2012 Joint Domestic Operations Equipment Requirements

ALWAYS READY - ALWAYS THERE

FOREWORD

Threats to the United States, particularly to our homeland, have grown significantly in the last decade. The United States Congress has recognized the importance of the National Guard's homeland response mission by codifying membership on the Joint Chiefs of Staff (JCS) for the Chief of the National Guard Bureau (CNGB) in the Fiscal Year 2012 National Defense Authorization Act. As a member of this group of defense advisors to the President of the United States, the Secretary of Defense, and Congress, the CNGB also has the responsibility of addressing matters involving non-Federalized National Guard forces in support of homeland defense and civil support missions.

The efforts undertaken at the Joint Domestic Operations Equipment Requirements Conference ensure our Citizen Soldiers and Airmen are able to protect our homeland and come to their neighbors' rescue when needed. Our 468,000 Guardsmen and women were busy in 2011, responding to 58 natural disasters across the nation, including devastating tornadoes, winter storms, hurricanes, tropical storms, and floods. The Air National Guard also continued to keep our skies safe by maintaining fighter aircraft on alert and ready to respond at a moment's notice. Our Civil Support Teams responded to 128 missions in 38 States last year alone. Furthermore, we provided roughly 70 percent of the Department of Defense's forces for response to weapons of mass destruction, which included the fielding of the first Homeland Response Forces.

On 21 February 2012, National Guard members came together from across all 54 states, territories, and the District of Columbia to participate in this year's conference. The assigned working groups addressed all of the Emergency Support Functions in the National Response Framework. The results of these deliberations are outlined in detail in the following pages and serve to establish requirements in the domestic area of operations.

As the first CNGB to sit on the JCS, I endorse the 2012 Joint Domestic Operations Equipment Requirements Book. I am extremely proud to represent our militia forces as they continue to protect our nation, just as they have done for over 375 years, and I pledge to ensure they are properly equipped to fulfill their most critical mission here at home.

Craig R. McKinley
General, USAF
Chief, National Guard Bureau

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Introduction

The Inaugural Joint Domestic Operations Equipment Requirements (JDOER) Conference and Book

Leveraging on the success of the previous Air National Guard Domestic Operations Equipment Requirements (DOER) Conferences and Requirements Books, the Chief of the National Guard (NG) directed that the 2012 conference take a broader, joint perspective.

This year's inaugural joint conference hosted over 500 military and civilian attendees representing all 54 states and territories, Federal Emergency Management Agency (FEMA) regions and Emergency Support Functions (ESFs), as well as Army National Guard (ARNG) and Air National Guard (ANG) Readiness Center staffs. The conference goal was to define and document ARNG, ANG, and joint capability shortfalls for domestic operations. Field experts identified critical capabilities by drawing on a vast pool of experience and an understanding of the domestic mission at the regional, state, and local level.

As in previous years, the 2012 JDOERs book is organized along ESFs. Posturing of NG resources across FEMA regions facilitates rapid access to critical consequence management capabilities. The **Domestic Operations Equipment Requirements Spreadsheet** summarizes program cost by capability and Service. The **State/FEMA Matrix** identifies states and FEMA regions projected to receive the identified critical capabilities. The remaining sections of the book are the specific **ESF Tabs** that include a summary of the conference results and information papers on each required capability classified as "Critical" (delivery in less than 3 years). Each Tab is further divided into ARNG and ANG sections to allow for an easier discussion of Service capabilities and needs in the context of the Department of Homeland Security/FEMA construct. Each paper addresses: **Background** - capability description; **Source of Need** - determines documented need; **Impact if Not Funded** - capability material gap; **Units Impacted** - units/states that would be included in the receipt of the capability; **Contractor** - current contractor if identified; **Contingency Supported** - **Previous Usage** - supported or anticipated; and **Cost** - funding required.

The JDOERs process, including the annual conference and associated requirements book, is the cornerstone of a vision that will equip and posture the National Guard as an unparalleled partner to civil agencies in times of domestic distress.

Emergency Support Functions (ESF)

The ESFs provide the structure for coordinating federal interagency support for a federal response to an incident. They are mechanisms for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for Stafford Act declared emergencies as well as non-Stafford Act incidents. The National Response Framework has designated fifteen EFSs to support domestic incident response. The chart below shows which National Guard Bureau ESF capabilities are included in the Joint Domestic Operations Equipment Requirements book. It is critical that state, local, and National Guard planners understand the National Incident Management System (NIMS) and the ESFs to ensure full use of state resources to provide a seamless incident response. The following pages include ten ESF tabs (in bold face type) including information papers on capability needs. Also included is a tab covering Incident Awareness and Assessment (IAA). While not an ESF, IAA provides critical capabilities during domestic incident response.

National Response Framework (NRF) Emergency Support Function (ESF)
ESF #1 - Transportation
ESF #2 - Communications
ESF #3 - Public Works and Engineering
ESF #4 - Firefighting
ESF #5 - Emergency Management
ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services
ESF #7 - Logistics Management and Resource Support (not included in this book, combined with ESF #6)
ESF #8 - Public Health and Medical Services
ESF #9 - Search and Rescue
ESF #10 - Oil and Hazardous Materials Response
ESF #11 - Agriculture and Natural Resources (not included in this book)
ESF #12 - Energy (not included in this book)
ESF #13 - Public Safety and Security
ESF #14 - Long-Term Community Recovery (not included in this book)
ESF #15 - External Affairs (not included in this book)
IAA - Incident Awareness and Assessment

Domestic Operations Equipment Requirements

2012 JOINT DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS

TRANSPORTATION (ESF #1)	Component	Type Funds	Units Req'd	Unit Cost	Program Cost
Capability For Dynamic Re-Tasking	**ANG**				
TBD		3080			$0
Enhanced Ability to Upload/Download Cargo at Incident Site	**ANG**				
All-Terrain 10K Forklift		3080	22	$172,032	$3,784,704
Enhanced Capability to Track Assets Enroute	**ANG**				
TBD		3080			$0
Subtotal ANG					$3,784,704
Subtotal ARNG					$0
TOTAL					$3,784,704
COMMUNICATIONS (ESF #2)		Type Funds	Units Req'd	Unit Cost	Program Cost
Next Generation Joint Incident Site Communications Capability (NG-JISCC)	**ANG**				
Next Generation Joint Incident Site Communications Capability Level I		3080	29	$250,000	$7,250,000
Next Generation Joint Incident Site Communications Capability Level II		3080	8	$850,000	$6,800,000
Satellite Communications (SATCOM) On-The-Move System	**ANG**				
Satellite Communications		3080	54	$250,000	$13,500,000
Transportation for Large/Heavy Communications Equipment	**ANG**				
Trucks		3080	33	$46,000	$1,518,000
Man-Portable Initial Entry Package	**ARNG**				
TBD		2035			$0
Modernize Cross-Banding Capability and Capacity	**ARNG**				
TBD		2035			$0
Satellite Communications (SATCOM) On-The-Move System	**ARNG**				
Satellite Communications		2035	54	$250,000	$13,500,000
Interoperable Line of Sight (LOS)/Beyond Line of Sight (BLOS) Comms	**ARNG**				
TBD		2035			$0
Untrusted Internet to Warfighter Information Network-Tactical (WIN-T)	**ARNG**				
TBD		2035			$0
Subtotal ANG					$29,068,000
Subtotal ARNG					$13,500,000
TOTAL					$42,568,000
PUBLIC WORKS AND ENGINEERING (ESF #3)		Type Funds	Units Req'd	Unit Cost	Program Cost
Prime Power Team	**ANG**				
Power Generator Sets 15kW to 750kW		3080	9	$1,900,000	$17,100,000
Expedient Facilities	**ANG**				
Disaster Relief Beddown Sets (DRBS)		3080	8	$2,300,000	$18,400,000
Road Clearance/Airfield Recovery (Heavy)	**ANG**				
Heavy Equipment Road Clearance/Airfield Recovery Sets		3080	3	$6,330,000	$18,990,000
Potable Water Production, Storage, and Distribution Equipment	**ANG**				
1,500 Gallon Per Hour Reverse Osmosis Water Purification Unit (ROWPU)		3080	6	$252,789	$1,516,734
Explosive Ordnance Disposal (EOD) Equipment	**ANG**				
Bomb Squad Emergency Response Vehicle (BSERV)		3080	17	$300,000	$5,100,000
Total Containment Vessel (TCV)			17	$285,000	$4,845,000
Tactical Electrical Power (TEP)	**ARNG**				
Small Tactical Electrical Power (TEP)		2035	6694		$0
Medium Tactical Electrical Power (TEP)		2035	9195		$0
Road Clearance and Debris Removal Heavy Equipment (Vehicles)	**ARNG**				
Bulldozers		2035	643	$300,000	$192,900,000
Loaders		2035	126	$190,000	$23,940,000
Skid Steer Loaders		2035	535	$28,000	$14,980,000
Hydraulic Excavator (HYEX)		2035	129	$240,000	$30,960,000
High Mobility Engineer Excavator (HMEE)		2035	162	$185,000	$29,970,000
Back Hoe Loader (BHL)		2035	205	$78,000	$15,990,000
Potable Water Production/Storage/Distribution	**ARNG**				
Tactical Water Purification System (TWPS)		2035	135	$562,000	$75,870,000
Subtotal ANG					$65,951,734
Subtotal ARNG					$384,610,000
TOTAL					$450,561,734

2012 JOINT DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS

FIREFIGHTING (ESF #4)		Type Funds	Units Req'd	Unit Cost	Program Cost
Interoperable Communication System	**ANG**				
Interoperable Communication Systems		3080	64		$0
Structural Firefighting Vehicles	**ANG**				
P-22 Rescue/Pumper		3080	10	$366,000	$3,660,000
P-26 Water Tender		3080	52	$360,000	$18,720,000
Command Vehicles with Topper and Slide-Outs		3080	26	$40,000	$1,040,000
Personal Protective Equipment For Structural Fire Fighting	**ANG**				
Structural Fire Fighting Protective Equipment		3080	3000	$3,400	$10,200,000
Aircraft Rescue Fire Fighting (ARFF) Vehicles	**ANG**				
P-19 Aircraft Rescue Fire Fighting (ARFF) Vehicles		3080	24	$820,000	$19,680,000
P-23 Aircraft Rescue Fire Fighting (ARFF) Vehicles		3080	56	$1,020,000	$57,120,000
Response Kits (Medical Kits, Incident Management Kits, Wide Area Search Kits)	**ANG**				
Incident Management Kits		3080	64	$750	$48,000
Wide Area Search Kit		3080	256	$300	$76,800
Medical Kits		3080	256	$15,000	$3,840,000
Subtotal ANG					$114,384,800
Subtotal ARNG					$0
TOTAL					$114,384,800

EMERGENCY MANAGEMENT (ESF #5)		Type Funds	Units Req'd	Unit Cost	Program Cost
FEMA Type II Mobile Emergency Operations Center (MEOC)	**ANG**				
Mobile Emergency Operations Center (MEOC)		3080	10	$600,000	$6,000,000
Liaison Command and Control (C2) Kit	**ANG**				
Liaison Command and Control (C2) Kit		3080	20	$30,000	$600,000
Chemical, Biological, Radiological and Nuclear (CBRN) Agent Detection and Decontamination	**ANG**				
Detection and Decontamination Kits		3080	67	$150,000	$10,050,000
Common Operating Picture (COP)	**ANG**				
Common Operating Picture (COP) Suites		3080	145	$28,000	$4,060,000
Mobile, Expandable, Sustainable Interoperable Command Control (C2) Capability	**ARNG**				
Mobile Emergency Operations Center (MEOC)		2035	10	$600,000	$6,000,000
Limited Scale, Immediately Deployable Communications	**ARNG**				
Command and Control (C2) Kit		2035	54	$30,000	$1,620,000
Shared Situational Awareness Resources	**ARNG**				
Common Operating Picture (COP) Suites		2035	145	$28,000	$4,060,000
Subtotal ANG					$20,710,000
Subtotal ARNG					$11,680,000
TOTAL					$32,390,000

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES (ESF #6)		Type Funds	Units Req'd	Unit Cost	Program Cost
Disaster Relief Mobile Kitchen Trailer (DRMKT)	**ANG**				
Disaster Relief Mobile Kitchen Trailer (DRMKT)		3080	6	$625,000	$3,750,000
Modified Disaster Relief Beddown Kits (DRBS)	**ANG**				
Modified Disaster Relief Beddown Kits (DRBS)		3080	10	$500,000	$5,000,000
Fatality Search and Recovery Teams (FSRT)/Push Packages	**ANG**				
Fatality Search and Recovery Teams (FSRT)/Push Packages		3080	2	$2,000,000	$4,000,000
People Tracking System for Civilians and Responders	**ANG**				
People Tracking System for Civilians and Responders		3080	27	$200,000	$5,400,000
Additional Materiel Handling Equipment	**ARNG**				
Light Capability Rough Terrain Forklift (LCRTF)		2035	292	$96,000	$28,032,000
Mechanical Sand Bag Equipment	**ARNG**				
TBD		2035			$0
People Tracking System for Civilians and Responders	**ARNG**				
People Tracking System for Civilians and Responders		2035	27	$200,000	$5,400,000
Regional Warehouse Facilities for Forward Storage, Supplies	**ARNG**				
M129 Trailers		2035	277	$84,500	$23,406,500
Tyvek Suites, Gloves, and Masks to Support Responders in a Mass Causality Situation	**ARNG**				
TBD		2035			$0
Subtotal ANG					$18,150,000
Subtotal ARNG					$56,838,500
TOTAL					$74,988,500

2012 JOINT DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS

PUBLIC HEALTH AND MEDICAL SERVICES (ESF #8)		Type Funds	Units Req'd	Unit Cost	Program Cost
Medical Support to the National Guard (CBRN) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF)	**ANG**				
CERFP/HRF Medical Resupply Pkgs		3080	6	$143,000	$858,000
CERFP/HRF Training Set		3080	1	$350,000	$350,000
CERFP/HRF Modernization		3080	17	$30,000	$510,000
Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages	**ANG**				
Mobile Equipment Calibration Sets		3080	3	$75,000	$225,000
Expeditionary Medical Support (EMEDS) Modernization		3080	11	$98,730	$1,086,030
Organization Equipment for Early Response Capability Supporting Domestic Mass Causality Events	**ANG**				
Med Rapid Response Equip Packages		3080	6	$67,200	$403,200
All Weather Clothing Sets		3080	27	$34,018	$918,486
Extreme Weather Medical Shelter		3080	1	$150,000	$150,000
Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events	**ANG**				
Medical Command and Control (MC2) Mobile Field Kits		3080	27	$84,500	$2,281,500
Field Network Extension Kits		3080	3	$15,100	$45,300
Medical Command and Control (MC2) Server		3080	1	$11,865,000	$11,865,000
National Guard (CBRN) Enhanced Response Force Package (CERFP) Medical Support	**ARNG**				
Medical Treatment Squadrons (1 per)		3080	7	$622,051	$4,354,357
Infantry Battalions (2 per)		3080	52	$622,051	$32,346,652
Area Support Medical Companies (ASMC) (6 per)		3080	222	$622,051	$138,095,322
Expeditionary Medical Support (EMEDS) Modernization	**ARNG**				
Brigade Medical Sets		2035	2	$1,857,196	$3,714,392
Ground Ambulance Sets		2035	207	$13,752	$2,846,664
Air Ambulance Sets		2035	46	$84,939	$3,907,194
Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events	**ARNG**				
Medical Command and Control (MC2) Mobile Field Kits		2035	27	$84,500	$2,281,500
Field MESH Network Extension Kits		2035	3	$15,100	$45,300
Medical Command and Control (MC2) Server		2035	1	$11,865,000	$11,865,000
Upgraded Ground Ambulance Platforms	**ARNG**				
Ground Ambulance		2035	500	$209,633	$104,816,500
Subtotal ANG					$18,692,516
Subtotal ARNG					$304,272,881
TOTAL					$322,965,397

SEARCH AND RESCUE (ESF #9)		Type Funds	Units Req'd	Unit Cost	Program Cost
Multi-Agency Communications	**ANG**				
HH-60 & H/MC-130 Radio NRE		3600	1	$4,000,000	$4,000,000
HH-60 & H/MC-130 ARC-210 Gen V Radios		3010	20	$100,000	$2,000,000
Radio Packages		3080	59	$86,000	$5,074,000
Dedicated Vehicle Support for Search and Rescue (SAR) Teams	**ANG**				
Vehicles		3080	186	$58,400	$10,862,400
Common Operating Picture	**ANG**				
H/MC-130 NRE		3600	1	$2,000,000	$2,000,000
H/MC-130 ARC-210 Gateway Kits		3010	13	$50,000	$650,000
H/MC-130 ARC-210 RTIC Upgrades		3010	13	$500,000	$6,500,000
GINA Implementation		3010	1	$500,000	$500,000
Blue Force Tracker II HH-60		3010	17	$171,000	$2,907,000
Blue Force Tracker II H/MC-130		3010	13	$130,000	$1,690,000
SABIR Systems		3010	3	$1,000,000	$3,000,000
AS-4 Pods		3010	3	$1,000,000	$3,000,000
Location Aides	**ANG**				
HH-60 & H/MC-130 NRE		3600	1	$3,000,000	$3,000,000
HH-60 H/MC-130 FMV/VDL Kits		3010	30	$100,000	$3,000,000
H/MC-130 EO/IR Sensors		3010	13	$850,000	$11,050,000
Cursor on Target Integration		3010	6	$150,000	$900,000
Underwater Search Robot		3080	6	$300,000	$1,800,000
Full Scan SONAR		3080	6	$200,000	$1,200,000
Urban Search and Rescue		3080	6	$100,000	$600,000
Subtotal ANG					$63,733,400
Subtotal ARNG					$0
TOTAL					$63,733,400

2012 JOINT DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS

OIL AND HAZARDOUS MATERIALS RESPONSE (ESF #10)		Type Funds	Units Req'd	Unit Cost	Program Cost
Multiband Radio System	**ANG**				
Multiband Radio System		3080	780	$5,619	$4,382,820
Detection and Assessment Equipment	**ANG**				
Multirae PRO w/ Gamma		3080	130	$6,035	$784,550
Thermolminescent Dosimeter (TLD)		3080	650	$100	$65,000
Decontamination Equipment	**ANG**				
Decontamination Units		3080	130	$3,600	$468,000
Handheld Global Positioning System (GPS) Unit	**ANG**				
Trimble Juno SD Handheld GPS Units		3080	130	$1,199	$155,870
Detection and Assessment Equipment	**ARNG**				
Multirae PRO w/ Gamma		2035	340	$6,035	$2,051,900
Thermoluminescent Dosimeter (TLD)		2035	2001	$100	$200,100
Personal Protective Equipment (PPE)	**ARNG**				
Frontline 500 Level A Suit		2035	430	$2,046	$879,780
Decontamination Equipment	**ARNG**				
Decontamination Units		2035	1278	$3,600	$4,600,800
Subtotal ANG					$5,856,240
Subtotal ARNG					$7,732,580
TOTAL					$13,588,820

PUBLIC SAFETY AND SECURITY (ESF #13)		Type Funds	Units Req'd	Unit Cost	Program Cost
Security Forces (SF) Vehicles	**ANG**				
Mid-Sized Vehicles		3080	186	$75,000	$13,950,000
Large-Sized Vehicles		3080	93	$125,000	$11,625,000
Security Forces (SF) Personal Protective Equipment (PPE)	**ANG**				
(26x93) Personal Protective Equipment (PPE) Sets		3080	2418	$2,500	$6,045,000
Domestic Operations (DOMOPS) Kits	**ANG**				
Domestic Operations Kits		3080	93	$42,000	$3,906,000
Communication Interoperability Upgrades	**ANG**				
AN/PRC-152 Radios		3080	1700	$700	$1,190,000
Subtotal ANG					$36,716,000
Subtotal ARNG					$0
TOTAL					$36,716,000

INCIDENT AWARENESS AND ASSESSMENT (IAA)		Type Funds	Units Req'd	Unit Cost	Program Cost
Unclassified Processing, Analysis, and Dissemination (PAD) System and Network	**ANG**				
IAA Mobile/Portable Receiver/Analysis Work Center		3080	13	$250,000	$3,250,000
FPED Hardware and Software Suites		3080	13	$602,000	$7,826,000
Video Downlink Receivers (VORTEX)		3080	13	$200,000	$2,600,000
Tactical Radios (PRC-117)		3080	13	$35,000	$455,000
Prime Movers		3080	13	$50,000	$650,000
Ground Based Sense-and-Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS)	**ANG**				
Ground Control Station Upgrades		3080	6	$1,500,000	$9,000,000
High Resolution (.5 Meter) Unclassified & Timely Commercial Satellite Imagery (Eagle Vision Next Generation Upgrade)	**ANG**				
Eagle Vision Next Generation (Scalable)		3080	3	$16,900,000	$50,700,000
Fully Mission Capable Incident Awareness and Assessment (IAA) Platforms And Sensors	**ANG**				
Wing Mounted Cellular Repeater Pods		3080			$0
Scalable Incident, Awareness and Assessment (IAA) Management Tool	**ANG**				
State Joint Forces Headquarters (SJFHQ) Locations		3080	54	$20,000	$1,080,000
ANG Defense Support of Civil Agencies (DSCA)/IAA Trailers		3080	13	$1,000,000	$13,000,000
Ground Based Sense and Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS)	**ARNG**				
Ground Control Station Upgrades (Scalable)		2035	32	$1,500,000	$48,000,000
Friendly Force Tracking (FFT) Device	**ARNG**				
Friendly Force Tracking (FFT)		2035	2700	$731	$1,973,700
Device Average Annual Airtime Cost		2035	2700	$540	$1,458,000
Geospatial Information Interoperability Exploitation Portable (GIIEP) System and Other Sensors Certification on Rotary Wing Aircraft	**ARNG**				
Certificate of Airworthiness of GIEEP System		2065	1	$200,000	$200,000
Add-On Imagery for Army Aviation and Ground Assets	**ARNG**				
TBD		2035	1	$500,000	$500,000
Subtotal ANG					$88,561,000
Subtotal ARNG					$52,131,700
TOTAL					$140,692,700

Total Air National Guard 2012 Domestic Operations Equipment Requirements					$465,608,394
Total Army National Guard 2012 Domestic Operations Equipment Requirements					$830,765,661
TOTAL JOINT 2012 DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS					$1,296,374,055

ANG State / FEMA Matrix

ESFs 1 - 6 / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #1 - Transportation																								
Dynamic Re-tasking																								
Enhanced Cargo Handling																								
Asset Tracking																								
ESF #2 - Communications																								
Man Portable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Equipment Transportation		●	●		●			●	●					●		●	●	●	●		●		●	●
ESF #3 - Public Works & Engineering																								
Prime Mover Team																								●
Disaster Relief Beddown Set				●			●							●	●			●				●		
Airfield & Route Clearance																								
Potable Water				●			●							●	●			●				●		
Explosive Ordnance Disposal		●				●	●					●						●	●	●				
ESF #4 - Firefighting																								
Interoperable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Structural Firefighting Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Aircraft Firefighting Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Response Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #5 - Emergency Management																								
Mobile Emergency Ops C2				●										●							●	●		●
Liaison Comms														●			●		●	●		●	●	●
CBRN Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing and Human Services																								
Mobile Kitchen		●					●							●										
Disaster Relief Beddown Set				●				●																
FRST Equipment																				●				
Patient Tracking		●		●				●	●		●			●		●	●	●	●	●				

ANG State / FEMA Matrix

ESFs 1 - 6 / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #1 - Transportation																					
Dynamic Re-tasking																					
Enhanced Cargo Handling																					
Asset Tracking																					
ESF #2 - Communications																					
Man Portable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Equipment Transportation	●				●			●			●			●		●					
ESF #3 - Public Works & Engineering																					
Prime Mover Team									●												
Disaster Relief Beddown Set					●		●						●				●	●			
Airfield & Route Clearance									●												
Potable Water					●		●						●				●	●			
Explosive Ordnance Disposal				●		●					●				●	●	●	●		●	
ESF #4 - Firefighting																					
Interoperable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Structural Firefighting Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Aircraft Firefighting Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Response Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #5 - Emergency Management																					
Mobile Emergency Ops C2	●					●															●
Liaison Comms	●			●		●		●	●	●	●		●		●		●				●
CBRN Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing and Human Services																					
Mobile Kitchen	●																				
Disaster Relief Beddown Set					●								●								
FRST Equipment																					
Patient Tracking	●	●		●	●	●		●	●		●	●		●		●					

