#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

24 October 2005

SUBJECT: FMTV FY07 UFR: \$4.99 Billion APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): T60081, T60149, T40329, T93484, T41995, T42063, T96564, T61908, T41135, T41203, T61704, T61772, T61840, Z94560, T61307, T61239, T94709, T64979, T64911, Z94047, T41036, T65526, T95555

**DESCRIPTION:** The Family of Medium Tactical Vehicles (FMTV) consists of a common medium truck chassis that is used for several vehicle configurations in two payload classes. It covers a family of diesel engine, automatic shift, all wheel driven trucks possessing the capability to haul 2.5 and 5 ton cargo requirements. This modern fleet is the backbone for all military requirements in logistical support.

**ISSUE JUSTIFICATION:** The FMTV Trucks will be operated throughout any theater of operation to include missions with in the United States as multi-purpose transportation and unit mobility vehicles by combat, combat support and combat service support units. The systems are capable of operating on primary and secondary roads, trails and cross-country terrain of all types. The vehicles are designed for around-the-clock all weather operations which is ideal for any wartime effort and any assigned relief and security missions stateside. The FMTV Trucks are a follow-on system for existing 2.5 and 5-ton truck fleets which are currently being phased out all active duty units. The Army National Guard (ARNG) currently owns over seventy percent (70%) of the 2.5 ton and 5-ton vehicles in the Armies inventory.

**PROGRAM STATUS:** Force requirement analysis based on FY11 Current Force Structure requires 36,082 FMTV's, including 11,694 trailers, to modernize its medium tactical vehicle fleet. The ARNG currently has 2022 FMTV's on hand, minus 609 for (SBE/APS/Battle losses) equal 1413, plus projected FY05 fielding of 1,086 shows a total of 2499 FMTV's on hand. The resulting shortage is 33,583 FMTV. In FY06 2,016, FY07 1,542, FY08 1,972, FY09 1,977, 2, FY11 1,960 FMTV's leaving a shortages remaining of 22,058 vehicles and trailers after all potential fieldings have been completed.

Note, Out of 20 Vehicle types costing data for 11 were averaged throughout the POM cycle (numbers from DA Procurement Unit Costs). 9 vehicles out of 20 costs were not averaged through the POM cycle (no graduated data available).

◆ Overall average cost of an FMTV is \$190,000 per vehicle, cost ranges from \$110K to 386K per vehicle type.

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding this system will enable the Army National Guard to train, deploy and operate within various Homeland Defense Missions and respond to its Homeland Security Mission requirements. Failure to fund the FMTV program will increase risk not only to the war effort but also to Homeland Security / Homeland Defense and will seriously degrade the ARNG's ability to perform its missions through full spectrum operations.

SUBJECT: FMTVAPPN: OPAAPE: D14500000MDEP: FPJCMDEP TITLE: Medium Tactical Vehicle (MTV) SystemsDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC: MAJ DukesDiv: ARQ-ETel: 607-7794Approval Authority: COL Moore/ NGB-ARQ / 703-607-7804

\$K	FY06	FY07
Validated Requirement	\$	\$
	5,592,821,977	5,251,194,536
Unvalidated Requirement		
Total Requirement	\$	\$
	5,592,821,977	5,251,194,536
Funded Amount	\$ 341,627,441	\$ 264,327,490
Total UFR	\$	\$
	5,251,194,536	4,986,867,046

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

20 October 2005

#### SUBJECT: HEMTT (Heavy Expanded Mobility Tactical Truck) FY07UFR: \$272M Fuelers \$110M Wreckers \$ 605M LHS (\$987M Total HEMTT) AREA OF INTEREST: DESCRIPTION: MODERNIZATION LIN(S): T39518, T39586, T39654, T59278, T58161, T87243, T63093

The HEMTT family consists of four configurations; Fuel Truck, Cargo truck, and Wrecker and LHS (Load Handling System). The HEMTT M978 is an 8 x 8 Fuel Truck with 2500 gal capacity.

The HEMTT M977 is a Cargo truck, 10-ton, tactical 8 x 8, heavy expanded mobility truck with light onboard material handling crane, with or without winch.

The HEMTT M984 is a Wrecker, 8 x 8, heavy expanded mobility tactical truck wrecker, with heavy duty crane and winch. It provides heavy wheeled recovery and crane support (recover/tow/maintenance lift assistance) to 10-ton and lighter tactical wheeled vehicles.

The HEMTT-LHS consists of standard M977/M978 or M985 HEMTT chassis equipment with a load handling system capable of loading/off-loading demountable cargo beds (flat racks) and 8x8x20 FT ISO containers/shelters. The Flat racks are interchangeable with the fielded PLS flat racks.

**ISSUE JUSTIFICATION:** Without the HEMTT Fuel Truck to provide refueling capability for combat and tactical vehicles, the maneuver elements of the armored and mechanized elements of divisions could be placed in a compromising position

Because the HEMTT Cargo is primarily used in an ammunition resupply roles in armored/mech infantry and artillery units, their ability to receive and redistribute supplies in a timely manner is placed in jeopardy.

Without the HEMTT Wrecker to accomplish tactical vehicle recovery missions, and maintenance lift of all power packs for tracked vehicles, some risk may have to be assumed in Armor, Artillery, Engineer, Transportation, Ordnance (maintenance/missile/munitions), Infantry (mech), Air Defense, and Aviation (ATK helicopter) units.

The HEMTT-LHS has the capability of transporting an 11 ton payload on the truck mounted flat rack while towing an M-1076 trailer loaded with additional 11 ton flat rack mounted load. The HEMTT-LHS will replace LIN T39518 on a one for one basis in the digitized heavy division.

### **PROGRAM STATUS:** HEMTT Program Underfunded.

Based on FY11 Force Structure the ARNG has a requirement of 2,118 M978 Fuel Trucks, 1110 on hand minus 212 (SBE/TPE/APS/Battlelosses) leaving on hand total of 898 on hand, programmed funding of 63 FY06, 180 FY07, 190 FY08, 192 FY09, 109 FY10, 51 FY11, minus FY06 NGREA seven fuelers leaving a total shortage of 428 HEMTT Fuelers. (Cost used \$278,000).

Based on FY11 Force Structure the ARNG Light and Medium Cargo requirements combined for a total requirement of 1,090, at this time no shortage of HEMTT Cargo vehicles.

Based on FY11 Force Structure the ARNG has a requirement for 924 M984s Wreckers, 602 are on hand minus 111 (SBE/TPE/APS/Battlelosses), leaving on hand total of 433 on hand, programmed

funding of 72 FY06, 71 FY07, 70 FY08, 41 FY09, 33 FY10, 29 FY11 leaving a shortage of 117 HEMTT Wreckers. (Cost used \$380,000).

Based on FY11 Force Structure the ARNG has a requirement of 2865 LHS, zero on hand, programmed fieldings 79 FY06, 120 FY07, 122 FY08, 70 FY09, 212 FY10, zero FY11, leaving a shortage of 2262 HEMTT LHS. (Cost used \$227,000).

#### IMPACT OF FUNDING THE CAPABILITY:

Providing this equipment would allow ARNG units the ability to adequately sustain army forces with fueling, supply and resupply, and recovery operations. It would also contribute greatly to the ability of providing assistance during homeland security missions and disaster relief duties.

SUBJECT: HEMTT (Heavy Expanded Mobility Tactical Truck)APPN: OPAAPE:MDEP: FPJAMDEP TITLE: Heavy Tactical VehiclesDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC:Debbie Wasner / NGB-ARQ/ 703-607-7834Approval Authority:COL Moore/ NGB-ARQ/ 703-607-7804

### Fuelers

\$K	FY06	FY07
Validated Requirement	339,160,000.00	
		321,646,000.00
Unvalidated Requirement	0	
Total Requirement	339,160,000.00	321,646,000.00
Funded Amount		
	17,514,000.00	50,040,000.00
Total UFR		
	321,646,000.00	271,606,000.00

Wreckers

\$K	FY06	FY07
Validated Requirement	164,540,000.00	137,180,000.00
Unvalidated Requirement	0	0
Total Requirement	164,540,000.00	137,180,000.00
Funded Amount	27,360,000.00	26,980,000.00
Total UFR	137,180,000.00	110,200,000.00

# LHS HEMTT

\$K	FY06	FY07
Validated Requirement	650,355,000.00	632,422,000.00
Unvalidated Requirement	0	0
Total Requirement	650,355,000.00	632,422,000.00
Funded Amount	17,933,000.00	27,240,000.00
Total UFR	632,422,000.00	605,182,000.00

ANALYSIS: Total of HEMTT family UFR is \$987M.

20 October 2005

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

SUBJECT: Light Tactical Vehicles (HMMWV) FY07 UFR: \$4.6B APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): 200395, 200394, T07679

**DESCRIPTION:** The High Mobility Multi-purpose Wheeled Vehicle (HMMWV). HMMWV is produced in several configurations to support weapons systems, command and control systems; field ambulances; and ammunition, troops and general cargo transport. The HMMWV is equipped with a high performance diesel engine; automatic transmission and four wheel drive that is air transportable and droppable for a variety of aircraft.

**ISSUE JUSTIFICATION:** The HMMWV serves as the Army's light tactical wheeled vehicle for command and control, light cargo and personnel transport, shelter carrier, ambulance, and weapons platform. The HMMWV is a highly reliable vehicle that can travel on all types of terrain while carrying troops, weapons, and payloads up to 5,100 lbs. The Up-Armored HMMWV provides soldiers with protection from small arms fire up to 7.62 AP and mines.

**PROGRAM STATUS:** Partially funded. Based on ARNG FY011 Force Structure has a requirement of 50,473 HMMWV's, 22,497 on hand, minus 2,015 (SBE/TPE/APS/Battlelosses) leaving 20,482 on hand, proposed fielding numbers per AEC3.1 FY06 931, FY07 220, FY08 1,988, FY09 2,407, FY10 2,614, FY11 1,429 leaving a shortage of 20,402 HMMWV's. (Cost used average \$161,000 each.)

**IMPACT OF FUNDING THE CAPABILITY:** HMMWVs are a critical component in meeting the needs of ARNG in supporting its federal and state missions. State missions include, but are not limited to floods, snowstorms, fires and homeland defense. Further, modernized HMMWVs will enable the ARNG to operate with compatibility to AC units as they transform to Interim and Objective Force units.

SUBJECT: Light Tactical Vehicles (HMMWV)APPN: OPAAPE:MDEP:FPJBMDEP TITLE: Light Tactical Vehicles (HMMWV)DAMO-ZR 1-N List Priority Number:Division Priority:Division Priority:Functional POC:Debbie Wasner/ NGB-ARQ/703-607-7834Approval Authority: COL Moore / NGB-ARQ/ 703-607-7804

### HMMWV

\$K	FY06	FY07
Validated Requirement	4,828,551,000.00	4,678,660,000.00
Unvalidated Requirement	0	0
Total Requirement	4,828,551,000.00	4,678,660,000.00
Funded Amount	149,891,000.00	35,420,000.00
Total UFR	4,678,660,000.00	4,643,240,000.00

**Analysis:** The ARNG requires new / modernized HMMWVs to replace its aging fleet of HMMWVs and should limit the number of cascaded systems from the AC because many of those systems, once cascaded to the ARNG, will be aged and nearing the end of their "life span." HMMWVs are key systems to support ARNG operations from full MTW to homeland security/defense missions.

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

31 October 2005

SUBJECT: Joint Network Transport Capability –Spiral (JNTC-S) FY06/07 UFR: \$68M Total UFR for JNN: \$174M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): 200562

**DESCRIPTION:** The Mobile Subscriber Equipment (MSE) network cannot keep up on the modern battlefield, nor is it designed to provide the increased level of bandwidth and services the Combatant Commander requires. These services include SIPR, NIPR, and VTC, and enable both circuit switching and Internet Protocol (IP) based networking. The Joint Network Node (JNN) package is designed to provide these services to the Commander at the Division, BCT and the Battalion Command post, providing with unprecedented communications services. It also provides the Division, BCT and BN CP headquarters the ability to operate independently into the Global Information Grid (GIG) or a joint headquarters as required. For the purposes of this UFR, the JNN package consists of:

- a. JNN terminal and vehicle
- b. Commercial Ku SATCOM with trailer
- c. Local Area Network Commercial-off-the-shelf (COTS) equipment.
- d. Network Management, ISYSCON(V)4 one per BN / 2 per BCT / 3 per Division
- e. High Capacity Line of Sight (HCLOS) radio upgrade to the AN/TRC-190(V)3 communications system.

A Maneuver Unit of Action / BCT package includes 2 each JNNs, 5 Battalion CP Nodes and associated LAN Transit cases. Total cost of the BCT JNN package is approximately \$11.10 million. A Division Headquarters requires 3 each JNNs and associated LAN Transit cases. The Division Headquarters is divided into a Main, TAC 1 and TAC 2. Total cost for a Division JNN package (minus the unit Hub terminals) is approximately \$24.85 million.

**ISSUE JUSTIFICATION:** The ARNG converts two Divisions and six BCTs in FY05; 2 Divisions, nine BCTs, 4 Maneuver Enhancement BDEs, eight Aviation BDEs, three Sustainment BDEs and 1 Fires BDE in FY07; and two Divisions, nine BCTS, and two Sustainment BDES in FY07. There is JNTC-S funding programmed for eight BCT sets. Source of funding is the FY06 Supplemental and PBD 753; other funding available is redirected AGRI funds and FY08 POM. Without the equipment, these units will convert to the Modular Force Structure (URS v 8.1), but not have the required communications equipment in order to properly train. This will quickly degrade Signal soldier skills, as well as degrade the overall unit (BCT) training, since the network and the communications services it provides the BCT commander is vital in providing connectivity for the ABCS (Army Battle Command System).

