel Structure  
 Modular Expandable Armor System  
 Ceramic Layer  
 Kevlar Spall Liner  
 Ion Beam Processing  
 Passive Rocket Propelled Grenade Add-on armor

## IAV Common Government Furnished Equipment and Associated Support Items Of Equipment

Force XXI Battle Command Battalion/Brigade and Below  
 Enhanced Position Location Reporting System Global Positioning System Thermal Weapons Sight

## Transportability

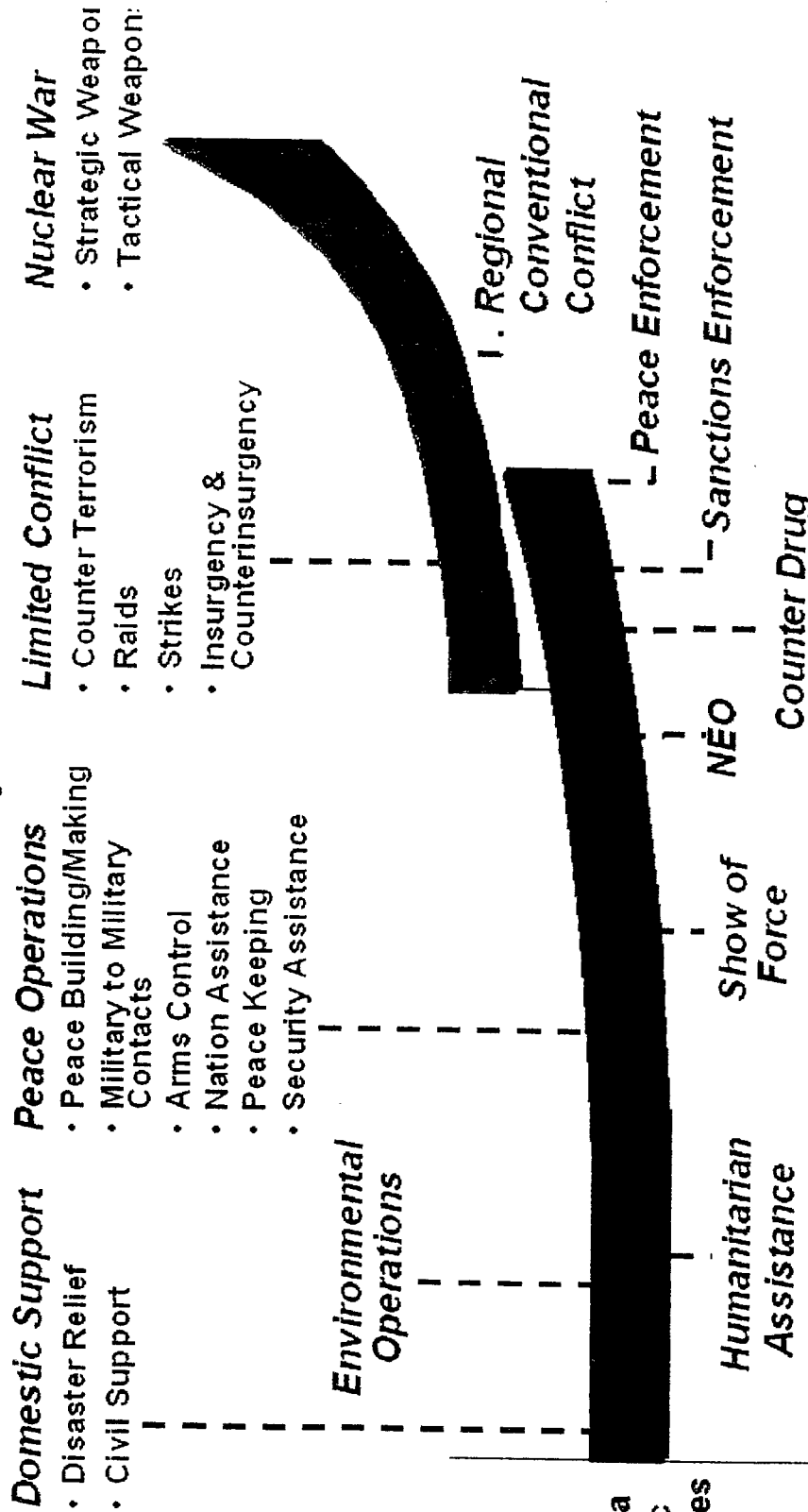
37,798 lbs Combat Weight  
 37,618 lbs Transport Weight

Vanguard For Army Transformation



# 21st Century Security Requirements

## Spectrum of Operations



### REQUIRE:

- Broad range of capabilities
- Strategic Responsiveness / Strategic Speed
- Dominance across the Full Spectrum of Operations

### Full Spectrum Challenges

- No single threat; a range of dynamic security challenges
- Increased threat from:
  - Asymmetric attacks on critical nodes
  - WMD proliferation
  - Terrorism

**The Objective Force Must Be:** Responsive, Deployable, Agile, Versatile, Lethal, Survivable, Sustainable



OPSEC REVIEW CERTIFICATION  
(AR 530-1, Operations Security)

I am aware that there is foreign intelligence interest in open source publications. I have sufficient technical expertise in the subject matter of this paper to make a determination that the net benefit of this public release outweighs any potential damage.

Reviewer: Douglas W. Templeton GS-15 TL, EMERGING TECHNOLOGIES  
Name Grade Title  
Douglas W. Templeton 02 Aug 01  
Signature Date

Description of Information Reviewed:  
Title: FCS Future Combat System Concept  
Author/Originator(s): Jack Parks  
Publication/Presentation/Release Date: 7 Aug 2001  
Purpose of Release: Ground Vehicle Conference

An abstract, summary, or copy of the information reviewed is available for review.

viewer's Determination (check one)

- 1. Unclassified Unlimited.
- 2. Unclassified Limited, Dissemination Restrictions IAW \_\_\_\_\_
- 3. Classified. Cannot be released, and requires classification and control at the level of \_\_\_\_\_

Security Office (AMSTA-CM-XS):

Concur/Nonconcur [Signature]  
Signature

7 Aug 01  
Date

Public Affairs Office (AMSTA-CM-PI):

Concur/Nonconcur [Signature]  
Signature

Aug 3, 2001  
Date