ANG State / FEMA Matrix

ESFs 1 - 6 / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #1 - Transportation									
Dynamic Re-tasking									
Enhanced Cargo Handling									
Asset Tracking									
ESF #2 - Communications									
Man Portable Comms	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●
Equipment Transportation		●		●					●
ESF #3 - Public Works & Engineering									
Prime Mover Team									
Disaster Relief Beddown Set		●	●						●
Airfield & Route Clearance									
Potable Water		●	●						●
Explosive Ordnance Disposal		●						●	
ESF #4 - Firefighting									
Interoperable Comms	●	●	●	●	●	●	●	●	●
Structural Firefighting Equip	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●
Aircraft Firefighting Equip	●	●	●	●	●	●	●	●	●
Response Kits	●	●	●	●	●	●	●	●	●
ESF #5 - Emergency Management									
Mobile Emergency Ops C2					●		●		
Liaison Comms	●						●		
CBRN Kits	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●
ESF #6 – Mas Care, Emergency Assistance, Housing, and Human Services									
Mobile Kitchen		●							●
Disaster Relief Beddown Set									●
FRST Equipment									
Patient Tracking	●	●		●				●	●

ANG State / FEMA Matrix

ESFs 8 - 10, 13 & IAA / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #8 - Public Health and Medical Services																								
CBRN Medical Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EMEDS Modernization	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Early Medical Response Kits	●	●		●	●	●		●			●			●	●	●				●				
Medical C2 Capability	●	●		●	●	●		●			●			●	●	●				●		●	●	
ESF #9 - Search and Rescue																								
Interoperable Comms																								
SAR Vehicles																								
SA Equipment								●																
Location Aides																								
ESF #10 - Oil and Hazardous Materials Response																								
Multiband Radios	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Detection Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Handheld GPS Units	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																								
Tactical Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DOMOPS Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Interoperable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment																								
Unclassified PAD System		●													●		●							●
RPA ATC Equip								●																
Eagle Vision Mod																	●						●	
Mobile Aerial Comms								●																
IAA Management Tool	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ANG State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #8 - Public Health and Medical Services																					
CBRN Medical Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EMEDS Modernization	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Early Medical Response Kits	●	●		●	●	●		●			●			●	●	●				●	
Medical C2 Capability	●	●		●	●	●		●			●			●	●	●				●	
ESF #9 - Search and Rescue																					
Interoperable Comms																					
SAR Vehicles																					
SA Equipment																					
Location Aides																					
ESF #10 - Oil and Hazardous Materials Response																					
Multiband Radios	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Detection Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Handheld GPS Units	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																					
Tactical Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DOMOPS Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Interoperable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment																					
Unclassified PAD System		●			●		●		●				●					●			
RPA ATC Equip					●						●							●			
Eagle Vision Mod																					
Mobile Aerial Comms					●						●							●			
IAA Management Tool	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ANG State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #8 - Public Health and Medical Services									
CBRN Medical Equip	●	●	●	●	●	●	●	●	●
EMEDS Modernization	●	●	●	●	●	●	●	●	●
Early Medical Response Kits		●		●	●			●	●
Medical C2 Capability		●		●	●			●	●
ESF #9 - Search and Rescue									
Interoperable Comms									
SAR Vehicles									
SA Equipment		●				●			
Location Aides									
ESF #10 - Oil and Hazardous Materials Response									
Multiband Radios	●	●	●	●	●	●	●	●	●
Detection Equipment	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●
Handheld GPS Units	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security									
Tactical Vehicles	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●
DOMOPS Kits	●	●	●	●	●	●	●	●	●
Interoperable Comms	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment									
Unclassified PAD System		●			●				●
RPA ATC Equip	●	●							
Eagle Vision Mod				●					
Mobile Aerial Comms	●	●							
IAA Management Tool	●	●	●	●	●	●	●	●	●

ARNG State / FEMA Matrix

ESFs 1 - 6 / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #1 - Transportation																								
N/A																								
ESF #2 - Communications																								
Man Portable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cross-Banding Mod	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Interop LOS/BLOS Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Open Internet to WIN-T	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #3 - Public Works & Engineering																								
Tactical Electrical Power																								
Airfield & Route Clearance																								
Potable Water																								
ESF #4 - Firefighting																								
N/A																								
ESF #5 - Emergency Management																								
Liaison Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mobile Emergency Ops C2																								
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing and Human Services																								
All Terrain 5K Forklift	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mechanical Sand Bag Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Patient Tracking																								
Regional Warehousing	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CBRN Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ARNG State / FEMA Matrix

ESFs 1 - 6 / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #1 - Transportation																					
N/A																					
ESF #2 - Communications																					
Man Portable Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cross-Banding Mod	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Interop LOS/BLOS Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Open Internet to WIN-T	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #3 - Public Works & Engineering																					
Tactical Electrical Power																					
Airfield & Route Clearance																					
Potable Water																					
ESF #4 - Firefighting																					
N/A																					
ESF #5 - Emergency Management																					
Liaison Comms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mobile Emergency Ops C2																					
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing and Human Services																					
All Terrain 5K Forklift	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mechanical Sand Bag Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Patient Tracking																					
Regional Warehousing	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CBRN Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ARNG State / FEMA Matrix

ESFs 1 - 6 / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #1 - Transportation									
N/A									
ESF #2 - Communications									
Man Portable Comms	●	●	●	●	●	●	●	●	●
Cross-Banding Mod	●	●	●	●	●	●	●	●	●
Portable Sat Comm	●	●	●	●	●	●	●	●	●
Interop LOS/BLOS Comms	●	●	●	●	●	●	●	●	●
Open Internet to WIN-T	●	●	●	●	●	●	●	●	●
ESF #3 - Public Works & Engineering									
Tactical Electrical Power									
Airfield & Route Clearance									
Potable Water									
ESF #4 - Firefighting									
N/A									
ESF #5 - Emergency Management									
Liaison Comms	●	●	●	●	●	●	●	●	●
Mobile Emergency Ops C2									
Common Operating Picture	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services									
All Terrain 5K Forklift	●	●	●	●	●	●	●	●	●
Mechanical Sand Bag Equip	●	●	●	●	●	●	●	●	●
Patient Tracking									
Regional Warehousing	●	●	●	●	●	●	●	●	●
CBRN Kits	●	●	●	●	●	●	●	●	●

ARNG State / FEMA Matrix

ESFs 8 - 10, 13 & IAA / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #8 - Public Health and Medical Services																								
CBRN Medical Equip																								
EMEDS Modernization	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Medical C2 Capability	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ambulance Vehicles																								
ESF #9 - Search and Rescue																								
N/A																								
ESF #10 - Oil and Hazardous Materials Response																								
Detection Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																								
N/A																								
IAA - Incident Awareness and Assessment																								
RPA ATC Equip						●	●	●					●	●	●		●	●	●		●	●		●
Asset Tracking	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sensor Equip																								
FMV and IR Imagery	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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ARNG State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #8 - Public Health and Medical Services																					
CBRN Medical Equip																					
EMEDS Modernization	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Medical C2 Capability	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ambulance Vehicles																					
ESF #9 - Search and Rescue																					
N/A																					
ESF #10 - Oil and Hazardous Materials Response																					
Detection Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																					
N/A																					
IAA - Incident Awareness and Assessment																					
RPA ATC Equip	●	●	●	●	●	●	●	●		●	●	●				●				●	
Asset Tracking	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sensor Equip																					
FMV and IR Imagery	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ARNG State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #8 - Public Health and Medical Services									
CBRN Medical Equip									
EMEDS Modernization	●	●	●	●	●	●	●	●	●
Medical C2 Capability	●	●	●	●	●	●	●	●	●
Ambulance Vehicles									
ESF #9 - Search and Rescue									
N/A									
ESF #10 - Oil and Hazardous Materials Response									
Detection Equipment	●	●	●	●	●	●	●	●	●
Personal Protective Equip	●	●	●	●	●	●	●	●	●
Decontamination Kits	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security									
N/A									
IAA - Incident Awareness and Assessment									
RPA ATC Equip		●					●	●	●
Asset Tracking	●	●	●	●	●	●	●	●	●
Sensor Equip									
FMV and IR Imagery	●	●	●	●	●	●	●	●	●

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***2012 Joint Domestic Operations Requirements* Book Credits:**

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Transportation

Transportation (ESF #1) - Transportation assists federal agencies, state and local governmental entities, and voluntary organizations requiring transportation capacity to perform response missions following a major disaster or emergency. ESF #1 also serves as a coordination point between response operations and restoration of the transportation infrastructure. It includes (1) aviation/airspace management and controls transportation safety, (2) restoration/recovery of transportation infrastructure, (3) movement restrictions, and (4) damage and impact assessment.

A major disaster may severely damage the civil transportation system throughout the impacted area. Most local transportation activities will be hampered by damaged facilities, equipment, and infrastructure, as well as disrupted communications. At the same time, the disaster will create significant demands for national, regional, and local transportation of resources to provide for relief and recovery. Federal assistance may be required to meet these demands for movement of essential resources, as well as for clearing and restoration of the transportation system.

This ESF supports transport of units, personnel, and/or materiel from a specified origin to a specified destination within a specified timeframe. Attributes include: (1) transport heavy equipment, (2) provide assets to transport personnel from the affected area, (3) provide assets to transport cargo: bulk, palletized, water, Petroleum, Oil and Lubricants (POL), and (4) unimproved, damaged, obstructed, flooded surface transport, (5) provide medical transport.

Transportation
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Dynamic Re-Tasking of Assets with Current Equipment in Use
- Enhance Ability to Handle and Transport Cargo in Austere Environmental Conditions

Army National Guard

- Dynamic Re-Tasking of Assets with Current Equipment in Use
- Programmable, Compatible Radios to Communicate with Civilian Authorities
- Enhanced Capability to Track Assets Enroute

Essential Capabilities List

None

Desired Capabilities List

None

TRANSPORTATION EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Capability for Dynamic Re-Tasking	TBD	TBD	TBD
Enhanced Ability to Upload/Download Cargo at Incident Site	$1.89	$1.89	-
Enhanced Capability to Track Assents Enroute	TBD	TBD	TBD

Note: All are 3080 Appropriation (Other Procurement)

- Capability for Dynamic Re-Tasking - Provides complementary capabilities with ARNG to form a tiered architecture using ground and airborne, Over-The-Horizon (OTH) relays to quickly communicate critical information.
- Enhanced Ability to Upload/Download Cargo at Incident Site - Provides the ability to rapidly on-load and off-load aircraft at forward operating locations and unimproved airfields during emergency responses (all-terrain forklifts).
- Enhanced Capability to Track Assets Enroute - Replaces traditional communication methods with digital capabilities and provides increased situational awareness and Command and Control (C2) to the lowest tactical echelons.

CAPABILITY FOR DYNAMIC RE-TASKING

1. Background. The Air National Guard (ANG) provides both air and ground transportation capabilities during a domestic response. These capabilities complement the Army National Guard's (ARNG) response capabilities which are critical to the success of the response at the forward deployed location. The ability to form a tiered architecture linking ground and airborne assets which utilize Over-The-Horizon (OTH) relays, is a vital component that allows Joint Task Force (JTF) planners to quickly locate, identify, communicate with, and potentially re-task these assets. This capability is critical in ensuring that the right domestic operations forces are in the right place at the right time.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and previous domestic operations lessons learned.

3. Impact If Not Funded. Diminished ANG ability to seamlessly integrate response assets with ARNG response assets for increased JTF situational awareness, and the ability to dynamically re-task assets real-time based on planning objectives.

4. Units Impacted. Each state that has not currently fielded Blue Force Tracker (BFT) for Domestic Operations (DOMOPS).

5. Contractor. General Dynamics, Falls Church, VA.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, Ike, and the Haiti earthquake. At all local, state, and federal disasters where there is a need for forward deployment of integrated ANG and ARNG assets.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

ENHANCED ABILITY TO UPLOAD/DOWNLOAD CARGO AT INCIDENT SITE

1. Background. One of the Air National Guard's (ANG) core transportation capabilities is the ability to on-load and off-load aircraft. During a domestic response, this capability is critical to the success of the operation in the forward deployed location. Currently, each ANG unit's capacity is limited to its peacetime training mission. In order to effectively respond to a domestic emergency, a response unit should have the ability to rapidly handle inbound and outbound aircraft from a forward deployed location. Each Small Air Terminal within an Airlift Wing should be authorized and equipped with one additional all-terrain forklift compatible with all tactical aircraft, operable on any airfield, in any weather, and versatile enough for forward deployment. At a minimum, each Federal Emergency management Agency (FEMA) region should have one all-terrain forklift strategically positioned.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and previous domestic operations lessons learned.

3. Impact If Not Funded. The inability to rapidly on-load/off-load aircraft at forward operating locations results in slowed recovery efforts and increased suffering due to delayed receipt of supplies, support equipment, and personnel.

4. Units Impacted. Each of the 22 Small Air Terminal/Aerial Ports assigned to airlift wings. At a minimum, one per each of the 10 FEMA regions.

5. Contractor. Multiple sources available.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, Ike, and the Haiti earthquake. At all local, state, and federal disasters where a need for a deployed aerial port capability exists and a Contingency Response Group (CRG) is not tasked or unavailable.

7. Cost.

Units Required	Unit Cost	Program Cost
(22) TRK FL 10K AT 463L (3080)	**$172,032**	**$3,784,704**
Total		**$3,784,704**

ENHANCED CAPABILITY TO TRACK ASSETS ENROUTE

1. Background. The ability to facilitate a seamless flow of information across the battle space and interoperate with external command and control and sensor systems to track cargo in the enroute system is vital to an effective air transportation system. The utilization of systems such as the Blue Force Tracking (BFT) program would replace paper maps and voice radio communications with digital capabilities, thus providing Shared Situational Awareness (SSA) and Command and Control (C2) to the lowest tactical echelons. This capability will provide an interface between the terrestrial radio network system and satellite communications system to allow for operations over long distances or rugged terrain to share a Common Operational Picture (COP). The end result is a vertical and horizontal integration of the digital battle space and the ability to track assets at the highest levels all the way down to the tactical unit levels.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and previous domestic operations lessons learned.

3. Impact If Not Funded. Diminished Air National Guard (ANG) ability to seamlessly integrate response assets with Army National Guard (ARNG) response assets for increased Joint Task Force (JTF) situational awareness and the ability to dynamically re-task assets real-time based on planning objectives.

4. Units Impacted. ANG unit assets (air and ground transportation, e.g. flatbed trailers for cargo movement) that do not have transponders capable of inputting location data into BFT.

5. Contractor. General Dynamics, Falls Church, VA.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, Ike, and the Haiti earthquake. At all local, state, and federal disasters where a need for forward deployment of integrated ANG and ARNG assets.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

Communications

Communications (ESF #2) - Communications ensure the provision of federal telecommunications support to federal, state, and local response efforts following a presidentially declared major disaster, emergency, or extraordinary situation under the National Response Framework (NRF). This ESF supplements the provisions of the National Plan for Telecommunications Support in Non-Wartime Emergencies, hereafter referred to as the National Telecommunications Support Plan (NTSP). It includes coordination with telecommunications and information technology industries; restoration and repair of telecommunications infrastructure; protection, restoration, and sustainment of national cyber and information technology resources, and oversight of communications within the federal incident management and response structures.

A disaster condition may result from a significant natural disaster, nuclear accident, or any other incident that causes extensive damage and/or results in a high volume of requests from all levels of government authority for services to save lives and alleviate human suffering. These authorities require accurate and timely information on which to base decisions and guide response actions. Concurrently, commercial telecommunications facilities may sustain widespread damage. At a time when the need for real-time electronically processed information is greatest, the capability to acquire it may be seriously restricted or nonexistent. All surviving telecommunications assets of the various levels of government, augmented by extra regional assets, will be needed immediately to ensure a proper response to the needs of victims.

The Army National Guard and Air National Guard are able to provide significant augmentation through its extensive communication resources. These include communications networks and information services that enable joint and multinational domestic operations support and war fighting capabilities. Much of the communications equipment required by the States in response to domestic operations is to ensure situational awareness and connectivity to other responders within the Incident Command System (ICS).

Communications
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Man Portable Initial Entry Package
- Modernize Cross-Banding Capability and Capacity *
- SATCOM On-the-Move
- Interoperable LOS/BLOS Capability
- Transportation for Large/Heavy Communications Equipment

Army National Guard

- Man Portable Initial Entry Package
- Modernize Cross-Banding Capability and Capacity *
- SATCOM On-the-Move
- Interoperable LOS/BLOS Capability
- Untrusted Internet to WIN-T in Support of Incident Site

Essential Capabilities List

Air National Guard

- ESF Needs Clearly Defined Requirements From ESFs and J3 for a Standardized Common Operating Picture
- Template Annex K for Domestic Incident Response
- Clearly Defined "Must-Protect" Systems/Capabilities for Cyber Defense Priority
- Field Input to Development of Next-Gen JISCC CONOPS
- Regional Spectrum Management Programs

Army National Guard

- ESF Needs Clearly Defined Requirements From ESFs and J3 for a Standardized Common Operating Picture
- Template Annex K for Domestic Incident Response
- Clearly Defined "Must-Protect" Systems/Capabilities for Cyber Defense Priority
- Field Input to Development of Next-Gen JISCC CONOPS
- Regional Spectrum Management Programs

Desired Capabilities List

None

* NOTE: All ESFs identified the need to modernize cross-banding capability as a top priority. In a collective meeting of all ESF Panel Chairs, NGB/A6 took on the responsibility of writing the NIMS-Compliant Information Paper in support of all ANG DOERs Book ESFs. The ESF #2 Information Paper on NIMS-Compliant Communications represents all JDOERs Book ESFs.

COMMUNICATIONS EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Next Generation JISCC Man Portable Initial Entry Package Modernize Cross-Banding Capability & Capacity Interoperable LOS/BLOS Capability	$4.68	$4.68	$4.68
SATCOM On-the-Move	$4.50	$4.50	$4.50
Transportation for Large/Heavy Communications Equipment	$0.50	$0.50	$0.50

Note: All are 3080 Appropriation (Other Procurement)

- Next Generation Joint Incident Site Communication Capability (NG-JISCC) - Provides a quick reaction, man-portable initial entry communications capability for personnel responding to domestic security missions, disaster relief, or any other contingency operation; Supports the following JDOERS ANG critical list items:
  - Man Portable Initial Entry Package - Provides a quick reaction initial-entry communications capability for proper Command and Control (C2) of National Guard (NG) forces, whether presented for domestic security missions, disaster response or any other contingency.
  - Modernize Cross-Banding Capability and Capacity - Provides Air National Guard (ANG) forces the ability to communicate seamlessly via a modernized voice-interoperable communications capability, with all mission partners including federal, state, and local military and civil emergency response agencies supporting the full range of domestic response operations.
  - Interoperable Line of Sight/Beyond Line of Sight (LOS/BLOS) Capability - Provides proper Command and Control (C2) of ARNG forces supporting domestic security missions, disaster response, or any other contingency.
- SATCOM On-the-Move - Extends command and control of NGB forces and civilian agencies in and around an incident site.
- Transportation for Large/Heavy Communications Equipment - Provides vehicles for domestic operations support specifically to support the JISCC.

ARNG Program	2013	2014	2015
Man Portable Initial Entry Package	-	-	-
Modernize Cross-Banding Capability and Capacity	-	-	-
SATCOM On-the-Move	$4.50	$4.50	$4.50
Interoperable LOS/BLOS Capability	-	-	-
Untrusted Internet to Warfighter Information Network-Tactical (WIN-T)	-	-	-

Note: All are 2035 Appropriation (Other Procurement)

- Man Portable Initial Entry Package - Provides a quick reaction initial-entry communications capability for proper Command and Control (C2) of National Guard (NG) forces, whether presented for domestic security missions, disaster response or any other contingency.
- Modernize Cross-Banding Capability and Capacity - Provides Army National Guard (ARNG) forces the ability to communicate seamlessly via a modernized voice-interoperable communications capability, with all mission partners including federal, state, and local military and civil emergency response agencies supporting the full range of domestic response operations.
- Interoperable LOS/BLOS Capability - Provides proper Command and Control (C2) of ARNG forces supporting domestic security missions, disaster response, or any other contingency.
- SATCOM On-the-Move - Extends Command and Control (C2) of NGB forces and civilian agencies in and around an incident site.
- Untrusted Internet to Warfighter Information Network-Tactical (WIN-T) - During particular support to domestic response incidents, ARNG personnel must be able to seamlessly and effectively exchange mission data with supported coordinating civilian forces, via civilian mission-response data portals or other information systems.

NEXT GENERATION JOINT INCIDENT SITE COMMUNICATION CAPABILITY (NG-JISCC)

1. Background. NG-JISCC provides a Level I quick reaction, man-portable initial entry communications capability and a Level II capability for superior Command and Control (C2) of Air National Guard (ANG) forces involving domestic security missions, disaster response, or any other contingency operation. The system provides voice, data, and interoperable radio communications between higher headquarters command centers and incident site first responders; is independent of local communication networks; and is compliant with National Incident Management System (NIMS) standards. The robust radio suite is interoperable with federal, state, and local military/civil emergency response agencies allowing communication among the full range of domestic response operations. Furthermore, the system's ability to link geographically-separated communication nodes through line-of-sight networking minimizes bandwidth usage over satellite networks, thus preventing overall network degradation and improves network efficiency for high tempo operations.

2. Source of Need. Recent analysis conducted by the National Guard Bureau Joint Staff (J8) revealed shortfalls in the condition of ANG communications equipment used to execute quick reaction operations supporting catastrophic domestic emergencies. The 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference also identified a rapid response communications capability as a high priority that supports all Emergency Support Functions.

3. Impact If Not Funded. The setup time and transportation requirements of legacy JISCC assets impede response times and flexibility needed to support crisis situations. NG-JISCC allows response within 15 minutes of notification. Without the interoperable radio suite, first responders and other emergency personnel have little ability to coordinate efforts during crisis situations, such as natural disasters, law enforcement operations, or search and rescue operations. Degraded network systems and decreased bandwidth can be expected which may limit near real-time C2 during recovery efforts.

4. Units Impacted. Completes the procurement of NG-JISCC to all 54 states and territories to enable Combat Communications Squadrons and communication flights to respond to contingencies.

5. Contractor. NAVAIR, Patuxent NAS, Lexington Park, MD.

6. Contingency Supported - Previous Usage. Lessons learned are from domestic operations efforts that supported emergency responses to hurricanes Katrina, Rita, and Ivan; and emergency responses to tornados throughout the Midwest and Southern regions.

7. Cost.

Units Required	Unit Cost	Program Cost
29 NG-JISCC Level I (3080)	**$250,000**	**$7,250,000**
8 NG-JISCC Level II (3080)	**$850,000**	**$6,800,000**
Total		**$14,050,000**

SATELLITE COMMUNICATIONS (SATCOM) ON-THE-MOVE SYSTEM

1. Background. Domestic incidents requiring National Guard assistance often involve mobile operations in austere communications environments. A SATCOM on-the-move capability provides reliable and instantaneous communications when en route to or about the joint operations area in support of any natural disaster or Chemical, Biological, Radiological, Nuclear (CBRN) incident. The ability to extend command and control of National Guard (NG) forces and civilian agencies in and around an incident site becomes imperative to recovery efforts. Recovery personnel require a communications system with the ability to share and manage information in near-real time with all NG and National Guard Bureau (NGB) stakeholders, vertically (combatant command, state, incident) and horizontally (interagency). While the system is mobile, it must deliver instantaneous communications in and around an incident site so that NGB users and stakeholders will have continuous situational awareness of all NGB Command, Control, Communications, Computer, Intelligence (C4I) assets. At a minimum, it should provide voice, data, and cross-banding capability between Higher Headquarters (HHQ) and the incident site first responders; be independent of terrestrial infrastructure; be National Incident Management System (NIMS)-compliant; and be interoperable with all mission partners including federal, state, and local military and civil emergency response agencies supporting the full range of domestic response operations.

2. Source of Need. During the 2012 Joint Domestic Operations Equipment Requirements (JDOER) conference, SATCOM on-the-move was identified as a capability gap by all ESFs to enhance and support CBRN response.

3. Impact If Not Funded. Failure to procure this equipment significantly limits the ability to extend and maintain command and control while advancing personnel in and around an incident site where operations in severely degraded environments exist.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to extend command and control capabilities. Equipment will be located within Combat Communications Squadrons and Communication Flights.