**PROGRAM STATUS:** Currently, through Army Equipping Conference 3, funds allocated to the ARNG are: FY06 Supplemental \$212 million, PBD 753 \$213.4 million, FY08 POM 133.2 million. Additionally, \$52 million (redirected AGRI funds) is in the FY06-11 POM for ARNG units. This money is programmed for FY08. Since the majority of these funds are Supplemental funds, the potential exists for them to be cut. Any funding delays will impact the fielding of the equipment, reduces readiness levels, and delays the sustainment training of the entire BCT for three years. Additionally, by end of FY07, the ARNG will have converted a total of six Divisions, twenty-five BCTs, eight Aviation BDEs, five Sustainment BDEs, one Fires BDE, and four Maneuver Enhancement BDEs, all requiring the JNTC-S suite of communications equipment.

**IMPACT OF FUNDING THE CAPABILITY:** Dramatic. Funding the JNTC-S program in FY06-FY08 allows the ARNG to reach a higher readiness state in a shorter period of time. Funding this capability also provides the ARNG the opportunity to increase retention, since it is difficult to recruit and retain a soldier who will not be provided the proper equipment upon which to train.

## (Include for internal ARNG coordination/use only)

SUBJECT: Joint Network Transport Capability –Spiral (JNTC-S)APPN: OPAAPE:MDEP: BB1600MDEP TITLE: ACUS ModernizationLIN:DAMO-ZR 1-N List Priority Number:Division Priority:Event StateFunctional POC:MAJ CamorodaDiv: NGB-ARF-SApproval Authority: COL Dixon / NGB-ARF / 703-607-7800Tel: 703-607-7826

\$M	FY05-FY06	FY07	FY08	Total thru FY08
Validated Requirement	\$318.0	\$213.6	\$239.2	\$220.0
Unvalidated Requirement	0	0	0	0
Total Requirement	4 Div, 15 BCTs, 4 MEs, 8 AVN, 3 Sust and 1 Fries BDE	2 Div, 9 BCTs And 2 Sust BDEs	2 Div, 9 BCTs, 6 MEs, 5 Fires and 3 Sust BDEs	2 Div, 9 BCTs, 3 MEs, 5 Fires and 3 Sust BDEs
Funded Amount	\$250.0	\$213.6	\$133.2	0
Total UFR	\$68.0	\$0	\$106.0	\$220.0

20 October 2005

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

SUBJECT: SINCGARS FY07 UFR: \$412M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): R83141, R67296, R67330, R44999, R68044, R68146, R45543

**DESCRIPTION:** Provides commanders with a highly reliable, secure, easily maintained combat net radio with voice and data handling capability, in support of command and control operations.

**ISSUE JUSTIFICATION:** One of the top ARNG equipping priorities is to purge the ARNG of its remaining (obsolete) VRC-12 series radios and replace them with SINCGARS. The VRC-12 series radios cannot operate in the frequency-hopping mode. The VRC-12 radios cannot transfer data via the tactical Intranet. Units with VRC-12 series radios are not deployable across the spectrum of operations because all other units in the Army would have to operate with severely degraded communications to maintain C3 interoperability with these ARNG units. If not funded, ARNG will have to wait until the Joint Tactical Radio System (JTRS) fielding starts for the cascade of SINCGARS from the AC to begin the purge the VRC-12 series radios from the force.

**PROGRAM STATUS:** SINCGARS information listed below is based on Current programmed ARNG FY11 requirements 138,116 Required, 45,901 on hand minus 1,941 (APS/TPE/SBE/) leaves a total on hand of 43,960. Proposed fielding numbers for FY06 23,000, FY07 30,000, FY08 15,000, FY09 3,500, FY10 2,500, no funding FY11 leaving a requirement of 20,156 SINCGARS per AEC3.1. (Cost used \$10,000).

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard to communicate and operate within the network-centric Army Transformation. This capability will allow all our units the ability to deploy and be interoperable with Active Component Legacy and Interim Forces across the spectrum of operations.

 SUBJECT: SINCGARS

 APPN: OPA
 APE:

 MDEP:
 MDEP TITLE:

 DAMO-ZR 1-N List Priority Number:

 Division Priority:

 Functional POC: Anita Rife Div: ARQ-E
 Tel: 607-5670

 Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

\$M	FY06	FY07
Validated Requirement	941,560,000.00	711,560,000.00
Unvalidated Requirement	0	0
Total Requirement	941,560,000.00	711,560,000.00
Funded Amount	230,000,000.00	300,000,000.00
Total UFR	711,560,000.00	411,560,000.00

# ANALYSIS:

SINCGARS	VRC-12
Digital Data Capability	Electromechanical
• SINCGARS versions <sup>1</sup> / <sub>4</sub> to <sup>1</sup> / <sub>2</sub> the size of the VRC-12.	Overheats
More than double the channels in congested frequency spectrum	Difficulty maintaining frequency alignment
High reliability (1250 hours)	<ul> <li>~ 200-400 hour Mean Time Before Failure</li> </ul>
Integrated COMSEC (ICOM)	Parts availability
Less weight	Parts obsolete
Frequency hopping (anti-jam)	Vulnerable to jamming
Less vulnerable to DF	Vulnerable to DF
Much less costly to maintain	Costly to sustain

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

SUBJECT: Radio Set AN/PRC-148 (V) 2 (C) Urban Version Radio Set PRC-117 FY07 UFR: EMBITR \$172.8 M FY07 UFR: PRC-117 \$297,000 APPN: OPA3 AREA OF INTEREST: MODERNIZATION LIN(S): Z99966

**DESCRIPTION:** The Multi-Band Intra/Inter Team Radio (MBITR) LIN Z99966 (AN/PRC-148(V)2) urban version is a portable, battery operated, communications system. The MBITR urban version is comprised of the LI-ON rechargeable battery, 90-512 MHz, 30-90 MHz antenna, carrying case, holster, battery holder, operator card, and operator manual. Capable of operating in the full frequency range of 30 to 512 MHz in the VHF-FM (low/high band), VHF-AM (high band), UHF-AM & FM bands with up to 5 watts utilizing a single hand held radio for ground to ground and air to ground connectivity. The MBITRS can be submerged in 20 meters (66 feet) of fresh or salt water for 30 minutes. This radio includes an embedded cryptographic module, a keypad, an internal speaker, a side connector, squelch override button, an internal microphone, dual purpose audio/key fill connector and a battery connector. This system is capable of providing secure and non-secure communications and will allow for transmission of voice in a whisper mode, can transfer channel presets to other hand-held radios by means of a cloning cable, and provides storage of 100 preset channels. MBITR will be primary means of communication for Special Operations Forces (SOF) detachments during the different missions that they perform. MBITR is a man pack radio with a lithium battery. The MBITR weighs 32 ounces, including battery and antenna. Dimensions are 2.626"W x 7.75"H x 1.45"D, including battery.

The PRC-117, also known ad AN/PSC-5 LIN R57606, better known as "SPITFIRE" is a man pack line-of-sight (LOS) and satellite communications (SATCOM) radio. The PRC-117 is comprised of receiver transmitter, handset, battery box, flexible antenna and satellite antenna, cable assembly, special purpose interface, transmit, re-transmit and SINCGARS. Capabilities of half-duplex communications via satellite mode in the 225 to 399.995 MHz frequency range, and via LOS mode in the 30 to 399.995 MHz frequency range. This radio is capable of continuous day or night operation, in temperature ranging from -30 to +55 degrees Celsius at 95% humidity, at altitudes up to 15,000 feet above sea level and has embedded communications security (COMSEC) for commands and control. Capable of operating in two modes; either man pack or vehicular mounted. Weighs 11.71 pounds and total volume is 441 cubic inches.

**ISSUE JUSTIFICATION:** The MBITR provides significantly enhanced performance over systems operating in the same frequency range as well as clear and secure voice and data transmissions. Analog and clear voice capabilities are provided. MBITRS is providing interoperability with existing legacy systems and commercial radios, while ensuring future operation with the next generation of communications equipment with seven programmable devices supported by flash memory incorporated into the architecture in combination of software upgradeability meeting the current and future requirements. MBITRs is light weight and provides secure and non-secure communication transmissions. MBITRs will support various Special OPS Aviation (SOA), Ranger Regiment, Rifle Company (RANGERS), Special Ops Signal BN (SOCB), Special Forces Group (SFG), and Psychological Operations, and numerous communication and combat units

The PRC-117 provides transmission in adverse conditions especially in terrain and temperature and operates in two modes. This radio will be used by units requiring radio transmissions beyond surface line-of-sight distances, and by units requiring secure voice communication for command and control. PRC-117

**PROGRAM STATUS:** MBITRs information listed below is based on Current programmed ARNG requirements 18,260 (Modularity(x83) only) with currently 979 OH (1093 on hand, minus 114 other (APS/TPE/SBE/)) leaves 17,281 required. Unfunded requirement is 17,281. (Cost used average \$10,000.00). A total unfunded requirement is \$172,810,000.

PRC-117 radio information listed below is based on Current programmed ARNG requirements 3356 with currently 235 OH (331 on hand, minus 96 other (APS/TPE/SBE)) leaves 3121 required. Our programmed receipts through FY 11 are 3110. Unfunded HLS requirement through FY 11 is 11. A total unfunded requirement of \$297,000 (Cost used average \$27,000). FY-06 fielding is 1700 and FY 07 fielding is 254 systems. This system is currently funded through the POM as a result of HLS/HLD priorities.

**IMPACT OF FUNDING THE CAPABILITY:** Fielding the radios would allow the ARNG to supply radios to units with the communications needed for secure information as well as protecting loss of life of our soldiers. These radios fulfill federal and state mission requirements. It would also provide one of the most considered necessary commodities during war, a natural disaster or state emergency.

20 October 2005

SUBJECT: Air Defense Airspace Management System (ADAMS) Cell FY 07 UFR: \$157.5M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S):

**DESCRIPTION:** The ADAMS Cell integrates air defense fire units, sensors, and C2 centers into a coherent system that can defeat/deny the aerial threat (unmanned aerial vehicles, helicopters, fixed wing, and so forth). The ADAMS Cell provides for automated, seamless C2 and Force XXI vertical and horizontal interoperability with joint and coalition forces for US Army air and missile defense (AMD) units. The system provides CHS modules at all echelons of command, which will provide for highly effective employment of Army AMD weapon systems as part of the joint force. The ADAMS Cell provides the third dimension situational awareness component of the common operational picture. Initially, the AMD-workstation will provide elements from EAC to battalion the capability to track the AMD battle force operations.

**ISSUE JUSTIFICATION:** The ADAMS Cell is required to de-conflict air space between aviation and fire support assets within an area of responsibility. The ADAM Cell provides the Brigade Combat Team organic assets that give the maneuver commander a complete air picture of the battlefield through an array of sensor assets.

**PROGRAM STATUS:** Underfunded. The Army National Guard requires 66 total ADAMS Cells. We have 0 total systems fielded to the ARNG. The shortage of ADAMS Cells is 66 systems. In FY06, 21 systems are programmed. The total unfunded requirement is 45 systems. Cost is 3.5M each system.

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard to be Joint interoperable across the spectrum of operations. ARNG needs to have this system to meet the needs of the missile defense community for force protection.

SUBJECT: Air Defense Airspace Management System (ADAMS) Cell LIN: APPN: OPA APE: MDEP: FPFE MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	231,000,000.00	157,500,000.00
Unvalidated Requirement		
Total Requirement	231,000,000.00	0
Funded Amount	73,500,000.00	157,500,000.00
Total UFR	157,500,000.00	157,500,000.00

# ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

20 October 2005

SUBJECT: All Source Analysis System Light (ASAS-L) FY 07 UFR: \$19.3M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): A35329, A35397

**DESCRIPTION:** The ASAS-L is the tool by which units send, receive, and exchange information and intelligence. It is the Intelligence and Electronic Warfare component of the Army Tactical Command and Control System (ATCCS) and is the interface between ATCCS and the Analysis and Control Element (ACE). Principal functionality of ASAS-L is the Intelligence Preparation of the Battlefield, current enemy and friendly situation, imagery, maps, graphics, and analyst tools.

**ISSUE JUSTIFICATION:** One of the main concerns of ARNG is the current intelligence picture for the units and soldiers protection. The ability to rapidly transmit the current enemy situational awareness will allow ARNG unit to be interoperable with the Active Component Counterpart. If not funded ARNG units will have to wait until at least FY15 before any new fieldings will take place. ARNG units without ASAS-L currently have no enhanced capability to operate in theater with the Combatant Commander's units.

**PROGRAM STATUS:** Underfunded. The Army National Guard requires 1158 total ASAS-L systems. We have 167 total systems fielded to the ARNG. The shortage of ASAS-L after FY07 is 723 systems. The 56<sup>th</sup> (SBCT) is scheduled to be fielded 20 ASAS-L systems in FY08; the only ARNG unit fully funded. ASAS-L costs \$28,400 per system for total package fielding while the IFS (fusion server) cost \$73,000 per system. Both are rolled up into LIN A35329 although a unit will get a combination of the two (more Lights than IFS). Currently, In FY 06, the ARNG will field 121 L and 15 IFS and in FY 07, 119 L and 13 IFS.

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard to be interoperability with its Active Component Forces across the spectrum of operations. ARNG requires this system to meet the needs of the intelligence community and its' operators.

SUBJECT: ASAS-L LIN: A35329, A35397 APPN: OPA APE: MDEP: FPFE MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	\$28,144	\$23,613
Unvalidated Requirement		
Total Requirement	\$28,144	\$23,613
Funded Amount	\$ 4,531	\$ 4,329
Total UFR	\$23,613	\$19,284

### ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

20 October 2005

SUBJECT: Battle Command Sustainment Support System (BCS3) FY 07 UFR: \$27.8 M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C56827

## DESCRIPTION:

BCS3 newly replaces Combat Service Support Control System (CSSCS) as the foundation for the Army logistics common operating picture (LCOP). The LCOP is a joint requirement that can provide visibility of data and decision-support tools needed to manage an end-to-end joint distribution system. BCS3 is the Army's maneuver command and control system used to fuse sustainment, In-Transit Visibility (ITV), and force level information data to aid commanders in making critical decisions. BCS3 is the Army's logistics "fusion center" at all echelons for maneuver sustainment support. It is modular, tailorable, and scalable to meet the full spectrum of operations and interoperates with the Army Battle Command System (ABCS) and other Army and Joint systems. BCS3 provides a near-real-time, continuous graphical representation of the current situation with the land Area of Operations (AO) to include all friendly locations, identification, and unit status.