5. Contractor. ITT Exelis, McLean, VA.

6. Contingency Supported - Previous Usage. Equipment type currently not fielded for domestic operations use.

7. Cost.

Units Required	Unit Cost	Program Cost
54 SATCOM (3080)	**$250,000**	**$13,500,000**
Total		**$13,500,000**

TRANSPORTATION FOR LARGE/HEAVY COMMUNICATIONS EQUIPMENT

1. Background. The Air National Guard (ANG) has no inherent capability to provide vehicles for domestic operations support specifically to transport the Joint Incident Site Communications Capability (JISCC). To be effective, JISCC assets require a light/medium duty Class 1/2 vehicle (i.e., truck) with features such as crew cab, diesel engine, four-wheel drive, dual rear wheels, heavy-duty tow, and suspension kits. These transport vehicles would also meet dual use (domestic and defense) operations requirements

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Expected incident site response time for a JISCC asset will be significantly increased without proper transport equipment. The JISCC asset will not have the ability to rapidly respond to domestic operations and will be forced to rely on limited capability or ad hoc vehicles. This will directly impact the ability to provide the necessary robust communications needed during a quickly developing domestic operations mission. In addition, it complicates air loading because no consistent prime mover is identified with the kit. This means that each aircraft load could be unique and no uniform load plan can be developed.

4. Units Impacted. All current ANG units that operate and support the JISCC Level II package.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ivan, American Samoa tsunami, National Special Security Events.

7. Cost.

Units Required	Unit Cost	Program Cost
33 Trucks (3080)	**$46,000**	**$1,518,000**
Total		**$1,518,000**

MAN-PORTABLE INITIAL ENTRY PACKAGE

1. Background. To provide proper Command and Control (C2) of National Guard (NG) forces, whether presented for domestic security missions, disaster response or any other contingency, a quick reaction initial-entry communications capability is required. The capability must be man-portable and, within the early phases of joint operations, able to provide rapid and robust non-secure, as well as secure, voice and data communications services to all NG stakeholders, vertically (combatant command, state, incident) and horizontally (interagency). Current Army National Guard (ARNG) communications systems (e.g., Joint Network Node (JNN)) require multiple personnel for operations, lengthy time for system set up, and involved coordination for system transportation. Having a man-portable initial entry communications package will enhance the ability to provide mission C2 in a timely and effective manner, while minimizing personnel, power, and transportation resource constraints.

2. Source of Need. Lessons learned from domestic operations as well as efforts in support of hurricanes Katrina, Rita, and Ivan. Man-Portable Initial Entry Package was identified as the number one joint capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and supports all of the ARNG Emergency Response Functions.

3. Impact If Not Funded. Failure to procure this capability will reduce mission effectiveness. This capability allows ARNG forces to rapidly set up communications equipment and provides mission-critical communications from the incident site to key stakeholders.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond rapidly to contingencies.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. N/A.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

MODERNIZE CROSS-BANDING CAPABILITY AND CAPACITY

1. Background. When working in conjunction with civilian first responders, it is imperative that Army National Guard (ARNG) forces have the ability to communicate seamlessly via a modernized voice-interoperable communications capability with all mission partners including federal, state, and local military and civil emergency response agencies supporting the full range of domestic response operations. Over the years, various states have developed or acquired their disparate solutions to meet this capability gap. This capability should allow ARNG force communications personnel to interconnect radio devices in any radio frequency band, including High-Frequency (HF), Very High Frequency (VHF), Ultra High Frequency (UHF), P25, and 800 trunked, as well as interconnect other voice communications, such as cellular and landline Public Switched Telecommunications Network (PSTN).

2. Source of Need. When responding to a natural or man-made disaster it is imperative that the ARNG units on the ground have the ability to cross-band various radios (i.e., interconnecting disparate frequency bands) to ensure all agencies can communicate seamlessly. There will be ARNG forces along with other federal and state government agencies at an incident site that will need to communicate with each another while providing disaster relief and life-saving operations. Additionally, interoperable communications was identified as the number four NG capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference. A modernized voice interoperability capability would provide an important part of fulfilling the requirement.

3. Impact If Not Funded. Failure to procure this capability will negatively impact mission effectiveness and the ability to establish and maintain Command and Control (C2) during domestic operation situations with risk of harm to the public. Currently, military and civilian agencies have limited equipment that can communicate effectively with one another. This capability would allow for ARNG forces to quickly integrate with first responders and other supporting agencies' communications systems.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Modernizing cross-banding capabilities provide voice interoperability with all mission partners including federal, state, and local military and civil emergency response agencies.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

SATELLITE COMMUNICATIONS (SATCOM) ON-THE-MOVE

1. Background. The ability to extend Command and Control (C2) of National Guard (NG) forces and civilian agencies in and around an incident site is imperative to domestic operation recovery efforts. The system must provide the ability to share and manage information in near real-time with all NG stakeholders, vertically (combatant commands, state, incident) and horizontally (interagency), as well as the ability to deliver instantaneous communications in and around an incident site to provide continued situational awareness of all NG Command, Control, Communications, Computers, & Intelligence (C4I) assets among Army National Guard (ARNG) users and stakeholders while on the move. At a minimum, this capability should provide non-secure, as well as secure, voice, data, and voice interoperability between the Joint Force Headquarters (JFHQ) and incident site first responders; independence of terrestrial infrastructure; National Incident Management System (NIMS) compliant; and interoperability with all mission partners including federal, state, and local military and civilian emergency response agencies supporting the full range of domestic response operations.

2. Source of Need. Lessons learned from domestic operations, efforts in support of hurricanes Katrina, Rita, and Ivan, as well as the 2012 Joint Domestic Operations Equipment Requirements (JDOER) conference have highlighted a capability gap. A high-priority (top three) capability gap was identified by ARNG Emergency Support Functions to enhance Chemical, Biological, Radiological, Nuclear (CBRN) response. A standardized ARNG SATCOM on-the-move capability can provide reliable and instantaneous communications when supporting ARNG forces are en route to the Joint Operations Area (JOA) in support of any natural disaster or CBRN incident.

3. Impact If Not Funded. Failure to procure this capability significantly limits the ability to extend and maintain C2, as well as integrate with all other responding agencies, while advancing ARNG forces to an incident site where operations in severely degraded environments exist. Failure to procure this capability also increases both vulnerability of ARNG personnel and the risk of harm to the public.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to extend C2 when responding to contingencies.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. N/A.

7. Cost.

Units Required	Unit Cost	Program Cost
54 SATCOM (2035)	**$250,000**	**$13,500,000**
Total		**$13,500,000**

INTEROPERABLE LINE OF SIGHT (LOS)/BEYOND LINE OF SIGHT (BLOS) COMMUNICATIONS

1. Background. Robust communications are necessary to provide proper Command and Control (C2) of Army National Guard (ARNG) forces supporting domestic security missions, disaster response, or any other contingency. It is essential to link geographically-separated long-haul terrestrial communications systems in order to minimize bandwidth use and prevent overall systems network degradation. An interoperable LOS/BLOS capability is required to link disparate networks, mitigate or reduce network congestion, and preserve quality of service while exchanging mission-critical information. An interoperable LOS/BLOS capability will minimize direct satellite communications access, decrease unnecessary bandwidth usage, and increase overall network efficiency. ARNG forces currently have LOS/BLOS capabilities embedded within the Warfighter Information Network Tactical Increment 1 (WIN-T Inc 1) platform; however, this capability only supports the Army and is restricted to the Tactical Network.

2. Source of Need. Interoperable LOS/BLOS communications was identified as the number four joint capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and supports all of the ARNG Emergency Response Functions.

3. Impact If Not Funded. Failure to provide funding for an interoperable LOS/BLOS capability would result in degraded network systems and decreased bandwidth limiting near real-time C2 capability during domestic operations support efforts.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ivan, G8/G20 Summits, Presidential Inauguration.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

UNTRUSTED INTERNET TO WARFIGHTER INFORMATION NETWORK-TACTICAL (WIN-T)

1. Background. The current Army National Guard's (ARNG) tactical communications equipment is the Warfighter Information Network-Tactical Increment 1 (WIN-T Inc 1). WIN-T Inc 1 is fielded to Modified Table of Organization & Equipment (MTOE) units and provides tactical Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) support capabilities. It is a U.S. Army communications system that provides secure video, data, imagery, and voice services to enable decisive combat actions. WIN-T Inc 1 includes the following capabilities: broadband satellite reach-back, Non-Secure Internet Protocol Router Network/Secure Internet Protocol Router Network (NIPR/SIPR) connectivity, voice switching, Voice over Internet Protocol (VoIP), High Capacity Line of Sight (LOS), and Defense Switched Network (DSN) service access. However, to provide proper Command and Control (C2) of ARNG forces, whether presented for domestic security missions, disaster response or any other contingency, a comprehensive communications capability is required. During particular support to domestic response incidents, ARNG personnel must be able to seamlessly and effectively exchange mission data with supported civilian forces, via civilian mission-response data portals or other information systems.

2. Source of Need. Lessons learned from domestic operations as well as efforts in support of hurricanes Katrina, Rita, and Ivan identified un-trusted commercial internet as a capability gap. Un-trusted commercial internet, also known as "dirty internet" was identified as the sixth major capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and supports all of the ARNG Emergency Response Functions.

3. Impact If Not Funded. Failure to procure this capability could result in significantly degraded mission effectiveness. This capability allows ARNG forces to communicate and integrate with all other responding agencies utilizing the units' organic Tactical Communication Network. Failure to procure increases both vulnerability of ARNG personnel and the risk of harm to the public. The lack of trusted Internet services for ARNG forces will negatively impact the ability to establish and maintain C2 during domestic operation situations.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories who fielded WIN-T Inc 1.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ivan, G8/G20 Summits, Presidential Inauguration.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

Public Works & Engineering

Public Works and Engineering (ESF #3) - The Department of Defense is the primary agency for providing the Public Works and Engineering Emergency Support Function technical assistance, engineering, and construction management resources during response activities. ESF#3 provides contracting support for construction management, road clearing and airfield recovery, electrical power generation and distribution, and emergency repair of water treatment facilities (potable water, ice, and wastewater). Other contracting activities include providing support for real estate use, life-saving and life-sustaining actions, damage mitigation, expedient bridging, and Explosive Ordnance Disposal (EOD) following a major disaster.

In a major disaster or emergency response, operations may be beyond state and local response capabilities. Homes, public buildings, bridges, and other facilities may have to be reinforced or demolished to ensure safety, and public utilities may be partially or fully inoperable. A major disaster may affect the lives of many state and local response personnel and their facilities, preventing them from performing their prescribed emergency response duties. Similarly, emergency response equipment in the immediate disaster area may be damaged or inaccessible. Therefore, sufficient resources may not be available to state and local agencies to meet emergency response requirements. Federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, coordinated, and effective response.

Public Works and Engineering
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Emergency Power Generation
- Expedient Facilities
- Road Clearance / Airfield Recovery Equipment
- Potable Water Supply Generation, Sustainment, Storage, and Distribution
- Explosive Ordnance Disposal (EOD) Equipment

Army National Guard

- Emergency Power Generation
- Road Clearance / Airfield Recovery Equipment
- Potable Water Supply Generation, Sustainment, Storage, and Distribution

Essential Capabilities List

None

Desired Capabilities List

None

PUBLIC WORKS AND ENGINEERING EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Prime Power Team	$1.90	$7.60	$7.60
Expedient Facilities	$4.60	$6.90	$6.90
Road Clearance / Airfield Recovery Equipment	$6.33	$6.33	$6.33
Potable Water Production, Storage, and Distribution Equipment	$1.00	$0.52	-
Explosive Ordnance Disposal (EOD) Equipment	$4.09	$2.92	$2.92

Note: All are 3080 Appropriation (Other Procurement)

- Prime Power Team - Deploys disaster relief operations to provide stable power support, advice, and technical assistance in all aspects of emergency electrical power and distribution systems.
- Expedient Facilities - Includes command and control, medical, and storage facilities. Facilities will include power generation and distribution, lighting, and basic latrine service.
- Road Clearance/Airfield Recovery Equipment - Provides equipment required to clear roads and access areas of debris in order to allow access for emergency services and relief personnel during disasters.
- Potable Water Production, Storage, and Distribution Equipment - Provides 1,500 gallon Reverse Osmosis Water Purification Unit (ROWPU) that can purify 1,500 gallons of water per hour in a disaster situation.
- Explosive Ordnance Disposal (EOD) Equipment - Provides Bomb Squad Emergency Response Vehicle (BSERV) and Total Containment Vessel (TCV) to allow EOD teams to respond to emergency situations with the proper equipment in a timely manner.

ARNG Program	2013	2014	2015
Tactical Electrical Power	-	-	-
Route Clearance and Debris Removal Heavy Equipment	$103.00	$103.00	$103.00
Potable Water Production and Storage Equipment	$25.87	$25.00	$25.00

Note: All are 2035 Appropriation (Other Procurement)

- Tactical Electrical Power - Provides power generation requirements necessary to support federal and state missions.
- Route Clearance and Debris Removal Heavy Equipment - Provides heavy equipment required to clear roads and other access areas of debris in order to allow access for emergency services and relief personnel during disasters.
- Potable Water Production and Storage Equipment - Provides ROWPU, filter, pump, 60 kW generator, and 15,000 gallon water storage and distribution system for use in a disaster situation.

PRIME POWER TEAM

1. Background. A prime power team consists of personnel and equipment that will deploy during a disaster relief operation to provide stable, reliable electrical power as well as advice and technical assistance in all aspects of emergency electrical power, electrical distribution systems and restoration of the permanent power grid. The team will provide limited installation, operation, and maintenance of emergency power generation systems. The team will be capable of maintaining and increasing the emergency power over an extended period of time to civilian and military emergency facilities including hospitals, police stations, command centers, or Joint Reception Staging and Onward Integration (JRSOI) sites. The team can also provide emergency power support to a school or small college campus being used as an evacuation point or temporary shelter. One set of 108 power generators of various sizes are required at each of the 10 Federal Emergency Management Agency (FEMA) regions.

2. Source of Need. Identified by the 2010 Domestic Operations Equipment Requirements (DOER) and 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conferences.

3. Impact If Not Funded. Adequate power would not be available to conduct effective recovery operations. This would lead to decreased ability to conduct recovery operations, hamper transport and medical treatment of casualties, resulting in loss of life and prolonged suffering of the affected populace.

4. Units Impacted. TBD.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Power generation capability by the Prime Power Team can provide stable power support to civilian and military emergency facilities supporting any natural disaster.

7. Cost.

Units Required	Unit Cost	Program Cost
9 Power Generator Sets **15 kW to 750 kW** (3080)	**$1,900,000**	**$17,100,000**
Total		**$17,100,000**

EXPEDIENT FACILITIES

1. Background. During natural or man-made disasters there is always a need for expedient facilities to support contingency responses. Each of the ten Federal Emergency Management Agency (FEMA) regions has an expedient facility capability provided by an existing Disaster Relief Beddown Set (DRBS). The DRBS supports 150 people and provides power generation and distribution, lighting, water purification, and basic latrine service. The DRBS will be used for sheltering responders or for providing additional key facilities needed in contingencies including Command and Control (C2) centers, feeding centers, medical aid, Joint Reception Staging and Onward Integration (JRSOI) sites or supply storage for points of distribution, in support of both military and civilian authorities. Facilities will also support international relief agencies for disasters outside the United States. A second expedient facility capability (DRBS) is required in each of the 10 FEMA regions.

2. Source of Need. Identified by the 2010 Domestic Operations Equipment Requirements (DOER) and 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conferences.

3. Impact If Not Funded. Responding military forces and civilian authorities will lack temporary facilities and will be hindered in coordinating responses, feeding personnel, providing medical assistance, and storing emergency supplies during contingencies and disasters.

4. Units Impacted. TBD.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Expedient facilities capability can support any domestic incident response.

7. Cost.

Units Required	Unit Cost	Program Cost
8 DRBS (3080)	**$2,300,000**	**$18,400,000**
Total		**$18,400,000**

ROAD CLEARANCE/AIRFIELD RECOVERY (HEAVY)

1. Background. During most natural disasters, there is a significant requirement to clear roads and airfields of debris. Roads and airfields must be rapidly cleared in order to facilitate the emergency response and recovery process, and allow additional resources to flow to the affected areas. Heavy equipment such as bulldozers, front-end loaders, dump trucks, and cranes must be available to ensure rapid clearing of critical access roads and airfields. This heavy capability compliments the previously procured light airfield and route clearance equipment which include chain saws, chop saws, hand tools, personnel protective equipment, rope ladders, and other light clearance equipment.

2. Source of Need. Identified by the 2010 Domestic Operations Equipment Requirements (DOER) and 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conferences.

3. Impact If Not Funded. If access roads are blocked or airfields are unsafe to support airlift, the overall response will be severely hindered. Relief personnel and the emergency services they provide will be severely delayed. Equipment and supplies will be unable to reach the areas affected by a disaster. Blocked roads and airfields will greatly slow the progress of relief operations. The ability of the responders to render medical aid, and deliver supplies, food, and water will be reduced and delayed, which will lead to increased suffering and loss of life.

4. Units Impacted. TBD.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ike.

7. Cost.

Units Required	Unit Cost	Program Cost
3 Heavy Equipment Road Clearance / Airfield Recovery Sets (3080)	**$6,330,000**	**$18,990,000**
Total		**$18,990,000**

POTABLE WATER
PRODUCTION, STORAGE, AND DISTRIBUTION EQUIPMENT

1. Background. There is a significant demand for potable water from expedient sources during most natural disasters. A Reverse Osmosis Water Purification Unit (ROWPU) provides an expedient water purification and desalination processing capability, yielding 1,500 gallons of potable water per hour. Large storage bladders are needed to store the potable water from the ROWPU. A distribution capability including water trailers and 5-gallon water jugs are also needed to efficiently supply and distribute the water. Each ROWPU also needs consumable filters, chemicals, and other supplies to support sustained operations. Several units have training ROWPUs and just need the consumable supplies to make them fully operational. The ROWPU can be connected to a water treatment plant for city use during a power outage. This requirement will provide capability in each Federal Emergency Management Agency (FEMA) region.

2. Source of Need. Identified by the 2010 Domestic Operations Equipment Requirements (DOER) and 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conferences.

3. Impact If Not Funded. The lack of potable water, a major humanitarian need following a disaster, will impact recovery efforts.

4. Units Impacted. TBD.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Tornadoes in Arkansas and hurricanes Katrina, Rita, and Ike.

7. Cost.

Units Required	Unit Cost	Program Cost
6 1,500-GPH ROWPU (3080)	**$252,789**	**$1,516,734**
Total		**$1,516,734**

EXPLOSIVE ORDNANCE DISPOSAL (EOD) EQUIPMENT

1. Background. There are 17 Air National Guard EOD units throughout the United States with limited equipment for training and response. The EOD units have been recently equipped with Personnel Protective Equipment (PPE), self-contained breathing apparatuses, radio/communication packages, night vision goggles, and demolition/detection packages. EOD units still lack a Bomb Squad Emergency Response Vehicle (BSERV) and a Total Containment Vessel (TCV). Without a BSERV, EOD units are required to improvise transportation solutions, and have to choose which pieces of their EOD equipment to leave behind. The TCV provides a safe way to contain, transport, and ultimately dispose of a CBRN (Chemical, Biological, Radiological, Nuclear) device. Without a TCV, EOD units lack the critical capability to handle and transport these hazardous devices. The lack of a BSERV and TCV reduce the effectiveness of EOD units and their response will be limited. The requirement provides effective response to situations requiring EOD capability and the ability to respond to hazardous CBRN incidents throughout the United States.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Not providing the BSERV and TCV will prevent the EOD units from being properly trained and equipped to respond to hazardous domestic CBRN incidents.

4. Units Impacted.

104 CES	Barnes, MA	125 CES	Jacksonville, FL	151 CES	Salt Lake City, UT
115 CES	Dane, WI	140 CES	Buckley, CO	155 CES	Lincoln, NE
116 CES	Robins, GA	142 CES	Portland, OR	158 CES	Burlington, VT
119 CES	Fargo, ND	144 CES	Fresno, CA	166 CES	New Castle, DE
120 CES	Great Falls, MT	147 CES	Ellington, TX	177 CES	Atlantic City, NJ
123 CES	Standiford, KY	148 CES	Duluth, MN		

5. Contractor. Hendon Company, Deerfield, IL; Allen Vanguard, Ashburn, VA.

6. Contingency Supported - Previous Usage. National Special Security Events.

7. Cost.

Units Required	Unit Cost	Program Cost
17 BSERV	**$300,000**	**$5,100,000**
17 TCV	**$285,000**	**$4,845,000**
Total		**$9,945,000**

Note: All are 3080 (Other Procurement)

TACTICAL ELECTRICAL POWER (TEP)

1. Background. The TEP consists of a family of three generators. The small family (2-3 kW), the medium family (5-60 kW) and power plant generator units (generators on trailers). Each family of generators consists of various sizes and capabilities of TEP Equipment. This Information Paper covers all of the TEP requirements. Fielding this equipment will allow the Army National Guard (ARNG) to continue to modernize and fill power-generation equipment requirements necessary to support federal and state missions.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact if Not Funded. At this time all Small and Medium state-wide Tactical Quiet Generator (TQG) shortages are being shipped to the states. Any reported generator shortages are scheduled to be filled in FY12.

4. Units Impacted. Majority of ARNG units have some level of equipment on hand to provide TEP in support of disaster relief.

5. Contractor. Department of Defense Project Manager is Mobile Electric Power, Fort Belvoir, VA.

6. Contingencies Supported - Previous Usage. Generator capability can provide stable power support to any natural disaster.

7. Cost.

Units Required	Unit Cost	Program Cost
6,694 Small TEP	**Multiple based on size**	**TBD**
9,195 Medium TEP	**Multiple based on size**	**TBD**
Total		

Note: All are 2035 (Other Procurement)

ROAD CLEARANCE AND DEBRIS REMOVAL
HEAVY EQUIPMENT

1. Background. During most natural disasters, there is a significant requirement to clear roads and other access areas of debris and/or snow in order to allow emergency services and relief personnel to access the affected area. In addition, the expeditious clearing of roads will speed up the recovery process and start to return conditions to normal. There are seven main pieces of heavy construction equipment. These seven pieces consist of the Scoop Loader, High Mobility Engineer Excavator (HMEE), Back Hoe Loader (BHL), Hydraulic Excavator (HYEX), Bulldozers, Skid Steer Loader, and Family of All Terrain Cranes (FOATC). All of these pieces of equipment are managed by HQDA G8 and are authorized by HQDA G3. Within the Army National Guard (ARNG) the systems are utilized by the 45 Horizontal Companies, 23 Engineer Support Companies, 12 Multi-Role Bridge Companies, as well as many lower density detachments and teams. The ARNG companies, detachments, and teams are used to clear roads, freeways and other areas of debris and/or snow in the event of a disaster and would allow emergency personnel the ability to respond to support national and local emergencies with the proper equipment.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. All ARNG Engineer units have required Mission Table of Organization and Equipment (MTOE) on hand. Program of record procurement efforts will focus on modernizing required MTOE.

4. Units Impacted. Programs are fully funded. There are 177 separate ARNG Engineer Companies, Teams, and Platoons that are equipped with route clearance vehicles.

5. Contractor. Program Executive Office Combat Support and Combat Service Support (PEO CS&CSS).

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ike. Regional ice and snow storms.

7. Cost.

Units Required	Unit Cost	Program Cost
643 Bulldozers	**$300,000**	**$192,900,000**
126 Loaders	**$190,000**	**$23,940,000**
535 Skid Steer Loaders	**$28,000**	**$14,980,000**
129 HYEXs	**$240,000**	**$30,960,000**
162 HMEEs	**$185,000**	**$29,970,000**
205 BHLs	**$78,000**	**$15,990,000**
Total		**$308,740,000**

Note: All are 2035 (Other Procurement)

POTABLE WATER PRODUCTION AND STORAGE EQUIPMENT

1. Background. The Tactical Water Purification System (TWPS) is a complete water purification system that consists of a feed water pump, hoses, Reverse Osmosis Water Purification Unit (ROWPU) elements, pre-filter, high pressure pump, 60 kW TQG generator, 15,000 gallon water storage & distribution system, and control panel. It will be mounted on a Load Handling System (LHS) – Pallet Load System (PLS) compatible flat-rack and can be transported on a C-130 fixed wing aircraft. Each TWPS will replace two - 600 ROWPUs which reduces manpower requirements and the logistics footprint.