## **ISSUE JUSTIFICATION:**

One of the main concerns of ARNG is the maneuver sustainment support picture for the leaders of modular units in the theater of operations. The ability to rapidly transmit command and control of logistical awareness will allow ARNG unit to be interoperable with the Active Component Counterpart. ARNG units without BCS3 currently have no enhanced capability to operate in theater with the Combatant Commander's units.

# **PROGRAM STATUS:**

Underfunded. The Army National Guard requires 851 (modularity only) total BCS3 systems. We have 15 total systems fielded to the ARNG. The shortage of BCS3 systems after FY 07 is 818 systems. BCS3 costs \$35,000 per system for total package fielding. In FY 06, the ARNG will field 0 systems and in FY 07 40 systems, of which 18 go to SBCT 6, HQDA SSO shows 1,434,000 in programmed funding for FY07 systems.

### IMPACT OF FUNDING THE CAPABILITY:

Funding this system will allow the Army National Guard to be interoperability with its Active Component Forces across the spectrum of logistic operations. ARNG needs to have this system to meet the needs of situational awareness of logistics on the battlefield. The capability of the BCS3 system will allow ARNG units the ability to deploy and inter-operate with the Active Components and provide ARNG combat units with a key system in units that transform from legacy to modular forces.

SUBJECT: BCS3 LIN: C56827 APPN: OPA APE: MDEP: FPFK MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	\$29,260	\$29,260
Unvalidated Requirement		
Total Requirement	\$29,260	\$29,260
Funded Amount	<b>\$</b> 0	\$1,434
Total UFR	\$29,260	\$27,826

### ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

21 October 2005

SUBJECT: Digital Topographic Support System (DTSS-L & DTSS-D) FY06 UFR: DTSS-L = \$600k, DTSS-D = \$250k APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): D10281, D11498,

**DESCRIPTION:** The Digital Topographic Support System (DTSS) is produced in several configurations to provide critical, timely, and accurate digital and hardcopy geospatial information to support mission planning and execution. The DTSS-Light is housed in an Army standard S-788 Lightweight Multipurpose Shelter (LMS) and mounted on a HMMWV. The DTSS-Deployable is configured for use in a garrison environment, or for field use in a tent or other enclosure.

**ISSUE JUSTIFICATION:** Combat commanders at all levels need timely and accurate terrain information and data about the battlefield if they hope to control the action upon it. There also is a need for quick turnaround, map-size, multicolor reproduction of this topographic information to support mission planning and the Commander's decision-making process. The **Digital Topographic Support System-Light (DTSS-L)** is designed to meet these needs. The **Digital Topographic Support System-Deployable (DTSS-D)** was originally acquired at the direction of the **Army Chief of Staff** to address an immediate need to provide image maps and terrain data to support Army missions. Then, as is still the case, standard map products did not exist or were out of date for a large portion of the Earth's surface. The DTSS-D provides the Commander with a capability to quickly produce map products from multispectral imagery when standard products are unavailable or unsuitable for reasons of content or currency. In the future modularity designs of the Army, there will be one each DTSS-L and DTSS-D at every UA, UEx, and UEy headquarters.

**PROGRAM STATUS:** Partially unfunded. Only 7 of 78 current DTSS-L and 9 of 51 current DTSS-D authorizations are funded. ARNG will have an FY09 requirement of 78 DTSS-L and 51 DTSS-D due to the conversion to modularity. This leaves a shortage of 0 DTSS-L and 42 DTSS-D.

**IMPACT OF FUNDING THE CAPABILITY:** In the future modularity designs of the Army, there will be one each DTSS-L and DTSS-D at every UA, UEx, and UEy headquarters. This equipment is the most critical part of the Terrain Analysis Team in each headquarters which supports the commander's terrain visualization for battlefield command and control.

SUBJECT: Digital Topographic Support Systems (DTSS-L & DTSS-D) APPN: OPA LIN: D10281 & D11498 APE: MDEP: FPFS. MDEP TITLE: EN C2 Systems DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Shane Elkins / NGB-ARF-S / 703-607-7824 Approval Authority: COL Rod Dixon / NGB-ARF/ 703-607-7800

## DTSS-L

	FY07
Validated Requirement	\$195 M
Unvalidated Requirement	0
Total Requirement	\$195M
Funded Amount	\$195 M
Total UFR	\$0.0 M

## DTSS-D

	FY07
Validated Requirement	\$13 M
Unvalidated Requirement	0
Total Requirement	\$13 M
Funded Amount	\$2.25M
Total UFR	\$10.5 M

**Analysis:** The ARNG requires new Digital Topographic Systems to support the conversions to the modular army units. There will be no possibility for cascaded systems from the AC because the Army will be increasing their requirements over the next few years to support modularity as well. DTSS's are key systems to support ARNG operations from the GWT to Homeland Security missions.

20 October 2005

SUBJECT: FBCB2/BFT FY 07 UFR: \$693.8 M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C18378

### DESCRIPTION:

**Force XXI Battle Command – Brigade and Below (FBCB2)** is a suite of digitally interoperable applications and platform hardware that provides on-the-move, real-time and near-real-time situational awareness and C2 information to combat, combat support, and CSS leaders from brigade to the platform and soldier level. The FBCB2 will feed the ABCS common database with automated positional friendly information and current tactical battlefield geometry for friendly and known/suspected enemy forces. The goal has been to field FBCB2 to tank and Bradley fighting vehicle and other platforms with a common look and feel screen. CHS design will facilitate training and standard operating procedures.

**Blue Force Tracking (BFT)** provides a means of sharing position location information, situational awareness, and data command and control messaging between equipped platforms. BFT uses commercial L-band personal mobile satellite communications equipment in lieu of EPLRS and SINCGARS communication assets. The system includes a primary and backup operations center that is used to route command and control messages between BFT platforms, generate periodic accumulated "SA-down" messages for the forward link, and to provide a Secure Internet Protocol Router (SIPR) interface of SA to the Global Command and Control System – Army (GCCS-A). The interface between the commercial L-band satellite provider hub and each of the operations centers is provided by leased 64 kbps INMARSAT channels, backed up via protected Internet connections. Transmission range is 1610–1660 MHz and receive range is 1525-1559 MHz. Operating bandwidth is programmable from 25 kHz; satellite bandwidth is leased via commercial providers.

### **ISSUE JUSTIFICATION:**

One of the main concerns of ARNG is the current friendly forces picture for the units and soldiers protection. The ability to rapidly transmit the current friendly situational awareness will allow ARNG unit to be interoperable with the Active Component Counterpart. ARNG units without BFT currently have no enhanced capability to operate in theater with the Combatant Commander's units.

### **PROGRAM STATUS:**

Underfunded. The Army National Guard requires 45,298 total BFT systems. We have 129 total systems fielded to the ARNG. The shortage of BFT is 45,169 systems. The 56<sup>th</sup> (SBCT) is scheduled to be fielded 781 FBCB2 systems in FY06; the only ARNG unit fully funded. BFT costs \$16,000 per system for total package fielding. Currently, In FY 06, the ARNG will field 485 systems and in FY 07, 540.

## IMPACT OF FUNDING THE CAPABILITY:

Funding this system will allow the Army National Guard to be interoperability with its Active Component Forces across the spectrum of operations. ARNG needs to have this system to meet the needs of situational awareness of friendly forces on the battlefield. The capability of the BFT system

will allow ARNG units the ability to deploy and inter-operate with the Active Components and provide ARNG combat units with a key system in units that transform from legacy to modular forces.

## (Include for internal ARNG coordination/use only)

SUBJECT: FBCB2/BFT LIN: C18378 APPN: OPA APE: MDEP: FPSC MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	\$722,704	\$702,448
Unvalidated Requirement		
Total Requirement	\$722,704	\$702,448
Funded Amount	\$ 20,256	\$ 8,640
Total UFR	\$702,448	\$693,808

### ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

20 October 2005

SUBJECT: Global Command and Control System – Army (GCCS-A) FY 07 UFR: \$8 M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): Z26878, Z40318

### DESCRIPTION:

GCCS-A is the Army link for ABCS to the GCCS. The GCCS-A will provide a suite of modular applications and information and decision support to Army strategic/ operational/ theater level planning and operational/theater operations and sustainment. The GCCS-A will support the apportionment, allocation, logistical support, and deployment of Army forces to the combatant commands. Functionality includes force tracking, host nation and civil affairs support, theater air defense, targeting, psychological operations, C2, logistics, medical, provost marshal, counter-drug, and personnel status. The GCCS-A will be deployed from theater EAC elements to division.

### ISSUE JUSTIFICATION:

One of the main concerns of ARNG is the command and control picture for the leaders of UEx units in the theater of operations. The ability to rapidly transmit command and control situational awareness will allow ARNG unit to be interoperable with the Active Component Counterpart. ARNG units without GCCS-A currently have no enhanced capability to operate in theater with the Combatant Commander's units.

### **PROGRAM STATUS:**

Underfunded. The Army National Guard requires 40 total GCCS-A systems (approximately 5 per UEx). We have 0 total systems fielded to the ARNG. The shortage of GCCS-A is 40 systems. Total package fielding cost for GCCS-A is \$200,000 per system. Currently, In FY 06 & 07, the ARNG will field 0 systems. However, FDIIS shows approximately \$10M spread over FY06-09 for GCCS-A for the ARNG.

### IMPACT OF FUNDING THE CAPABILITY:

Funding this system will allow the Army National Guard to be interoperability with its Active Component Forces across the spectrum of operations. ARNG needs to have this system to meet the needs of situational awareness of command and control on the battlefield. The capability of the GCCS-A system will allow ARNG units the ability to deploy and inter-operate with the Active Components and provide ARNG combat units with a key system in units that transform from legacy to modular forces.

SUBJECT: GCCS-A LIN: Z26878/Z40318 (new LINs Z00552, 553, & 554) APPN: OPA APE: MDEP: FPFR MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	\$8,000	\$8,000
Unvalidated Requirement		
Total Requirement	\$8,000	\$8,000
Funded Amount	<b>\$</b> 0	\$ 0
Total UFR	\$8,000	\$8,000

### ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

20 October 2005

SUBJECT: Integrated Meteorological System (IMETS) FY07 UFR: \$45M (\$6,068M (IMETS Light); \$39M (IMETS Heavy)) APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): J41800 (L), M55690 (H)

**DESCRIPTION:** The Integrated Meteorological System (IMETS) is the meteorological component of the Intelligence and Electronic Warfare (IEW) sub element of the Army Battle Command System (ABCS). IMETS is a tactical automated weather data receiving, processing, and dissemination system designed to provide timely weather and environmental effect forecasts, observations, and decision aid support to the Army. It is an Army-furnished system which will be operated by Air Force weather personnel and maintained within planned Army support for systems and components IAW AR115-10/AFR 105-3. There are two versions of IMETS: AN/GMQ-36, Integrated Meteorological System (Light) and the AN-TMQ-40B, IMETS-B (Heavy). The IMETS (Light) is a laptop system that provides the small task force weather functions. The IMETS (Heavy) consists of a standard shelter and vehicle, and Army Common Hardware and Software of the Army Battle Command System.

**ISSUE JUSTIFICATION:** IMETS is necessary to provide tactical commanders with common operating environment (COE) awareness. IMETS provides U.S. Army Commanders at all echelons with an automated tactical weather system to receive, process, and disseminate weather forecast and weather effects decision aid products to all ABCS Battlefield Functional Areas (BFA) and users.

**PROGRAM STATUS:** Based on current programmed FY11 requirements, the ARNG has a total requirement of 84 IMETS (Light) systems, and currently has two on hand. Between FY06-11 ARNG is anticipated to receive a total of 24 IMETS (Light) systems, ARNG is currently working with the HQDA SSO to determine the requirements for FY06 and FY07 fielding. System cost is \$74,000 per the HQDA SSO. Currently, 58 IMETS (Light) systems are unfunded.

Based on current programmed FY11 requirements, the ARNG has a total requirement of 27 IMETS (Heavy) systems, and currently has one on hand, ARNG is anticipated to receive eight IMETS (Heavy) systems in FY07, and eight additional systems by FY11. ARNG is currently working with the HQDA SSO to determine the requirements for FYs 06 and 07 fielding. System cost is \$1,500,000 per the HQDA SSO. Currently, 10 IMETS (Heavy) systems are unfunded.

**IMPACT OF FUNDING THE CAPABILITY:** IMETS will greatly increase ARNG unit effectiveness in all tactical operations by providing the impacts of weather on friendly and enemy weapons systems and Soldiers. Without IMETS, tactical commanders' ability to determine or conduct intelligence preparation of the battlefield (IPB), force protection, mission planning, and provide accurate high resolution weather and environmental effects will be degraded.

SUBJECT: Integrated Meteorological System (IMETS) APPN: OPA LIN: J41800, M55690 APE: MDEP: FPFF MDEP TITLE: DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Dadey Div: NGB-ARQ-E Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7076

IMETS (Light)

\$K	FY06	FY07
Validated Requirement	\$6.068M	\$6.068M
Unvalidated Requirement		
Total Requirement	\$6.068M	\$6.068M
Funded Amount	0	0
Total UFR	\$6.068M	\$6.068M

IMETS (Heavy)

\$K	FY06	FY07
Validated Requirement	\$39M	\$39M
Unvalidated Requirement		
Total Requirement	\$39M	\$39M
Funded Amount	0	0
Total UFR	\$39M	\$39M

#### ANALYSIS:

IMETS (LIGHT) System Cost: \$74,000 IMETS (Heavy) System Cost: \$1,500,000

20 October 2005

SUBJECT: Maneuver Control Station (MCS) FY 07 UFR: \$16.5 M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): Z72475

### DESCRIPTION:

MCS is the primary battle command source, providing the common operational picture, decision aids, and overlay capabilities to support the tactical commander and the staff via interface with the force level information database populated from other AISs. MCS provides the functional common applications necessary to access and manipulate the Joint Common Database (JCDB). MCS will satisfy information requirements for a specific operation; track resources; display situational awareness; effect timely control of current combat operations (offense, defense, stability, and support); and effectively develop and distribute plans, orders, and estimates in support of future operations. It will support the military decision-making process. MCS will be deployed from corps to the maneuver battalions.