2. Source of Requirement. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact if Not Funded. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

4. Units Impacted. There are 76 Combat Service and Quartermaster Battalions and Companies that are authorized for equipment.

5. Contractor. Global Defense Engineering, Easton, MD.

6. Contingencies Supported - Previous Usage. Equipment can be used to support any disaster requiring water purification.

7. Cost.

Units Required	Unit Cost	Program Cost
135 TWPS (2035)	**$562,000**	**$75,870,000**
Total		**$75,870,000**

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Firefighting

Firefighting (ESF #4) - Firefighting detects and suppresses woodland, rural, and urban fires resulting from, or occurring coincidentally with a major disaster or emergency requiring federal response assistance. ESF #4 manages and coordinates firefighting activities including the detection and suppression of fires on federal lands and provides personnel, equipment, and supplies in support of state and local agencies involved in rural and urban firefighting operations.

The management of a large firefighting operation is complex, often involving thousands of personnel and resources from many different agencies and jurisdictions. Fires resulting from, or occurring coincidentally with a major disaster or emergency may place extraordinary demands on available resources and logistics support systems. A major disaster or emergency may cause a large number of urban, rural, and woodland fires. The damage potential from fires in urban areas during and after a major disaster (such as an earthquake) exceeds that of all other causes. Numerous fires may have the potential to spread rapidly, cause extensive damage, and pose a serious threat to life and property. Urban fire departments not incapacitated by an earthquake may be totally committed to fires in urban areas. Normally available firefighting resources may be difficult to obtain and use because of massive disruption of communication, transportation, utility, and water systems. Agencies will exceed capabilities during a catastrophic event requiring resources from outside departments.

Air National Guard Fire Emergency Services team is capable of augmenting local firefighting resources. The team consists of management, emergency incident commanders, and fire fighters. These teams provide: fire protection to mitigate the damage from fire (structural and aircraft) that would seriously degrade mission capability, technical rescue to save lives involving confined space, high and low angle, motor vehicle, machinery/equipment, aircraft, and trench rescue situations, as well as hazardous materials response including Weapons of Mass Destruction (WMD) and Chemical, Biological, Radiological, Nuclear (CBRN) events. The Fire Chief and Deputy Fire Chief provide fire protection management of a fire department and provide senior leadership advice on vital information for minimizing loss of life and property damage. The Assistant Fire Chief provides fire fighter supervision and emergency incident scene management and can be expanded to provide fire department training and fire prevention support to include facility inspections, reviews of plans, and fire prevention education. Finally, fire crews are available to man the apparatus and provide the firefighting, rescue, and hazardous material response.

Firefighting
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Interoperable Communication System
- Structural Fire Fighting Vehicles
- Structural Personal Protective Equipment (PPE)
- Aircraft Rescue Fire Fighting Vehicles (ARFF)
- Response Kits (Medical, Incident Management, Wide Area Search)

Essential Capabilities List

Air National Guard

- Mobile Airborne Fire Fighting System (MAFFS)
- Bambi Buckets

Desired Capabilities List

None

FIREFIGHTING
EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Interoperable Communication System	TBD	TBD	TBD
Structural Fire Fighting Vehicles	$7.80	$7.80	$7.80
Personal Protective Equipment (PPE) for Structural Fire Fighting	$3.40	$3.40	$3.40
Aircraft Fire Fighting Vehicles	$25.60	$25.60	$25.60
Response Kits (Medical Kits, Incident Management Kits, Wide Area Search Kits)	$1.32	$1.32	$1.32

Note: All are 3080 Appropriation (Other Procurement)

- Interoperable Communication System - Consists of portable and mobile radios that field programmable, mobile, or vehicle mounted repeaters, as well as internet connectivity from austere sites to secure the ability to communicate with any agency being supported.
- Structural Fire Fighting Vehicles - Provides structural fire fighting vehicles for ANG Fire Emergency Services Fights to conduct day-to-day operations and support to domestic operations contingencies.
- Personal Protective Equipment (PPE) for Structural Fire Fighting - Provides fire fighters the protective equipment necessary to support domestic operations during natural or man-made disasters.
- Aircraft Fire Fighting Vehicles - Provides P-19 and P-23 aircraft rescue fire fighting vehicles to support logistical staging areas for Air Bridge fire protection support.
- Response Kits (Medical Kits, Incident Management Kits, Wide Area Search Kits) - Provides Medical, Incident Management, and Wide Area Search kits for fire fighters deploying into an area that has been hit by a major disaster.

INTEROPERABLE COMMUNICATION SYSTEM

1. Background. Communication issues have been identified as key problems on incidents since September 11, 2001. The Air National Guard (ANG) requires the ability to communicate with any agency responding in support of the Incident Command System (ICS). This includes operations at a remote air head as well as day-to-day operations with mutual aid partners. The communication system identified during this process include portable and mobile radios that are field programmable, mobile, or vehicle mounted repeaters, as well as internet connectivity from austere sites.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and lessons learned from hurricane Katrina and the Haiti earthquake.

3. Impact If Not Funded. The impact of not funding interoperable communication systems will result in degraded communications in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These systems will provide a valuable service to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All 64 ANG Fire Emergency Service Flights.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Local, state, and federal disasters where a need for interoperable communications existed.

7. Cost.

Units Required	Unit Cost	Program Cost
64 Interoperable Communication Systems (3080)	**TBD**	**TBD**
Total		

STRUCTURAL FIREFIGHTING VEHICLES

1. Background. The structural firefighting vehicle is needed for operational support of Defense Support of Civil Authorities (DSCA). Disasters such as hurricane Katrina, the Haiti earthquake, and others have shown a need for support to civilian agencies as resources are rapidly expended. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. Firefighting capability will be increased with the procurement and posturing of structural firefighting apparatus at ANG locations that are available to support domestic operations and support Mutual Aid Agreement day to day operations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and hurricane Katrina and the Haiti earthquake lessons learned.

3. Impact If Not Funded. The impact of not funding structural firefighting vehicles could result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide valuable life-saving resources to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All ANG Fire Emergency Service Flights.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Local, state, and federal disasters where a need for specialized vehicles existed.

7. Cost.

Units Required	Unit Cost	Program Cost
10 P-22 Rescue/Pumper	**$366,000**	**$3,660,000**
52 P-26 Water Tender	**$360,000**	**$18,720,000**
26 Command Vehicles with Topper and Slide-Outs	**$40,000**	**$1,040,000**
Total		**$23,420,000**

Note: All are 3080 Appropriation (Other Procurement)

PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR STRUCTURAL FIRE FIGHTING

1. Background. Air National Guard (ANG) Fire Emergency Services primary mission is Aircraft Rescue Fire Fighting (ARRF) on airfields and in proximity of the installation. The PPE used is not compatible with civilian fire departments. Structural PPE would provide ANG firefighters the needed protection to support domestic operations in the event of natural or man-made disasters. The requirement procures structural PPE for all ANG firefighters in support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) to fill capability shortfalls in response to National Response Framework (NRF) threats and scenarios.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The need for structural PPE is critical to the appropriate level of support in several areas. This level of protection would allow ANG firefighters to staff structural fire fighting vehicles in support of DSCA and NGCS. These assets will provide a valuable resource to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. 34 locations for traditional fire fighters and 59 locations for Master Cooperative Agreement (MCA) fire fighters in ANG Fire Emergency Service Flights.

5. Contractor. Multiple vendors available.

6. Contingency Supported - Previous Usage. Local, state, and federal disasters where a need for Fire Department services existed.

7. Cost.

Units Required	Unit Cost	Program Cost
3,000 Structural Personal Protective Equipment Sets (3080)	**$3,400**	**$10,200,000**
Total		**$10,200,000**

AIRCRAFT RESCUE FIRE FIGHTING (ARFF) VEHICLES

1. Background. The Air National Guard (ANG) lacks adequate numbers of ARFF vehicles to support Forward Operating Locations (FOL) in the event of a natural or man-made disaster when a logistical staging area is required. The use of existing vehicles reduces the level of fire protection at ANG locations with a potential negative impact on mission requirements. Firefighting capability would be increased by posturing ARFF vehicles to support the potential logistical staging areas for Air Bridge fire protection support. This equipment fills the capability gaps in response to all National Response Framework (NRF) threats and scenarios.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The impact of not funding ARFF vehicles will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. If this initiative is not funded it would delay appropriate fire protection and negatively affect the logistical staging process. These assets will provide valuable resources to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All ANG Fire Departments.

5. Contractor. Multiple vendors available.

6. Contingency Supported - Previous Usage. Local, state, and federal disasters where ARFF services were needed.

7. Cost.

Units Required	Unit Cost	Program Cost
24 P-19 Aircraft Rescue Fire Fighting Vehicles	**$820,000**	**$19,680,000**
56 P-23 Aircraft Rescue Fire Fighting Vehicles	**$1,020,000**	**$57,120,000**
Total		**$76,800,000**

Note: All are 3080 Appropriation (Other Procurement)

RESPONSE KITS (MEDICAL KITS, INCIDENT MANAGEMENT KITS, WIDE AREA SEARCH KITS)

1. Background. Lessons learned from hurricane Katrina and the Haiti earthquake have driven home the need to bring everything that will be needed when deploying forward into an area that has been hit by a major disaster. Responders cannot rely on finding needed items in a disaster zone, requiring them to report to a fire department, hospital, etc., instead of directly to the event site, wasting valuable time. Packaged response kits that are set up and ready to go at all times will help alleviate some of these needs. Medical kits will allow responders to work on patients as well as themselves when working in very austere conditions, Incident Management Kits that contain Incident Command System (ICS) tools and forms, and Wide Area Search Kits that contain tools and forms are needed to perform what can be a vital lifesaving mission in a disaster zone.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and hurricane Katrina and the Haiti earthquake lessons learned.

3. Impact If Not Funded. The impact of not funding these response kits could result in the potential of responding personnel not having everything they need to effectively perform their missions in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide valuable, life-saving resources to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All 64 Air National Guard (ANG) Fire Emergency Service Flights.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Local, state, and federal disasters where a need for specialized missions existed.

7. Cost.

Units Required	Unit Cost	Program Cost
64 Incident Management Kits	**$750**	**$48,000**
256 Wide Area Search Kits	**$300**	**$76,800**
256 Medical Kits	**$15,000**	**$3,840,000**
Total		**$3,964,800**

Note: All are 3080 Appropriation (Other Procurement)

Emergency Management

Emergency Management (ESF #5) - Emergency Management is responsible for supporting overall activities of the Federal Government for domestic incident management. ESF #5 provides the core management and administrative functions in support of FEMA's National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) operations.

ESF #5 serves as the support ESF for all federal departments and agencies across the spectrum of domestic incident management from prevention to response and recovery and facilitates information flow in the pre-incident prevention phase in order to place assets on alert or pre-position for quick response. During the post-incident response phase, ESF #5 transitions and is responsible for support and planning functions. ESF #5 activities include those functions that are critical to support and facilitate multiagency planning and coordination for operations involving potential and actual incidents of national significance. This includes alert and notification, deployment and staffing of Department of Homeland Security (DHS) emergency response teams, incident action planning, coordination of operations, logistics and materials, direction and control, information management, facilitation of requests for federal assistance, resource acquisition and management (to include allocation and tracking), worker safety and health, facilities management, financial management, and other support as required.

The National Guard brings with it a natural organizational hierarchy which translates effectively and efficiently into the National Incident Management System (NIMS) organization. The combination of these categories of command, control, and communications produces the capabilities required to maximize the Common Operating Picture (COP) within local communities, states and to all appropriate ESF agencies. The equipment allowing maximum COP (e.g., Mobile Emergency Operations Centers (MEOC), Liaison Officer Tool Kits, All-Source COP) also provides connectivity between the Incident Command System (ICS), which commands disaster operations in local communities, the National Guard and other federal agencies as required.

Emergency Management
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Mobile Emergency Operations Center (MEOC)
- Liaison Command and Control (C2) Kit
- Chemical Biological Radiological Nuclear (CBRN) Equipment
- Common Operational Picture Suite

Army National Guard

- Mobile Emergency Operations Center (MEOC)
- Liaison Command and Control (C2) Kit
- Common Operational Picture Suite

Essential Capabilities List

Air National Guard

- Interoperable Communications with ANG**,** ARNG, and Civilian Agencies
- Hazardous Materials Identification and Decontamination Capability

Desired Capabilities List

None

EMERGENCY MANAGEMENT EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Mobile Emergency Operations Center	$3.00	$3.00	-
Liaison Command and Control Kit	$0.60	-	-
Chemical, Biological, Radiological, Nuclear (CBRN) Equipment	$5.25	$5.25	-
Common Operational Picture Suite	$2.38	$2.38	$2.38

Note: All are 3080 Appropriation (Other Procurement)

- Mobile Emergency Operations Center (MEOC) - Deploys during disaster relief operations and large scale installation emergencies to provide interagency/interoperable command and control with integration of Federal Emergency Management Agency (FEMA) Type II requirements including full spectrum voice, data and imagery.
- Liaison Command and Control (C2) Kit - Provides advanced agile, field expedient, mobile communications to support Incident Command and first responders in joint interagency response.
- Chemical, Biological, Radiological, Nuclear (CBRN) Equipment - Required by 67 Air National Guard (ANG) Emergency Management Flights to respond to HAZMAT incidents throughout the United States and abroad.
- Common Operational Picture (COP) Suite - Provides fusion of multiple data sources across the air, ground, and maritime domain incorporating geospatial information, Command and Control (C2), and plume modeling to provide leadership with real-time situational awareness.

ARNG Program	2013	2014	2015
Mobile, Expandable, Sustainable, Interoperable Command and Control (C2) Capability	$3.00	$3.00	-
Limited Scale, Immediately Deployable Communications	$1.62	-	-
Shared Situational Awareness (SSA) Resources	$2.38	$2.38	$2.38

Note: All are 2035 Appropriation (Other Procurement)

- Mobile Emergency Operations Center (MEOC) - Deploys during disaster relief operations and large scale installation emergencies to provide interagency/interoperable command and control with integration of Federal Emergency Management Agency (FEMA) Type II requirements including full spectrum voice, data and imagery.
- Liaison Command and Control (C2) Kit - Provides advanced agile, field expedient, mobile communications to support Incident Command/first responders in joint interagency response.
- Common Operational Picture (COP) Suite - Provides fusion of multiple data sources across the air, ground, and maritime domain incorporating geospatial information, Command and Control (C2), and plume modeling to provide leadership with real-time situational awareness.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) TYPE II MOBILE EMERGENCY OPERATIONS CENTERS (MEOC)

1. Background. The Homeland Security Presidential Directive (HSPD) 5 mandates directing military, state, and federal government response agencies to meet communications interoperability requirements. Published guidance mandates that commanders will provide Command and Control (C2) capabilities to support a Common Operating Picture (COP) to aid in accountability and decision support to fulfill Air Force Incident Management System (AFIMS) requirements. Currently Air National Guard (ANG) Emergency Management possesses limited capability to provide agile C2 or interoperability to responders. Federal Emergency Management Agency (FEMA) Type II requirements provide compatible full spectrum of voice, data, and imaging in support of surrounding local authorities' emergency responder capabilities.

2. Source of Need. ANG Emergency Management Flights require full FEMA Type II compliant MEOC to support Domestic Operations.

3. Impact If Not Funded. Current capability limitations could create life safety issues for ANG personnel, local responders, and affected populations. ANG enterprise would be in abeyance of Homeland Security Presidential Directives (HSPD) 5/8.

4. Units Impacted. All FEMA regions possessing tasked units are impacted. Eight units have been procured as of late 2011. (Larger regions will receive two units to cover area.)

5. Contractor. North American Catastrophe Services (NACS), Melbourne, FL.

6. Contingency Supported - Previous Usage. FEMA Type II MEOC supports Homeland Defense Operations/Domestic Operations and Response, National Guard Civil Support (NGCS) Title 32, NORTHCOM Title 10 missions and Emergency Management Assistance Compacts.

7. Cost.

Units Required	Unit Cost	Program Cost
10 MEOC (3080)	**$600,000**	**$6,000,000**
Total		**$6,000,000**

LIAISON COMMAND AND CONTROL (C2) KIT

1. Background. During the recent 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference, the emergency management breakout session highlighted a common need for interoperable, portable, and agile C2 including the following capabilities: ruggedized computer, printer, copier, scanner, air card, International Maritime Satellite Organization (INMARSAT) Satellite Communication (SATCOM) access, webcam, digital video, and an interoperability module. This system will provide agile support to Incident Commanders, Liaison Officers, Field Responders, and those requiring situational awareness. Current equipment does not support joint or interagency operations.

2. Source of Need. Liaison C2 Kits are required for each 4F9WM Designed Operating Capability (DOC) tasked Air National Guard (ANG) units.

3. Impact If Not Funded. If Liaison C2 Kits are not funded, there will be a lack of situational awareness and Command and Control for the event. Additionally, ANG Emergency Management enterprise responses will not be in abeyance of Homeland Security Presidential Directives (HSPD) 5/8.

4. Units Impacted. Twenty 4F9WM DOC tasked units and an additional 20 planned units will be impacted.

5. Contractor. 308 Systems Inc., Ft. Collins, CO.

6. Contingency Supported - Previous Usage. National Guard Civil Support (NGCS) Title 32/NORTHCOM Title 10 missions - All Hazards response (Natural Disaster/CBRN/Technological/Terrorism) and Emergency Management Assistance Compacts are supported.

7. Cost.

Units Required	Unit Cost	Program Cost
20 C2 Kits (3080)	**$30,000**	**$600,000**
Total		**$600,000**

CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) AGENT DETECTION AND DECONTAMINATION

1. Background. Enhancing the ability of Air National Guard (ANG) Emergency Management (EM) CBRN response teams requires the procurement and standardization of a robust field ready CBRN agent detection capability. The currently fielded equipment only provides presumptive results requiring additional testing and confirmation. Additionally, the aging equipment is unreliable. During CBRN response operations involving any hazardous materials incident, results for determination of results and actions are delayed due to inability of ANG EM personnel to quickly confirm presence of CBRN agents. One of the key components to any CBRN response is the decontamination of personnel and equipment. Currently, ANG EM personnel lack most of this capability and rely on others to provide decontamination.

2. Source of Need. Advanced CBRN detection and decontamination capability needed/required for each Designed Operational Capability (DOC) tasked Unit Type Code (UTC).

3. Impact If Not Funded. Current technology limitations could create life safety issues for ANG personnel.

4. Units Impacted. All 67 UTC DOC tasked units are impacted.

5. Contractor. Multiple are available.

6. Contingency Supported - Previous Usage. Capability supports CBRN response request actions and Overseas Contingency Operations.

7. Cost.

Units Required	Unit Cost	Program Cost
67 Detection and Decontamination Kits (3080)	**$150,000**	**$10,500,000**
Total		**$10,500,000**

COMMON OPERATING PICTURE (COP)

1. Background. Enhancing combat and domestic operations capability of National Guard (NG) Command and Control (C2) requires integration of multiple data systems. The Common Operating Picture (COP) must be able to fuse data across the ground, air, and sea domains incorporating Geospatial Information System (GIS), C2, and plume modeling. This capability provides state and unit leadership immediate access to their status of forces and the ability to quickly assess critical information resulting in timely dissemination to mission partners and effective employment of forces for domestic operations. State and unit leadership must be able to develop and maintain overall awareness and understanding of an incident across jurisdictions while preparing for potential requirements and requests for additional support. They must possess the ability to formulate, execute, and communicate operations decisions at an incident site, as well as between incident management entities across the jurisdiction and functional agencies.

2. Source of Need. 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference highlighted the need for a COP suite for each state's and territory's Joint Operations Center, Air National Guard (ANG) flying Wing, Western and Eastern Air Defense Sectors (WADS and EADS), and the 601st Air Operations Center (AOC).

3. Impact If Not Funded. Failure to develop and field COP suite will deny state and installation leadership teams the ability to maintain and disseminate time critical incident situational awareness to fully integrate with mission partners.

4. Units Impacted. All ANG Wings, state JOCs, WADS, EADS and 601st AOC will be impacted.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. COP supports Operation NOBLE EAGLE, Aerospace Control Alert (ACA) missions, tanker wings supporting ACA missions, hurricanes Katrina, Ike, and Gustave.

7. Cost.

Units Required	Unit Cost	Program Cost
145 COP Suites (3080)	**$28,000**	**$4,060,000**
Total		**$4,060,000**

MOBILE, EXPANDABLE, SUSTAINABLE, INTEROPERABLE COMMAND AND CONTROL (C2) CAPABILITY

1. Background. A Level 2 Command and Control (C2) communications capability (as defined by *USNORTHCOM Joint Pub 6-02 Deployable Communications Standards*) is necessary to enable mobile, scalable, sustainable, and interoperable communications services. This capability is required to connect all National Guard (NG) stakeholders, vertically (Combatant Command, state, incident) and horizontally (interagency). The mobile, expandable, sustainable, and interoperable communications capability provides a mission C2 capability that the Army National Guard (ARNG) does not currently possess. It will allow USNORTHCOM mobility while at the same time being able to conduct C2 activities more effectively.

2. Source of Need. Lessons learned from domestic operations as well as efforts in support of hurricanes Katrina, Rita, and Ivan identified a need for a mobile expandable, sustainable, interoperable C2 capability. This capability was identified as the number one joint capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and supports all of the ANRG Emergency Response Functions.

3. Impact If Not Funded. Failure to procure this capability will degrade mission effectiveness. This capability provides for mobile C2 for ARNG forces and key stakeholders the incident site. Current Level 1 packages provide small-scale and limited mobile and interoperable options that ensure initial response communications.

4. Units Impacted. All Federal Emergency Management Agency (FEMA) regions possessing tasked units are impacted. Eight units have been procured as of late 2011. Larger regions will receive two units to cover area.

5. Contractor. North American Catastrophe Services (NACS), Melbourne, FL.

6. Contingency Supported - Previous Usage. The mobile expandable, sustainable, interoperable communications capability provides Homeland Defense Operations/Domestic Operations and Response, National Guard Civil Support (NGCS) Title 32, NORTHCOM Title 10 missions and Emergency Management Assistance Compacts.

7. Cost.

Units Required	Unit Cost	Program Cost
10 Mobile Emergency Operations Centers (2035)	**$600,000**	**$6,000,000**
Total		**$6,000,000**

LIMITED SCALE, IMMEDIATELY DEPLOYABLE COMMUNICATIONS

1. Background. A portable, limited scale, and immediately deployable communications capability is necessary to support initial response during joint operations. This capability must be able to provide robust voice and data communications capabilities to all National Guard (NG) stakeholders, vertically (Combatant Command, state, incident) and horizontally (interagency). The development of a limited scale, immediately deployable communications capability will provide a mission control capability that the Army National Guard (ARNG) does not currently have to support domestic response operations more effectively.

2. Source of Need. Lessons learned from domestic operations as well as efforts in support of hurricanes Katrina, Rita, and Ivan have shown limited scale, immediately deployable communications as a capability gap. It was identified as the number two joint capability gap at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and supports all of the ARNG Emergency Response Functions.

3. Impact If Not Funded. Failure to procure this capability will degrade mission effectiveness. This capability will allow ARNG forces to rapidly deploy and set up communications equipment that will improve communications from the incident site to key stakeholders.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies. Equipment will be located at Combat Communications Squadrons.

5. Contractor. 308 Systems, Ft. Collins, CO.

6. Contingency Supported - Previous Usage. Provides National Guard Civil Support (NGCS) Title 32/NORTHCOM Title 10 missions - All Hazards response (Natural Disaster/CBRN/Technological/Terrorism) Emergency Management Assistance Compacts.

7. Cost.

Units Required	Unit Cost	Program Cost
54 C2 Kits (2035)	**$30,000**	**$1,620,000**
Total		**$1,620,000**

SHARED SITUATIONAL AWARENESS (SSA) RESOURCES

1. Background. Maintaining situational awareness during domestic security missions, disaster responses or other contingencies is vital. This responsibility primarily resides with state and local governments and their emergency management and first responder resources for coordinating emergency response and recovery. A shared Common Operating Picture (COP) and situational awareness solution do not exist and present significant capability gaps. Tactical systems such as Blue Force Tracker (BFT) and Movement Tracker System (MTS) are being evaluated as possible candidates that can be enhanced to fulfill this capability gap. These tools will increase situational awareness and safety, and can provide a COP for personnel that are supporting emergency response operations.