### **ISSUE JUSTIFICATION:**

One of the main concerns of ARNG is the common operational picture for the leaders of modular units in the theater of operations. The ability to rapidly transmit command and control of situational awareness will allow ARNG unit to be interoperable with the Active Component Counterpart. ARNG units without MCS currently have no enhanced capability to operate in theater with the Combatant Commander's units.

### **PROGRAM STATUS:**

Underfunded. The Army National Guard requires 3150 total MCS-L systems. We have 95 total systems fielded to the ARNG. The shortage of MCS systems after FY06 is 3008 systems. MCS costs \$5,500 per system for total package fielding. In FY 06, SBCT6 will be fielded 47 MCS-L systems and 0 systems fielded in FY 07.

### IMPACT OF FUNDING THE CAPABILITY:

Funding this system will allow the Army National Guard to be interoperability with its Active Component Forces across the spectrum of combat operations. ARNG needs to have this system to meet the needs of situational awareness on the battlefield. The capability of the MCS system will allow ARNG units the ability to deploy and inter-operate with the Active Components and provide ARNG combat units with a key system in units that transform from legacy to modular forces.

SUBJECT: MCS LIN: Z72475 APPN: OPA APE: MDEP: FPFP MDEP TITLE: DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: MAJ Brian McCormack Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7891

\$K	FY06	FY07
Validated Requirement	16,802,500.00	16,544,000.00
Unvalidated Requirement		
Total Requirement	16,802,500.00	16,544,000.00
Funded Amount	258,500.00	\$0
Total UFR	16,544,000.00	16,544,000.00

## ANALYSIS:

The failure to fund will seriously disrupt the ARNG's ability to perform its wartime mission.

20 October 2005

SUBJECT: Tactical Airspace Integration System (TAIS) FY07 UFR: \$28 M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C61597

**DESCRIPTION:** Each AN/TSQ-221 "Full" TAIS Shelter consists of an Extended Capacity M1113 HMMWV with Standard Rigid-Wall Shelter Housing the Mission Equipment Package; one M1097 Cargo HMMWV; a PU-801 15 KW Tactical Generator; Antennas; and a Standard Installation Command Post System (SICPS) Extension. The system provides automated Army Airspace Command and Control (A2C2), Air Traffic Services (ATS), and Aviation C2 capabilities to ATS companies and warfighting commands with linkage to the Joint airspace management processes.

**ISSUE JUSTIFICATION:** The TAIS is a critical part of the Army's ABCS and a key wartime asset for the management of the third dimension – Airspace. The two TAIS for each of the eight ARNG Divisions (16 Systems) are currently unfunded leaving those Divisions without the ability to use A2C2 systems.

**PROGRAM STATUS:** The Army is currently authorized 75 TAIS of which 30 systems are required by the Army National Guard (ARNG). Currently all 16 ARNG Division TAIS sets are unfunded. Only the 14 sets are currently scheduled for distribution to the ARNG with five systems on-hand and four systems currently scheduled for delivery in FY06. Eight systems could be procured for the ARNG in FY 06 with another eight systems being procured in the out years.

**IMPACT OF FUNDING THE CAPABILITY:** The funding of eight systems in FY 06 will give half of the ARNG's Divisions the ability to provide A2C2 for the two Tactical Command Posts of Division and to participate in the Army's ABCS.

SUBJECT: Tactical Airspace Integration System (TAIS)APPN: APAAPE: AA0050MDEP:RD16MDEP TITLE: ATC EquipmentDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC: Mr Don Wellen/ NGB-AVS-O/703-607-9755Approval Authority:COL Moore / NGB-ARQ/ 703-607-7804

\$K	FY06	FY07
Validated Requirement	\$105,000	
Unvalidated Requirement		
Total Requirement	\$105,000	
Funded Amount	\$77,000	
Total UFR	\$28,000	

Analysis:

January 2006

SUBJECT: Forward Area Air Defense Command and Control System (FAADC2) FY07 UFR: \$ APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C90531, C90599, C36104, C90735

**DESCRIPTION:** Provides Short Range Air Defense (SHORAD) units with the ability to collect, digitally process, and disseminate real-time target cueing and tracking information, common tactical air picture, and command, control and intelligence information.

**ISSUE JUSTIFICATION:** Digitization and automation of C2 functions within Army National Guard air defense units will allow for increased lethality, interoperability and compatibility with active component counterparts.

**PROGRAM STATUS:** This system has been fielded to two of the nine Avenger Battalions and is currently scheduled for fielding to an additional two battalions assigned to III Corps (Funding issues currently put timelines in question). The Army National Guard requires an additional 13 systems to complete fielding. Failure to fund will effectively keep 75% of the Army National Guard air defense force from being automated, thereby reducing potential engagement opportunity, reducing interoperability and increasing the potential for fratricide.

REQ.	<u>OH</u>	PROG.	SHORT.
18	3	2	13

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard to maintain interoperability within the total air defense umbrella. This capability will allow all our units the ability to increase their lethality, thereby increasing force protection against aircraft, unmanned aerial vehicles and cruise missiles. It will also reduce the potential for fratricide.

SUBJECT: Forward Area Air Defense Command Control and Intelligence System (FAADC2I) APPN: OPA2 APE: MDEP: FPFB MDEP TITLE: Air & Missile Defense C2 Systems DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: MAJ Jim Jones Div: ARQ-AS Tel: 703-607-9073 Approval Authority: COL Lance Moore / NGB-ARQ / 703-607-7804

\$K	FY06	FY07
Validated Requirement		
Unvalidated Requirement		
Total Requirement		
Funded Amount		
Total UFR		

Data is provided as of the PF \_\_\_\_\_ locked position

# ANALYSIS:

FAADC2I	ABMOC Section w/ analog functions
Digital Data Capability	Soldier maps/overlays/radio
Real-time data	Delay due to processing time
Common tactical picture	<ul> <li>Overlays w/ time lag between updates</li> </ul>
Joint interoperability	Interoperability relies on liaison     officer/radio types/communication links
•	•
•	•
•	•
•	•
•	•

- This system was to have been fielded to all the Avenger BNs by the end of FY03. The last unit was then moved to FY07. This required removing the equipment from several documents subsequently creating a gap between FAADC2I and Sentinel. We now are totally decremented for the remaining units and have no projected fielding dates for the remaining units.
- States, which had begun recruiting 14Js for the FAADC2I system, will now have to apply them against Sentinel slots instead.

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>DIGITAL ENABLERS</u>

8 November 2005

SUBJECT: CAISI FY07 UFR: \$23.4 APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): Z53098, Z00057, Z00056, J46526

**DESCRIPTION**: Combat Service Support (CSS) Automated Information Systems Interface (CAISI), allows for anywhere anytime communications system connectivity in conjunction with a satellite communications system. CAISI has two primary functions one as a concentrator for the Combat Service Support (CSS) community and to serve as an interface device that provides network connectivity to both legacy and emerging Standard Army Management Information Systems (STAMIS). Two will allow for local area transmitting of critical sustainment data as well as linking CSS systems to a CSS VAST satellite communications system.

**ISSUE JUSTIFICATION:** when used in connection with the Multi-Media Communications System and the CSS Automated Information Systems Interface, provides worldwide voice, video, and data communications capability for forward operating bases. With this system, CSS units can share documents, process requisitions, conduct online meetings, send and receive text messages, and use the system as a short-range telephone.

**PROGRAM STATUS:** Funding for CAISI's is focused mainly on the Brigade Combat Teams (BCT's) most of the Guard force structure is not BCT oriented, support assets critical for BCT operations must be funded. Currently the Army National Guard has a requirement for 3,630 CAISI's modules, FY05 funding is for \$1.2M for a total of 132 modules, in FY06 \$836K for a total of 94 modules and in FY07 \$1.4M for a total of 159 modules. Total shortage is 3,092 modules with a cost of \$23.4M still needed to fully fund the Guard.

- Costing data for all CAISI's comes from the Product Manager and LIDB
- Fielding data comes from both PM and NGB Logistics division, fielding data is as of July of 2006
- CAISI concentrator \$22K, Processor \$4K, Client Module is \$12K and the Bridge Module is \$6K

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding this system will enable the Army National Guard to train, deploy and operate within various Homeland Defense Missions and respond to its Homeland Security Mission requirements and allow full sustainment of both operations. Failure to fund the FMTV program will increase risk not only to the war effort but also to Homeland Security / Homeland Defense and will seriously degrade the ARNG's ability to perform its missions through full spectrum operations.

SUBJECT: CAISIAPPN: OPAAPE: 52899922MDEP: MPTOMDEP TITLE: STAIMS Communications HardwareDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC: MAJ DukesDiv: ARQ-ETel: 607-7794Approval Authority: COL Moore/ NGB-ARQ / 703-607-7804

\$K	FY06	FY07
Validated Requirement	\$	\$
	25,632,000.00	24,796,000.00
Unvalidated Requirement		
Total Requirement	\$	\$
	25,632,000.00	24,796,000.00
Funded Amount	\$ 836,000.00	\$ 1,406,000.00
Total UFR	\$	\$
	24,796,000.00	23,390.000.00

8 November 2005

### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>DIGITAL ENABLERS</u>

SUBJECT: MC4 FY07 UFR: \$41.1M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C27639, C27571, C27503, C18277, C18209, C18345

**DESCRIPTION:** The MC4 Program is the Army's single medical Information Management/Information Technology Program that provides automation and digitization efforts for deployable medical forces. MC4 serves as the Army's hardware integrator and materiel developer for the DoD Theater Medical Information Program (TMIP) software. Providing tactical medical information to all levels of medical care and the Army Battle Command.

**ISSUE JUSTIFICATION:** MC4 is a complex system that has joined military leaders, health care and technology experts as the single medical information system. MC4 offers medical units a wide range of integrated systems (<u>software</u> and <u>hardware</u>) that bridge the tactical and sustaining base Information Management and Information Technology health care systems. By utilizing this system, relevant medical data flows vertically throughout levels of health care and to joint medical databases. This enables tactical medical forces the ability to electronically record health services rendered and facilitates theater-wide medical surveillance and trend analysis. The system also provides pertinent medical information horizontally into the Army Battle Command, Combat Service Support and Communications architecture. As a result, MC4 enables enhanced medical situational awareness for HLS/HLD and GWOT.

**PROGRAM STATUS:** Currently the only fieldings scheduled for this system are for Brigade Combat Teams (CBT's) and units deploying. The Army National Guard has most of its force not receiving any MC4 devices, current funding is only for BCT's and UEx's as prescribed by the Army Campaign Plan (ACP). The current distribution plan falls well short of the total National Guard requirement of 11,142 devices, total devices funded is 2,046 leaving a shortage of 8,888.

Currently funded in FY05 is \$5.8M for a total of 1,718 devices, in FY06 \$1M for a total of 262 devices, in FY07 \$250K for a total of 66 devices. Total shortages for FY05 is \$41.1M, in FY06 is \$40.1M and in FY 07 is \$39.9M

- Costing data is from the product manager, costs range from \$2,600 to \$83,000 per item
- On-hand data from LIDB

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding this system will enable the Army National Guard to train, deploy and operate within various Homeland Defense Missions and respond to its Homeland Security Mission requirements. Failure to fund the MC4 program will increase risk not only to the war effort but also to Homeland Security / Homeland Defense and will seriously degrade the ARNG's ability to perform its missions through full spectrum operations.
# SUBJECT: MC4APPN: OPAAPE: MA8046000MDEP: FL8DMDEP TITLE: COMBAT SUPPORT MEDICALDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC: MAJ DukesDiv: ARQ-ETel: 607-7794Approval Authority: COL Moore/ NGB-ARQ / 703-607-7804

\$	FY06	FY07	
Validated Requirement	\$	\$	
	41,097,222.00		40,086,102.00
Unvalidated Requirement			
Total Requirement	\$	\$	
	41,097,222.00		40,086,102.00
Funded Amount	\$ 1,011,120.00	\$	247,595.00
Total UFR	\$	\$	
	40,086,102.00		39,383,507.00

## ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S DIGITAL ENABLERS

8 November 2005

SUBJECT: CSS VSAT FY07 UFR: \$76.1M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): 200560

**DESCRIPTION:** CSS VSAT increases readiness by giving Combat Service Support (CSS) Soldiers in the field the ability to electronically transmit supply requisitions and receive near-real time status reports on their orders. The system also enhances force protection by greatly reducing the need for Soldiers to get into convoys and risk being ambushed in hand-delivering disks containing detailed logistics orders to other locations, or in traveling to maintenance meetings, which they can conduct "virtually" via CSS VSAT".

**ISSUE JUSTIFICATION:** CSS VSAT provides satellite communication for CAISI Wireless. It supports the DA G-4 focus area of "Connecting Army Logisticians" by providing self-contained and self-supporting secure communication lines in both a tactical and non-tactical environment. It also supports the DA G-4 focus area of "Modernizing Theater Distribution" by providing communication between all current and future STAMIS, therefore providing total asset visibility throughout the supply chain.

**PROGRAM STATUS:** Currently funding for the Army National Guard is for minimal fieldings or what is known as Just Good Enough Solutions for the BCTs. CSS VSATs are a crucial link to full logistical interoperability throughout the National Guard. Current known fieldings are as follows, FY05 5 for a total of \$825K, data for FY06 and FY07 are not specified in any available documents though it is believed that each BCT will receive 1 and each UEx will reactive an additional system. Potential fieldings for FY06 could be for a total of 11 systems ( this number is not confirmed) Based on what is known the Guards total requirement is for 468 systems and we have two on hand with a total of three more being fielded. The total bill is \$76.1M which will fill all known shortages and allow for total interoperability for all assigned missions.

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding this system will enable the Army National Guard to train, deploy and operate within various Homeland Defense Missions and respond to its Homeland Security Mission requirements. Failure to fund the CSS VSAT program will increase risk not only to the war effort but also to Homeland Security / Homeland Defense and will seriously degrade the ARNG's ability to perform its missions through full spectrum operations.