2. Source of Need. Lessons learned from domestic operations as well as efforts in support of hurricanes Katrina, Rita, and Ivan have shown a capability gap in shared situational awareness. The lack of shared situational awareness was included in the top three joint capability gaps identified at the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and support all of the Army National Guard (ANRG) Emergency Response Functions.

3. Impact If Not Funded. Failure to procure this capability will degrade mission effectiveness. This capability allows ARNG forces to be aware of other supporting agency forces within the supported incident area.

4. Units Impacted. Shortfalls in SSA impact the ability of all 54 states and territories to respond to contingencies. Equipment will be located at Combat Communications Squadrons.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. SSA resources support Operation NOBLE EAGLE, Aerospace Control Alert (ACA) missions, tanker wings supporting ACA missions, hurricanes Katrina, Ike, and Gustave.

7. Cost.

Units Required	Unit Cost	Program Cost
145 COP Suites (2035)	**$28,000**	**$4,060,000**
Total		**$4,060,000**

Mass Care, Emergency Assistance, Housing, & Human Services

Mass Care, Emergency Assistance, Housing, and Human Services (ESF #6) – Mass Care, Emergency Assistance, Housing, and Human Services coordinates federal assistance in support of state and local efforts to meet the mass care needs of victims of a disaster. This federal assistance will support the delivery of mass care services of shelter, feeding, and emergency first aid to disaster victims; and the establishment of systems to provide bulk distribution of emergency relief supplies to disaster victims. The system will also need to operate a personnel check-in and status reporting system to coordinate rescuer response, report on victim status, and assist in family reunification.

The magnitude of damage to structures and lifelines will rapidly overwhelm the capacity of state and local governments to assess the disaster and respond effectively to basic and emergency human needs.

Damage to roads, airports, and communications systems will hamper emergency response efforts. The damaged infrastructure will also seriously impede the movement of emergency supplies. Many professional emergency workers and others who normally would help during a disaster will be dead, injured, involved with family issues resulting from the disaster, or unable to reach their assigned posts. State, county, and municipal emergency facilities will be severely damaged or inaccessible. Depending on factors such as time of occurrence, area demographics, building construction, and existing weather conditions, hundreds of thousands of disaster victims could be forced from their homes. The resulting large number of casualties could leave a large population with virtually no support.

National Guard resources can quickly mobilize and coordinate the delivery of federal mass care, emergency assistance, housing, and human services when local, tribal, and state response and recovery needs exceed their capabilities. In order to achieve an effective response to a mass care situation, the National Guard requires additional materials, processes, and training.

Mass Care, Emergency Assistance, Housing, and Human Services
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Disaster Relief Mobile Kitchen Trailers
- Disaster Relief Beddown Sets and Modified Disaster Relief Beddown Sets with Increased Portable Facilities for Mass Casualties
- Additional Equipment to Support Responders Including Tyvek Suits, Gloves, and Masks and Enhanced Mortuary Services Push Packs
- People/Asset Tracking System for Civilian and Responder "Check In" and Tracking
- Regional Warehouse Facilities for Forward Storage and Movement

Army National Guard

- Material Handling Equipment
- Sandbagging Machines
- People/Asset Tracking System for Civilian and Responder "Check In" and Tracking
- Regional Warehouse Facilities for Forward Storage and Movement
- Additional Numbers of Tyvek Suits, Gloves, and Masks to Support Responders

Essential Capabilities List

None

Desired Capabilities List

None

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Disaster Relief Mobile Kitchen Trailers	$3.75	-	-
Modified Disaster Relief Beddown Sets	$5.00	-	-
Fatality Search and Recovery Teams/Push Packages	$4.00	-	-
People/Asset Tracking System	$5.40	-	-

Note: All are 3080 Appropriation (Other Procurement)

- Disaster Relief Mobile Kitchen Trailers - Provides additional food preparation and distribution capability.
- Modified Disaster Relief Beddown Sets with Increased Portable Facilities for Mass Casualties - Increases our ability to house/manage responders and evacuees.
- Additional Equipment to Support Responders Including Tyvek Suits, Gloves, and Masks and Enhanced Mortuary Services Push Packs - Gives the responders the equipment necessary to respond effectively to the emergency.
- People/Asset Tracking System - Provides emergency responders with a system to support management, tracking, and status emergency services.

ARNG Program	2013	2014	2015
Material Handling Equipment	$28.03	-	-
Sandbagging Machines	TBD	-	-
People/Asset Tracking System	$5.40	-	-
Regional Warehouse Facilities for Forward Storage and Movement	$23.40	-	-
Additional Support Equipment for Responders	TBD	-	-

Note: All are 2035 Appropriation (Other Procurement)

- Material Handling Equipment - Adds additional capability to move equipment and materials to and within the disaster area.
- Sandbagging Machines - Enables responders to quickly buildup sandbags for flood control.
- People/Asset Tracking - Provides emergency responders with system to support management, tracking, and status of emergency services.
- Regional Warehouse Facilities for Forward Storage and Movement - Creates facilities that stockpile and manage emergency supplies so there is a ready source for emergency supplies.
- Additional Equipment to Support Responders Including Tyvek Suits, Gloves, and Masks and Enhanced Mortuary Services Push Packs - Gives the responders the equipment necessary respond effectively to mass casualty emergencies.

DISASTER RELIEF MOBILE KITCHEN TRAILER (DRMKT)

1. Background. The DRMKT is a versatile platform that provides rapid response mass fielding to a planned incident or disaster. Recent incidents have shown a need for support to response forces and displaced civilian agencies as food is a basic necessity of sustainment. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to sustain life and provide mass care. Mass field feeding capability will increase with the procurement and posturing of DRMKTs throughout each of the Federal Emergency Management Agency (FEMA) regions.

2. Source of Need. Identified by the 2010 Domestic Operations Equipment Requirements (DOER) and 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conferences. Lessons learned from hurricane Katrina, Haiti earthquake, and the 2008 Presidential Inauguration.

3. Impact If Not Funded. Not funding the DRMKT will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of life sustainment.

4. Units Impacted. Specific basing for the remaining six units is still being determined, but there will be one postured in each FEMA Region and two in the Northeast.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. New initiative.

7. Cost.

Units Required	Unit Cost	Program Cost
6 DRMKTs (3080)	**$625,000**	**$3,750,000**
Total		**$3,750,000**

MODIFIED DISASTER RELIEF BEDDOWN SETS (DRBS)

1. Background. Natural or man-made disasters require expedient facilities to support contingency responses. Each of the 10 Federal Emergency Management Agency (FEMA) regions has an expedient facility capability provided by an existing DRBS. The DRBS supports 1,000 people and provides power generation and distribution, lighting, water purification, field feeding, and basic latrine service. The DRBS will be used for sheltering responders and/or displaced civilians providing additional support needed in contingencies including Command and Control (C2) centers, feeding centers, medical aid, Joint Reception, Staging, and Onward Integration (JRSOI) sites, or supply storage for points of distribution in support of both military and civilian authorities. There is also a need for scaled down sets which will temporily shelter and beddown mass displaced individuals or additional follow on forces. These scaled down sets would contain basic life sustainment essentials such as shelters, cots, recreation equipment, fresh ration preparation equipment, etc. Facilities will also be leveraged to support international relief agencies for disasters outside the United States. A second modified DRBS is required in each of the 10 FEMA regions.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Adequate capability will not be available to conduct effective recovery operations. This will lead to decreased ability to conduct recovery operations, hamper transport and medical treatment of causalities, resulting in potential loss of life and prolonged suffering of the affected populace.

4. Units Impacted.

105 AW	Stewart, NY	157 ARW	Pease, NH	200 CES	Camp Perry, OH
141 ARW	Fairchild, WA	190 ARW	Forbes, KS		

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Expedient facilities capability can support any domestic incident response.

7. Cost.

Units Required	Unit Cost	Program Cost
10 Modified DRBS (3080)	**$500,000**	**$5,000,000**
Total		**$5,000,000**

FATALITY SEARCH AND RECOVERY TEAMS (FSRT)/PUSH PACKAGES

1. Background. FSRTs have been funded with basic recovery equipment to support fatality management in a mass casualty event for five days. Additional recovery equipment is needed in the form of an operational push packages to bridge the immediate gap until commercial contracts are available. FSRTs have the ability to train essential augmentees to act as a force multiplier during recovery operations. Additional packages of critical equipment will be needed for augmentees assisting the FSRTs in recovery operations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and hurricane Katrina, Haiti earthquake, and Japan tsunami recovery lessons learned.

3. Impact If Not Funded. Dignified and technically executed Search and Recovery (SAR) has profound and long lasting effects on the mental health of both responders and survivors. The recovery of remains so they may be identified and returned to their families is paramount. If operations are delayed due to a lack of on hand equipment, early opportunities to identify remains may be severely hindered as the remains decompose. The impact of not funding FSRT's push packages will severely impact proper respect, dignity, and identification of remains for the stricken families and communities.

4. Units Impacted. Consequence Management, Inc., Winchester, KY.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for specialized vehicles are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
2 FSRT Push Packages (3080)	**$2,000,000**	**$4,000,000**
Total		**$4,000,000**

PEOPLE TRACKING SYSTEM FOR CIVILIANS AND RESPONDERS

1. Background. The current Army National Guard (ARNG) medical communications system is Medical Communications for Combat Casualty Care (MC4). The MC4 system is used by medical personnel to read and record medical information of soldiers receiving medical care. Although MC4 creates an electronic medical record for service members, it lacks the capability to track civilian medical care, discharged, and/or deceased patients. The Air National Guard (ANG) uses the Emergency Tracking Accountability System (ETAS) which is designed to track evacuees. There is a capability gap with ETAS, as it lacks the interoperability with civilian systems of record. A joint system is needed to track personnel who enter and leave a hazardous area or shelter, or to track a casualty in mortuary affairs units. Children with no surviving parents may receive care while relatives or loved ones are being located. The ability to provide real-time personnel data to responders is vital to effective emergency operations and the ARNG's/ANG's ability to assist in operations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The lack of a people tracking system for civilians and responders will result in the lack of critical real-time information being available to relief organizations during the next disaster scenario.

4. Units Impacted. All 27 states that have Homeland Response Force (HRF), Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Packages (CERFP) capability.

5. Contractor. Multiple generic systems are available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for specialized people tracking systems exists.

7. Cost.

Units Required	Unit Cost	Program Cost
27 People Tracking Systems (3080)	**$200,000**	**$5,400,000**
Total		**$5,400,000**

ADDITIONAL MATERIEL HANDLING EQUIPMENT

1. Background. The Light Capability Rough Terrain Forklift (LCRTF) 5K fulfills the 4K forklift requirement while increasing its capability. It is capable of loading and unloading equipment in shipping containers and is C-130/CH-47 transportable. With its enclosed air conditioned cab, moveable tines, Tier III engine, and improved helicopter lift, the LCRTF is a significant improvement over the existing 4K forklift.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact if Not Funded. States will have a diminished capability to provide required materiel handling capability in response to disasters.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. Kalmar, Cibolo, TX.

6. Contingencies Supported - Previous Usage. All local, state, and federal disasters where specialized equipment has been needed.

7. Cost.

Units Required	Unit Cost	Program Cost
292 LCRTF (2035)	**$96,000**	**$28,000,000**
Total		**$28,000,000**

MECHANICAL SAND BAG EQUIPMENT

1. Background. During most natural disasters involving either large amounts of snow or heavy rains, there is a significant requirement to reinforce river banks or build protection barriers around property. This is often accomplished through the emplacement of sand bags. Sand bags are constructed of a durable bag filled with material that is both dense and easy to transfer from material pile to sand bag. Sand bags can be filled either mechanically or by hand, or a mixture of the two. Each state currently has a minimum of one mechanical sandbagging machine; however, one machine is not sufficient to mitigate rising flood waters to protect personal property damage and conduct evacuations. The suggested material solution is to purchase an additional Commercial Off-the-Shelf (COTS) item similar to the units currently possessed by the states.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The lack of mechanical sand bag equipment will decrease response time of emergency response personnel at disaster sites due to increased time to fill multiple sand bags by hand and result in increased water damage to personal property and infrastructure.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. TBD.

6. Contingencies Supported - Previous Usage. At all local, state, and federal disasters where sand bag equipment has been needed.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

PEOPLE TRACKING SYSTEM FOR CIVILIANS AND RESPONDERS

1. Background. The current Army National Guard (ARNG) medical communications system is Medical Communications for Combat Casualty Care (MC4). The MC4 system is composed of seven Army-approved line items of Medical Communications tools used by medical personnel to read and record medical information of soldiers receiving medical care. This equipment allows medical personnel access to the personal medical baseline information of patients in their care. Although MC4 creates an electronic medical record for service members it lacks the capability to track civilian medical care, discharged, and/or deceased patients. In terms of mass care and logistics, the ARNG does not have a people tracking system with the ability to track personnel who enter and leave a hazardous area or are admitted to a shelter, or to track a casualty in the mortuary affairs units. Children may be cared for with no surviving parents and visibility is needed for relatives or searching for loved ones. The MC4 system also lacks the ability to communicate with the Air National Guard (ANG) Joint Reception, Staging, and Onward Integration (JRSOI), fire and rescue, and other civilian agency systems. Possessing a people tracking system for personnel and responders would provide real-time awareness of the locations of persons of interest to the ARNG, government, and American public.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The lack of a people tracking system for civilians and responders will result in the lack of critical real-time information being available to relief organizations during the next disaster scenario.

4. Units Impacted. All 27 states that possess Homeland Response Force (HRF), Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Packages (CERFP) capability.

5. Contractor. Multiple generic systems are available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for specialized people tracking systems exists.

7. **Cost**.

Units Required	Unit Cost	Program Cost
27 People Tracking Systems (2035)	**$200,000**	**$5,400,000**
Total		**$5,400,000**

REGIONAL WAREHOUSE FACILITES FOR FORWARD STORAGE, SUPPLIES

1. Background. During the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference, a capability gap was identified for a facility within the 10 Federal Emergency Management Agency (FEMA) regions to act as a forward storage area for aid and relief supplies during domestic aid missions. Currently, the Army National Guard (ARNG) provides force packages that are composed of equipment, vehicles, and personnel as a part of the State Active Duty mission for disaster and emergency response. The M129 30 foot semitrailer supply van, LIN S75175, can be added to these force packages to deploy as mobile forward supply points for positioning at FEMA relief and aid areas where no regional warehouse facilities exist. The M129 supply van allows for the prepositioning storage of palletized nonperishable items. The M129 supply van is also wired to receive electricity inside the box of the trailer, is insulated against heat and cold, and can also be used to operate a remote office facility. Each trailer requires an M1088 tractor to pull it. A pallet jack is required to move pallets from the front to the rear of the trailer for on and off loading by Material Handling Equipment (MHE). The ARNG currently has 390 M129 box trailers on hand, with an FY13 requirement for 667 trailers.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The response time to an emergency will be negatively impacted due to supply items needing to be transported from greater distances than if they had been effectively stored in mobile pre-positioned assets.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. Product Manager Heavy Tactical Vehicles.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for specialized vehicles exists.

7. Cost.

Units Required	Unit Cost	Program Cost
277 M129 Trailers (2035)	**$84,500**	**$23,406,500**
Total		**$23,406,500**

TYVEK SUITS, GLOVES, AND MASKS TO SUPPORT RESPONDERS IN A MASS CASUALTY SITUATION

1. Background. The Army and Air National Guard on behalf of Department of Defense plans to establish a total of 10 Homeland Response Force (HRF) units nationwide, with one HRF in each of the 10 Federal Emergency Management Agency (FEMA) regions. The first two HRFs (Ohio and Washington) are in place with the remaining eight HRFs (Massachusetts, New York, Pennsylvania, Georgia, Texas, Missouri, Utah, and California) expected to be in place no later than FY12. HRFs will self-deploy by ground within 6 to 12 hours of an event, delivering life-saving medical, search and extraction, decontamination, security, and Command and Control (C2) capabilities. This represents a dramatic improvement in response time and life-saving capability to the previous construct. HRFs will provide a regional response capability of approximately 570 personnel composed of Chemical, Biological, Radiological (CBRN) Enhanced Response Force Packages (CERFP) teams. The CERFP capabilities include: locate and extract victims from a contaminated environment, perform mass patient/casualty decontamination, and provide medical treatment as necessary to stabilize patients for evacuation. CERFP's teams will be composed of existing National Guard units trained to respond to a CBRN weapon. Currently only members of the HRF and CERFP teams (Soldiers and Airmen) will be issued Tyvek suits, gloves, and masks to support responders in a mass casualty situation. It wears out quickly and the units do not have on-hand resupply available. Additionally, it is required for responders and augmentees who are assisting causalities in a contained area.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The impact of not funding additional Tyvek suits, gloves, masks, and additional resupply protective clothing would mean that ARNG could be unable to provide life-saving capability to support responders in a mass casualty situation.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for specialized protective clothing are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**TBD**	**TBD**
Total		

Public Health & Medical Services

Public Health, Medical, Mental Health Services, and Mass Fatality Management (ESF #8) - Public Health, Medical, Mental Health Services, and Mass Fatality Management provides coordinated federal assistance to supplement state and local resources in response to public health and medical care needs following a major disaster, emergency, or a developing potential medical situation. Assistance provided under ESF #8 is directed by the Department of Health and Human Services (HHS) through its executive agent the Assistant Secretary for Public Health Emergency Preparedness (ASPHEP).

A significant natural disaster or man-made event that overwhelms the affected state may necessitate federal public health and/or medical care assistance. Healthcare facilities may be severely damaged or destroyed. Facilities that survive with little or no structural damage may be rendered unusable or only partially usable due to a lack of power, water, sewer, etc. Medical facility staff might be unable to report for duty as a result of personal injuries and/or damage to infrastructure. Medical and healthcare facilities that remain in operation and have the necessary utilities and staff will probably be overwhelmed by the "walking wounded" and seriously injured victims in the immediate aftermath of the occurrence. In the face of massive increases in demand, medical supplies (including pharmaceuticals) and equipment will likely be in short supply with disruptions to the normal resupply process.

ESF #8 services include the management of health resources such as: manpower and facilities, preventive and curative health measures, evacuation of the wounded or sick, selection of the medically fit and disposition of the medically unfit, blood management, medical supply, equipment and maintenance, stress control, and medical, dental, veterinary, laboratory, optometric, nutrition therapy, and medical intelligence services. Attributes include Civilian Emergency Medical System (CEMS) support, Crisis Intervention Stress Management (CISM) in coordination with Religious Support Teams, Public Health System support in the distribution and administration of vaccines and antidotes to the public, State Emergency Medical Response Plan implementation assistance; critical force health protection and mortuary support.

The Air National Guard and the Army National Guard Medical Services may be called to support medical emergencies independently or cooperatively depending on the magnitude of the emergency and the specific capabilities that are needed. Additionally, the National Guard (Army and Air) medical service is developing at the city, county, and state levels, cooperative efforts of medical response and support with local emergency medical management organizations.

Public Health and Medical Services
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Chemical, Biological, Radiological, Nuclear (CBRN) Materials
- Expeditionary Medical Support (EMEDS) Modernization
- Organizational Equipment for Early Response Capability
- Medical Operations and Support System

Army National Guard

- Chemical, Biological, Radiological, Nuclear (CBRN) Materials
- Expeditionary Medical Support (EMEDS) Modernization
- Medical Operations and Command System
- Upgraded Evacuation Platforms

Essential Capabilities List

None

Desired Capabilities List

None

PUBLIC HEALTH AND MEDICAL SERVICES EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Medical Support to the National Guard Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF)	$1.72	-	-
Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages	$1.31	-	-
Organizational Equipment for Early Response Capability (Golden Hour - Emergency Treatment and Triage, All Weather Clothing, Inclement Weather Treatment Shelter) Supporting Domestic Mass Casualty Event	$0.49	$0.49	$0.49
Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events	$11.90	$1.15	$1.15

Note: All are 3080 Appropriation (Other Procurement)

- Medical Support to the National Guard (NG) Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) - Provides medical resupply packages for the CBRN Enhanced Response Force Package (CERFP)/Homeland Response Force (HRF) medical elements. Modernize CERFP/HRF patient care simulators and procure modified EMEDS training set for CERFP/HRF teams.
- Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages - Modernizes EMEDS medical equipment assemblages and infrastructure and provides EMEDS equipment calibration sets for the Consolidated Storage and Deployment Centers (CSDC).
- Organizational Equipment for Early Response Capability (Golden Hour - Emergency Treatment and Triage, All Weather Clothing, Inclement Weather Treatment Shelter) Supporting Domestic Mass Casualty Event - Expands Medical Group (MDG) capabilities across the country to be self-sufficient in food, shelter and water for three days as well as the ability to provide immediate triage and lifesaving medical care. Includes all weather gear and a single deployable structure able to provide decontamination capability in extreme cold weather and prevent patient hypothermia.
- Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events - Provides MC2 electronic data capability to communicate mass casualty patient information from on-scene to local, regional, or national level entities.

ARNG Program	2013	2014	2015
Medical Support to the National Guard (NG) Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF)	$1.20	-	-
Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages	$1.82	-	-
Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events	$11.90	$1.15	$1.15
Upgraded Ground Ambulance Platforms	$34.90	$34.90	$35.00

Note: All are 2035 Appropriation (Other Procurement)

- Medical Support to the National Guard (NG) Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) - Provides medical resupply packages for the CBRN Enhanced Response Force Package (CERFP)/Homeland Response Force (HRF) medical elements. Modernize CERFP/HRF patient care simulators and procure modified EMEDS training set for CERFP/HRF teams.
- Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages - Modernizes EMEDS medical equipment assemblages and infrastructure and provides EMEDS equipment calibration sets for the Consolidated Storage and Deployment Centers (CSDCs).
- Medical Command and Control (MC2) Electronic Data Capability Supporting Domestic Mass Casualty Events - Provides MC2 electronic data capability to communicate mass casualty patient information from on-scene to local, regional, or national level entities.
- Upgraded Ground Ambulance Platforms - Replaces an aging legacy fleet that is nearing the end of its Maintenance Expenditure Limit and eliminates the current shortfall in the fleet.

MEDICAL SUPPORT TO THE NATIONAL GUARD CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR (CBRN) ENHANCED RESPONSE FORCE PACKAGE (CERFP) AND HOMELAND RESPONSE FORCE (HRF)

1. Background. There are three Consolidated Storage and Deployment Centers (CSDC) that require six pre-positioned medical resupply sets to rapidly deploy in support of the17 National Guard (NG) Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) teams and 10 Homeland Response Force (HRF) teams to maintain mission capability. Additionally, one modified Expeditionary Medical Support training set is required at the Air National Guard (ANG) medical school house to train the CERFP/HRF teams. Seventeen CERFP/HRF medical unit's patient care training simulators also need to be upgraded for medical providers to sustain proficiency in trauma care. The Chief, National Guard Bureau selected Expeditionary Medical Support (EMEDS) as the Medical Element in support of Homeland Defense. The Secretary of Defense supports the National Guard Bureau homeland security posturing for the NG CERFP/HRF.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference. Lessons learned from hurricanes Katrina, Ike, Gustav, and the Greensburg, Kansas tornado.

3. Impact If Not Funded. If funding is not approved, there will be a decrease in ANG medical response capability to support the CERFP/HRF mission.

4. Units Impacted. Twenty-eight states including the 190th MDG, Topeka, KS; 111th MDG, Willow Grove, PA; and 141st MDG, Fairchild AFB, WA. These three CSDCs provide support to 17 CERFP states, 10 HRF states, 89 Medical Groups, and 10 Aeromedical Evacuation units.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Ike, Gustav, Democratic and Republican National Conventions, Olympics, Super Bowl, and Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
6 CERFP/HRF Medical Resupply Packages	**$143,000**	**$858,000**
1 CERFP/HRF Training Set	**$350,000**	**$350,000**
17 CERFP/HRF Modernization	**$30,000**	**$510,000**
Total		**$1,718,000**

Note: All are 3080 Appropriation (Other Procurement)

MODERNIZATION OF EXISTING EXPEDITIONARY MEDICAL SUPPORT (EMEDS) MEDICAL ASSEMBLAGES

1. Background. There are three Consolidated Storage and Deployment Centers (CSDC) that require three mobile equipment calibration sets to calibrate the rapid response medical equipment in support of the 17 National Guard (NG) Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) teams and 10 Homeland Response Force (HRF) teams to maintain mission capability. A total of 11 Emergency Medical Support (EMEDS) medical assemblages require modernization to include new equipment and infrastructure to keep up with changes to the EMEDS Allowance Standards. Chief, National Guard Bureau selected EMEDS as the Medical Element in support of Homeland Defense. The Secretary of Defense supports the National Guard Bureau homeland security posturing for the NG CERFP/HRF.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference. Lessons learned from hurricanes Katrina, Ike, Gustav, and the Greensburg, Kansas tornado.