SUBJECT: CSS VSATAPPN: OPAAPE: 122G15.00MDEP: MPTOMDEP TITLE: CSS CommunicationsDAMO-ZR 1-N List Priority Number:Division Priority:Functional POC: MAJ DukesDiv: ARQ-ETel: 607-7794Approval Authority: COL Moore/ NGB-ARQ / 703-607-7804

\$K	FY06 FY07		FY07
Validated Requirement	\$ \$		
	76,065,000.00		76,065,000.00
Unvalidated Requirement			
Total Requirement	\$	\$	
	76,065,000.00		76,065,000.00
Funded Amount	\$	\$	
Total UFR	\$	\$	
	76,065,000.00		76,065,000.00

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

20 October 2005

SUBJECT: Shadow 200 Tactical Unmanned Aerial Vehicle (TUAV) FY07 UFR: \$440.8M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): Z16242

**DESCRIPTION:** The Shadow 200 is a small, lightweight Tactical Unmanned Aerial Vehicle (TUAV) designed as a ground maneuver commander's primary day or night reconnaissance, surveillance, target acquisition, system. The Shadow 200 Tactical Unmanned Aerial Vehicle (TUAV) is the ground maneuver commander's primary day/night, Reconnaissance, Surveillance, and Target Acquisition (RSTA) and battle damage assessment system. The TUAV provides the commander with several capabilities: enhanced enemy situational awareness, a target acquisition capability, BDA, and enhanced battle management capabilities (friendly situation and battlefield visualization). These capabilities contribute to commanders' dominant situational awareness and allow commanders to maneuver assets, improve positional advantage with speed and precision, and conduct decisive operations. As a command and control enabler for tactical decision making, it's the commander's "dominant eye", allowing him to shape the Army XXI battlefield to ensure mission success.

**ISSUE JUSTIFICATION:** This system has been proven in actual combat operations in locating, identifying and defeating both traditional troop formations as well as small, highly mobile enemy groups. The Shadow 200 employment is flexible and can be tailored to support operations down to company/squad level. The TUAV also greatly enhances Force Protection with its on-station loitering ability and high-resolution sensors.

**PROGRAM STATUS:** Based on current programmed FY11 requirements, the ARNG has a total requirement of 36 systems, and currently has one TUAV on hand. Between FY07-11 ARNG units are scheduled to receive 35 Shadow 200 TUAV systems: six in FY07, six in FY08, six in FY09, eight in FY10, and 9 in FY11. Shadow 200 TUAV systems are fully funded. System cost is \$15,200,000 per the HQDA SSO.

**IMPACT OF FUNDING THE CAPABILITY:** Without Shadow 200 Tactical Unmanned Aerial Vehicle funding, the ARNG will be unable to provide maneuver commanders superior battlefield situational awareness, information flow, and adequate Force Protection in urban and conventional tactical environments.

SUBJECT: Shadow 200 Tactical Unmanned Aerial Vehicle (TUAV) APPN: OPA LIN: Z16242 APE: MDEP: FPFF MDEP TITLE: DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Dadey Div: NGB-ARQ-E Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

Tel: 703-607-7076

\$K	FY06	FY07
Validated Requirement	\$547.2M	\$532M
Unvalidated Requirement		
Total Requirement	\$547.2M	\$532M
Funded Amount	\$15.2M	\$91.2M
Total UFR	\$532M	\$440.8M

#### ANALYSIS:

Z16242 (SHADOW 200) System Cost: \$15,200,000 Shadow Fielding Plan UFR:

\$K	FY06	FY07	FY08	FY09	FY10	FY11
Validated Requirement	\$547.2M	\$532M	\$440.8M	\$349.6M	\$258.4M	\$136.8M
Unvalidated Requirement						
Total Requirement	\$547.2M	\$532M	\$440.8M	\$349.6M	\$258.4M	\$136.8M
Funded Amount	\$15.2M	\$91.2M	\$91.2M	\$91.2M	\$121.6M	\$136.8M
Total UFR	\$532M	\$440.8M	\$349.6M	\$258.4M	\$136.8M	\$0

Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically. Next analysis and update will occur in early March 06.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S ENGINEER SYSTEMS

14 October 2005

SUBJECT: M917A1/A2 Heavy Dump Truck FY07 UFR: \$67,000,000 APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): X44403

**DESCRIPTION:** The M917A2 provides primary haul capability in engineer units for earth, rock, aggregate, and construction materials. The M917A2 is used to load, transport, and dump payloads of sand and gravel aggregates, crushed rock, hot paving mixes, earth clay, rubble, and large boulders at engineer construction sites under worldwide climatic conditions in a military environment. This dump truck has a heavy duty steel, 18.5-Ton, 14 cubic yard capacity dump body and is equipped with tandem axles, duel wheels, and rear dump body. The 20-ton dumps are commercial vehicles with minor modifications to meet military use.

**ISSUE JUSTIFICATION:** The Army 20 ton dump truck fleet is over-aged and in critical need of replacement and modernization, with the majority of the older equipment in the Army National Guard (ARNG). The M917A2 replaces the 27 year old F5070 and the 21 year old M917 models on a one-forone basis. In an effort to modernize this fleet and satisfy worldwide mission needs, the new M917 Dump Trucks are needed. The enhanced capabilities provided by the M917 Dump Trucks would enable ARNG Engineer units to better support Army across the full spectrum of operations and support the many state missions that require this type of engineer support.

**PROGRAM STATUS:** The ARNG total requirement is 544 with 212 on hand, zero assets identified for (APS/SBE/TPE), Battle loss minus 2 each, 210 on hand. Un-funded requirement is 334. No programmed fielding after FY05. A total unfunded requirement of \$67,000,000, procurement cost is \$203,000 each.

**IMPACT OF FUNDING THE CAPABILITY:** The ARNG has Engineer Combat Heavy Battalions and Companies, Engineer Support Companies, Combat Support Companies, and Dump Truck companies that require the M917 dump truck. With modularity the Horizontal Construction Companies, Asphalt Companies, Haul Companies, and Quarry Teams are also authorized the M917 dump truck. Without these M917 20-ton dump trucks Army National Guard units will continue to operate with obsolete 20-ton dump trucks incapable of fully supporting unit missions. Additionally, they are very difficult and costly to sustain and repair parts are challenging to acquire.

SUBJECT: M917A2 Dump Truck APPN: OPA APE: MDEP: RF03 MDEP TITLE: Construction Equipment DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Mitchell Div: NGB-ARQ-M Tel: 703-607-7479 Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

\$K	FY06	FY07
Validated Requirement	\$67,000,000	\$67,000,000
Unvalidated Requirement	0	0
Total Requirement	\$67,000,000	\$67,000,000
Funded Amount	0	0
Total UFR	\$67,000,000	\$67,000,000

**ANALYSIS:** The ARNG has not received any indication that they will be programmed after FY05.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S ENGINEER SYSTEMS

21 October 2005

SUBJECT: Engineer Mission Modules (EMMs) FY06 UFR: APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): T40999, S13546, M81382, D17391

**DESCRIPTION:** EMMs consist of dump body modules, mobile concrete mixer modules and bituminous distributor modules. Engineer Mission Module (EMM) components are designed to be used on the Palletized Load System (PLS) M1075 Truck and M1076 Trailer. The modules are mounted on flat racks, similar to those used with the PLS for hauling ammunition and other supplies. Bituminous Distributor (EMM-BD) provides the capability to spread measured amounts of bituminous material for road preparation, repair, and other engineer applications. EMM-BD has a 2800 gallon capacity, and is powered by and operable from the PLS truck. It is transportable but not operable on the PLS trailer. Bitumen spray is computer-controlled and will automatically compensate for variations in speed, and is operated by a single soldier. Concrete Mobile Mixer (EMM-CMM) transports raw concrete materials, mixes concrete as needed, and emplaces the mixed concrete. EMM-CMM is self-powered, can be used on the PLS truck or trailer (mobile mode) or on the ground (standalone mode). Its bins store enough material for five cubic vards of mixed concrete in mobile mode and eight cubic vards in standalone mode. Dump Body (EMM-DB) hauls and spreads engineering construction material such as rocks, gravel, sand, and dirt. With a 12 to 14 cubic yard capacity by volume, 13 ton by weight, it is powered by the PLS truck, and can be operated on the PLS truck or trailer.

**ISSUE JUSTIFICATION:** Equipping the ARNG enables engineers to tailor equipment to particular mission needs through modular components, saving critical transit time and improving distribution efficiency. The EMM will replace legacy equipment that can no longer keep pace with the rapidly changing requirements of the US Army Engineers around the globe.

**PROGRAM STATUS:** The ARNG has a total unfunded EMM equipment requirement of 65 M1075 PLS trucks, 340 M1076 PLS trailers, 304 M6 EMM dump body modules, 14 M4 EMM bituminous distributor modules, and 13 M5 EMM mobile concrete mixer modules.

**IMPACT OF FUNDING THE CAPABILITY:** The Army Engineer's construction truck fleet is well overaged and in critical need of replacement and modernization, with the majority of this equipment belonging to the Army National Guard (ARNG). In an effort to modernize this fleet and satisfy world-wide mission needs, Engineer Mission Modules (EMMs) were developed.

EMM	<u>RQ'D</u>	<u>O/H</u>	PROG	<u>SHORT</u>	<u>COST</u>
PLS TRUCK PLS TRAILER BITUMINOUS	122 SEE MBRC	57	0	65	\$276K
SPREADER	38	24	0	14	\$85K
MODULE M6 DUMP	39 154	26 112	0 42	13 0	\$117K \$35K

SUBJECT: Engineer Mission Modules (EMMs) APPN: OPA LIN: T40999, T93761, S13546, M81382, D17391 APE: MDEP: RF03 MDEP TITLE: Construction Equipment DAMO-ZR 1-N List Priority Number:

**Division Priority:** 

Functional POC: MAJ Shane Elkins / NGB-ARF-S / 703-607-7824 Approval Authority: COL Rod Dixon / NGB-ARF/ 703-607-7800

	FY07
Validated Requirement	\$74 M
Unvalidated Requirement	0
Total Requirement	\$74M
Funded Amount	\$37 M
Total UFR	\$37 M

## ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S ENGINEER SYSTEMS

# 21 October 2005

SUBJECT: Bridges, Common Bridge Transporter (CBTs) and System Enablers (PLS Trailer, Bridge Adapter Pallet (BAP), and Improved Boat Cradle (IBC))
FY06 UFR:
APPN: OPA
AREA OF INTEREST: MODERNIZATION
LIN(S): T91308, T93761, P78313, C33925, B26007, K97376, R10527

**DESCRIPTION:** The new bridge and bridge transporter systems were developed in an effort to upgrade the current old and undersized bridge transporters in order to handle the increased weight of bridge bays and associated bridging equipment. The HEMTT-based Common Bridge Transporter (CBT) vehicle was developed, together with a load handling system, the PLS M1076 trailer, Bridge Adapter Pallets (BAP) and Improve Boat Cradles (IRB) to provide a more capable, flexible, and common truck to transport and deploy both dry and float bridges and bridge erection boats. This 8x8 truck features a 445-horsepower electronic engine and five-speed automatic transmission. It can ford four feet of water, climb 60-percent grades and can be transported by C-130 aircraft wherever the mission demands

**ISSUE JUSTIFICATION:** The U.S. Army National Guard (ARNG) is now responsible for ten (10) MRBC companies, giving the ARNG a key role in Engineer bridge construction operations. Modernization of the MRBCs is essential to keep the ARNG with Total Force requirements. Without funding for the CBTs, we cannot activate or convert six of the ten MRBCs. This will cause a severe degradation in the ARNG's required support to the Army Warfighting requirements, as well as support to the States in response to domestic missions such as annual river floods.

**PROGRAM STATUS:** The ARNG has a total unfunded CBT equipment requirement of 107 CBTs (T91308), 340 M1076 PLS trailers (T93761), 254 BAPs (P78313), 84 IBCs (C33925) and 24 Dry Support Bridges (B26007).

MBRC	<u>RQ'D</u>	<u>O/H</u>	PROG	<u>SHORT</u>	<u>COST</u>
СВТ	564	233	224	107	\$321K
PLS	622	282	0	340	\$47K
BAP	420	166	0	254	\$37K
IBC	140	56	0	84	\$22K
DSB	40	0	16	24	\$5.9M

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding this capability will enable the ARNG to convert the MRBC units with modern equipment that can keep pace with the severely stretched bridging requirements. The MRBC is one of the most utilized units in the Engineer inventory and is desperate need of modernization.

SUBJECT: Bridges, Common Bridge Transporter (CBTs) and System Enablers (PLS Trailer, Bridge Adapter Pallet (BAP), and Improved Boat Cradle (IBC)) APPN: OPA LIN: T91308, T93761, P78313, C33925, B26007, K97376, R10527 APE: MDEP: RF01 MDEP: RF01 MDEP TITLE: Tactical Bridging DAMO-ZR 1-N List Priority Number:

**Division Priority:** 

Functional POC: MAJ Shane Elkins / NGB-ARF-S / 703-607-7824 Approval Authority: COL Rod Dixon / NGB-ARF/ 703-607-7800

	FY07
Validated Requirement	\$546M
Unvalidated Requirement	0
Total Requirement	\$546 M
Funded Amount	\$142M
Total UFR	\$404 M

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

20 October 2005

SUBJECT: Tactical Electric Power (Medium Sets 5-60kw) and (Small Sets 3kw)
FY07 UFR: Medium Sets 63M Small Sets 59M
APPN: OPA3
AREA OF INTEREST: MODERNIZATION
LIN(S): P28083, P28151, P42262, P42330, P42614, P42126, P42194, P42534, G42238, G42170, G53403, G11966, G74711, G12170, G74575, G12034, G12102, G74779, G12238, G74643, G18052, G18358, G74847, G78203, G78374, G53778, G35851, G35919, G78306, G17460

**DESCRIPTION:** The medium set effort includes the following Tactical Quiet Generator (TQG) sets: 5kw (60Hz & 400Hz), 10kw (60Hz & 400Hz), 15kw (60Hz & 400Hz), 30kw (60Hz & 400Hz) and 60kw (60Hz & 400Hz). Small set includes 3kw (60hz).

The small set effort includes the following Tactical Quiet Generator (TQG) sets: 3kw 60Hz, AC, Skid-mounted; 3kw, 400Hz, AC, skid-mounted; power plant, AN/MJQ-42, two 3kw 60Hz, AC, M116A3 Trailer Mounted with rack assembly, stowage, and ancillary equipment; and power plant, AN/MJQ-43, two 3kw, 60Hz, AC, M116A3 Trailer-Mounted with ancillary equipment.

**ISSUE JUSTIFICATION:** These sets will replace corresponding MIL-STD units which are over aged (over 18 years old), gasoline and diesel engine driven with modernized assets. The new sets increase safety and survivability by reducing operating noise levels, reducing weight, providing high altitude electromagnetic pulse protection and increasing infrared signature suppression. These new modernized sets will support various Missile/Air Defense Systems, Tactical Operations Centers, numerous communication and combat systems.

**PROGRAM STATUS:** 5-60kw Generator information listed below is based on Current programmed ARNG FY11 requirements 9,422 5-60kw generators currently 2,737 on hand, minus 300 other (APS/TPE/SBE/) leaves 2437 on hand proposed fielding numbers for FY06 2,212 FY07 2,169, FY08 1,669, FY09 1,531 no funding in FY10 or FY11 per AEC3.1 leaving a zero requirement for 5-60kw generators. (Cost used average \$24,400).

3kw Generator information listed below is based on Current programmed ARNG FY11 requirements 7,057 3kw generators currently 984 on hand, minus 135 other (APS/TPE/SBE) leaves 849 on hand proposed fielding numbers for FY06 zero, FY07 zero, FY08 1,530, FY09 1,531 no funding in FY10 or FY11 per AEC3.1 leaving a 3,147 requirement for 3kw generators. (Cost used average \$9,500).

**IMPACT OF FUNDING THE CAPABILITY:** Fielding the sets would allow the ARNG to supply electrical power as needed to fulfill federal and state mission requirements. It would also provide one of the most considered necessary commodities during a natural disaster or state emergency.

 SUBJECT: Tactical Electric Power (5-60kw Medium Set Generators) (3kw Small Sets)

 APPN: OPA3
 APE:

 MDEP: RJC9
 MDEP TITLE: Tactical Electric Power

 DAMO-ZR 1-N List Priority Number:
 Division Priority:

 Division Priority:
 Functional POC: Debbie Wasner/NGB-ARQ/ 703-607-7834

 Approval Authority: COL Moore /NGB-ARQ/ 703-607-7804

Medium Sets 5-60kw Generators

\$K	FY06	FY07
Validated Requirement	\$	\$
	170,434,000.00	116,461,200.00
Unvalidated Requirement		
Total Requirement	\$	\$
	170,434,000.00	116,461,200.00
Funded Amount	53,972,800.00	52,923,600.00
Total UFR	\$	
	116,461,200.00	63,537,600.00

Small Sets 3kw Generators

\$K	FY06	FY07
Validated Requirement	58,976,000.00	\$ 58,976,000.00
Unvalidated Requirement	\$	
Total Requirement	\$	
-	58,976,000.00	58,976,000.00
Funded Amount	0	\$ 0
Total UFR	58,976,000.00	58,976,000.00

ANALYSIS:

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

25 October 2005

SUBJECT: Tactical Water Purification System (TWPS) 1500 GPH FY06: \$2.8M APPN: 2 AREA OF INTEREST: MODERNIZATION LIN(S): Z97761

**DESCRIPTION**: The TWPS is capable of supplying 1500 gallons per hour (GPH) of potable drinking water for Unit of Employment (UE) and Unit of Action (UA) ground units in remote areas. Extremely mobile, the TWPS is flat rack mounted allowing it greater tactical agility in support of ground, amphibious, air assault, and airborne forces. The system can purify water in all climates and in nuclear, biological, and chemical (NBC) conditions and is easily transported on a HEMTT LHS, PLS. CH-47F, C-130.

**ISSUE JUSTIFICATION**: The Army National Guard requires 95 TWPS. The requirement covers the Infantry UA's, Aviation UA's Fires UA's, SBCT, and the water companies. The first modular water company begins conversion in FY06 and the last is programmed for FY11.

**PROGRAM STATUS:** Programmed dollars fund water purification systems for fielding to 6 UEx, 3 SUAs, and 3 SBCTs. Programmed OPA and RDTE support the Transformation Campaign Plan and the system has an approved ORD. POM 06- 5 TWPS funding was at minimum production rate which equates to a critical requirement of 1 TWPS per month (enough to keep the production line open). The program is funded at 100% of critical requirements (Qty = 12, POM = 5.7M). There is a supplemental request by the active component that totals \$8.6M to buy 20 additional TWPS to support modularity.

**IMPACT OF FUNDING THE CAPABILITY:** The TWPS provides purified and potable water for the individual soldier and unit sustainment. Tactical water purifiers provide quality water support to sustain the war fighters, civilian agencies, or host-nations for disaster relief, humanitarian efforts, and peace keeping missions. The TWPS reduces the logistical footprint by replacing existing systems and has significant manpower reductions. Additionally, it reduces the transportation requirement for bottled water and reduces traffic on main supply routes. At present, the Army National Guard depends on 20 year old, less capable and reliable technology to provide clean drinking water to our soldiers. The system supports the Army's demand for water resources in the Joint Operating Area (JOA).

SUBJECT: Tactical Water Purification System (TWPS) 1500 GPH APPN: 2 APE: R05200 LIN: Z97761 MDEP: RJL7 MDEP TITLE: liquid log DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: MAJ Jenkins Div: NGB-ARF-L Tel: 703-607-7829 Approval Authority: COL Dixon / NGB-ARF / 703-607-7800

\*Note: Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically.

Division Priority: Functional POC: MAJ Jenkins Div: NGB-ARF-L Tel: 703-607-7829 Approval Authority: COL Dixon / NGB-ARF / 703-607-7800

	FYO6	FY08	FY09
Validated Requirement	2.8K	5.8K	4.6K
Un validated Requirement	0	0	0
Total Requirement	5 TWPS	10 TWPS	8 TWPS
Funded Amount	2.8K	5.8K	4.6K
Total UFR			

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

4 November 2005

SUBJECT: Night Vision Goggles (AN/PVS-7/14) FY 07 UFR: \$498M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): N05482 (PVS-7), M79678 (PVS-14)

**DESCRIPTION:** Lightweight, binocular goggle using a single passive third generation image intensifier tube. The goggle is used in combat, combat support, and combat service support operations. Night vision goggles enable soldiers to operate more effectively and safely during night operations. The ARNG is short NVGs for both air and ground units. The current inventory represents only 32 percent of the ARNG requirement for NVG. The shortages adversely impact a unit's ability to train for and conduct night operations. The older PVS-5 NVGs used as substitutes are inadequate and limit units' capability to maneuver under the cover of darkness with the same agility.

**PROGRAM STATUS:** The ARNG total requirement is 225,183 with 71,036 on hand. CECOM lists a cost per unit of \$4,000. There are 4,257 assets identified as APS-5, SBE CAT 1-4, TPE, or battle loss. Thus, the delta of 158,404 equals a total unfunded requirement of \$633,616,000. There are 6,153 each (PVS 7's) programmed for FY06 and 27,692 each (PVS 7's) programmed for FY07. Overall, the shortage after FY07 for PVS 7/14's is 124,559. There are zero PVS-14's programmed for FY06-07. The Army requested approximately \$111M for NVG's for the Reserve Components in the FY06 Supplemental for transformation. The exact requirements are still only estimates at this time.

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the ARNG to operate effectively during night operations. The ability to operate effectively and safely at night is a critical component of how our Army fights today. This capability will allow all our units the ability to deploy and inter-operate with the Active Component during times of national crisis and/or need.

SUBJECT: Night Vision Goggles (AN/PVS-14)LIN: M79678/N50482APPN: OPAAPE:MDEP: FPDEMDEP TITLE:DAMO-ZR 1-N List Priority Number: NoneDivision Priority:Functional POC: CPT Jennifer Mitchell Div: ARQ-M Tel: 703-607-7479Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

	FY06	FY07
Validated Requirement	\$633,616,000	\$609,004,000
Unvalidated Requirement		
Total Requirement	\$633,616,000	\$609,004,000
Funded Amount	\$24,612,000	\$110,768,000
Total UFR	\$609,004,000	\$498,236,000

**ANALYSIS:** NVG Program Manager, states there is no plan to cascade the Army National Guard older versions of the AN/PVS-7s when the AC receives newer versions of the AN/PVS-7s (or new generation NVGs). They anticipate those older systems will be fielded to other AC units.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S

4 November 2005

SUBJECT: AN/PAS-13 Thermal Crew Served Weapon Sights FY 07 UFR: \$839M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): S60356 (L), S90535 (M), S90603 (H)

**DESCRIPTION:** The AN/PAS-13 is a family of 3 Thermal Weapon Sights (TWS). They are lightweight, battery or external power operated, second-generation, forward looking infrared (FLIR) imaging devices designed for use as small arms sights/scopes. Thermal sights provide enhanced target acquisition and first round hit capability over the light intensifying PVS-4/5 systems currently fielded. The 3 versions are designed for hand held use and/or mounting on individual and crew-served weapons. They operate in both daylight and darkness, through obscuration, at various effective ranges. They have a standard video output used for training and image transfer to a monitor for remote viewing. Thermal imaging allows units to continue day or night operations during degraded visual conditions caused by smoke, fog or dust.

AN/PAS-13	(V)1 (Light)	(V)2 (Medium)	(V)3 (Heavy)
Range	550 m	1100 m	2000 m
Weight	2.7 lbs	4.7 lbs	5.3 lbs
Supported Weapons	M16, M4 Carbine	M240, M246, M60	M2 .50 Cal, MK-19
ARNG Authorized*	5918	18,518	19,808
Item Cost (approx)	\$12 k	\$19 k	\$21 k

\*Per USAFMSA RDD data base.

**ISSUE JUSTIFICATION:** These thermal sights greatly increase soldier effectiveness, survivability and over-match in adverse visibility conditions both day and night. They provide such an improved capability over the PVS-4 & 5 that they are among the 6 most requested items by Combat Commanders in Operation Iraqi Freedom. The need is compounded by the fact that soldiers are being employed largely in HMMWV's or dismounted rather than from the tracked vehicles which mount the majority of the Army's existing thermal systems.

**PROGRAM STATUS:** The Army National Guard total requirement is 51,551 with 1,938 on hand. There are 122 assets identified as APS-5, SBE CAT 1-4, TPE, or battle loss. There are zero AN/PAS 13's programmed for FY06-07. The average procurement cost of the AN/PAS-13 is \$17,000. Thus, the delta of 49,613 equals a total unfunded requirement of \$839,273,000.

**IMPACT OF FUNDING THE CAPABILITY:** While funding the entire \$825.4M ARNG authorization may not be realistic at this time, units deploying to arid and urban combat zones have a critical need for thermal sensors and sights. The AN/PAS-13 has the potential to save lives and shorten the conflict making them a top priority for Commanders in theater. Thermal sights of the 3 versions should be immediately procured in sufficient numbers to equip every patrol and dismounted post. Additional systems should be programmed for future general fielding as the technology matures.

SUBJECT: AN/PAS-13 Thermal Crew Served Weapon Sights (V)1-3 LIN: V1 S60356, V2 S90535, V3 90603 APPN: OPA APE: MDEP: FPFE MDEP TITLE: DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Jennifer Mitchell Div: ARQ-M Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

	FY06	FY07
Validated Requirement	\$839,273,000	\$839,273,000
Unvalidated Requirement		
Total Requirement	\$839,273,000	\$839,273,000
Funded Amount	\$0	\$0
Total UFR	\$839,273,000	\$839,273,000

# ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>SMALL ARMS</u>

19 October 2005

SUBJECT: M4 Carbine FY07 UFR: \$37.26M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): R97234

**DESCRIPTION:** The M4 Carbine is an M16 based 5.56mm lightweight, gas operated, magazine fed, selective fire, rifle. Equipped with a shorter barrel, collapsible stock and accessory rails, it provides soldiers operating in close quarters with improved handling and the capability to rapidly and accurately engage targets at extended range, day or night.

**ISSUE JUSTIFICATION:** One of the ARNG central readiness requirements is individual weapons modernization. The ARNG still has several thousand obsolete M16A1's in its inventory. Obtaining ammunition for these rifles has become increasingly difficult and they have been designated as non-deployable by the Army.

The M16A2 and M16A4 have also been fielded to replace the first generation rifle but are no longer in production. Both these earlier replacements for the A1 use the same heavier ammunition as the M4 Carbine. The M4 is issued to units and personnel with a requirement for an effective but compact, highly portable, sling carried "hands free" weapon. It is ideally suited for use in close quarters and/or by soldiers who operate from vehicles with limited stowage space. The M4 can mount the optics and lighting components of the Modular Weapons System (MWS) which gives it significant additional capabilities. It has become the weapon of choice for the Global War on Terror and homeland security. Any M4 Carbines purchased for priority units already modernized with M16A2/A4's will cascade those weapons to replace the much older A1's in other ARNG units. Though the XM-8 Modular Assault Weapon System, if procured, is expected to cost about the same as the M-4, fielding to the Active Army is unlikely to begin before FY-08.

**PROGRAM STATUS:** The current ARNG requirement for M4 Carbines is 132,362 rifles at a cost of \$1k each. The decision to "pure-fleet" the Modular BCT's, based on its success in combat operations, has significantly increased the required quantity. The ARNG has On-hand 39,020 M4 Carbine's, with modernization fielding suspended in order to push the entire weapons production to units either deploying or converting to the Modular Force Design. 56,081 Carbine's are programmed for the ARNG through FY-11, leaving a shortfall of 37,261 rifles. Excess production capacity is available after FY-05 and approximately 1000 weapons per month could be delivered on a new contract.