3. Impact If Not Funded. If funding is not approved, there will be a decrease in Air National Guard (ANG) medical response capability to support the CERFP/HRF mission. ANG Medical Service personnel with non-calibrated medical equipment will not be able to rapidly respond to domestic CBRN events, resulting in ANG mission failure and potential loss of lives.

4. Units Impacted. Twenty-eight states including the 190th MDG, Topeka, KS, 111th MDG, Willow Grove, PA, and 141st MDG, Fairchild AFB, WA. These three CSDCs provide support to 17 CERFP states, 10 HRF states, 89 Medical Groups, and 10 Aeromedical Evacuation units.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Ike, Gustav, Democratic and Republican National Conventions, Olympics, Super Bowl, and Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
3 Mobile Equipment Calibration sets	**$75,000**	**$225,000**
11 EMEDS Modernization	**$98,730**	**$1,086,000**
Total		**$1,311,030**

Note: All are 3080 Appropriation (Other Procurement)

ORGANIZATIONAL EQUIPMENT FOR EARLY RESPONSE CAPABILITY (GOLDEN HOUR - EMERGENCY TREATMENT & TRIAGE, ALL WEATHER CLOTHING, INCLEMENT WEATHER TREATMENT SHELTER) SUPPORTING DOMESTIC MASS CASUALTY EVENTS

1. Background. There is a public expectation that local, state, and federal authorities will respond with haste and efficiency to provide medical care during domestic contingencies. Air National Guard (ANG) Medical Groups (MDG) are postured to provide short notice, effective response to a broad spectrum of disaster scenarios. Most MDGs do not possess medical supplies necessary to respond to no-notice events as a self-sufficient, scalable, and flexible force package in support of civil authorities. A capability based on 25 backpacks of basic, shelf-stable medical supplies per unit expands MDG capabilities to be self-sufficient with shelter and water for three days to provide immediate triage and lifesaving medical care. The backpack footprint allows MDGs to be relevant as a medical rapid response force package. Additionally, medical personnel assigned to the Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) teams and 10 Homeland Response Forces (HRF) teams mission lack protective clothing to operate in all regions during all seasons. Providing all weather clothing to assigned personnel will prevent responders from becoming casualties due to environmental exposure. A single deployable structure is required to shelter CERFP/HRF medical teams and equipment in order to allow decontamination capability in extreme cold weather to prevent hypothermia.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference. Lessons learned from major mass casualty incidents such as the Haiti earthquake.

3. Impact If Not Funded. A valuable core capability of ANG MDGs would not be available to save the lives and mitigate suffering of disaster victims.

4. Units Impacted. Six ANG MDGs TBD, 17 CERFP states, and 10 HRF states.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. This is a new capability that fills a critical gap in ANG medical response. This equipment supports any homeland incident requiring medical response.

7. Cost.

Units Required	Unit Cost	Program Cost
6 Med Rapid Response Equip Packages	**$67,200**	**$403,200**
27 All Weather Clothing Sets	**$34,018**	**$918,486**
1 Extreme Weather Medical Shelter	**$150,000**	**$150,000**
TOTAL		**$1,471,686**

Note: All are 3080 Appropriation (Other Procurement)

MEDICAL COMMAND AND CONTROL (MC2) ELECTRONIC DATA CAPABILITY SUPPORTING DOMESTIC MASS CASUALTY EVENTS

1. Background. Medical responders need a robust MC2 platform to keep pace with managing large scale disasters where multiple casualties must be evaluated, treated, transported, and information processed to ensure proper coordination, communication, and synchronization of local, regional, and national level disaster management efforts. MC2 will provide a Common Operating Picture (COP) for medical planning and response. Electronic communications must be encrypted and Health Insurance Portability and Accountability Act (HIPAA) compliant. MC2 must be accessible with appropriate read/write privileges for those who need it. Additionally, it must have the ability to document medical care, print results/reports, and provide an intuitive user interface which requires minimal training to use. For interoperability, the MC2 platform must be able to create information in an Emergency Data Exchange Language (EDXL) format to share information with other systems such as the Joint Patient Assessment and Tracking System (JPATS). MC2 should have the ability to review medical data and metrics in a real time, web-based, and Geographic Information System (GIS)-enabled environment. MC2 should provide timely and accurate information on the location, movement, status, and identity of equipment, supplies, and personnel. On-scene handheld devices should be able to capture multimedia data such as photos and be automated to preclude having to input information manually, especially for responders wearing Personal Protective Equipment (PPE).

2. Requirements Source. Identified by the 2012 Joint Domestic Equipment Requirements (JDOER) Conference. Lessons learned from hurricanes Katrina, Rita, Wilma, and the Haiti earthquake.

3. Impact If Not Funded. ANG Medical Service personnel will not be able to rapidly transmit vital medical information to destination hospitals or Aeromedical Evacuation systems.

4. Units Impacted. 111th Medical Group, Willow Grove, PA; 190th Medical Group, Forbes Field, KS; 141st Medical Group, Spokane, WA; 27 medical units supporting CBRN Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) medical elements.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. This is a new capability that fills a critical gap in ANG medical response. Supports any major homeland incident requiring medical response.

7. Cost.

Units Required	Unit Cost	Program Cost
27 MC2 Mobile Field Kits	**$84,500**	**$2,281,500**
3 Field Network Extension Kits	**$15,100**	**$45,300**
1 MC2 Server	**$11,865,000**	**$11,865,000**
Total		**$14,191,800**

Note: All are 3080 Appropriation (Other Procurement)

MEDICAL SUPPORT TO NATIONAL GUARD CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, (CBRN) ENHANCED RESPONSE FORCE PACKAGE (CERFP) AND HOMELAND RESPONSE FORCE (HRF)

1. Background. Currently the Army National Guard (ARNG) has a requirement of 457 Chemical Biological Protective Shelters (CBPS). The CBPS is a self-contained, mobile medical unit that is a rapidly deployable collective protection system designed to operate in the forward battle area. The system features a 400 square-foot contamination-free and environmentally controlled work area for medical personnel. Advanced, onboard digital control system automatically initiates chemical/biological protection when threats are detected.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference. Lessons learned from hurricanes Katrina, Ike, Gustav, and the Greensburg, Kansas tornado.

3. Impact If Not Funded. If funding is not approved to alleviate the shortfall, there will be a decrease in ARNG medical response capability to support the homeland response mission.

4. Units Impacted. Seven Medical Treatment Squadrons (SQD), 26 Infantry Battalions (IN BN), and 37 Area Support Medical Companies (ASMC).

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Ike, Gustav, and Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
7 Medical Treatment SQDs (1 per)	**$622,051**	**$4,354,357**
26 IN BNs (2 per)	**$622,051**	**$32,346,652**
37 ASMCs (6 per)	**$622,051**	**$138,095,322**
Total		**$174,796,331**

Note: All are 2035 Appropriation (Other Procurement)

EXPEDITIONARY MEDICAL SUPPORT (EMEDS) MODERNIZATION

1. Background. The current Army National Guard (ARNG) Modification Table of Organization and Equipment (MTOE) structure consists of 37 Area Support Medical Companies (ASMC), seven Ground Evacuation Companies, 363 Air Medical Evacuation Aircraft (UH60 and LUH 72) spread across the 54 states and territories, two Medical Logistic Companies, 28 Medical Companies (of the 28 Maneuver Brigade Combat Teams (BCT)) and eight Multifunctional Medical Battalions (MMB) for Medical Command and Control (MC2) spread across the 54 states and territories. This structure is designed to support Homeland Security efforts and/or supplement the civilian emergency medical response system as required.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and lessons learned from hurricanes Katrina, Ike, Gustav, the Louisiana floods, and the Greensburg, Kansas tornado.

3. Impact If Not Funded. If funding is not approved, resupply of ARNG Medical Companies, Area Support Medical Companies, and Ground and Air Evacuation Companies will lack push-package resupply ability for events lasting more than two to three days. Without resupply, unit effectiveness will diminish and likely result in mission failure and increase the potential loss of life.

4. Units Impacted. All 54 states and territories will lack the ability to receive timely reach-back resupply.

5. Contractor. Minnesota Medical Warehouse and National Prime Vendors.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Ike, Gustav, Democratic and Republican National Conventions, Louisiana floods, and Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
2 Brigade Medical Sets	**$1,857,196**	**$3,714,392**
207 Ground Ambulance Sets	**$13,752**	**$2,846,664**
46 Air Ambulance Sets	**$84,939**	**$3,907,194**
Total		**$10,468,250**

Note: All are 2035 Appropriation (Other Procurement)

MEDICAL COMMAND AND CONTROL (MC2) ELECTRONIC DATA CAPABILITY SUPPORTING DOMESTIC MASS CASUALTY EVENTS

1. Background. The current Army National Guard (ARNG) medical communications system is Medical Communications for Combat Casualty Care (MC4). The MC4 system is composed of seven Army approved line items of medical communications tools used by medical personnel to read and record medical information of soldiers receiving medical care. This equipment allows medical personnel access to the personal medical baseline information of patients in their care, enhances medical readiness, and provides a comprehensive life-long electronic medical record for all service members. Although MC4 creates an electronic medical record for service members, it lacks the capability to communicate with the Air National Guard (ANG) Joint Patient Tracking System (JPATS), fire and rescue, and other civilian agencies' systems. A proposed material solution is to have a medical communication system such as the MC2 electronic data capability that creates information in an Emergency Data Exchange Language (EDXL) system, which has the ability to review medical data and metrics in a real time, is web-based, and placed in a Geographic Information System (GIS)-enabled environment. The solution system should provide timely and accurate information on the location, movement, status, and identity of equipment, supplies, and personnel and have general interoperability.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Without a MC2 electronic data system that supports general interoperability there will be a breakdown in medical communications in the event of a natural disaster and/or terrorist attack.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. This equipment will be utilized for all local, state, and federal disasters where a need for specialized medical communication systems is required.

7. Cost.

Units Required	Unit Cost	Program Cost
27 MC2 Mobile Field Kits	**$84,500**	**$2,281,500**
3 Field MESH Network Extension Kits	**$15,100**	**$45,300**
1 MC2 Server	**$11,865,00**	**$11,865,000**
Total		**$14,191,800**

Note: All are 2035 Appropriation (Other Procurement)

UPGRADED GROUND AMBULANCE PLATFORMS

1. Background. The current Army National Guard (ARNG) ambulance fleet consists of 20 year old legacy High Mobility Multipurpose Wheeled Vehicle (HMMWV) ambulances that are nearing the end of their Maintenance Expenditure Limit (MEL). The fleet is comprised of 29 M996 (2-litter) and 1,340 M997 (4-litter) HMMWV ambulances but is short 319 authorized ambulances. One of the most important ARNG missions is to provide support during Chemical, Biological, Radiological, Nuclear (CBRN), Homeland Defense/Homeland Support, natural disaster relief operations, and to support civilian authorities within the guidelines of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). These essential requirements demand that the ARNG have capable and modernized ambulances that can navigate terrain to the last mile beyond the limitations of standard commercial ambulances and be interoperable with the total modernized force. In addition to providing medical treatment and transportation of military personnel, ARNG Medical and Combat Service Support (CSS) units requiring M997s provide substantial augmentation support to civilian agencies throughout the year and especially during the hurricane season.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The impact of not funding ground ambulances in the ARNG would result in the ARNG's inability to provide critical medical treatment and transportation for personnel, ultimately resulting in the potential loss of life. ARNG Medical and CSS units require M997s to provide substantial augmentation support to civilian agencies throughout the year and especially during the hurricane season.

4. Units Impacted. In Federal Emergency Management Agency (FEMA) Regions 4 and 6 there are eight ARNG critical hurricane states with 106 units requiring this capability. Especially important are the HMMWV ambulance shortages in Alabama, Mississippi, Louisiana, Florida, and Texas which account for 90 M997s each.

5. Contractor. US Army, Rock Island Arsenal, Rock Island, IL.

6. Contingency Supported - Previous Usage. This equipment will be utilized for local, state, and federal disasters where a need for specialized vehicles is required.

7. Cost.

Units Required	Unit Cost	Program Cost
500 Ground Ambulance (2035)	**$209,633**	**$104,816,500**
Total		**$104,816,500**

Search & Rescue

Search and Rescue (ESF #9) - Search and Rescue rapidly deploys components of the National Urban Search and Rescue (US&R) Response System to provide specialized lifesaving assistance to state and local authorities in the event of a major disaster or emergency. US&R operational activities include locating, extricating, and providing on-site medical treatment to victims trapped in collapsed structures. The Department of Homeland Security (DHS), as primary agency for ESF #9, will activate the national US&R Response System for any incident or anticipated incident that is determined likely to result in collapsed structures that would overwhelm existing state and local US&R resources. The likelihood of activation depends on the nature and magnitude of the event, the suddenness of onset, and the existence of US&R resources in the affected area.

Disasters and emergencies vary widely in scope, degree of devastation, and threat to human life. For example, in situations that entail structural collapse, large numbers of people may require rescue and medical care. The mortality rate among trapped victims rises dramatically after 72 hours, thus US&R must be initiated without delay. During the response, rescue personnel may encounter extensive damage to the local infrastructure, such as buildings, roadways, public works, communications, and utilities. Damage can create environmental safety and health hazards, such as downed power lines, unsafe drinking water, and unrefrigerated food. Following an earthquake, aftershocks, secondary events, and/or other hazards (e.g. fires, tsunami, landslides, flooding, and hazardous material releases) may compound problems and threaten both disaster victims and rescue personnel, and in some circumstances, rescue personnel may be at risk from terrorism, civil disorder, or crime.

The 129 RQW continues to provide civil search and rescue capabilities to the state of California to include wildfire rescue support and also responded for hurricane Irene support. The 176 WG continues to hold a 24-hour state-wide rescue alert in Alaska resulting in numerous lives saved and also responds to national emergencies such as hurricane Irene. The 106 RQW from New York continues its long standing tradition of responding to state and federal rescue missions to include hurricane Irene which resulted in numerous lives saved. Upcoming modernization efforts for the ANG rescue fleet include AN/ARS-6v12 LARS which will continue to help locate survivors, communication upgrades that will allow for enhanced communications with civil responders, and mission operations trailers and tents that allow for self-sustained rescue operations for at least 72 hours.

Search and Rescue
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Multi-Agency Communications
- Dedicated Vehicles for Transport of Search and Rescue (SAR) Teams
- Common Operating Picture Among Stakeholders
- Location Aides
- On Scene Chemical, Biological, Radiological, Nuclear (CBRN) Detection

Army National Guard

- Multi-Agency Communications
- Common Operating Picture Among Stakeholders
- Location Aides
- On Scene Chemical, Biological, Radiological, Nuclear (CBRN) Detection

Essential Capabilities List

Air National Guard

- Forward Area Refueling

Desired Capabilities List

None

SEARCH AND RESCUE EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Multi-Agency Communications	- $4.00 [3] -	$2.00 [2] - $5.07 [4]	- - -
Dedicated Vehicles for Transport of Search and Rescue (SAR) Teams and Equipment	$5.43 [4]	$5.43 [4]	-
Common Operating Picture Among Stakeholders	- $2.00 [3]	$6.50 [2] -	$6.00 [2] -
Location Aids	- $3.00 [3] $0.60 [4]	$3.00 [2] - $1.20 [4]	$11.05 [2] - $1.80 [4]

Notes: [1] 3840 Appropriation [2] 3010 Appropriation [3] 3600 Appropriation [4] 3080 Appropriation

- Multi-Agency Communications - Provides a secure multi-spectrum radio to ensure military and civil command authorities can communicate directly with Air National Guard (ANG) rescue helicopters, H/MC-130 aircraft, and ground rescue personnel.
- Dedicated Vehicles for SAR Teams - Provides heavy duty vehicles capable of moving personnel and equipment postured at ANG locations available to support domestic operations and support Mutual Aid Agreement day to day operations.
- Common Operating Picture - Provides data to all command and control, air and ground rescue parties with Beyond Line of Sight (BLOS) voice, digital, and video communications.
- Location Aides - Provides aircraft with Full Motion Video (FMV) capability with an enhanced Electro-Optical/Infrared (EO/IR) sensor to greatly enhance search operations. Equipping ground personnel with robots, sonar, and urban search and rescue kits will eliminate a current shortfall within the rescue community.

MULTI-AGENCY COMMUNICATIONS

1. Background. The Homeland Defense mission of responding to civil taskings (natural and man-made disasters as well as law enforcement operations) requires immediate and decisive operations to minimize the loss of life and property. The HH-60G and the H/MC-130 has severely limited capability to communicate with civil responders, hindering rescue relief operations. A secure multi-spectrum radio will ensure military and civil command authorities can communicate directly with Air National Guard (ANG) rescue helicopters and equip these helicopters to support any relief operation. In addition, the radio increases the HH-60G and the H/MC-130 combat search and rescue capability by filling an existing secure radio shortfall. Furthermore, search and rescue capability will be increased with procurement of a radio package capable of communicating with multiple agencies on the scene of a natural or man-made disaster by ground search parties improving the overall Incident Action Plan.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Lack of direct National Incident Management System (NIMS) compliant communication to on-scene first responders will result in slower response time to civil disasters and risk loss of life and property.

4. Units Impacted.
106 RQW Gabreski Field, NY 129 RQW Moffett Federal Airfield, CA 176 WG JB Elmendorf , AK
All 59 ANG Fire Emergency Service Flights.

5. Contractor. Rockwell Collins, Cedar Rapids, IA.

6. Contingency Supported - Previous Usage. Provides support for any man-made or natural disaster requiring deployment of rescue aircraft or Fire Emergency Service Flights.

7. Cost.

Units Required	Unit Cost	Program Cost
HH-60 & H/MC-130 Radio NRE (3600)	**N/A**	**$4,000,000**
***20 HH-60 and 13 H/MC-130 ARC-210 Gen V Radios** (3010)	**$100,000**	**$2,000,000**
59 Radio Packages (3080)	**$86,000**	**$5,074,000**
Total		**$11,074,000**

*Includes 10 % spares.

DEDICATED VEHICLE SUPPORT FOR SEARCH AND RESCUE (SAR) TEAMS

1. Background. Dedicated vehicles are needed for operational support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Previous disasters such as hurricane Katrina, the Haiti earthquake, and others have revealed that departments required additional vehicles to distribute and replenish assets in a timely manner. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. SAR capability will be increased with the procurement of heavy duty vehicles capable of moving personnel and equipment postured at ANG locations available to support domestic operations and Mutual Aid Agreement day to day operations. The vehicles should be F550s or matching equivalent due to the need to transport heavy trailers, large amounts of equipment, and people in austere conditions. Each base requires three dedicated vehicles capable of supporting domestic operations with short notice.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The impact of not funding dedicated vehicle support could result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide a valuable service to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted.
106 RQW Gabreski Field, NY 129 RQW Moffett Federal Airfield, CA 176 WG JB Elmendorf , AK
All 59 ANG Fire Emergency Service Flights.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Dedicated vehicle support for SAR teams provide support for any man-made or natural disaster requiring deployment of Guardian Angel or Fire Emergency Service Flights.

7. Cost.

Units Required	Unit Cost	Program Cost
186 Vehicles (3080)	**$58,400**	**$10,862,400**
Total		**$10,862,400**

COMMON OPERATING PICTURE (COP)

1. Background. HH-60 and H/MC-130 aircraft are required to provide the Combat Search and Rescue Task Force with enhanced situational awareness capability. Installation of a Tactical Data Link provides comprehensive Command and Control (C2) and maximizes H/MC-130 aircrew situational awareness with Beyond Line of Sight/Secure Line of Sight capabilities. Current situational awareness data link capabilities require second generation Blue Force Tracking II upgrades to increase C2 awareness and tactical coordination between Army National Guard (ARNG) and Air National Guard (ANG) rescue forces. Gateways are crucial to allow different data links to communicate together in today's environment. The Global Information Network Architecture (GINA) provides real-time information exchange between disparate rescue forces enabling improved situational awareness across the tactical, operational, and strategic levels of C2. The GINA "DragonPulse" Information Management Specification developed for the Army's 18th Airborne Corps leverages state-of-the-art information technology to collect and relate critical information spanning the full spectrum of joint domestic operations. H/MC-130 aircraft equipped with Special Airborne Mission Installation and Response (SABIR) system with AS-4 instrument pod provides rescue forces and other first responders with installed Incident Awareness and Assessment (IAA) capability for search and rescue in all weather conditions while providing time-sensitive information to incident C2.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference; Hurricane Ike Rescue After Action Report to NGB, 2008.

3. Impact If Not Funded. Crews will not be able to access critical real-time data which could result in degraded mission performance and potential lives lost during rescue operations.

4. Units Impacted.
106 RQW Gabreski Field, NY 129 RQW Moffett Airfield, CA 176 WG JB Elmendorf, AK

5. Contractor. L3, San Diego, CA; USACE ERDC, Vicksburg, MS; MITRE, Bedford, MA; US Army PEO C3T, Fort Hood, TX; Airdyne, Calgary, AL.

6. Contingency Supported - Previous Usage. Provides support for any man-made or natural disaster requiring deployment of rescue aircraft or Fire Emergency Service Flights.

7. Cost.

Units Required	Unit Cost	Program Cost
H/MC-130 NRE (3600)	**N/A**	**$2,000,000**
13 H/MC-130 Gateway kits (3010)	**$50,000**	**$650,000**
13 H/MC-30 RTIC Upgrades (3010)	**$500,000**	**$6,500,000**
GINA Implementation (3010)	**$500,000**	**$500,000**
17 Blue Force Tracker II HH-60 (3010)	**$171,000**	**$2,907,000**
13 Blue Force Tracker II H/MC-130 (3010)	**$130,000**	**$1,690,000**
3 SABIR Systems (3010)	**$1,000,000**	**$3,000,000**
3 AS-4 Pods (3010)	**$1,000,000**	**$3,000,000**
Total		**$20,247,000**

LOCATION AIDES

1. Background. Rescue aircraft and ground crews require state of the art equipment to aid locating survivors of natural or man-made disasters. An Electro-Optical/Infra-Red (EO/IR) sensor must be capable of supporting full-motion video with line of sight video downlink capability, increased field of view, cursor on target/IR cueing, low-light television, hyper/multispectral sensors, thermal imaging, and eye safe laser range finder/designator capability. Auto stability and auto focus with precise magnification is required to find, fix, and track targets. Cursor on Target provides real-time information exchange capability to improve coordination and achieves interoperability with other rescue forces and first responders by using existing civilian systems. Equipping rescue aircraft with state of the art technology will take the search out of "search and rescue" and will ultimately save lives. One of the key elements to the recovery of isolated personnel is to locate the survivors. At the present time, the ground attack community lacks the effective capability required to locate survivors and equipment, dramatically increasing risk to the operator. Operators are spending longer amounts of time searching for isolated personnel, diving deeper than necessary, or searching in the wrong location. Specialized equipment such as underwater robots and sonar can dramatically reduce the time spent locating the survivor, reduce exposure to rescue personnel, and increase the likelihood of successfully completing missions.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. Crews will not be able to access critical real-time data which will result in degraded mission performance and potential lives lost during rescue operations.

4. Units Impacted.
106 RQW Gabreski Field, NY 129 RQW Moffett Airfield, CA 176 WG JB Elmendorf, AK
All 59 ANG Fire Emergency Service Flights.

5. Contractor. FLIR, Arlington, VA; L3, San Diego, CA; MITRE, Bedford, MA.

6. Contingency Supported - Previous Usage. Location aids provide support for any man-made or natural disaster requiring deployment of rescue aircraft, Guardian Angel personnel, or Fire Emergency Service Flights.

7. Cost.

Units Required	Unit Cost	Program Cost
HH-60 & H/MC-130 NRE (3600)	**N/A**	**$3,000,000**
30 HH-60 H/MC-130 FMV/VDL kits (3010)	**$100,000**	**$3,000,000**
13 H/MC-130 EO/IR Sensors (3010)	**$850,000**	**$11,050,000**
6 Cursor on Target Integration (3010)	**$150,000**	**$600,000**
6 Underwater Search Robot (3080)	**$300,000**	**$1,800,000**
6 Full Scan SONAR (3080)	**$200,000**	**$1,200,000**
6 USAR (3080)	**$100,000**	**$600,000**
Total		**$22,250,000**

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Oil and Hazardous Materials Response

Oil and Hazardous Materials Response (ESF #10) - Oil and Hazardous Material response teams provides federal support to state and local governments in response to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency. As an element of the National Response Framework (NRF), ESF #10 may be activated in response to a disaster for which the President of the United States (POTUS), through the Department of Homeland Security (DHS), determines that federal assistance is required to supplement the response efforts of the affected state and local governments. A natural or other disaster could result in numerous situations in which hazardous materials are released into the environment. Fixed facilities (e.g., chemical plants, tank farms, laboratories, operating hazardous waste sites) that produce, generate, use, store, or dispose of hazardous materials could be damaged so severely that existing spill control apparatus and containment measures are not effective. Hazardous materials that are transported may be involved in rail accidents, highway collisions, or waterway mishaps. Abandoned hazardous waste sites could be damaged, causing further degradation of holding ponds, tanks, and drums. The damage to, or rupture of pipelines transporting materials that are hazardous if improperly released will present serious problems. Disaster recovery procedures could generate hazardous materials threats to the public health or welfare of the environment. Terrorism incidents involving Weapons of Mass Destruction (WMD) may take place requiring fully equipped hazardous material response teams.

Oil and Hazardous Materials Response
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Multiband, Programmable, Interoperable Radios
- Personal Protective Equipment (PPE) Including Flash Protection for Level A and Structural Gear (See ESF #4)
- Active/Passive Chemical, Biological, Radiological, Nuclear (CBRN) (e.g., Dosimeters, 5 Gas Meters) for Detection/Assessment; Toxic Industrial Chemicals (TIC)/Toxic Industrial Materials (TIM) and Remote Controlled Detection
- Emergency Decontamination Kits (e.g., EPDS)
- GPS/GIS - Identifying/Tagging Items for Future Mitigation (GPS cameras); Uplink to Incident Commander, etc.

Army National Guard

- Multiband, Programmable, Interoperable Radios
- Active/Passive Chemical, Biological, Radiological, Nuclear (CBRN) (e.g., Dosimeters, 5 Gas Meters) for Detection/Assessment; Toxic Industrial Chemicals (TIC)/Toxic Industrial Materials (TIM) and Remote Controlled Detection
- Personal Protective Equipment (PPE) for Operator; JSLIST
- Decontamination Trailer/Truck; Emergency Decontamination Kits

Essential Capabilities List

Air National Guard

- Plume Modeling
- Overhead Imaging Capability
- Hot Zone Equipment Providing 6 - 8 Hours Sustainment

Army National Guard

- Plume Modeling
- Overhead Imaging Capability
- Hot Zone Equipment Providing 6 - 8 Hours Sustainment

Desired Capabilities List

None

OIL AND HAZARDOUS MATERIALS RESPONSE EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Multiband Radio System	$1.46	$1.46	$1.46
Detection and Assessment Equipment	$0.40	$0.42	-
Emergency Decontamination Kits	$0.468	-	-
GPS/GIS	$0.156	-	-

Note: All are 3080 Appropriation (Other Procurement)

- Multiband, Programmable, Interoperable Radios - Provides Motorola XTS 7000 multiband radios for operational support of Domestic Operations to Civil Authorities.
- Active/Passive Chemical, Biological, Radiological, Nuclear (CBRN) (e.g., Dosimeters, Five Gas Meters) for Detection/Assessment; Toxic Industrial Chemicals (TIC)/Toxic Industrial Materials (TIM) and Remote Controlled Detection - Provides operational personnel with active detection of hazardous chemical materials and gamma radiation.
- Emergency Decontamination Kits - Provides a portable, self-contained, decontamination system capable of supporting a team sized element responding to natural or man-made disasters involving Chemical, Biological, Radiological, or Nuclear (CBRN) agents.
- GPS/GIS - Provides a handheld GPS unit with mapping capabilities to plot, plan, and mitigate such spills or hazardous materials releases.

ARNG Program	2013	2014	2015
Detection and Assessment Equipment	$1.126	$1.126	-
Personal Protective Equipment (PPE)	$0.88	-	-
Decontamination Equipment	$2.30	$2.30	-

Note: All are 2035 Appropriation (Other Procurement)

- Active/Passive Chemical, Biological, Radiological, Nuclear (CBRN); Toxic Industrial Chemicals (TIC)/Toxic Industrial Materials (TIM) and Remote Controlled Detection - Provides operational personnel with active detection of hazardous chemical materials and gamma radiation.
- Personal Protective Equipment (PPE) - Provides the Kappler Frontline 500 Encapsulating Level A suit.
- Decontamination Equipment - Provides decontamination of personnel which is paramount to sustaining operational capacity when responding to natural or man-made disasters potentially involving Chemical, Biological, Radiological, or Nuclear (CBRN) agents.

MULTIBAND RADIO SYSTEM

1. Background. The Multiband Radio System (Motorola XTS 7000) is needed for operational support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Disasters such as hurricanes and earthquakes have shown a need for support to civilian communities as resources are expended quickly. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. Communications will be enhanced by allowing military units to communicate with outside agencies that are requesting assistance. Interoperable communications are required for the ANG to support domestic operations and Mutual Aid Agreement day to day operations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and hurricane Katrina and the Haiti earthquake lessons learned.

3. Impact If Not Funded. The impact of not funding multiband radios could result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide valuable life-saving resources to local communities, governors, and the Department of Defense for the purpose of saving lives and enhancing overall communications with the communities who need support.

4. Units Impacted. All 65 ANG Fire Emergency Service Flights are provided 12 portable radios each.

5. Contractor. Motorola Inc., Schaumburg, IL.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where there is a response for hazardous materials teams and they are engaged in operations.

7. Cost.

Units Required	Unit Cost	Program Cost
780 Multiband Radio System (3080)	**$5,619**	**$4,382,820**
Total		**$4,382,820**

DETECTION AND ASSESSMENT EQUIPMENT

1. Background. Increased safety measures are needed for operational support during response to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). The safety of operational personnel is enhanced by active detection of hazardous chemical materials and gamma radiation which are Immediately Dangerous to Life and Health (IDLH). Active detection is required by the Occupational Safety and Health Administration (OSHA) to ensure the level of Personal Protection Equipment (PPE) in operation is adequate for the hazard present. The National Guard has the ability to deliver these assets in a timely manner within the hours needed to save lives. Downrange operational capability is increased and the safeguard of personnel enhanced with procurement of a five gas meter and dosimeter for radiological detection.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and the continuing need to safeguard the first responder community from unseen life threatening environments.

3. Impact If Not Funded. The impact of not funding a five gas meter and a dosimeter will result in the loss of life and the loss of critical capabilities during response to all hazardous environments, i.e. earthquakes, hurricanes, terrorist attacks, or other disasters. These assets will provide an extremely valuable asset to local communities, governors, and the Department of Defense for the purpose of safeguarding response personnel by detecting IDLH situations.

4. Units Impacted. All 65 ANG Fire Emergency Service Flights are provided 2 Multitrae and 10 Thermoluminescent units.

5. Contractor. Rae Systems, Inc., San Jose, CA; Panasonic, Inc., Secaucus, NJ.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters or response at which the environment known to be contaminated but the threat is unknown.

7. Cost.

Units Required	Unit Cost	Program Cost
130 Multirae PRO w/ Gamma	**$6,035**	**$784,550**
650 Thermoluminescent Dosimeter (TLD)	**$100**	**$65,000**
Total		**$849,550**

Note: All are 3080 Appropriation (Other Procurement)

DECONTAMINATION EQUIPMENT

1. Background. Increased safety measures are needed for operational support during response to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Decontamination of personnel is paramount to sustaining operational capacity when responding to natural or man-made disasters potentially involving Chemical, Biological, Radiological, or Nuclear (CBRN) agents. A portable, self-contained, decontamination system capable of supporting a team-size element would provide a quick, robust, tactical, and functional decontamination platform that can be deployed in a moment's notice. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. Downrange operational capability is increased and the safeguard of personnel enhanced with procurement of a self-contained, portable decontamination system.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and the continuing need to safeguard the first responder community from unseen life threatening environments.

3. Impact If Not Funded. The impact of not funding a self-contained, portable, decontamination system could result in the loss of life and the loss of critical capabilities during the next earthquake, hurricane, CBRN terrorist attack, or other disaster in the United States. These assets will provide extremely valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of safeguarding response personnel by providing a quick, robust, tactical, and functional decontamination platform for CBRN materials, Toxic Industrial Chemicals (TIC) and Toxic Industrial Materials (TIM).

4. Units Impacted. All 65 ANG Fire Emergency Service Flights.

5. Contractor. Technical Solutions Group International (TSGI), Las Vegas, NV.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters or response at which the environment known to be contaminated but the threat is unknown.

7. Cost.

Units Required	Unit Cost	Program Cost
130 Decontamination Units (3080)	**$3,600**	**$468,000**
Total		**$468,000**

HANDHELD GLOBAL POSITIONING SYSTEM (GPS) UNIT

1. Background. The handheld GPS unit is needed for operational support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Hazardous material spills and releases occur throughout the United States and are most likely to occur during disasters such as hurricanes or earthquakes. There is a need for responders to have GPS and mapping capabilities to plot, plan, and mitigate such spills or releases. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. Hazardous materials decision making capability will be increased with procurement of handheld GPS units postured at ANG locations available to support domestic operations and support Mutual Aid Agreement day to day operations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. The impact of not funding handheld GPS units will result in potential loss of life during a hazardous materials spill since there is no quick way for plotting a hazardous materials release or spill in the United States. These assets will provide valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All 65 ANG Fire Emergency Service Flights.

5. Contractor. Trimble Inc., Sunnyvale, CA.

6. Contingency Supported - Previous Usage. For any local, state, and federal disaster, where a specialized hazardous material response team will be conducting operations.

7. Cost.

Units Required	Unit Cost	Program Cost
130 Trimble Juno SD Handheld GPS Units (3080)	**$1,199**	**$155,870**
Total		**$155,870**

DETECTION AND ASSESSMENT EQUIPMENT

1. Background. Increased safety measures are needed for operational support during response to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). The safety of operational personnel is enhanced by active detection of hazardous chemical materials and gamma radiation that are Immediately Dangerous to Life and Health (IDLH). Active detection is required by the Occupational Safety and Health Administration (OSHA) to ensure the level of Personal Protective Equipment (PPE) in operation is adequate for the hazard present. The National Guard has the ability to deliver these assets in a timely manner within the hours needed to save lives. Downrange operational capability is increased and the safeguard of personnel enhanced with procurement of a five gas meter and dosimeter for radiological detection.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and the continuing need to safeguard the first responder community from unseen life threatening environments.

3. Impact If Not Funded. The impact of not funding a five gas meter and a dosimeter could result with the loss of life and the loss of critical capabilities during response to all hazardous environments, i.e. earthquakes, hurricanes, terrorist attacks, or other disasters. These assets will provide extremely valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of safeguarding response personnel by detecting IDLH situations.

4. Units Impacted. All 57 Army National Guard Civil Support Teams (CST), all 17 Chemical, Biological, Radiological, Nuclear (CBRN) Enhanced Response Force Package (CERFP) teams, and 10 Homeland Response Force (HRF) missioned units.

5. Contractor. Rae Systems, Inc., San Jose, CA; Panasonic, Inc., Secaucus, NJ.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters or response at which the environment known to be contaminated but the threat is unknown.

7. Cost.

Units Required	Unit Cost	Program Cost
340 Multirae PRO w/ Gamma	**$6,035**	**$2,051,900**
2,001 Thermoluminescent Dosimeter (TLD)	**$100**	**$ 200,100**
Total		**$2,252,000**

Note: All are 2035 Appropriation (Other Procurement)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. Background. The Kappler Frontline 500 Encapsulating Level A Suit is a flash and heat resistant Level A suit that offers the most protection to Hazmat Technician first responder personnel in support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). The majority of man-made disasters involving toxic industrial chemicals and toxic industrial materials involve the act of fire and demonstrate the need for a flash and heat resistant level A ensemble. The National Guard has the ability to deliver these assets in a timely manner within the hours needed to save lives. Hazmat Technician level capability will be increased with the procurement of the Kappler Frontline 500 NFPA 1991 Certified Level A encapsulating suit.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and the continuing need to safeguard the first responder community from unseen life threatening environments.

3. Impact If Not Funded. The impact of not funding Kappler Frontline 500 NFPA 1991 Certified Level A encapsulating suits will result in potential loss of life during the next earthquake, hurricane, terrorist attack, or other natural or man-made disaster in the United States. These assets will provide valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All 57 Civil Support Teams (CST).

5. Contractor. Kappler Inc., Gunterville, AL.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for Hazmat technicians existed.

7. Cost.

Units Required	Unit Cost	Program Cost
430 Frontline 500 Level A Suit (2035)	**$2,046**	**$879,780**
Total		**$879,780**

DECONTAMINATION EQUIPMENT

1. Background. Increased safety measures are needed for operational support during response to Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Decontamination of personnel is paramount to sustaining operational capacity when responding to natural or man-made disasters potentially involving Chemical, Biological, Radiological, or Nuclear (CBRN) agents. A portable, self-contained, decontamination system capable of supporting a team-size element would provide a quick, robust, tactical, and functional decontamination platform that can be deployed in a moment's notice. The National Guard has the ability to deliver these assets in a timely manner within the hours needed to save lives. Downrange operational capability is increased and the safeguard of personnel enhanced with procurement of a self-contained, portable decontamination system.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and the continuing need to safeguard the first responder community from unseen life threatening environments.

3. Impact If Not Funded. The impact of not funding a self-contained, portable decontamination system could result in the loss of life and the loss of critical capabilities in the next earthquake, hurricane, CBRN terrorist attack, or other disaster in the United States. These assets will provide extremely valuable life-saving resources to local communities, states, and the Department of Defense for the purpose of safeguarding response personnel by providing a quick, robust, tactical, and functional decontamination platform for CBRN materials, Toxic Industrial Chemicals (TIC) and Toxic Industrial Materials (TIM).

4. Units Impacted. All 57 Army National Guard (ARNG) Civil Support Teams (CST), all 17 CBRN Enhanced Response Force Package (CERFP) missioned units, and all 10 Homeland Response Force (HRF) missioned units.

5. Contractor. Technical Solutions Group International (TSGI), Las Vegas, NV.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters or response at which the environment known to be contaminated but the threat is unknown.

7. Cost.

Units Required	Unit Cost	Program Cost
1,278 Decontamination Units (2035)	**$3,600**	**$4,600,800**
Total		**$4,600,800**

Public Safety and Security

Public Safety and Security (ESF #13) - Public Safety and Security includes facility and resource security, security planning and technical resource assistance, public safety and security support, and traffic and crowd control. It integrates countrywide public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual Incidents of Critical Significance.

While state, tribal, local, and private-sector authorities have primary responsibility for public safety and security, ESF #13 provides federal public safety and security assistance to support preparedness, response, and recovery priorities when state, tribal, and local resources are overwhelmed or inadequate. When activated, ESF #13 coordinates the implementation of federal authorities (to include mission assignments) and resources that are appropriate for the situation. ESF #13 may provide protection and security resources, planning assistance, technology support, and other technical assistance to support incident operations, consistent with federal agency authorities and resource availability.

Security includes measures taken by a military unit, activity, or installation to protect it against all acts designed to, or which may impair its effectiveness. Security creates a condition resulting from the establishment and maintenance of protective measures to ensure a state of inviolability from hostile acts or influences. Additionally, security, with respect to classified matter, prevents unauthorized persons from having access to official information that is safeguarded in the interests of national security.

There are various examples of functions which have involved integration with public service, military police, or security activities. The threat of tropical storms and hurricanes, earthquakes, winter storms, blackouts, forest/wildfires, or civil unrest are examples of incidents which ESF #13 is prepared to assist and support local authorities or agencies. Specific cases of these examples are the earthquake which rattled the East Coast and hurricane Irene in August 2011, which affected the Northeastern coast of the United States. Upcoming modernization efforts for the ANG security forces require more Less Than Lethal (LTL) weapons and explosive detection kits.

Public Safety and Security
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Transportation Availability and Shortfalls
- Personal Protective Equipment (PPE)
- Enhanced Security and Traffic Control Equipment (Domestic Operations Kits)
- Sustainable/Portable Power
- Communication/Navigation/ Situational Awareness: Air National Guard (ANG), Army National Guard (ARNG), and Civil Agencies Require Interoperability & Up-To-Date Navigation

Essential Capabilities List

Air National Guard

- Mobile Multiband Radios (High Frequency For Communication with Civil Agencies)
- Portable Explosive Detection Package

Desired Capabilities List

None

PUBLIC SAFETY AND SECURITY EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Security Forces (SF) Tactical Vehicles	$8.53	$8.53	$8.53
SF Personal Protective Equipment (PPE)	$3.02	$3.02	-
Domestic Operations Kits	$3.91	$3.91	-
Communication Inoperability Upgrades	$1.19	-	-

Note: All are 3080 Appropriation (Other Procurement)

- SF Tactical Vehicles - Provides vehicles capable of transporting personnel and equipment to domestic operations, conduct security patrols, and other domestic operation missions. They also provide enhanced capability to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar missions.
- SF PPE - Provides basic PPE including rubber gloves, dust masks/respirators, and protective suits. Items are necessary in order to allow responders to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar missions.
- Domestic Operations Kits - Provides necessary safety equipment (reflective vests, cones, signage, etc.) to include portable power that is currently unavailable to SF members performing these tasks. Additionally, the Enhanced Security Kits and Traffic Control Kits provide an additional capability to provide better security and control for any domestic scenario.
- Communication Interoperability Upgrades - Provides interoperability and Command and Control (C2) between Air National Guard (ANG) SF and disaster response agencies.

SECURITY FORCES (SF) VEHICLES

1. Background. SF are the first responders of choice at home and abroad. Responses range from events such as Presidential Inaugurations, G20 Summits, Mardi Gras, and disaster responses such as ice storms, tsunamis, and floods. Air National Guard (ANG) SF does not have any tactical vehicles (e.g. HMMWVs) in its inventory. ANG SF only has vehicle authorizations necessary for Force Protection Contingency (FPCON) normal base security posting. Thus, ANG SF have no inherent capability to provide vehicles for Domestic Operations (DOMOPS) support. SF require vehicles capable of transporting personnel and equipment to DOMOPS and vehicles which can be used for security patrols and other DOMOPS missions. They also provide enhanced capability to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar missions. Procurement of tactical vehicles would solve this shortfall with dual-use assets. However, due to a pre-established limit the Air Force (AF) has established for tactical vehicles, it is impossible to procure any tactical vehicles as any growth would exceed AF authorized quantities. The ANG requires policy flexibility in this area in order to break through established AF limits.

2. Source of Need. Lessons learned from Operations ENDURING FREEDOM and IRAQI FREEDOM and domestic operations such as Operation JUMP START and efforts in support of hurricanes Katrina and Rita.

3. Impact If Not Funded. SF members have limited capability to respond to DOMOPS and will continue to rely on vehicles on an ad-hoc basis. This directly impacts the mission, with a negative impact on mission success by not allowing the timeliest response.

4. Units Impacted. Shortfalls impact 8,000 SF Airmen at all 92 ANG SF squadrons within the 54 states and territories.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. No tactical mid or large-sized vehicles are currently assigned to ANG SF. Vehicles acquired through other sources (Army, local law enforcement, etc.) supported DOMOPS during OPERATION JUMP START, hurricanes Katrina and Rita, US Olympics, and various sporting events.

7. Cost.

Units Required	Unit Cost	Program Cost
186 Mid-Sized Vehicles	**$75,000**	**$ 13,950,000**
93 Large-Sized Vehicles	**$125,000**	**$ 11,625,000**
Total		**$ 25,575,000**

Note: All are 3080 Appropriation (Other Procurement)

SECURITY FORCES (SF) PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. Background. SF are the first responders at home and abroad and forces generally arrive on-scene with limited or no basic PPE. Basic PPE includes rubber gloves, dust masks/respirators, and protective suits. These items are necessary in order to allow responders to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar missions. Other than deployment assets, SF have no PPE within its inventory other than Chemical, Biological, Radiological, Nuclear (CBRN) masks and suits. Deployment assets are only effective against certain weaponized biological and chemical hazards, therefore, Air National Guard (ANG) SF have limited and degraded inherent capability to provide immediate support safely for Domestic Operations.

2. Source of Need. Lessons learned from Operations ENDURING FREEDOM and IRAQI FREEDOM and domestic operations such as Operation JUMP START and efforts in support of hurricanes Katrina and Rita.

3. Impact If Not Funded. SF members have degraded capability to respond to domestic operations. This directly impacts the mission, and has a negative impact on overall mission success.

4. Impacted. Shortfalls impact 8,000 SF Airmen at all 92 ANG SF squadrons within the 54 states and territories.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Operation JUMP START, hurricanes Katrina and Rita, US Olympics, and various sporting events.

7. Cost.

Units Required	Unit Cost	Program Cost
2,418 (26 x 93) PPE Sets (3080)	**$2,500**	**$6,045,000**
Total		**$6,045,000**

DOMESTIC OPERATIONS (DOMOPS) KITS

1. Background. Security Forces (SF) are the first responders of choice at home and abroad. Responses range from events such as Presidential Inaugurations, G20 Summits, Mardi Gras, and disaster responses such as ice storms, tsunamis, and floods. Current DOMOPS equipment consists of basic mobility equipment and limited Personal Protective Equipment (PPE), thus severely degrading response due to equipment shortfalls. SF provide security and traffic control duties in support of DOMOPs, such as traffic control points, checkpoints, and cordon areas. Currently SF are not properly equipped to perform these functions. These kits provide necessary safety equipment (reflective vests, cones, signage, etc.) and include portable power that is currently unavailable to SF members performing these tasks. The Enhanced Security Kits and Traffic Control Kits provide an additional capability to provide better security and control for any domestic scenario.

2. Source of Need. Lessons learned from Operations ENDURING FREEDOM and IRAQI FREEDOM and DOMOPS such as Operation JUMP START and efforts in support of hurricanes Katrina and Rita.

3. Impact If Not Funded. Failure to procure this equipment significantly degrades mission effectiveness and places Air National Guard (ANG) SF performing these tasks in jeopardy. These kits allow for safe SF response and minimal use of force. Failure to procure increases both vulnerability of SF personnel and the risk of harm to the public. The lack of enhanced security and traffic control kits for SF will negatively impact the ability to establish and maintain control during DOMOPS situations, as well as ANG SF members' personal safety.

4. Units Impacted. Shortfalls impact 8,000 SF Airmen at all 92 ANG SF squadrons within the 54 states and territories plus civilian personnel which they support.

5. Contractors. Garrett Container Systems, Inc., 123 N. Industrial Park Ave, Accident, MD.

6. Contingency Supported - Previous Usage. Operation JUMP START, hurricanes Katrina and Rita, US Olympics, and various sporting events.

7. Cost.

Units Required	Unit Cost	Program Cost
93 Domestic Operations Kits (3080)	**$42,000**	**$3,906,000**
Total		**$3,906,000**

COMMUNICATION INTEROPERABILITY UPGRADES

1. Background. Upgraded communications equipment will provide proper Command and Control (C2) between Air National Guard (ANG) Security Forces (SF) and disaster response agencies. Interoperability of current communications (AN/PRC-152 radios) is insufficient and requires attention. Responses have ranged from events such as Presidential Inaugurations, G20 Summits, Mardi Gras, and disaster responses such as ice storms, tsunamis, and floods. Current Domestic Operations (DOMOPS) communications equipment consists of utilizing mobility assets which are adequate but require "upgrade" to improve interoperability with aforementioned agencies. SF provide security and traffic control duties and are unable to communicate with non-DOD entities during DOMOPS. Traffic control points, checkpoints, and cordon areas are a routine part of DOMOPS. Currently, SF are not properly equipped with communications equipment to perform these functions. These upgrades provide necessary communication equipment which enhances capability to provide better security and control for any domestic scenario.