**IMPACT OF FUNDING THE CAPABILITY:** Funding this program will allow the Army National Guard to deploy and operate with maximum effectiveness on all fronts of the Global war on Terror. It contributes to soldiers self defense capability and, with the MWS components, significantly increases the soldiers ability to rapidly engage targets in all environments. It is essential that the M16A1's be replaced as soon as possible. M16A2 and A4 fielding has ended but some operational A2's are being cascaded to the ARNG as M4's are fielded to the Active Army Modular Forces. Failure to fund M4 fielding reduces combat effectiveness and increases risk to soldiers operating in confined spaces. Cost avoidance for predeployment cross-level shipping and re-qualification off-sets much of the \$1k unit price.

SUBJECT: M4 Carbine APPN: OPA APE: MDEP: MDEP TITLE: DAMO-ZR 1-N List Priority Number: None Division Priority: Functional POC: LTC Paul Ebhardt Div: NGB-ARQ-E Tel: 703-607-7849 Approval Authority: (pending) COL Moore / NGB-ARQ / 703-607-7804

	FY06-11 (Qty)	Cost (\$M)
Requirement	132,362	132.36
On-Hand	39,020	39.02
Programmed	56,081	56.08
Un-funded	37,261	37.26
Total UFR		37.26

# ANALYSIS:

\*Note: Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically. Next analysis and update will occur in early January 06.

# ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>SMALL ARMS</u>

19 October 2005

SUBJECT: M240B Machine Gun FY07 UFR: \$0.0M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): M92841

**DESCRIPTION:** The M240B 7.62mm Machine Gun is a very reliable, fully-automatic, gas-operated, beltfed, crew-served weapon. The M240 family of machine guns replaces the 40 year old M-60 design. The M240B is the US Infantry version, equipped with a folding bi-pod, pintle mount, forestock and accessory rails to mount optics and target illuminators. The pintle mount allows tri-pod and vehicle mounting. The M240C coaxial version is used in all US armored vehicles. The M240H spade grip version is being fielded to Army utility and cargo helicopter units. The M240G is in use by the US Marines. At over 50,000 MRBF (mean rounds between failure) the M240 is widely accepted as the most reliable machine gun in the world. The M240B provides the accurate and effective sustained rate of fire required to suppress and destroy enemy soft targets.

**ISSUE JUSTIFICATION:** One of the ARNG critical readiness requirements is small arms and crewserved weapons modernization. The ARNG still has in its inventory 3,753 M-60's which are no longer supportable in the combat theaters. The M240B is issued to units requiring the capability to deliver high rates of suppressive fire. It has become the machine gun of choice for the Global War on Terror.

**PROGRAM STATUS:** The current ARNG requirement for the M240B is 5,649 at a cost of \$9k each. However this is expected to increase significantly with the Modular redesign of Combat Support (CS) and Combat Service Support (CSS) units incorporating additional convoy self defense capability. On hand are 2,383 M240B's, with 1743 of those currently deployed. The currently documented shortage of 3,266, plus the estimated additional requirement for the Modular CS & CSS units is programmed to be filled by the 7,000 M240B's programmed for the ARNG between FY-06 and 11.

**IMPACT OF FUNDING THE CAPABILITY:** Funding the M240B will give National Guard Soldiers the same capability as Active Army Forces to deploy and operate with maximum effectiveness and accuracy on all fronts. It greatly contributes to their ability to rapidly defend themselves with precise, high volume, suppressive fire in adverse conditions. It is essential that the M-60's be replaced as soon as possible. Failure to fund the M240B will increase soldier risk and the costs of pre-deployment cross-leveling and retraining.

SUBJECT: M240B Machine Gun LIN: R92841 APPN: OPA APE: MDEP: MDEP TITLE: DAMO-ZR 1-N List Priority Number: None Division Priority: Functional POC: LTC Paul Ebhardt Div: NGB-ARQQ-E Tel: 703-607-7849 Approval Authority: (pending) COL Moore / NGB-ARQ / 703-607-7804

	FY05-09	Cost (\$M)
Requirement	5,649	50.84
On-Hand	2,383	21.45
Funded Program Distribution	7,000	63.0
Un-funded	0	0
Total UFR	0	0

# ANALYSIS:

\*Note: Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically. Next analysis and update will occur in early January 06.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>SMALL ARMS</u>

07 November 2005

SUBJECT: M249 Squad Automatic Weapon/Light Machine Gun (SAW/LMG) FY 07 UFR: 11,199,000.00 APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): M09009, M39263 (L)

**DESCRIPTION:** The 5.56MM M249 Squad Automatic Weapon and Light Machine Gun (SAW)/(LMG) is a fully-automatic, gas-operated, magazine or disintegrating metallic link-belt fed, individually portable weapon. The SAW is an Infantry Weapon used in 2 roles, Automatic Rifle (AR) and Light Machine Gun (LMG). It can be fired from the shoulder, hand-held or from the integral bipod. It is equipped with rails to mount optics and target illuminators and has an optional short barrel for close-quarters operations. The M249 SAW provides the squad with the accurate, effective and sustained fire required to suppress and destroy enemy soft targets.

**ISSUE JUSTIFICATION:** One of the ARNG critical readiness requirements is individual weapons modernization. The ARNG has an inventory of 11,000 M16A1's serving as substitutes for the M249 in the Automatic-Rifle role. Also, still in the ARNG inventory are 3,753 M60 Machine Guns substituting in the Light Machine Gun role. These weapons are obsolete and obtaining ammunition for the M16A1 rifle has become increasingly difficult. The M249 is issued to units requiring the capability to deliver high rates of suppressive fire. It has become the automatic rifle of choice for the Global War on Terror and homeland security.

**PROGRAM STATUS:** The RDD currently validates an ARNG requirement for 33,409 M249's at a cost of \$3k each. On hand are 24,374 M249's in both roles, most of which are deployed. Overall shortage is 9035. Programming FY06 1,524, FY07 3,778, FY08 1,889, FY09 3,778, FY10 2,519. ARNG will no longer have Un-funded requirement after FY10 if expected funding is received.

**IMPACT OF FUNDING THE CAPABILITY:** Funding the M249 SAW will give National Guard Soldiers the same capability as Active Army Forces to deploy and operate with maximum effectiveness on all fronts of the Global war on Terror. It contributes to their ability to rapidly and effectively defend themselves with high volume, suppressive fire in adverse conditions. It is essential that the M16A1's be replaced as soon as possible. The M16A2, A4 and M4 fieldings are partially funded, but alone will not displace all the A1's and M-60's. Failure to fund the M249 fielding will increase risk to the soldiers and costs of pre-deployment cross-leveling, which also degrades the ARNG's ability to train for and execute its federal and state missions.

SUBJECT: M249 SAW/LMG LIN: M09009, M39263 APPN: OPA APE: MDEP: MDEP TITLE: DAMO-ZR 1-N List Priority Number: None Division Priority: Functional POC: Rusty Rife Div: NGB-ARF-M Tel: 703-607-5670 Approval Authority: (pending) COL Moore / NGB-ARQ / 703-607-7804

	FY05	FY06	
Validated Requirements Unvalidated Requirements	27,105,000.00	22,533,000.00	
Total Requirements	27,105,000.00	22,533,000.00	
Funded Amount	4,572,000.00	11,334,000.00	
Total UFR	22,533,000.00	11,199,000.00	
			+

ANALYSIS:

## ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>SMALL ARMS</u>

07 November 2005

SUBJECT: MK-19 Grenade Machine Gun FY 07 UFR: \$40M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): M92362

**DESCRIPTION:** The MK-19 (Mod 3) Automatic Grenade Launcher/Machine Gun is a self-powered, aircooled, belt-fed, blowback operated, crew-served weapon. The MK-19 replaces or augments selected M2 .50 caliber Machine Guns throughout the Army. It is also in use by the US Navy, Marines and Air Force. The MK-19 is mounted on HMMWV's, trucks and M88 Recovery Vehicles to deliver intense suppressive fire against enemy personnel and lightly armored vehicles or bunkers.

**ISSUE JUSTIFICATION:** One of the ARNG critical readiness requirements is small arms and crewserved weapons modernization. As the primary suppressive weapon for CS and CSS any shortage of these weapons is critical.

**PROGRAM STATUS:** The RDD currently validates an ARNG requirement for 9,862 M249's at a cost of \$26,171K each. On hand are 8,332 MK-19's, the majority of which are deployed. Overall shortage of 1530 MK-19s. Fielding to fill the previous ARNG requirement was completed in 2003 and the new increased requirement has not yet been programmed. The only alternative weapon systems are the XM-307/312 Advanced Crew Served (Air-burst) Weapons which are still under development with no projected fielding date.

**IMPACT OF FUNDING THE CAPABILITY:** Funding the MK-19 will give National Guard Soldiers the same capability as Active Army Forces to deploy and operate with maximum effectiveness on all fronts of the Global war on Terror. It greatly contributes to their ability to rapidly defend themselves with high volume, suppressive fire in adverse conditions. Failure to fund the MK-19 will increase soldier risk and the costs of pre-deployment cross-leveling, which also degrades the ARNG's ability to train for and execute both its federal and state missions.

SUBJECT: MK-19 Machine Gun LIN: M92362 APPN: OPA APE: MDEP: MDEP TITLE: DAMO-ZR 1-N List Priority Number: None

\$M	FY06	FY07
Validated Requirement	40,041,630.00	40,041,630.00
Unvalidated Requirement		
Total Requirement	40,041,630.00	40,041,630.00
Funded Amount	0	0
Total UFR	40,041,630.00	40,041,630.00

**Division Priority:** 

Functional POC: Rusty Rife Div: NGB-ARF-M Tel: 703-607-5670 Approval Authority: (pending) COL Moore / NGB-ARF / 703-607-7804

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S CHEMICAL ALARM/DETECTOR/MONITOR

14 October 2005

SUBJECT: Automatic Chemical Agent Alarm - M22 ACADA FY07 UFR: \$165M APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): A33020

**DESCRIPTION:** An advanced point-sampling, chemical-agent alarm system. The ACADA is capable of detecting, warning, and identifying standard blister and nerve agent simultaneously. It is man-portable and operates independently after system start-up. The ACADA replaces the M8A1 Alarm as an automatic point detector and augments the Improved Chemical Agent Monitor as a survey instrument.

**ISSUE JUSTIFICATION:** One of the top 25 ARNG equipping priorities is to field units with a capable and up-to-date chemical alarm. The ACADA is capable of detecting more than one chemical agent simultaneously and is an excellent detector for Homeland Security missions. If not funded the ARNG will have to wait until the outdated M8 chemical Alarm, which is no longer in production are cascaded from the AC. The M22 ACADA will affect the majority of ARNG Combat, Combat Support, and Combat Service Support Units. The ACADA provides early warning against multiple threats over a broad spectrum in both combat and homeland defense missions.

**PROGRAM STATUS:** The Army National Guard has a total requirement of 19,247 M22 ACADA's with 1,275 on hand. The procurement cost is \$10,000 each. There are zero assets identified as APS-5 and 189 each identified as SBE CAT 1-4. Battle loss is calculated at 3 each (1% of deployed assets). Thus, the delta of 18,164 (1,275 on hand minus 189 for SBE minus 3 for battle loss) equals a total unfunded requirement of \$164,620,000.

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard a better defense against a potential Chemical attack. The ACADA provides early warning of a chemical attack and will save lives. At present the ARNG depends upon the cascading of the outdated M8 alarm to provide early warning of chemical attacks. The capability of chemical attack early warning will allow ARNG units the ability to deploy and inter-operate with the active component, as well as conduct Homeland Security missions.

SUBJECT: ACADA APPN: OPA APE: MDEP: MDEP TITLE: ACADA DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Mitchell Div: ARQ-M Tel: 703-607-7479 Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

	FY06	FY07
Validated Requirement	\$181,640,000	\$169,720,000
Unvalidated Requirement	0	0
Total Requirement	\$181,640,000	\$169,720,000
Funded Amount	11,920,000	5,100,000
Total UFR	\$169,720,000	\$164,620,000

**ANALYSIS:** The M22 ACADA allows for early warning against a chemical attack in both combat and homeland defense missions. This equates to a requirement of \$161 million dollars.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S CHEMICAL ALARM/DETECTOR/MONITOR

14 October 2005

SUBJECT: IMPROVED CHEMICAL AGENT MONITOR (ICAM) FY06 UFR: \$42 APPN: OPA AREA OF INTEREST: MODERNIZATION LIN(S): C05701

**DESCRIPTION:** The ICAM is a hand held, soldier operated post attack device for monitoring chemical agent contamination on personnel and equipment. The ICAM detects vapors of chemical agents by sensing molecular ions of specific mobilities (time of flight) and uses timing and microprocessor techniques to reject interferences. The monitor detects and discriminates between vapors of nerve and mustard agents.

**ISSUE JUSTIFICATION:** ARNG top 25 equipping priorities are to improve unit capabilities with up to date chemical systems. The Improved Chemical Agent Monitor is an improvement over the currently fielded CAM. The modular design is less expensive to repair, requires less maintenance, and eliminates depot level repair now required for the CAM. The ICAM also starts up faster after prolonged storage and is more reliable.

**PROGRAM STATUS:** The Army National Guard has a total requirement of 11,881 ICAM's with 2,734 on hand. There are zero assets identified in APS-5, 19 identified in TPE, and 14 identified in SBE CAT 1-4. Battle loss is calculated at 12 each (1% of deployed assets). Thus, the delta of 5,613 (11,881 required, minus 2734 on hand, minus 19 in TPE, minus 14 in SBE, minus 12 for battle loss, minus 1500 each programmed in FY06, and 2079 programmed in FY07) equal a total unfunded requirement of \$42,097,500. The procurement cost is \$7,500 each.

**IMPACT OF FUNDING THE CAPABILITY:** Funding towards this system will provide Army National Guard an improved Chemical hand held monitoring devise for detection against Chemical attack. Currently the ARNG capability is the older CAM model; the ICAM would enhance detection capabilities. This capability would provide chemical detection for ARNG units to deploy and inter-operate with Active Components units as well as proved support for Homeland security missions.