2. Source of Need. Lessons learned from Operations ENDURING FREEDOM and IRAQI FREEDOM and domestic operations such as Operation JUMP START and efforts in support of hurricanes Katrina and Rita.

3. Impact If Not Funded. Failure to procure these communication equipment upgrades significantly degrades mission effectiveness and places ANG SF performing these tasks in jeopardy. These upgrades allow for safe SF response and collateral communications between ANG SF and civilian agencies. The lack of these upgrades could negatively impact the ability to establish and maintain control during DOMOPS situations, as well as ANG SF members' personal safety.

4. Units Impacted. Shortfalls impact 8,000 SF Airmen at all 92 ANG SF squadrons within the 54 states and territories plus civilian personnel which they support.

5. Contractors. Harris RF Communications Inc., Rochester, NY.

6. Contingency Supported - Previous Usage. Operation JUMP START, hurricanes Katrina and Rita, US Olympics, and various sporting events.

7. Cost.

Units Required	Unit Cost	Program Cost
1,700 AN/PRC-152 Radios (3080)	**$700**	**$1,190,000**
Total		**$1,190,000**

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Incident Awareness & Assessment

Incident Awareness and Assessment (IAA) - Shared Situational Awareness (SSA) assists federal, state, and local governmental entities, as well as voluntary organizations requiring a common understanding of the hazards faced in order to perform unilateral or multi-lateral response missions. IAA serves as a coordination point between response operations and restoration of the civilian infrastructure and services through such missions as situational awareness, damage assessment, evacuation monitoring, search and rescue, Chemical, Biological, Radiological, Nuclear, (CBRN) assessment, hydrographic survey, and dynamic ground coordination. It includes (1) Friendly Force Tracking (FFT) and display of forces, (2) open standards for sharing information amongst a wide disparity of situational awareness viewers, (3) use of airborne platforms/sensors and other systems that can provide geospatial products to build situational awareness, and (4) wider availability of unclassified Processing, Assessment, and Dissemination (PAD) mobile units.

A major disaster may severely damage the civilian infrastructure and processes throughout the Joint Operational Environment. IAA gives the incident commander the ability to provide common situational awareness and assessment of the disaster area through the operations centers working to provide support to the responders on the ground. Damaged infrastructure, hazardous areas, location of forces, and staging of supplies are all parts of the managed chaos that responding agencies must maintain awareness of. IAA supports the common understanding and shared awareness so that key decision makers can flow the proper resources to the critical areas in the quickest time possible. As additional forces flow into the disaster area, decision makers will use IAA to understand the current situation on the ground to properly allocate and direct the actions of follow-on forces.

The National Guard's IAA role supports all ESFs across the spectrum of domestic incident management. IAA's emphasis on building SSA will enhance our collective response while operating throughout the Joint Operational Environment.

Incident Awareness and Assessment (IAA)
2012 Joint Domestic Operations Equipment Requirements Conference

Critical Capabilities List

Air National Guard

- Unclassified Processing, Analysis, and Dissemination (PAD) System and Unclassified PAD Network
- Sense and Avoid System for Remotely Piloted Aircraft
- High resolution (.5 meter) Unclassified and Timely Commercial Satellite Imagery (Broad Area Coverage)
- Fully Mission Capable IAA Platforms and Sensors
- Scalable IAA Management Capability

Army National Guard

- Unclassified Processing, Analysis, and Dissemination (PAD) System and Unclassified PAD Network
- Sense and Avoid System for Remotely Piloted Aircraft
- Expand Friendly Force Tracker (FFT) Capability Nationwide and Integrate into Shared Situational Awareness
- GIIEP System Airworthiness Certification
- Flexible, Low Cost, Add-On Imagery for Army Vertical Lift and Ground Assets

Essential Capabilities List

None

Desired Capabilities List

None

INCIDENT AWARENESS AND ASSESSMENT (IAA) EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

ANG Program	2013	2014	2015
Unclassified Processing, Analysis, and Dissemination (PAD) System and Network	$4.93	$4.93	$4.93
Ground-Based Sense-and-Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS)	$3.00	$3.00	$3.00
High Resolution (.5 meter) Unclassified & Timely Commercial Satellite Imagery	$16.90	$16.90	$16.90
Fully Mission Capable IAA Platforms and Sensors	TBD	TBD	TBD
Scalable IAA Management Tool	$7.54	$6.54	-

Note: All are 3080 Appropriation (Other Procurement)

- Unclassified Processing, Analysis, and Dissemination (PAD) System and Network - Provides capability to process and analyze imagery from multiple sources at the unclassified level.
- Ground-Based Sense-and-Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS) - Links a network of low-cost, scalable, deployable 3-D radars to Ground Control Stations (GCS) enabling pilots to "see-and-avoid."
- High Resolution (.5 meter) Unclassified & Timely Commercial Satellite Imagery - Provides unclassified imagery for operations, mission planning, geospatial awareness, homeland defense, and emergency management.
- Fully Mission Capable IAA Platforms and Sensors - Provides emergency telecommunications capability in the aftermath of a large-scale disaster.
- Scalable IAA Management Tool - Automated method to use four-dimensional visualization (elevation, horizon, depth, and time) to support efficient/effective planning and direction of real-time IAA imagery operations.

ARNG Program	2013	2014	2015
Ground-Based Sense-and-Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS)	$9.00 [1]	$9.00 [1]	$12.00 [1]
Friendly Force Tracking (FFT) Device	$1.97 [1]	-	-
FFT	$1.46 [2]	-	-
Device Activation			
Geospatial Information Interoperability Exploitation Portable (GIIEP) System Airworthiness	$0.20 [2]	-	-
Flexible, Low Cost, Add-on Imagery for Army Vertical Lift and Ground Assets	TBD	TBD	TBD

Note: [1] 2035 Appropriation (Other Procurement) [2] 2065 Appropriation (O&M)

- Ground-based Sense-and-Avoid Systems to Enable Remotely Piloted Aircraft (RPA) Access to the National Airspace System (NAS) - Links a network of low-cost, scalable, deployable 3-D radars to Ground Control Stations (GCS) enabling pilots to “see-and-avoid” for safe operation.
- Friendly Force Tracking (FFT) Device - Iridium/GPS handheld devices with the ability to track, display, and share guardsmen positioning with situational awareness systems.
- Geospatial Information Interoperability Exploitation Portable (GIIEP) System and Other Sensors On Rotary Wing Aircraft - Airworthiness certification of GIIEP.
- Flexible, Low Cost, Add-on Imagery for Army Vertical Lift and Ground Assets - Real-time IAA video and imagery systems.

UNCLASSIFIED PROCESSING, ANALYSIS, AND DISSEMINATION (PAD) SYSTEM AND NETWORK

1. Background. Air National Guard (ANG) Intelligence, Surveillance, and Reconnaissance (ISR) units have highly trained and experienced Imagery/Geospatial Analysts at units located in each of the 10 Federal Emergency Management Agency (FEMA) regions. However, the units are not capable of processing imagery from multiple sources at the unclassified level; effectively inhibiting a valuable ANG resource from supporting Homeland Defense (HLD) or Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Installing an unclassified PAD system and network will allow unit personnel at home station to provide direct imagery analysis support to first responders, State and Federal agencies, and other involved parties.

2. Source of Need. USAF Katrina/Rita Lessons Learned, 2006; USAF Homeland Defense Conference Briefs, 27 Feb - 1 Mar 2007; California wildfires, 2007-2009; Haiti, 2010; Gulf of Mexico Oil Spill, 2010.

3. Impact If Not Funded. ANG support to HLD/DSCA/NGCS operations will not be provided in a timely manner, negatively affecting civil agency Search and Rescue (SAR) operations.

4. Units Impacted.

101 IW	Otis ANGB, MA	152 IS	Reno, NV	194 IS	Tacoma, WA
117 IS	Birmingham, AL	178 IS	Dayton, OH	234 IS	Sacramento, CA
119 IS	Fargo, ND	181 IW	Terre Haute, IN	236 IS	Nashville, TN
123 IS	Little Rock, AR	184 IW	Wichita, KS		
150 IS	Albuquerque, NM	192 IS	Langley AFB, VA		

5. Contractor. SAIC, McLean, VA; WR-ALC/560 ASG, Robins AFB, GA.

6. Contingency Supported - Previous Usage. HLD/DSCA/NGCS operations, Title 32, and NORTHCOM Title 10 missions included.

7. Cost.

Units Required	Unit Cost	Program Cost
13 IAA Mobile/Portable Receiver/Analysis Work Centers	**$250,000**	**$3,250,000**
13 FPED hardware and Software Suites	**$602,000**	**$7,826,000**
13 Video Downlink Receivers (VORTEX)	**$200,000**	**$2,600,000**
13 Tactical Radios (PRC-117)	**$35,000**	**$455,000**
13 Prime Movers	**$50,000**	**$650,000**
Total		**$14,781,000**

Note: All are 3080 Appropriation (Other Procurement)

GROUND-BASED SENSE-AND-AVOID SYSTEMS TO ENABLE REMOTELY PILOTED AIRCRAFT (RPA) ACCESS TO THE NATIONAL AIRSPACE SYSTEM (NAS)

1. Background. Air National Guard (ANG) RPA units require increased access to the NAS in order to train and respond to domestic emergencies. The Federal Aviation Administration (FAA) restricts operations to Restricted and Warning Areas through a cumbersome process known as Certificates of Authorization (COA). Based upon their regulatory guidance that aircraft must "see and avoid" other aircraft, COAs do not enable RPA operations without the use of visual spotters or chase aircraft unless inside Restricted/Warning areas. This effectively denies ANG units a majority of traditional military use airspace, particularly Military Operating Areas (MOA) and Joint-Use Class D control zones at military/civilian airfields. RPA assets performing Homeland Defense (HLD) missions or Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) [IAW 32 USC 904, 32 CFR 185, JP 3-27 & 28] require the ability to detect, track, and avoid both cooperative and non-cooperative air traffic. Current technology can link a network of low-cost, scalable 3-D radars to Ground Control Stations (GCS) enabling pilots to "see-and-avoid" for safe operation. Integrating 3-D active sensors into networked displays and traffic deconfliction systems can be tested and installed in less than three years. The ideal system will integrate Commercial Off-the-Shelf (COTS) technology with FAA-certified displays installed at pilot positions and FAA Air Traffic Controller locations to enhance situational awareness. The system will balance costs and operational interfaces for all partners (ANG, ACC, Customs and Border Protection (CBP), etc.).

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and lessons learned from hurricane Katrina, Haiti earthquake and Fukushima, Japan.

3. Impact If Not Funded. Continued inability to train in NAS throughout CONUS impacts safety with regard to both domestic IAA and contingency ISR operations. ANG RPA ability to comply with FAA requirements for "see and avoid," and the ability to provide IAA DSCA/NGCS support will be delayed.

4. Units Impacted.

119 WG Fargo, ND	163 RW March AFB, CA	178 ISRW Springfield, OH
147 RW Ellington Fld, TX	174 WG Syracuse, NY	214 RG Davis-Monthan AFB, AZ

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. HLD/DSCA/NGCS operations; Title 32, and NORTHCOM Title 10 missions.

7. Cost.

Units Required	Unit Cost	Program Cost
6 Ground Control Station Upgrades (3080)	**$1,500,000 (Scalable)**	**$9,000,000**
Total		**$9,000,000**

HIGH RESOLUTION (.5 METER) UNCLASSIFIED & TIMELY COMMERCIAL SATELLITE IMAGERY

1. Background. Eagle Vision is the Department of Defense's only deployable commercial imagery direct downlink ground station. It provides unclassified imagery for combat operations, mission planning, geospatial awareness, homeland defense, and emergency management. The stations located at Redstone Arsenal, Hickam AFB, and McEntire JNGB are configured with architectures facing obsolescence. The new architecture is based on a new generation of multi-processor servers and transforms the underlying core capability to a common processor array. This evolution closely mirrors advances taking place throughout the international remote sensing community providing compatibility with nearly all of the commercial remote sensing satellite interfaces. This modernization will improve performance, reduce sustainment, and better support Information Assurance objectives. These stations will have near real-time access to most kinds of remote sensing data, including high resolution (.5 Meter), broad area coverage, multi-spectral optical, synthetic aperture radar, stereo, and monoscopic imagery. This type of imagery supports the dramatic growth in the missions these stations can support, including maritime domain awareness, change detection, verification, identification, disaster monitoring, persistent surveillance, rapid mapping, and sensor cueing.

2. Source of Need. USSPACECOM requirements, 2011 Air Reserve Component (ARC) Weapons and Tactics (WEPTAC) Conference, Coalition Warrior Interoperability Demonstration (CWID), and the 2012 Joint Domestic Operations Requirements (JDOER) Conference.

3. Impact If Not Funded. ANG support to Homeland Defense (HLD) or Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) will remain degraded. The new architecture provides the bridge for delivering timely international remote sensing products to the net-centric architectures reaching maturity throughout the community.

4. Units Impacted.

169 CF, Eagle Vision 4, McEntire JNGB, SC	201 CCG, Eagle Vision 5, Hickam AFB, HI	226 CCG, Eagle Vision 6, Redstone Arsenal, AL

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricane Irene, southeast tornadoes, Missouri and Mississippi River floods, Texas wildfires, and earthquake in Virginia and Washington, D.C.

7. Cost.

Units Required	Unit Cost	Program Cost
3 Eagle Vision Next Generation (Scalable) (3080)	**$16,900,000**	**$50,700,000**
Total		**$50,700,000**

FULLY MISSION CAPABLE INCIDENT AWARENESS AND ASSESSMENT (IAA) PLATFORMS AND SENSORS

1. Background. The Public Safety and Homeland Security Bureau (PSHSB) stated a need for a Deployable Aerial Communications Architecture (DACA) to provide communications during natural or man-made catastrophic events. Noting that terrestrial-based cellular systems may be partially or completely damaged in many disaster scenarios, the use of an airborne cellular repeater pod would allow first responders and other emergency management entities continued use of day-to-day communication devices such as cellular and smart phones. Such relay systems placed on the wing of high endurance Remotely Piloted Aircraft (RPA) such as the MQ-1 and MQ-9, could fulfill the DACA vision of providing cellular and broadband communications over an affected area within the first 12-18 hours of an event, and continue non-stop coverage for a period of 72-96 hours by cycling in additional aircraft. Placing such systems on RPAs would provide longer loiter times than manned aircraft, as well as provide full motion video and Electro-Optical/Infrared (EO/IR) capabilities.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and lessons learned from the earthquakes in Haiti and Japan.

3. Impact If Not Funded. ANG support to Homeland Defense (HLD) or Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) will remain degraded.

4. Units Impacted.

119 WG Fargo, ND	163 RW March AFB, CA	178 ISRW Springfield, OH
147 RW Ellington Fld, TX	174 WG Syracuse, NY	214 RG Davis-Monthan AFB, AZ

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. HLD/DSCA/NGCS missions, Haitian and Japanese earthquakes, and hurricanes Katrina and Rita.

7. Cost.

Units Required	Unit Cost	Program Cost
18 Wing Mounted Cellular Repeater Pods (3080)	**TBD**	**TBD**
Total		

SCALABLE INCIDENT AWARENESS AND ASSESSMENT (IAA) MANAGEMENT TOOL

1. Background. IAA is similar to its Title 10 Intelligence, Surveillance, and Reconnaissance (ISR) counterpart, as it IAA lacks an automated method to use four-dimensional visualization (elevation, horizon, depth, and time) to support efficient/effective planning and direction of real-time IAA imagery operations. To effectively plan and coordinate the activities of multiple airborne IAA platforms, IAA collection managers need the ability to "fly" the projected IAA plan to see if it will accomplish all/most of the tasked imagery requirements to meet the incident commander's priority information requirements. This IAA management tool must provide 3-D modeling of common IAA sensor capabilities (MC-12, MQ-1/9, RC-26, Civil Air Patrol platforms/sensors, etc.) over a display of the incident area, to include terrain elevation data over a period of time. It also should provide an assessment for whether the proposed IAA decks for the various platforms/sensors will meet the tasked imagery requirements. The "scalable" part of this requirement should allow IAA collection managers to plug in the operating characteristics and sensor capabilities of IAA platforms that show up unannounced to help (e.g., the Icelandic airplane that was used in Deepwater Horizon). The IAA management tool should then be able to incorporate these "uncommon" IAA platforms/sensors into the 3-D visualization and modeling.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and any large-scale Domestic Operations (DOMOPS) event which required sustained IAA imagery collection (e.g., Deep Water Horizon, hurricane Katrina relief operations, etc.).

3. Impact If Not Funded. The impact of not funding a scalable IAA management tool will reduce IAA imagery collection effectiveness and hamper IAA platform/sensor resource management.

4. Units Impacted. All 54 state's and territory's Joint Force Headquarters (JFHQ) could use this tool. It should also be part of the suite of systems the ANG is preparing to field via its mobile Defense Support of Civil Agencies (DSCA), National Guard Civil Support (NGSC), and IAA Processing, Analysis, and Dissemination (PAD) trailers (approximately 13 intelligence units).

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Homeland Defense (HLD) or DSCA and National Guard Civil Support (NGCS) missions; Deepwater Horizon oil spill; Haitian and Japanese earthquakes.

7. Cost.

Units Required	Unit Cost	Program Cost
54 SJFHQ Locations	**$20,000**	**$1,080,000**
13 ANG DSCA/IAA Trailers	**$1,000,000**	**$13,000,000**
Total		**$14,080,000**

Note: All are 3080 Appropriation (Other Procurement)

GROUND-BASED SENSE-AND-AVOID SYSTEMS TO ENABLE REMOTELY-PILOTED AIRCRAFT (RPA) ACCESS TO THE NATIONAL AIRSPACE SYSTEM (NAS)

1. Background. Army National Guard (ARNG) Unmanned Aerial System (UAS) units require increased access to the NAS in order to train and respond to domestic emergencies. The Federal Aviation Administration (FAA) restricts operations to Restricted and Warning Areas through Certificates of Authorization (COA). Based upon FAA regulatory guidance that aircraft must "see and avoid" other aircraft, COAs do not allow UAS operations without the use of either visual spotters or chase aircraft. This effectively denies UASs the use of a majority of its military use airspace, particularly Military Operating Areas (MOA) and Joint-Use Class D control zones at military/civilian airfields. UAS performing Homeland Defense (HLD) missions or Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS) [IAW 32 USC 904, 32 CFR 185, JP 3-27 & 28] need the ability to detect, track, and avoid both cooperative and non-cooperative air traffic. Technology exists to link a network of low-cost, scalable, deployable 3-D radars to Ground Control Stations (GCS) enabling pilots to accomplish FAA-endorsed "sense-and-avoid" methods. Integrating 3-D active Sensors into networked displays can be tested and installed in less than three years. The ideal system will integrate Commercial Off-the-Shelf (COTS) technology with FAA-certified displays.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact If Not Funded. If not funded, UASs will be unable to fly and train in airspace throughout CONUS, impacting safety with regard to both domestic IAA and contingency ISR operations. Additionally, it will further delay ARNG UAS ability to comply with FAA requirements for "see and avoid," and negatively impact the ability of the ARNG to meet UAS training requirements and provide IAA DSCA/NGCS, emergency, and disaster support.

4. Units Impacted.

1/34 HBCT, MN	30 HBCT, NC	45 IBCT, OK	56 SBCT, PA	116HBCT, ID
2/28 HBCT, PA	32 IBCT, WI	48 IBCT, GA	70 IBCT, CA	116 IBCT, VA
2/34 IBCT, IA	33 IBCT, IL	50 IBCT, NJ	72 IBCT, TX	155 HBCT, MS
19 SF GP, UT	37 IBCT, OH/MI	53 IBCT, FL	76 IBCT, IN	256 IBCT, LA
20 SF GP, AL	39 IBCT, AR	55 HBCT, PA	81 HBCT, WA	278 HBCT, TN/MD
27 IBCT, NY	41 IBCT, OR	56 IBCT, TX	86 IBCT, VT/CO	

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Will be used for domestic incident responses.

7. Cost.

Units Required	Unit Cost	Program Cost
32 Ground Control Station Upgrades (Scalable) (2035)	**$1,500,000**	**$48,000,000**
Total		**$48,000,000**

FRIENDLY FORCE TRACKING (FFT) DEVICE

1. Background. Friendly Force Tracking devices are needed for operational support of Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). As disaster responses unfold, incident commanders and operations centers need to know where their forces are aligned and what resources are waiting in the wings to be moved into the Joint Operational Environment. FFT devices, such as the SHOUT nano are Iridium/GPS handheld devices already in use by the Department of Defense (DoD) (such as NORTHCOM and some select state National Guard units) as well as interagencies (such as Department of State, Federal Emergency Management Agency (FEMA), and the Department of Homeland Security (DHS)) for operational and exercise support. The Army National Guard (ARNG) has the ability to track and display their friendly forces to shared situational awareness systems. However, this equipment is not readily available or fully deployed throughout the National Guard (NG). FFTs are available for procurement now and can be quickly integrated into operations with position location information seamlessly injected into the NORTHCOM unclassified and classified data architectures that support our missions today.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference, Deep Water Horizon lessons learned, and National Special Security Events.

3. Impact If Not Funded. The impact of not funding FFT devices may result in potential loss of life through delayed response in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These devices will provide a valuable asset to local communities, governors, and the Department of Defense for the allocation of forces and critical equipment to areas needing lifesaving and property damage mitigation.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. Naval Special Warfare Center (NSWC), Crane, IN.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a FFT capability is needed.

7. Cost.

Units Required	Unit Cost	Program Cost
2,700 FFTs (2035)	**$731**	**$1,973,700**
2,700 Device Average Annual Airtime Cost (2065)	**$540**	**$1,458,000**
Total		**$ 3,431,700**

GEOSPATIAL INFORMATION INTEROPERABILITY EXPLOITATION PORTABLE (GIIEP) SYSTEM AND OTHER SENSORS CERTIFICATION ON ROTARY WING AIRCRAFT

1. Background. The GIIEP system and other modular sensors are great resources to provide commanders Shared Situational Awareness (SSA) and the ability to make informed decisions in a domestic operational environment. These systems enhance Incident Awareness and Assessment (IAA) capabilities but have had limited use by the Army National Guard (ARNG) due to the lack of certification for airworthiness on Army rotary wing aircraft. These platforms are utilized through cooperative agreements with the Civil Air Patrol but are not meeting their full potential due to lack of certification.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference and hurricane Irene.

3. Impact If Not Funded. The impact of not funding the certification of the GIIEP system for airworthiness of ARNG rotary wing aircraft would be a degradation of SSA for the commander involved in Defense Support of Civil Authorities (DSCA) or National Guard Civil Support (NGCS) operations. This lack of SSA during vital operations such as search and rescue and Chemical, Biological, Radiological, Nuclear, (CBRN) decontamination operations could lead to the loss of life.

4. Units Impacted. All 50 states have been given at least one GIIEP system. Full utilization of the system requires the ability to use it on airframes organic to the state or at least ARNG.

5. Contractor. N/A.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where a need for better Incident Awareness and Assessment is needed.

7. Cost.

Units Required	Unit Cost	Program Cost
1 Certificate of Airworthiness of GIIEP System (2065)	**$200,000**	**$200,000**
Total		**$200,000**

ADD-ON IMAGERY FOR ARMY AVIATION AND GROUND ASSETS

1. Background. The capability for devices that provide real-time motion video and imagery is needed for Defense Support of Civil Authorities (DSCA) and National Guard Civil Support (NGCS). Forward Looking Infrared (FLIR) technology exists that enables military operators to conduct reconnaissance and surveillance operations. This technology can be mounted on Army ground vehicles, aviation assets, or in dismounted configurations.

2. Source of Need. Identified by the 2012 Joint Domestic Operations Equipment Requirements (JDOER) Conference.

3. Impact if Not Funded. The Army National Guard (ARNG) will have a decreased capability to provide surveillance assistance and provide a valuable asset to local communities, governors, and the Department of Defense for the critical equipment to areas needing assistance for Civil Authorities in response to disasters.

4. Units Impacted. Shortfalls impact the ability of all 54 states and territories to respond to contingencies.

5. Contractor. DoD PM Night Vision/Reconnaissance, Surveillance, and Target Acquisition.

6. Contingencies Supported - Previous Usage. OCONUS missions and Border Control operations.

7. Cost.

Units Required	Unit Cost	Program Cost
TBD	**$500,000**	**TBD**
Total		

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