SUBJECT: ICAM APPN: OPA APE: MDEP: MDEP TITLE: DAMO-ZR 1-N List Priority Number: Division Priority: Functional POC: CPT Mitchell Div: ARQ-M Tel: 703-607-7479 Approval Authority: COL Moore / NGB-ARQ / 703-607-7804

	FY06	FY07
Validated Requirement	\$68,940,000	\$57,690,000
Unvalidated Requirement	0	0
Total Requirement	\$68,940,000	\$57,690,000
Funded Amount	\$11,250,000	\$15,592,500
Total UFR	\$57,690,000	\$42,097,500

**ANALYSIS:** The ICAM provides a means of quickly locating the presence or absence of nerve- and mustard-agent contamination on personnel and equipment in both combat and homeland defense missions. This equates to a requirement of \$42 million dollars.

## ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>STAMIS</u>

24 January 2006

SUBJECT: Property Book Unit Supply Enhanced (PBUSE)) FY 07 UFR: \$M APPN: AREA OF INTEREST: MODERNIZATION LIN(S): Z39441, Z39509

**DESCRIPTION:** PBUSE is the Army's web-based, state-of-the art, Combat Service Support property accountability system. System features provide Standard Property Book System-Redesign (SPBS-R) and Unit Level Supply System-S4 (ULLS-S4) functionality plus a seamless, Federal Financial Management Improvement Act (FFMIA)/Chief Financial Officer (CFO) compliant, data access by permission control system for both garrison and tactical environments. When tactical requirements dictate and direct connection to the web is not possible, the system operates in a disconnected stand-alone mode. Upon completion of a stand-alone tactical requirement, the system is reconnected to the web for resynchronization of the user's data to the central database. Business Process Reengineering (BPR) provides major improvements to readiness in addition to timely and accurate information flow. Improvements to simplify existing capabilities, and address the "any time, any place" data access needs for property accountability users.

**ISSUE JUSTIFICATION:** PBUSE reduces the footprint and infrastructure requirements by consolidating two baselines into one. The system functionality provides many efficiencies for the logistics community. For the commander, it provides a real time view of assets and allows the commander to access the systems for queries without having to depend on the PBO to gather, prepare and present the information. It also provides real time total asset visibility throughout all levels of Army management, automatic LOGTAADS updates, elimination of UIT reporting through automatic serial number tracking, Automated catalog changes, CFO compliance for MTOE units and Unit Transfer/Task Force/Split Operations. PBUSE is a property accountability systems modernization initiative which complies with the Chief of Staff of the Army's "Good Enough" guidance which allows PBUSE to act as a bridge between current functionality and the Enterprise Resource Planning (ERP) solution.

**PROGRAM STATUS**: PBUSE has fielded 374 of the 378 Authorized Property Books (PBUSE v2) and 1865 of the 3560 Authorized Unit Supply (PBUSE v1) systems authorized in the National Guard. As of today the completion for fielding of PBUSE is schedule for Sep 07. The fielding plan for converting Defense Property Accountability Program (DPAS) accounts has not been finalized.

**IMPACT OF FUNDING THE CAPABILITY:** Fully funding TDY for PBUSE training will ensure that the Army National Guard is fully trained and equipped with the latest property accounting technology. The PBUSE system will align the Guard with the rest of the components of the Army for asset visibility and redistribution. With the pending conversion of over 400 DPAS accounts full funding of PBUSE is vital so all property accounting systems are on one database.

SUBJECT: Property Book Unit Supply Enhanced (PBUSE)APPN:APE:MDEP: MPTIMDEP TITLE: Single Army Logistics Enterprise (SALE)DAMO-ZR 1-N List Priority Number:Division Priority:Functional POC:CW3 James RootsDiv: ARLTel:703-607-7815Approval Authority:

**ANALYSIS:** PBUSE enables the ARNG to see all states and territories MTOE assts in real time and provides the ability to account for, direct, redirect assets as mission dictates in a matter of minutes instead of days as with previous STAMIS systems. PBUSE is necessary for interoperability with the Army and is a key system to support ARNG operations from the GWT to HLS missions.

#### ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>STAMIS</u>

January 2006

SUBJECT: Standard Army Maintenance System (SAMS) And Unit Level Logistics System – Ground (ULLS-G) FY 07 UFR: \$M APPN: AREA OF INTEREST: MODERNIZATION LIN(S): C28078, C78759, C18718, C18446

**DESCRIPTION:** SAMS is an automated maintenance management system. SAMS-1 is used at the direct support (DS) Maintenance Company found in the separate brigade, division, corps, and echelons above corps and the general support (GS) Maintenance Company at echelons above corps. The system automates work order registration and document registers. It automates inventory control and reorder of shop and bench stock as well as automating work order parts and requisitioning. It produces preformatted and ad hoc reports and allows extensive on line inquiry. SAMS-2 is used at the main support battalion (MSB), the forward support battalion (FSB) in the division, and the materiel officer of functional maintenance battalions and support groups in the corps and echelons above corps (EAC). It is also used at the material management center (MMC) and in the division support command (DISCOM), corps support command (COSCOM), and the theater Army area command (TAACOM). SAMS-2 is used by the field commands to collect and store equipment performance and maintenance operations data. This is used to determine guidance to be given to their subordinate maintenance units.

**ISSUE JUSTIFICATION:** Maintenance Transformation changes the doctrine from four-level maintenance to a two level maintenance (TLM) process. TLM consolidates the Organizational and Direct Support Level into Field Maintenance that has a direct impact on the supporting automation systems (ULLS-G and SAMS-1/2). Today's units need to be able to use both systems without switching from one IT hardware platform to the other. Units are required to deploy quickly and set up operations ASAP. Having both ULLSG and SAMS applications on a laptop/notebook system will allow for quick unit movement and setup. Transferring to a single maintenance support system requires Standard Army Maintenance System - Enhanced (SAMS-E). SAMS-E is a maintenance systems modernization initiative which complies with the Chief of Staff of the Army's "Good Enough" guidance which allows SAMS-E to act as a bridge between current functionality and the Enterprise Resource Planning (ERP) solution.

**PROGRAM STATUS**: PM ALIS has been given authority to field SAMS-E Army-wide. However, funding constraints as well as legal issues have delayed the development and launch of Site Surveys and Fielding schedules. The PM is committed to supporting deploying units and will addressing fielding these elements on a case by case basic per guidance from Department of the Army (DA). The current strategy is to field SAMS-E regionally to all Army components to include ARNG. Site Surveys will be conducted based on priorities set by DA and feedback from supported MACOMS/Components.

**IMPACT OF FUNDING THE CAPABILITY:** Fielding of SAMS-E to the Army National Guard will ensure interoperability with its Active Component Forces across the spectrum of logistical operations.

SUBJECT: Standard Army Maintenance System (SAMS)APPN:APE:MDEP:MDEP TITLE:DAMO-ZR 1-N List Priority Number:Division Priority:Functional POC:Div:Approval Authority:

ANALYSIS:

## ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>STAMIS</u>

January 2006

SUBJECT: Unit Level Logistics System (ULLS) FY 07 UFR: \$M APPN: AREA OF INTEREST: MODERNIZATION LIN(S): Z00713, C18582, C18446

**DESCRIPTION:** ULLS automates organizational level supply, maintenance, property accountability, readiness and unit status reporting functions in tactical units for the Active Army, the Army National Guard, and the Army Reserve. It consists of three applications: ULLS-Ground (ULLS-G), ULLS-Aviation (ULLS-A) and ULLS-S4. Each application provides a menu-driven, interactive capability which provides on-line inquiry responses and file updates, and can accommodate multiple units' requirements on a single computer. ULLS-G is located at organizational level maintenance elements. For maneuver units, the systems are co-located at the battalion level; for combat support and combat service support elements, ULLS-S4 is located at battalion, company and separate company level. ULLS-A is located with the aircraft at flight companies and at Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM) units.

# **ISSUE JUSTIFICATION:**

# **PROGRAM STATUS:**

# IMPACT OF FUNDING THE CAPABILITY:

SUBJECT:Unit Level Logistics System (ULLS)APPN:APE:MDEP:MDEP TITLE:DAMO-ZR 1-N List Priority Number:Division Priority:Division Priority:Tel:Functional POC:Div:Approval Authority:

ANALYSIS:

# ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>AVIATION SYSTEMS</u>

20 November 2005

SUBJECT: CH-47F Chinook FY 06 UFR: \$6.2B APPN: ACFT AREA OF INTEREST: EQUIPPING LIN(S): H30517

**DESCRIPTION:** The CH-47F Chinook is the only modernized heavy lift cargo helicopter in the Army fleet. The CH-47 Chinook, assigned to an ARNG unit, is a valuable tool for the battlefield commander as well as an integral part of the Total Army Warfight. It is equally important during peacetime to perform disaster relief operations and other critical state missions. Chinooks in the Army National Guard are the older CH-47D's. The Army is buying the CH-47F and will not transfer their older CH-47Ds as they are scheduled for the Boeing re-build lines and then back into compo 1 structure units.

**ISSUE JUSTIFICATION:** As of 1 Oct 06 the ARNG had 131 of its 159 required CH-47 aircraft. Additional CH-47 Chinook assets are needed to fill modularity aviation units currently in the OIF/OEF deployment cycles. The Army Aviation Modernization Plan (AAMP), Army procurement goal of 159 still leaves 100% of the ARNG fleet of CH-47D models that are approaching an average age of 25 years. The Army Plan through 2015 projects the ARNG will not be getting any more CH-47S. In addition, only a very few of the 131 CH-47Ds will have undergone recapitalization (depot rebuilds). The older aircraft are more costly to maintain and units with these aircraft consistently report lower OR rates than other units with newer (CH-47F) aircraft.

**PROGRAM STATUS:** The 08-13 POM programs a total of 0 CH-47Fs to be purchased and the Department of the Army procurement cap is 0, however the ARNG is not resourced for the recapitalization program. Due to the numerous deployments bestowed on the force, it is imperative that all of these units are fully resourced.

**IMPACT OF FUNDING THE CAPABILITY:** If the additional CH-47s were funded, the ARNG will be able to field at least one fully resourced cargo company detachment in every state/territory. In wartime, full resourcing will allow all ARNG cargo units to be deployable to a theater of war as an integral part of the "Plug and Play" concept.

Accelerating the CH-47 recapitalization/new build program will allow the Army National Guard to ensure units are deployable and interoperable throughout Army Transformation and compatible with legacy and interim forces that deploy for full spectrum operations, as they are organized and equipped.

SUBJECT: CH-47F PROCUREMENT APPN: ACFT APE: A05002000 MDEP: FPEG MDEP TITLE: CHINOOK DAMO-ZR 1-N List Priority Number:

Division Priority: Functional POC: CW5 Gary Nisker Div: NGB-ARF Approval Authority: COL Dixon / NGB-ARF / 703-607-7800

Tel: 703-607-7846

# ARMY NATIONAL GUARD FY 07 BROWN BOOK UFR'S <u>AVIATION SYSTEMS</u>

1 November 2005

SUBJECT: UH-60 Blackhawk FY 06 UFR: \$2.2B APPN: ACFT AREA OF INTEREST: EQUIPPING LIN(S): H32361 (L), Z33664 (M), U84291 (L)

**DESCRIPTION:** The UH-60 Blackhawk is the only modernized utility/MEDEVAC helicopter in the Army fleet. The UH-60 Blackhawk, assigned to an ARNG unit, is a valuable tool for the battlefield commander as well as an integral part of the Total Army Warfight. It is equally important during peacetime to perform disaster relief operations and other critical state missions. Blackhawks in the Army National Guard are either older UH-60A/UH-60Q's or the currently built UH/HH-60Ls. The Army is buying the UH-60M and will transfer older UH-60As and UH-60Ls to the Army National Guard. It is critical that the entire ARNG fleet of UH-60As/UH-60Ls be modernized.

**ISSUE JUSTIFICATION:** As of 1 Oct 06 ARNG had 626 of its 710 required UH-60 aircraft. Additional UH-60L/M Blackhawks are needed to replace Vietnam era UH-1 aircraft that will be retired by 2013. The Army Aviation Modernization Plan (AAMP), Army procurement goal of 710 still leaves nearly 60% of the ARNG fleet of UH-60s consists of UH-60A models that are approaching an average age of 20 years. The Army Plan through 2015 projects the ARNG will only have 71 UH-60Ms, 273 UH-60Ls and 366 UH-60As. In addition only 193 of the 476 UH-60As will have undergone recapitalization (depot rebuild). The older aircraft are more costly to maintain and units with these aircraft consistently report lower than ARNG units with newer (UH-60L) aircraft.

**PROGRAM STATUS:** The 08-13 POM programs a total of 119 UH-60Ls to be purchased and the Department of the Army procurement cap is 710, however the ARNG is not resourced for the recapitalization program, do to the numerous deployments bestowed on the force, it is imperative that all of these units be fully resourced.

**IMPACT OF FUNDING THE CAPABILITY:** If the additional UH-60s are funded, the ARNG would be able to field at least 1 fully resourced utility company or MEDEVAC detachment in every state/territory (except Guam which has no ARNG Aviation assets). In wartime, full resourcing would allow all ARNG utility units to be deployable to a theatre of war as an integral part of the "One Army" concept.

Funding the UH-60 recapitalization program will allow the Army National Guard units to be deployable and interoperable throughout the Army, which in turn, will make them compatible with legacy and interim forces that deploy for full spectrum operations as they are organized and equipped.

# SUBJECT: UH-60L PROCUREMENT APPN: ACFT APE: A05002000 MDEP: FPEG MDEP TITLE: BLACKHAWK DAMO-ZR 1-N List Priority Number:

**Division Priority:** 

Functional POC:CW5 Gary NiskerDiv: NGB-ARFTel: 703-607-7846Approval Authority:COL Lance Moore / NGB-ARQ / 703-607-7804

	FY06	FY07
\$K		
Validated Requirement	7,831,800,000	1,083,000,000
Unvalidated Requirement	1,094,400,000	1,094,400,000
Total Requirement	8,926,200,000	2,177,400,000
Funded Amount	6,748,800,000	-
Total UFR	2,177,400,000	2,177,400,000

Data is provided as of the PF \_\_\_\_\_ locked position

# ANALYSIS: