

# 2018



## DOMESTIC CAPABILITY PRIORITIES



**AIR NATIONAL  
GUARD**



# FOREWORD



The Air National Guard (ANG) stands ready to provide Airmen and equipment in support of the American people during times of domestic need. As a first step to prepare for homeland response, National Guard experts from wings and state headquarters across the nation gather together during our annual ANG Domestic Capability Priorities (DCP) conference to define the capabilities our responders need.

We identify, prioritize, and organize capability needs according to FEMA defined Emergency Support Functions (ESF). This serves as a starting point for the allocation of the ANG's limited procurement funds. The ANG strives to keep the process transparent, documenting the DCP outputs and making them publicly available on the internet.

ANG Airmen are ready to respond in the homeland and OCONUS while maintaining Air Force training and readiness standards. I am grateful to our ANG Airmen and partner agencies across the country who participate in the DCP process and steer ANG resources in the most effective direction. The DCP process and products exemplify our steadfast commitment to communities, states, territories, and the nation.

A handwritten signature in black ink that reads "L. Scott Rice".

L. SCOTT RICE  
Lieutenant General, USAF  
Director, Air National Guard

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# Introduction



The 2018 Air National Guard (ANG) Domestic Capability Priorities (DCP) Book documents capability priorities identified during the May 2017 ANG DCP Conference in Colorado Springs, Colorado. This location was selected to enhance NORTHCOM's participation with the ANG. The DCP Conference leveraged working groups for 11 National Response Framework Emergency Support Functions (ESF). The conference welcomed over 320 military and civilian attendees representing 53 states and territories from the ANG wings and state Joint Force Headquarters, other government agencies, civil partners, as well as National Guard Bureau (NGB) staff. The objective of the ESF working groups was to identify capabilities needed by the ANG to effectively execute the domestic incident response mission, classified by urgency of need: Critical (crucial within the next 1 to 3 years), Essential (vital within the next 3 to 5 years), or Desired (enhances mission success beyond 5 years).

<b>National Response Framework (NRF) Emergency Support Functions (ESF)</b>
<b>ESF 1 - Transportation</b>
<b>ESF 2 - Communications</b>
<b>ESF 3 - Public Works and Engineering</b>
<b>ESF 4 - Firefighting</b>
<b>ESF 5 - Information and Planning</b>
<b>ESF 6 - Mass Care, Emergency Assistance, Temporary Housing, &amp; Human Services</b>
<b>ESF 7 - Logistics Management and Resource Support</b>
<b>ESF 8 - Public Health and Medical Services</b>
<b>ESF 9 - Search and Rescue</b>
<b>ESF 10 - Oil and Hazardous Materials Response</b>
ESF 11 - Agricultural and Natural Resource (No ANG Equity)
ESF 12 - Energy (No ANG Equity)
<b>ESF 13 - Public Safety and Security</b>
ESF 14 - Long-Term Community Recovery (Superseded by National Disaster Recovery Framework)
ESF 15 - External Affairs (No ANG Equity)

The introductory section of the 2018 DCP book includes a spreadsheet summarizing estimated costs for each critical capability. The State/FEMA Matrix identifies states and FEMA regions where working groups recommended fielding equipment. The book is organized into 11 ESF tabs; each begins with an ESF mission description followed by a summary page of critical, essential and desired capabilities identified at the DCP Conference. An information paper describes each capability classified as critical. Each information paper captures: Background (capability description) and Program Details (quantity of equipment needed, the estimated unit costs, and estimated program costs).





# State and FEMA Matrix

Current and potential locations for capabilities identified in this book

		ESF 1	ESF 2	ESF 3	ESF 4	ESF 5	ESF 6	ESF 7	ESF 8	ESF 9	ESF 10	ESF 13																																												
		Transportation	Communications	Public Works and Engineering	Firefighting	Information and Planning	Mass Care	Logistics	Public Health	Search and Rescue	Oil and HAZMAT Response	Public Safety and Security																																												
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		Cargo and Utility Vehicles Fleet Modernization	Remotely Piloted Aircraft Sense and Avoid System	MEOC Prime Mover Upgrade	Debris Clearance and Route Opening Prime Movers	Heavy Mobile Equipment Maintenance Truck	JISCC Block III Satellite Antenna Modernization	Airborne Communications Interoperability Node	Rapid Deployable Communications Solution	JISCC Block III Operational Trailer	JISCC Block III Incident Site Data Service Extension	EOD Man-portable Robots	EOD Bomb Suit Modernization	Water Storage And Dispersal Capability	Potable Water Production Equipment	Prime Power Team, Generation, and Distribution Equipment	Aircraft Rescue Fire Fighting Vehicles	Structural Firefighting Personal Protective Equipment	Personal Protective Gear Washer-Extractor	Rotary-Wing Aerial Firefighting	MAFFS Base Fixed Agent Pits	Incident Commander Mobile Situational Awareness Kit	FEMA Type II Mobile Emergency Operations Center	High-speed IAA Network and Servers	Portable Large Area Mass Notification System	Wide Area Multi-Spectral Imagery (Placement TBD)	Physiological Monitor System	Rapid Deployment Shelter	Religious Support Kit	DRMKT and Modernization	Generator Modernization	Mobile Fuel Support System	KC-135 Fuel Off-Load Hoses/Nozzles	Mobile Loading Dock & Trailer Ramps	Weigh In-Motion Scales	Forklift Adapter Kit	Delivery Oxygen Generation System (DOGS)	Airway Management Critical Care System	Patient Movement Item (PMI) Kits	Patient Tracking/Treatment System	Medical Rapid Response Equipment	Personal Protective Equipment for Urban Search and Rescue	Urban Search and Rescue (USAR) Vehicles	Urban Search and Rescue (USAR) Kit Modernization	Guardian Angel Arctic Search and Rescue Capability	SAR Searchlight and Loudspeaker System	Cellular Data and Radio Interoperability System	CBRN Prime Mover Upgrade	CBRN Response Trailer	CBRNE Detection Robot	HAZMAT Personal Protective Equipment (PPE) Modernization	Security Forces Vehicles	Security Forces Emergency Vehicle Response Kit	Security Forces Interoperable Radios	Security Forces Less-than-Lethal Kit Trailer	Security Forces Law Enforcement Ensemble Kit



# Transportation

**Transportation (ESF 1)** - ESF 1 encompasses intermodal transportation, aviation and airspace management, transportation safety, restoration and recovery of transportation infrastructure, movement restrictions and impact assessment. To move essential resources during a disaster, ANG assistance may be required to clear and restore the transportation system. The ANG can provide temporary alternative transportation when infrastructure is damaged, unavailable or overwhelmed. The ANG has many transportation resources to support the movement of personnel and materiel, to include heavy equipment, medical first responders and patients, bulk and palletized cargo, fire suppression systems, water, petroleum, oil, lubricants, and ground transportation across a multitude of damaged surfaces.



# **ESF 1 - Transportation**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Cargo and Utility Vehicles Fleet Modernization
- Remotely Piloted Aircraft (RPA) Sense and Avoid System
- Mobile Emergency Operations Center (MEOC) Prime Mover Upgrade
- Debris Clearance and Route Opening Prime Movers
- Heavy Mobile Equipment Maintenance Truck

### ***Essential Capabilities List***

- Construction Trailer Movement Capability
- High-Reach Wide-Body Aircraft Upload/Download Capability
- Bridge Legacy Ground Control System for MQ-9 Block 5 Aircraft
- Shop-In-A-Box
- Unmanned Aircraft System (UAS) Sustainment Capability

### ***Desired Capabilities List***

- Forward Area Refueling Point for Tactical Fuel Requirements

*Transportation*

**CARGO AND UTILITY VEHICLES FLEET MODERNIZATION**

**1. Background.** Medium duty class ½-to-2 ½ ton vehicles capable of towing 10,000-20,000 pounds are required for towing the Disaster Relief Bed-down Sets (DRBS), Fatality Search and Recovery Trailers (FSRT), Reverse Osmosis Water Purification Units (ROWPU), Disaster Relief Mobile Kitchen Trailers (DRMKT), and Hazardous Materials (HAZMAT) response trailers. ANG units need features such as crew cab, diesel engine, four-wheel drive, dual rear wheels, heavy-duty tow, and suspensions to allow for a more timely and effective response by the ANG to an array of emergency situations. The ANG needs to replace half of the 1,720 replacement eligible cargo and utility vehicles with tow-capable vehicles that meet the ANG needs.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>1,720 Cargo/Utility Vehicle Fleet Modernization (3080)</b>	<b>\$41,000</b>	<b>\$70,520,000</b>
<b>Total</b>		<b>\$70,520,000</b>

**REMOTELY PILOTED AIRCRAFT (RPA) SENSE AND AVOID SYSTEM**

**1. Background.** An Airborne Collision Avoidance System (ACAS) for unmanned aircraft or Ground-Based Sense and Avoid (GBSAA) system facilitates unrestricted access to the National Airspace System (NAS) for Remotely Piloted Aircraft (RPA). Flying in the NAS is critical for Title 32 civil support missions as well as Title 10 defense support of civil authorities' missions. Federal Aviation Regulation (FAR) 91.113 Right-of-Way Rules requires all pilots to “see-and-avoid” other aircraft. The current RPA configuration and equipment fails to satisfy Federal Aviation Administration (FAA) safety requirements, limiting the ability to operate RPAs in civil airspace. Any solution should provide each of the five Launch and Recovery Element (LRE) units with one permanent GBSAA system and one to rapidly deploy to a regional incident. Additionally, one ACAS system per aircraft will be fielded for the 12 aircraft currently in the ANG inventory.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>Non-Recurring Engineering (3080)</b>	<b>N/A</b>	<b>\$3,000,000</b>
<b>10 Ground-Based Sense and Avoid Systems (3080)</b>	<b>\$2,500,000</b>	<b>\$25,000,000</b>
<b>12 Airborne Collision Avoidance Systems (3080)</b>	<b>\$2,000,000</b>	<b>\$24,000,000</b>
<b>Total</b>		<b>\$52,000,000</b>

*Transportation*

**MOBILE EMERGENCY OPERATIONS CENTER (MEOC) PRIME MOVER  
UPGRADE**

**1. Background.** Current F-550 MEOC Prime Movers are stretched to their structural and towing limits. Operations with the current vehicles damage transmissions and motors, average four miles per gallon, and have difficulty stopping within a safe distance. Max towing is rated at 26,000 pounds and the MEOC trailers are deployed with a loaded weight of 24,000-25,000 pounds. A more capable MEOC Prime Mover is required to ensure safe and efficient operations during MEOC deployments. Users require a vehicle with a towing capacity of 31,000-37,000 pounds to ensure adequate safety, performance and longevity. The upgraded vehicle requires the following capabilities: four-wheel drive; seating for 5-6 passengers; fifth wheel receiver hitch; pintle-hook; air brakes; and a Turbo Diesel engine with a minimum 330 horsepower/725 foot-pounds of torque and an exhaust brake. One MEOC Prime Mover Upgrade for each of the 19 MEOC trailers is requested.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>19 4-Door Cargo Trucks (3080)</b>	<b>\$72,355</b>	<b>\$1,374,745</b>
<b>Total</b>		<b>\$1,374,745</b>



*Transportation*

**DEBRIS CLEARANCE AND ROUTE OPENING PRIME MOVERS**

**1. Background.** Trucks rated at 2.5 tons are needed to provide transportation for debris clearance and route opening equipment packages. Following many disasters, roads and airfields must be cleared of debris to facilitate the movement of emergency response vehicles, equipment, and personnel. There are no dedicated vehicles in the ANG inventory responsible for facilitating the movement of the route clearance equipment package and debris. One 2.5 ton truck per ANG wing is requested.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 2.5-Ton Trucks (3080)</b>	<b>\$74,000</b>	<b>\$6,660,000</b>
<b>Total</b>		<b>\$6,660,000</b>

*Transportation*

**HEAVY MOBILE EQUIPMENT MAINTENANCE TRUCK**

**1. Background.** Heavy equipment and emergency vehicles are prone to failure in the field during domestic operations. The ANG cannot readily respond to these breakdowns because it does not have a truck capable of carrying out a full range of vehicle maintenance and repairs. One ton, four-wheel drive, crew cab trucks (Contact Trucks) are needed to perform mobile maintenance support of heavy equipment and other emergency vehicles or trucks during domestic responses. The trucks should be furnished with a mobile crane, welder, air compressor and hand tools (Service Bodies) for repairing all types of vehicles and equipment in the field. One fully equipped heavy mobile equipment maintenance truck is requested for each ANG wing.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 1-Ton 4x4 Crew Cab Chassis (3080)</b>	<b>\$49,000</b>	<b>\$4,410,000</b>
<b>90 Service Bodies (Maintenance Equipment) (3080)</b>	<b>\$66,000</b>	<b>\$5,940,000</b>
<b>90 Sets of Hand Tools (3080)</b>	<b>\$22,000</b>	<b>\$1,980,000</b>
<b>Total</b>		<b>\$12,330,000</b>

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# Communications

**Communications (ESF 2)** - Communication enablers are comprised of a full spectrum of interoperable capabilities to include voice, data, cellular, radio, and video capabilities over sophisticated networks establishing shared situational awareness among federal, state, and local agencies in response to disaster recovery efforts. These capabilities include bridging critical communications, facilitating coordination of emergency response operations, and acting as a conduit between responding local, state and federal agencies. The communications function encompasses close coordination with the commercial industry, reestablishment, sustainment & defense of local, state and national information technology resources, and oversight of command and control within the federal, state, and local incident management and response operations centers.



security of communications devices and networks, support cyber defense and mitigation activities, and increase interoperability among responders, while reducing response times.

The ANG has 62% of the AF total communications capability. Field representatives from the ANG address operational shortfalls and propose updated communications capabilities to improve the ANG's ability to respond quickly and function efficiently during emergency operations in support of civil authorities, federal and state partners. The capabilities identified improve the



# **ESF 2 - Communications**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Joint Incident Site Communications Capability (JISCC) Block III Satellite Antenna Modernization
- Airborne Communications Interoperability Node
- Rapid Deployable Communications Solution
- Joint Incident Site Communications Capability (JISCC) Block III Operational Trailer
- Joint Incident Site Communications Capability (JISCC) Block III Incident Site Data Service Extension

### ***Essential Capabilities List***

- Portable Repeater Package
- Command and Control (C2) Non-secure Internet Protocol Router (NIPR) Communications Response Kit
- Multi-path Microwave Solution
- Deployed Cyber Response Kit
- Joint Reception Staging Onward Movement and Integration Mobile Tracking Mechanism

### ***Desired Capabilities List***

- Regional Communication Management Package
- Global Positioning System (GPS) Personnel Tracker

**JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY (JISCC) BLOCK III  
SATELLITE ANTENNA MODERNIZATION**

**1. Background.** The Joint Incident Site Communications Capability (JISCC) provides ANG communications units with military Command and Control (C2) and National Incident Management System (NIMS) compatible data information using a standardized mobile and modular communications platform at the incident site. The existing antenna has a 35% failure rate that affects the ability of JISCC teams to serve as a quick response communications provider. Replacing the current antenna with a parabolic triband satellite antenna will reduce signal loss, improve satellite connectivity, and increase reliability. A tri-band antenna allows JISCC teams to provide reach back services and access into the Wideband Global System (WGS) of military satellites supporting all domestic response missions. Each of the 42 JISCC Block III assigned ANG units should receive one tri-band antenna and the support depot should receive four to utilize as spares.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>46 SATCOM Triband Terminals (3080)</b>	<b>\$237,000</b>	<b>\$10,902,000</b>
<b>Total</b>		<b>\$10,902,000</b>

**AIRBORNE COMMUNICATIONS INTEROPERABILITY NODE**

**1. Background.** Military aircraft and ground personnel often lack the ability to communicate with their civilian counterparts at the state and federal level. Radio line-of-sight restrictions due to terrain or distance and incompatible radios between incident participants are the main issues. An airborne pod will provide a persistent communication capability covering an entire incident site during domestic operations to ensure all participants are able to pass real-time data, video, and voice. The pod will act as an enabler, propagating and extending the range of Link 16 and Mobile Ad Hoc Networks (MANET) (e.g. Adaptive Networking Wideband Waveform (ANW2) and Wave Relay). The airborne pod will simultaneously bridge military voice communications (ultrahigh frequency/very high frequency), civilian Public Safety Organization P25 radio bands, and MANET voice channels to ensure communication with all affected parties during an incident. One airborne pod is required for each of the 10 FEMA regions.

**2. Program Details.**

<b>Remaining Quantity Required</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>10 Airborne Pods (3080)</b>	<b>\$910,000</b>	<b>\$9,100,000</b>
<b>Total</b>		<b>\$9,100,000</b>

**RAPID DEPLOYABLE COMMUNICATIONS SOLUTION**

**1. Background.** While operating during a natural disaster or emergency, a communications gap can exist between emergency responders due to the disabled or poor infrastructure. A rapid deployable communications solution fills this critical need with satellite voice, cellular, data and video streaming. Kit requirements include the following: set-up in under 15 minutes with no tools; weight of less than 90 pounds total; power requirements of 120 volts alternating current, 6 amps maximum, with a consumption of 50 watts while idle and 150 watts when operational; and a dual-band (2.4 Gigahertz (Ghz) and 5.8Ghz) 802.11 a/b/g/n/ac wireless network. Due to transportability concerns on small aircraft and vehicles, the kit must breakdown into segments weighing no more than 45 pounds. The system needs to create an area of cellular coverage to support Verizon, Sprint, AT&T and T-Mobile users, and be FirstNet Band 14 capable. Training and monthly satellite sustainment costs should be included with the initial purchase price for the first 36 months. One kit is required for each of the 90 ANG wings.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 Rapid Deployable Communications Kits (3080)</b>	<b>\$55,000</b>	<b>\$4,950,000</b>
<b>Total</b>		<b>\$4,950,000</b>



**JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY (JISCC) BLOCK III  
OPERATIONAL TRAILER**

**1. Background.** ANG Joint Incident Site Communications Capability (JISCC) units require a secure mobile operations facility capable of conducting network and radio frequency operations in support of a broad range of domestic missions. Block III operational trailers will provide JISCC units with a secure, climate controlled environment for the JISCC's sensitive information technology equipment. The trailer enables 24/7 access to communications services and serves as lodging for a six person team. This self-contained capability allows operators to rapidly relocate to another incident site in a very short period of time. One Block III Operations Trailer upgrade is requested for 41 of the 42 ANG JISCC systems.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>41 JISCC Operations Trailers (3080)</b>	<b>\$33,000</b>	<b>\$1,353,000</b>
<b>Total</b>		<b>\$1,353,000</b>

**JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY (JISCC) BLOCK III  
INCIDENT SITE DATA SERVICE EXTENSION**

**1. Background.** During operations, incident commanders often request Joint Incident Site Communications Capability (JISCC) teams to project communications services to multiple military and civilian entities. Current solutions only allow the JISCC to extend services to a single remote site. The JISCC requires the ability to extend core data and voice services to responders in a Defense Support of Civil Authorities (DSCA) or all hazards response event. An incident site communications extension system allows a JISCC terminal to extend data and voice services to three separate locations simultaneously and independently to support civilian or military personnel at the incident sites. Additionally, the system can be configured as a repeater to project services to remote locations not normally accessible to satellite or cellular based systems. One point-to-multipoint antenna system is requested for each of the 42 ANG JISCC systems.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>41 Point to Multipoint Antenna Systems (3080)</b>	<b>\$62,500</b>	<b>\$2,625,000</b>
<b>Total</b>		<b>\$2,625,000</b>

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# Public Works and Engineering

**Public Works and Engineering (ESF 3)** - The United States Army Corps of Engineers is the primary agency for providing technical assistance, engineering, and construction management resources during response activities. ESF 3 provides contracted 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. ANG assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, coordinated, and effective response.

# **ESF 3 - Public Works and Engineering**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Explosive Ordnance Disposal (EOD) Man-Portable Robots
- Explosive Ordnance Disposal (EOD) Bomb Suit Modernization
- Water Storage and Dispersal Capability for each ANG Base
- Potable Water Production Equipment
- Prime Power Team, Generation and Distribution Equipment

### ***Essential Capabilities List***

- Pavement Evaluation Kit
- Explosive Ordnance Disposal Large Robot Upgrade
- Small Unmanned Aircraft System for Incident Area Assessment
- High Capacity Water Pump Kits
- Telescopic Boom Loader

### ***Desired Capabilities List***

- Safety Beacons
- Six Pack All-Terrain Vehicle
- Four Cubic Yard Front End Loader
- Light Emitting Diode Tripod Lights
- Outdoor Covers for Civil Engineering Equipment

**EXPLOSIVE ORDNANCE DISPOSAL (EOD) MAN-PORTABLE ROBOTS**

**1. Background.** Robots currently in the ANG Explosive Ordnance Disposal (EOD) unit inventories are too heavy to be man-portable and are too large to operate in confined spaces such as culverts, ditches, sewers, attics, crawl spaces, and roof-tops. Small lightweight robots are needed in these confined areas for use against improvised explosive devices. A portable, real-time, video X-ray unit capable of small robot deployment accelerates hazard identification and isolation. Each of the 17 ANG EOD flights needs one robot and one lightweight X-ray system, plus one additional set of equipment for each of the two regional training sites, and two sets of spares.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>21 Small Portable EOD Robots* (3080)</b>	<b>\$82,200</b>	<b>\$1,726,200</b>
<b>21 Lightweight Real-Time X-Ray Systems* (3080)</b>	<b>\$77,400</b>	<b>\$1,625,400</b>
<b>Total</b>		<b>\$3,351,600</b>

\*Includes 10% spares.

**EXPLOSIVE ORDNANCE DISPOSAL (EOD) BOMB SUIT MODERNIZATION**

**1. Background.** Bomb suits issued to ANG Explosive Ordnance Disposal (EOD) units have been outpaced by new technologies. Modern advanced bomb suits provide enhanced ballistic protection while reducing weight and increasing mobility, field of vision, and situational awareness. Advanced bomb suits also provide communications and sensory input using shielded electronics, which are safe in radio frequency hazard areas. All of these improvements, combined with an integrated cooling system, reduce strain and fatigue to allow longer, more focused, and safer use of the bomb suit. Plans call for active duty EOD personnel to be issued with advanced bomb suits, but ANG EOD units supporting domestic operations are not scheduled to receive them. Each of the 17 ANG EOD flights needs one advanced bomb suit kit, with one additional kit for each of the two regional training sites, plus two kits for spares. Each kit consists of three advanced bomb suits along with associated equipment.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>21 Advanced Bomb Suit Kits* (3080)</b>	<b>\$146,000</b>	<b>\$3,066,000</b>
<b>Total</b>		<b>\$3,066,000</b>

\*Includes 10% spares.

**WATER STORAGE AND DISPERSAL CAPABILITY FOR EACH ANG BASE**

**1. Background.** Potable water containers have a critical role in water storage and distribution. Virtually every domestic operation requires access to drinkable water on site. Water storage equipment would provide an easily transportable, collapsible container system holding at least 320 gallons of potable water. Disposable liners within the containers collapse as water is used ensuring the water exiting the container is of the same quality as the water source. Each ANG wing requires four collapsible containers and stands, one trailer, and 200 liners.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>360 Collapsible Containers (3080)</b>	<b>\$4,700</b>	<b>\$1,692,000</b>
<b>360 Stands (3080)</b>	<b>\$1,400</b>	<b>\$504,000</b>
<b>90 Trailers (3080)</b>	<b>\$6,300</b>	<b>\$567,000</b>
<b>1800 FDA Approved Liner Bags (3080)</b>	<b>\$80</b>	<b>\$144,000</b>
<b>Total</b>		<b>\$2,907,000</b>



**POTABLE WATER PRODUCTION EQUIPMENT**

**1. Background.** Virtually every major domestic disaster requires large quantities of drinkable water. A Reverse Osmosis Water Purification Unit (ROWPU) provides an expedient water purification and desalination processing capability during these times of crisis. The ROWPU can produce 1,500 gallons of potable water per hour for first responders and the civilian population. In addition to the ROWPU, each storage equipment kit will include two water storage bladders, a light cart, a shelter tent, and a 45-foot trailer to haul the equipment. Each of the ten Federal Emergency Management Agency (FEMA) regions needs one additional ROWPU kit, plus one kit each for Alaska, Hawaii, and Puerto Rico.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>13 ROWPU and Storage Equipment Kits (3080)</b>	<b>\$390,900</b>	<b>\$5,081,700</b>
<b>Total</b>		<b>\$5,081,700</b>

**PRIME POWER TEAM, GENERATION AND DISTRIBUTION EQUIPMENT**

**1. Background.** Almost every major domestic disaster requires additional sources of power along with technical assistance on power generation and distribution. Prime Power teams provide emergency power to civilian and military facilities including clinics, nursing homes, police stations, command centers, and Joint Reception, Staging, Onward Movement, and Integration sites during disaster relief operations. Prime Power equipment includes 20 generators (eight 100 kW, seven 60 kW, and five 30 kW), wiring, supplies, tools, portable lighting, and personal protection equipment. Two pilot Prime Power teams are established and equipped at the 150th Special Operations Wing (Kirtland AFB, NM) and the 118th Air Wing (Nashville IAP, TN). A set of Prime Power equipment is needed for 8 additional sites to cover all 10 Federal Emergency Management Agency (FEMA) Regions.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>8 Sets of 8 Generators, 100 kW (3080)</b>	<b>\$431,000</b>	<b>\$3,448,000</b>
<b>8 Sets of 7 Generators, 60 kW (3080)</b>	<b>\$293,300</b>	<b>\$2,346,400</b>
<b>8 Sets of 5 Generators, 30 kW (3080)</b>	<b>\$146,900</b>	<b>\$1,175,200</b>
<b>8 Sets of Wiring and Supplies (30 days) (3080)</b>	<b>\$33,900</b>	<b>\$271,200</b>
<b>8 Sets of Tools (3080)</b>	<b>\$37,300</b>	<b>\$298,400</b>
<b>Total</b>		<b>\$7,539,200</b>

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# Firefighting

**Firefighting (ESF 4)** - Firefighting capabilities include detecting and suppressing wildland, rural, and urban fires from the ground and air, while managing and coordinating those firefighting efforts. The management of a large firefighting operation often involves thousands of people and equipment from many agencies and jurisdictions. A major disaster may impose extraordinary demands and exceed local firefighting capabilities.

ANG Fire and Emergency Services (FES) personnel can augment local firefighting resources because ANG firefighters maintain the same certifications as their civilian counterparts.



The firefighting team consists of managers, incident commanders, and firefighters. In addition to traditional fire and rescue capabilities, ANG firefighters provide hazardous materials response to include Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) events. The ANG firefighting enterprise consists of 62 FES units, and for airborne firefighting, three C-130 and three HH-60 units.



With any specialty that has potential exposure to hazards, there comes inherent risk. To minimize the risks to first responder safety, the proper personnel protective equipment, tools, and training are needed for each specialty.



# **ESF 4 - Firefighting**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Aircraft Rescue Fire Fighting Vehicles
- Structural Firefighting Personal Protective Equipment
- Personal Protective Gear Washer-Extractor
- Rotary-Wing Aerial Firefighting
- MAFFS Base Fixed Agent Pits

### ***Essential Capabilities List***

- Wildland Equipment Kit
- Modernize Aircraft Rescue Fire Fighting (ARFF) Trainers for training sites
- Multi-Gas Detectors for First Line Fire Truck
- Full Motion Video Direct Feeds From Aerial Assets

### ***Desired Capabilities List***

- Single Fire Emergency Services - Incident Management System (FES-IMS) Platform that Integrates Automated Civil Engineer System - Fire Department (ACES-FD) (Including Dispatch Client), Monaco, and Webcobra

*Firefighting*

**AIRCRAFT RESCUE FIRE FIGHTING VEHICLES**

**1. Background.** All ANG units lack the second fire engine authorized by Allowance Standard Code (ASC) 010 and the fire apparatus they do have are not on a par with their active duty counterparts. Adding a second fire engine and upgrading the fire apparatus will maintain critical levels of service at the ANG bases and provide additional force projection capacity for mutual aid agreements. Modernized Aircraft Rescue Fire Fighting (ARFF) trucks provide the ability to forward project ANG fire protection to remote or damaged airfields for flying operations. Upgraded ARFF trucks provide greater reliability decreasing maintenance instances making them better suited to respond to off-base emergencies.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>22 ARFF UHP P-19 Vehicles (3080)</b>	<b>\$689,500</b>	<b>\$15,169,000</b>
<b>30 ARFF UHP P-23 Vehicles (3080)</b>	<b>\$648,085</b>	<b>\$19,442,550</b>
<b>9 ARFF P-34 Vehicles (3080)</b>	<b>\$251,992</b>	<b>\$2,267,928</b>
<b>Total</b>		<b>\$36,879,478</b>

*Firefighting*

**STRUCTURAL FIREFIGHTING PERSONAL PROTECTIVE EQUIPMENT**

**1. Background.** Contact with chemicals, fuel, and all products of combustion during fires impregnates Personal Protective Equipment (PPE) with these carcinogenic compounds requiring de-contamination, which can take weeks to accomplish. Because of this, ANG Fire and Emergency Services (FES) units need a second set of structural PPE to maintain the response capability of their firefighters at 100%. A second set of structural PPE will provide the firefighter with the ability to respond to a structural fire when the primary set is being repaired or cleaned. The ensemble includes pants, coats, boots, gloves, and hood. One set is needed for each firefighter at the 62 FES units.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>2000 Structural Ensembles (3080)</b>	<b>\$3,200</b>	<b>\$6,400,000</b>
<b>Total</b>		<b>\$6,400,000</b>

**PERSONAL PROTECTIVE GEAR WASHER-EXTRACTOR**

**1. Background.** Routine contact with chemicals, fuel, and the products of combustion require Personal Protective Equipment (PPE) de-contamination, which can take weeks without an in-house cleaning capability. An extractor (washer) and dryer will provide the capability for Fire and Emergency Services (FES) flights to conduct proper post-emergency cleaning of PPE. With the addition of a water penetrator tester, all FES flights will have the capability to conduct in-house annual advanced cleaning in accordance with National Fire Protection Association (NFPA) 1851. Currently, FES units utilize a million dollar, 3-year contract to conduct the advanced inspections for one set of gear per ANG firefighter. The extractor, dryer, and penetrator can be used for structural, wildland, and rescue PPE decontamination as well as annual advanced cleaning, eliminating the requirement for contract cleaning. One extractor, dryer, and penetrator tester is needed for each of the 62 ANG FES units. Training on the use and maintenance of the equipment and inspection of the PPE for three individuals at each unit is also required.

**2. Program Details.**

Quantity	Unit Cost	Program Cost
<b>62 Washer Extractor (3080)</b>	<b>\$10,500</b>	<b>\$651,000</b>
<b>62 Gear Dryer (3080)</b>	<b>\$10,000</b>	<b>\$620,000</b>
<b>62 Water Penetrator Tester (3080)</b>	<b>\$2,000</b>	<b>\$124,000</b>
<b>62 Extractor/Dryer Installation (3080)</b>	<b>\$2,000</b>	<b>\$124,000</b>
<b>62 Gear Inspection Training for 3 personnel/unit (3080)</b>	<b>\$4,000</b>	<b>\$248,000</b>
<b>Total</b>		<b>\$1,767,000</b>



*Firefighting*

**ROTARY-WING AERIAL FIREFIGHTING**

**1. Background.** While the ANG has sling-loaded fire-bucket systems in its inventory, these systems are incapable of controlling the volume of water dropped and cannot fill from shallow water sources. The ability to control the volume of water dropped from the bucket and to fill the bucket from small sources of water (ponds, pools, etc.) would greatly enhance firefighting effectiveness. A multiple drop valve fire-bucket system will allow ANG helicopters to combat multiple wildland fires under austere conditions with greater efficiency. Four multiple drop valve sling-load buckets, four bucket maintenance kits, eight power packs, four 150 foot lines, and four remote hooks are requested for each ANG HH-60 rescue unit.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>12 Firefighting Buckets, 530-Gallon (3010)</b>	<b>\$33,099</b>	<b>\$397,188</b>
<b>12 Firefighting Bucket Maintenance Kits (3010)</b>	<b>\$604</b>	<b>\$7,248</b>
<b>24 Firefighting Bucket Power Packs (3010)</b>	<b>\$1,952</b>	<b>\$46,848</b>
<b>12 Line, 150-Foot (3010)</b>	<b>\$6,490</b>	<b>\$77,880</b>
<b>12 Snorkel Kit (3010)</b>	<b>\$10,785</b>	<b>\$129,420</b>
<b>12 Mobility Kit (3010)</b>	<b>\$4,292</b>	<b>\$51,504</b>
<b>Total</b>		<b>\$710,088</b>

*Firefighting*

**MAFFS BASE FIXED AGENT PITS**

**1. Background.** Modular Aircraft Fire Fighting System (MAFFS) equipped C-130 units take too long to respond to wildland fires due to a lack of indigenous fire suppressant loading capability. MAFFS units currently have to fly to Type 1 Air Tanker Bases to load. A Type 1 Air Tanker Base supports loads of at least 3,000 gallons of retardant per sortie via a 100,000 gallon tank preloaded with retardant. Installing this equipment and its associated pump systems adjacent to the MAFFS pits at all three ANG MAFFS locations would decrease their standup time from 24 hours to 3 hours. One MAFFS unit would receive the fixed agent pits to prove the concept, with the other two MAFFS units following after that.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>3 MAFFS Fixed Agent Pits (3010)</b>	<b>\$550,000</b>	<b>\$1,650,000</b>
<b>Total</b>		<b>\$1,650,000</b>

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# Information and Planning

**Information and Planning (ESF 5)** - Information and planning capabilities include collecting, processing, analyzing, and disseminating information, conducting incident planning activities, and coordinating response and recovery efforts. During the post-incident response phase, support transitions to managing response efforts and multiagency coordination for all types of operations, and relies heavily on information generated from Incident Awareness and Assessment (IAA) systems utilizing ground and air assets. Through the use of the ANG operations centers, robust command and control capability is readily available. ANG Mobile Emergency Operation Centers (MEOC) provide mobile, on-site command and control and information dissemination. This past year, ANG MEOCs responded over 150 times to domestic events.



# **ESF 5 - Information and Planning**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Incident Commander Mobile Situational Awareness Kit
- Federal Emergency Management Agency Type II Mobile Emergency Operations Center
- High-speed Information Awareness and Assessment Network and Servers
- Portable Large Area Mass Notification System
- Wide Area Multi-Spectral Imagery

### ***Essential Capabilities List***

- Credentialing System
- Mobile Ad Hoc Network
- Force Tracking and Information Sharing
- Web-based Common Operating Picture
- Wide Area Motion Imagery

### ***Desired Capabilities List***

- Cross-banding for Radio Communications
- Situational Awareness and Communications Small Drone
- Cellular and Wi-Fi Signal Booster
- Airborne Command and Control (C2) Interoperability Node

**INCIDENT COMMANDER MOBILE SITUATIONAL AWARENESS KIT**

**1. Background.** Incident commanders, first responders, and emergency operations center personnel require the ability to access and utilize still and full motion video imagery of a site to enhance decision making capabilities. The Incident Commander Mobile Situational Awareness Kit (MSAK) utilizes commercial off-the-shelf tools with government furnished communications equipment to upload geotagged still images or full motion video to the National Guard Bureau Domestic Operations Awareness & Assessment Response Tool website. MSAKs can be deployed on the ground or in rotary/fixed-wing aircraft rapidly and at low cost. Each kit will contain an upgraded Global Positioning System (GPS) enabled camera, laser rangefinder, infrared camera, a video receiver for tactical airborne sensors, and a ruggedized tablet with video capture equipment. Recommended fielding is one kit for each of the 54 Joint Forces Headquarters Joint Emergency Operations Centers.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>54 Incident Commander Mobile Situational Awareness Kits (3080)</b>	<b>\$25,000</b>	<b>\$1,350,000</b>
<b>Total</b>		<b>\$1,350,000</b>

**FEDERAL EMERGENCY MANAGEMENT AGENCY TYPE II MOBILE  
EMERGENCY OPERATIONS CENTER AND MODERNIZATION**

**1. Background.** Communication equipment in fielded Mobile Emergency Operation Centers (MEOC) has reached the end of its service life. MEOCs provide mobile command and control capable of broad interoperability among responders for on-scene incident management and long-term recovery. The MEOC Modernization Equipment Kits will replace or upgrade equipment such as communications and networking gear, video conferencing, power systems, cosmetics, displays, antennas, lighting, as well as necessary safety compliance upgrades. National Incident Management System requirements and US Northern Command communications rules of engagement require four additional MEOCs and their prime movers. Twenty of the ANG’s MEOCs need a modernization equipment kit. In addition, the ANG needs four new MEOCs. One MEOC is needed to replace the old and outdated motorhome style MEOC in the National Capital Region. One MEOC is needed for each of the three western Federal Emergency Management Agency (FEMA) regions due to their large geographic size and mountainous terrain.

**2. Program Details.**

Quantity	Unit Cost	Program Cost
<b>4 FEMA Type II MEOCs (3080)</b>	<b>\$1,000,000</b>	<b>\$4,000,000</b>
<b>4 MEOC Prime Movers (3080)</b>	<b>\$80,000</b>	<b>\$320,000</b>
<b>20 MEOC Modernization Equipment Kits (3080)</b>	<b>\$500,000</b>	<b>\$10,000,000</b>
<b>Total</b>		<b>\$14,320,000</b>

**HIGH-SPEED INFORMATION AWARENESS AND ASSESSMENT NETWORK AND SERVERS**

**1. Background.** The National Guard requires high-speed, high-bandwidth open architecture networks to manage, analyze, and disseminate video, voice, and data. The network will be approved by the Defense Information Systems Agency (DISA), but will be separate from standard Non-classified Internet Protocol Router (NIPR) and Secret Internet Protocol Router (SIPR) networks to allow for open architecture. It should be able to actively communicate and be compatible with the Domestic Operations Awareness and Assessment Response Tool Suite. Each organization will possess either a “hub” or “spoke” site. Hub sites are the entry point of commercial service into a region. Spoke sites are the entry point of commercial service via a hub site. Each spoke site will consist of a router, switch, firewall, and other standard networking equipment. Each hub site will require the same equipment as a spoke site plus additional cybersecurity equipment; such as a domain controller, HBSS, and other standard enterprise security hardware. Hub sites are requested for CA, NY, and TN plus 2 spares; spoke sites are requested for AK, AL, AZ, CA, IN, KS, MA, ND, NV, NY (2), OH, TN, TX, and VA. The Program Details below assumes 12 states requiring two spoke kits, 3 states requiring 1 spoke kit, and two client workstations at each of the sites.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>5 Commercial Internet Access Servers and Hardware “Hub” Site Kits (3080)</b>	<b>\$172,500</b>	<b>\$862,500</b>
<b>26 Spoke Site Kits (3080)</b>	<b>\$92,000</b>	<b>\$2,392,000</b>
<b>58 Client Workstations (3080)</b>	<b>\$2,000</b>	<b>\$116,000</b>
<b>Total</b>		<b>\$3,370,500</b>



**PORTABLE LARGE AREA MASS NOTIFICATION SYSTEM**

**1. Background.** ANG wings lack the capability to provide wide area notifications in large, remote areas. Emergency mass notification is critical for safety and mission continuation. A portable mass notification system allows for immediate warning to personnel in large gathering areas, such as staging areas, base camps, Joint Reception, Staging, Onward Integration, and Points of Distribution (PODS). A small, lightweight, free standing system housed in a compact form factor case is needed for ease of mobility. The system should be capable of broadcasting pre-recorded messages. Each of the 90 ANG Emergency Management Flights need a system.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 Portable Large Area Mass Notification Systems (3080)</b>	<b>\$25,000</b>	<b>\$2,250,000</b>
<b>Total</b>		<b>\$2,250,000</b>

## **WIDE AREA MULTI-SPECTRAL IMAGERY**

**1. Background.** The lack of unclassified, near real-time, high resolution, wide-area, multi-spectral imagery data collection within the ANG degrades domestic operational incident responses. Rapid analysis and assessment of incident information is crucial to multiple elements of disaster response, quickly enabling responders to accurately direct their resources against the most critical areas. A highly capable, pod-mounted sensor is needed which can be carried on multiple fixed-wing airframes. Three pods are requested to cover the US regionally with an asset in the Eastern, Central, and Western portions of the country.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>3 Multi-Spectral Sensor Pods (3010)</b>	<b>\$7,000,000</b>	<b>\$21,000,000</b>
<b>3 Installation and Maintenance Kits (3080)</b>	<b>\$200,000</b>	<b>\$600,000</b>
<b>Total</b>		<b>\$21,600,000</b>

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# Mass Care, Emergency Assistance, Temporary Housing, & Human Services

## **Mass Care, Emergency Assistance, Temporary Housing, & Human Services (ESF 6)**

Mass care needs during a disaster include the delivery of mass shelter, feeding, and first aid to disaster survivors, fatality management, and religious support to responders as well as systems to distribute emergency relief supplies to disaster survivors. Disaster survivor check-in and status reporting systems are used to coordinate rescuers, report on victim status, and assist families to reunite. During response efforts, the magnitude of damage to buildings and infrastructure can overwhelm the capacity of state and local governments to assess the disaster and respond effectively to basic life sustainment and emergency needs. Additionally, damage to roads, airports, and communications systems often hamper emergency response efforts.



The ANG provided key services in past mass care events, including the 2013 and 2017 Presidential Inauguration. During this event, over 1,500 soldiers and airmen were called upon to provide security and the ANG provided the mobile kitchens that fed them during the event, ensuring an effective security force. Additionally, events like the annual PATRIOT Exercise and the 2014 Oso, Washington landslide have demonstrated how ANG resources can mobilize to assist federal, state, and local authorities.



The ANG needs additional materials, processes, and training to better reach the people and areas in need, provide essential services once on the scene, and achieve a more effective response to a mass care situation.

**ESF 6 - Mass Care, Emergency Assistance,  
Temporary Housing & Human Services  
2017 Domestic Capability Priorities Conference**

***Critical Capabilities List***

- Physiological Monitoring System
- Rapid Deployment Shelter
- Religious Support Kit
- Disaster Relief Mobile Kitchen Trailer (DRMKT) and Modernization
- Generator Modernization

***Essential Capabilities List***

- Patient Tracking System
- Portable Morgue

***Desired Capabilities List***

- Disaster Relief Beddown System Plus-Up to 200 Personnel
- Dining Shelter to Deploy with Disaster Relief Mobile Kitchen Trailer

**PHYSIOLOGICAL MONITORING SYSTEM**

**1. Background.** Fatality Search and Rescue Team (FSRT), Search and Extraction (S&E), and medical leadership do not have a real time capability to monitor vital signs to mitigate avoidable health hazards for rescue, extraction and other support personnel during mission operations. While conducting mission activities, downrange personnel need to be remotely monitored for geo-location, heart rate, breathing rate and temperature allowing for the rapid determination of potential medical issues. Each of the ANG's 27 FSRTs need 11 monitors and each of the 27 S&E teams need 10 monitors.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>297 FSRT Monitors (3080)</b>	<b>\$15,000</b>	<b>\$4,455,000</b>
<b>270 Med S&amp;E Monitors (3080)</b>	<b>\$15,000</b>	<b>\$4,050,000</b>
<b>Total</b>		<b>\$8,505,000</b>

**RAPID DEPLOYMENT SHELTER**

**1. Background.** The Expeditionary Medical Support (EMEDS) Consequence Management (CM) teams’ ability to respond in a timely manner to provide medical care is hindered by the set-up time of the medical tents. Each tent takes an average of 25 minutes and a minimum of 8-10 personnel to erect. Rapid deployment tents take under 5 minutes to erect by two personnel. The time savings facilitates decreased response times and availability of emergency medical care during mass casualty incidents. The new rapid deployment medical tents need to meet the following requirements: designed from the ground up to network together through a simple connection process; not require tools, ladders or equipment to deploy; the interior frame should allow support bars capable of holding up to 50 pounds; have rigid double doors to provide a large entry way with a ramp to move gurneys and large equipment; roof cap vents to reduce condensation; flame retardant vinyl that is resistant to ultraviolet light, mildew, and abrasion; a Heating, Ventilation, and Air Conditioning (HVAC) system; Light Emitting Diode (LED) lighting; Ground Fault Circuit Interrupter (GFCI) outlets. The ANG needs one hardened shelter for each of the 27 Fatality Search and Rescue Teams (FSRT), plus six air shelter kits for each of the 27 EMEDS CM teams.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>27 Rapid Deployment Hardened Shelters (3080)</b>	<b>\$116,500</b>	<b>\$3,145,500</b>
<b>162 Rapid Deployment Air Shelter Tents (3080)</b>	<b>\$20,804</b>	<b>\$3,370,248</b>
<b>162 Air Shelter Tent Anchor Sets w/Water Bladders (3080)</b>	<b>\$625</b>	<b>\$101,250</b>
<b>162 Air Shelter Radiant Barrier Insulation Kits with HVAC Plenum (3080)</b>	<b>\$3,200</b>	<b>\$518,400</b>
<b>162 LED lighting system/control box kits for Tent (3080)</b>	<b>\$5,527</b>	<b>\$895,374</b>
<b>162 Equipment Fastening Rod Kits/Equipment GFCI Outlets (3080)</b>	<b>\$500</b>	<b>\$81,000</b>
<b>Total</b>		<b>\$8,111,772</b>

## **RELIGIOUS SUPPORT KIT**

**1. Background.** Service members responding to highly stressful operations are frequently exposed to severe mental trauma and many desire immediate religious support. The Tactical Field Religious Support Kit (TFRSK) provides a respite center for these service members to separate from operations and interact with Religious Support Teams (RST) who are trained to mitigate operational stress. The TFRSK is a portable self-contained shelter system, which can be towed by a standard 1/2 ton pickup truck. It is erected on site by a trained two-person RST and is fully mission capable in less than an hour. The kit includes: a three room portable shelter partitioned into one large open area and two private rooms, an environmental control unit, generator, trailer, hand tools for assembly, storage cabinets, 6 lightweight tables, and 20 chairs. A TFRSK is needed for each of the 90 ANG Wings.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 TFRSK Shelters</b>	<b>\$61,378</b>	<b>\$5,524,020</b>
<b>90 Trailers with Storage</b>	<b>\$26,118</b>	<b>\$2,350,620</b>
<b>90 Generators</b>	<b>\$5,200</b>	<b>\$468,000</b>
<b>90 Shelter Covers</b>	<b>\$1,674</b>	<b>\$150,660</b>
<b>90 1-Day Training/Orientation</b>	<b>\$2,500</b>	<b>\$225,000</b>
<b>Total</b>		<b>\$8,718,300</b>



**DISASTER RELIEF MOBILE KITCHEN TRAILER (DRMKT) AND  
MODERNIZATION**

**1. Background.** Disasters such as Hurricane Katrina, the Haiti earthquake, and other special security events have shown a need for support to civilian agencies as food is a basic necessity of sustainment. The Disaster Relief Mobile Kitchen Trailer (DRMKT) provides a mass field feeding capability. The 19 fielded ANG DRMKTs need modernization to meet safety requirements. These modifications include reductions in weight, changes in weight distribution, and upgrades of internal components. Three new DRMKTs are needed, one each at the 156th Airlift Wing in Puerto Rico and the 168th Air Refueling Wing in Alaska, and one to replace a unit rendered unserviceable in a transport accident.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>3 Disaster Relief Kitchen Trailers (3080)</b>	<b>\$700,000</b>	<b>\$2,100,000</b>
<b>19 DMRKT Upgrades (3080)</b>	<b>\$170,000</b>	<b>\$3,230,000</b>
<b>Total</b>		<b>\$5,330,000</b>

## **GENERATOR MODERNIZATION**

**1. Background.** The Expeditionary Medical Support System (EMEDS) needs generators providing cleaner power at a reduced noise level. The EMEDS Consequence Management (CM) teams are used to respond to mass casualty incidents and provide triage, emergency medicine, and patient stabilization to mitigate the effects of a terrorist incident or natural/man-made disaster. The availability of powered medical equipment at the incident is a prime factor in saving the lives of critical patients. New compact 11 kilowatt diesel generators with direct-coupled 2-pole, single phase power and producing noise levels at or below 68 decibels will ensure EMEDS CM teams have a reliable power supply with minimum noise to reduce interference with medical treatment. The generators should be environmentally friendly and comply with US EPA emission Tier 2 regulations. Existing generators will be repurposed through CM. The ANG needs a one-for-one replacement of their 207 EMEDS generators.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>207 11Kw Portable Diesel Generators (0380)</b>	<b>\$9,000</b>	<b>\$1,863,000</b>
<b>Total</b>		<b>\$1,863,000</b>

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# Logistics Management and Resource Support

**Logistics Management and Resource Support (ESF 7)** - The ANG's logistics function encompasses those capabilities necessary for the delivery of supplies, equipment, services, and facilities. This includes logistics planning, technical assistance, training, education, exercises, incident response, and sustainment. Logistics includes centralized management of supply chain functions in support of local, state, and federal governments during domestic incidents. It includes coordination of supply sources; acquisition; delivery of supplies, equipment, and services; resource tracking; facility space acquisition; and transportation coordination. This includes integration of community logistics partners through prior planning and crisis collaboration to reestablish local and state self-sufficiency as rapidly as possible.



# **ESF 7 - Logistics Management and Resource Support**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Mobile Fuel Support System
- KC-135 Fuel Off-Load Hoses/Nozzles
- Mobile Loading Dock and Trailer Ramps
- Weigh In-Motion Scales
- Forklift Adapter Kit

### ***Essential Capabilities List***

- Universal Tow Kit
- Hard-sided Expandable Small Air Mobile Shelter (HESAMS) Mobile Work Area
- High Reach Capable Forklift
- Modular Aircraft Loading Ramps
- Shop In-A-Box (Portable Vehicle Maintenance Tool Container/Shop)

### ***Desired Capabilities List***

- Mobile Aviation Refueling System
- All-Terrain (AT) 10,000 Pound Forklift
- 500 Gallon Mobile Fuel Tanks
- Portable Solar Powered Scales
- Self-Loading 8,000 Pound Forklift and Trailer Combination

## **MOBILE FUEL SUPPORT SYSTEM**

**1. Background.** The ANG provides gasoline and diesel support to emergency response vehicles and equipment during domestic emergencies, but must do so by positioning fuel trucks as temporary fuel service stations. Many of the ANG's fuel dispensing trucks are not equipped with standard service station nozzles, limiting their use to specific equipment. This setup presents safety and environmental hazards in the event of a fuel spill, especially when no permanent spill containment systems are installed. A Mobile Fuel Containment System mitigates these risks by providing a spill containment solution for all fuel products in the event of a mechanical or human error during a fuel servicing operations. It can be transported by fuel trucks or other vehicles to the site, where it is easily setup by two personnel. It also provides secondary containment of all fuels as required by federal and state environmental regulations. In addition, equipping ANG fuel trucks with standard service station nozzles enables fuel support to emergency response and tactical vehicles, generators and ground support equipment. Request a mobile fuels containment system, gasoline/diesel fuels nozzle and a one and a half inch hose to fuel nozzle adapter per each of the 10 FEMA regions.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>10 Mobile Fuels Containment System (3080)</b>	<b>\$4,000</b>	<b>\$40,000</b>
<b>10 Gasoline/Diesel Fuels Nozzle (3080)</b>	<b>\$100</b>	<b>\$1000</b>
<b>10 1 1/2" Hose to Fuel Nozzle Adapter (3080)</b>	<b>\$100</b>	<b>\$1000</b>
<b>Total</b>		<b>\$42,000</b>

**KC-135 FUEL OFF-LOAD HOSES/NOZZLES**

**1. Background.** Fuel transfer from ANG KC-135s on the ground can only be conducted with a truck that has an onboard pump and this typically can only be done at a very slow rate. The addition of fuel off-load hoses and nozzles will allow the transfer of fuel from a KC-135 to virtually any tank truck. This equipment will significantly increase the rate of fuel transfer and expand the different types of fuel trucks compatible with the off-loading operation. In a domestic emergency scenario, this allows the off-load of fuel to any military or commercial truck to support staged or mobile refueling operations. The ANG needs two sets of hoses/nozzles for each of the 17 ANG air refueling wings with primary assigned aircraft.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>34 KC-135 Fuel Off-Load Hoses/Nozzles (3080)</b>	<b>\$7,000</b>	<b>\$238,000</b>
<b>Total</b>		<b>\$238,000</b>

## **MOBILE LOADING DOCK AND TRAILER RAMPS**

**1. Background.** Logistics Readiness Squadrons (LRS) are responsible for moving personnel, equipment, supplies, and vehicles at home and abroad, but do not have loading docks that can be moved to where they are needed. This slows down the movement of equipment. Mobile loading docks allow for the loading and off-loading from commercial transport vehicles of equipment, supplies, and vehicles without permanent, stationary loading docks. Mobile loading docks allow point of distribution missions for the distribution of supplies and equipment to disaster stricken areas. Mobile loading docks capable of supporting 10,000 pounds to 30,000 pounds and with manual height adjustment from 45 to 62 inches better equips LRS units to support domestic incidents. During domestic operations, these mobile loading docks can be used to load and off-load trailers and vehicles, ranging in size from commercial semi-trailers to light medium tactical vehicles. In addition to supporting the ANG's domestic mission, mobile loading docks are capable of supporting overseas deployments. Each ANG wing needs one mobile loading dock and ramp system.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 Mobile Loading Docks (3080)</b>	<b>\$17,417</b>	<b>\$1,567,530</b>
<b>90 Loading Ramps (3080)</b>	<b>\$7,000</b>	<b>\$630,000</b>
<b>Total</b>		<b>\$2,197,530</b>



## **WEIGH IN-MOTION SCALES**

**1. Background.** ANG Logistics Readiness Squadrons (LRS) are required to accomplish cargo deployment functions for all overseas deployments and domestic operations. During the joint inspection process, cargo is weighed and measured manually using individual wheel scales that require repositioning of scales for each vehicle axle or cargo pallet. The process of weighing, measuring, marking, and calculating the center of balance requires 4-6 personnel and takes approximately 20 minutes per piece of cargo. Weigh in-motion scales use lasers to precisely measure cargo dimensional data during in-motion weighing. These scales will reduce the number of personnel required to perform the joint inspection and the time required by 50 percent. One weigh in-motion scale is requested for the airlift control flights, contingency response groups, and select units processing large amounts of cargo for a total of 18 scales.

### **2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>18 Weigh In-Motion Scales (3080)</b>	<b>\$70,000</b>	<b>\$1,260,000</b>
<b>Total</b>		<b>\$1,260,000</b>

**FORKLIFT ADAPTER KIT**

**1. Background.** ANG Logistics Readiness Squadrons lack forklift equipment needed to safely handle many material items encountered during domestic emergencies. A forklift adapter kit, consisting of a hoist, telescopic boom, fork extensions, and barrel/drum adapters, will enable a forklift operator to safely and efficiently handle a variety of material items. This equipment enhances the material movement capabilities of current 6,000, 8,000, and 10,000 pound forklifts. Additionally, the kit includes adapters, such as a hitch receiver and vestal truck hook, which enhance the versatility of a forklift to tow trailers and disabled vehicles. The kit also includes a work platform attachment that enables personnel to safely work at elevated levels with non-standard materiel. Each ANG wing needs one forklift adapter kit.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 Forklift Adapter Kits (3080)</b>	<b>\$10,000</b>	<b>\$900,000</b>
<b>Total</b>		<b>\$900,000</b>

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# Public Health and Medical Services

## Public Health/Medical Care (ESF 8) -

Public health and medical services include emergency medical management of health service resources, such as preventive and curative health measures, triage of injured or sick, evacuation of the injured or sick, fatality management, blood management, medical supply, equipment, stress control, medical, dental, veterinary, laboratory, optometric, nutrition therapy, bioenvironmental health, and medical intelligence services. These



services also include civilian emergency medical system support and *Crisis Intervention Stress Management* in coordination with religious support teams. Public health and medical services support the public health system in the distribution and administration of vaccines and antidotes, implementation of state emergency medical response plans, protection of critical force health, and delivery of mortuary support.

ANG medical services may be called to support medical emergencies independently or cooperatively depending on the emergency. ANG medical services continue to develop cooperative efforts of medical response and support with local emergency medical management organizations at the state, county, and city levels.



Over the last several years, the ANG has developed a robust Chemical, Biological, Radiation, Nuclear, and Explosives (CBRNE) response plan that includes Civil Support Teams (CST), Homeland Response Forces (HRF), and CBRNE Enhanced Response Force Packages (CERFP). These emergency response forces have highly skilled medical personnel and capabilities, and are equipped and trained to respond to hazards, to include specialized skills needed at CBRNE-type events.

# **ESF 8 - Public Health and Medical Services**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Delivery Oxygen Generation System (DOGS)
- Airway Management Critical Care System
- Patient Movement Item (PMI) Kits
- Patient Tracking/Treatment System
- Medical Rapid Response Equipment

### ***Essential Capabilities List***

- Bariatric Litters and Wheelchairs
- Infection Control and Containment
- Public Address for the Medical Control Center (MCC) Trailer
- Water Filtration for Contingency Response Element (CRE)
- Staging kit for Contingency Response Element (CRE)

### ***Desired Capabilities List***

- None

**DELIVERY OXYGEN GENERATION SYSTEM (DOGS)**

**1. Background.** The availability of medical oxygen in a mass casualty incident is a prime factor in saving the lives of critical patients. The current oxygen distribution system is no longer supported by the manufacturer and parts for repair have become unavailable. In addition, the use of high pressure oxygen cylinders used by the current distribution system creates an unacceptable logistical burden associated with transportation, refill, and storage. A lightweight and self-contained Deployable Oxygen Generation System (DOGS) produces medical grade 93% oxygen from ambient air at the point of use and eliminates any resupply requirements. Each of the ANG's 27 Homeland Response Force (HRF)/Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Enhanced Response Force Package (CERFP) medical elements needs a DOGS.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>27 Deployable Oxygen Generation Systems (3080)</b>	<b>\$72,000</b>	<b>\$1,944,000</b>
<b>Total</b>		<b>\$1,944,000</b>

## AIRWAY MANAGEMENT CRITICAL CARE SYSTEM

**1. Background.** ANG Homeland Response Force (HRF)/Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Enhanced Response Force Package (CERFP) medical elements and Guardian Angel (GA) search and rescue units do not have the airway management equipment essential for treatment of critically injured and ill patients. This includes the capability for definitive airway management through endotracheal intubation, automated mechanical respiratory support, and real-time and ongoing monitoring of multiple medical parameters. Current medical standards of care for airway management include use of video laryngoscopy as a primary intubation technique or as an airway rescue technique. Automated mechanical patient ventilators are a critical item of care and free up medical staff to perform other lifesaving treatment. Medical monitors are vital to initial and ongoing assessment of ill and critically injured patients. An optimal video laryngoscopy system would include the following capabilities: be portable; battery powered; easy to learn to operate; have disposable blades or blade covers; and must be airworthy. Ventilators must be: portable; easy to use; include an internal compressor; have adapters for both adult and pediatric circuits; extended battery power; digital airway pressure displays; sensitive alarm system; airway pressure limiting; fittings for High Efficiency Particulate Air (HEPA)/Biological/Chemical filters; automatic altitude compensation; and be airworthy. Monitors must be small and lightweight, and include: a 2-lead electrocardiogram measurement and interpretation system; ability to monitor oxygen and carbon dioxide levels, and blood pressure; automatic and manual defibrillation; external cardiac pacing; an integrated information management system that can send patient information remotely; and be airworthy. Based on their various missions, ANG HRF, CERFP, and GA units need the quantities of video laryngoscopes, defibrillators, and ventilators as defined in the table below.

### 2. Program Details.

Quantity	Unit Cost	Program Cost
<b>54 Video Laryngoscopes (2 per HRF/CERFP) (3080)</b>	<b>\$15,000</b>	<b>\$810,000</b>
<b>10 Video Laryngoscopes (2 per GA) (3080)</b>	<b>\$15,000</b>	<b>\$150,000</b>
<b>2 Video Laryngoscopes (2 per EMEDS) (3080)</b>	<b>\$15,000</b>	<b>\$30,000</b>
<b>135 Defibrillators (5 per HRF/CERFP) (3080)</b>	<b>\$35,000</b>	<b>\$4,725,000</b>
<b>30 Defibrillators (6 per GA) (3080)</b>	<b>\$35,000</b>	<b>\$1,050,000</b>
<b>14 Defibrillators (7 per EMEDS) (3080)</b>	<b>\$35,000</b>	<b>\$490,000</b>
<b>15 Ventilators (3 per GA) (3080)</b>	<b>\$15,000</b>	<b>\$225,000</b>
<b>Total</b>		<b>\$7,480,000</b>

### PATIENT MOVEMENT ITEM (PMI) KITS

**1. Background.** During mass civilian evacuations, the ANG is often tasked with supporting the air transport of critically ill patients located in hospitals in the affected area. The ANG lacks the critical care equipment needed to safely move these patients, which risks the patient's life or requires leaving them in the affected area for a longer period until they can be moved safely. A PMI kit, consisting of a ventilator, vital signs monitor, intravenous (IV) infusion pump, and a suction pump, will significantly improve a patient's chances of survival during transport. In order to safely move these patients, the ANG requires enough critical care equipment to move up to 560 patients in 24 hours. It is expected that 20% of the 560 patients or 112 of the patients treated will require critical care equipment.

#### 2. Program Details.

Quantity	Unit Cost	Program Cost
112 Ventilators (3080)	\$14,014	\$1,569,490
112 Vital Signs Monitors (3080)	\$19,744	\$2,211,328
112 IV Infusion Pumps (3080)	\$5,807	\$650,384
112 Suction Pumps (3080)	\$2,518	\$282,016
<b>Total</b>		<b>\$4,713,218</b>



## PATIENT TRACKING/TREATMENT SYSTEM

**1. Background.** In the event of a mass casualty incident, patient treatment at the site prior to transportation is documented on paper tags (e.g. triage tag), which are prone to data entry error and can be lost at the expense of patient care. A portable personnel patient, casualty, and fatality treatment and accountability system would provide timely and accurate information on the location, movement, status and identity of equipment, supplies, casualties, human remains and the deceased. This system must document medical care, print reports, and provide an intuitive user interface that requires minimal training. The system needs to be able to receive information autonomously through patient monitors to avoid errors made by manual entry. The system must share information via Health Level Seven (HL7) compatible files to external systems such as a Joint Patient Assessment and Tracking System or other hospital-based electronic medical records. One accountability system is requested for each of the ANG's 27 Homeland Response Force (HRF)/Chemical, Biological, Radiological, Nuclear, and high-yield Explosives (CBRNE) Enhanced Response Force Package (CERFP) Medical Elements and 27 Fatality Search and Recovery Teams (FSRT).

### 2. Program Details.

Quantity	Unit Cost	Program Cost
27 Patient Accountability Systems (3080)	\$200,000	\$5,400,000
27 FSRT Accountability Systems (3080)	\$200,000	\$5,400,000
<b>Total</b>		<b>\$10,800,000</b>

## MEDICAL RAPID RESPONSE EQUIPMENT

**1. Background.** The 89 ANG medical groups need a standardized general purpose first responder kit to render first aid in mass casualty environments. This capability is critical for triage, stabilization, and transportation of victims to a higher level of care. The kit needs to be light weight, easily stored, and configured modularly to enable a team of responders to access pouches so that mobility of efforts can be accomplished. A folding litter that is easily carried but can transport a non-ambulatory patient is vital. The ideal mass casualty treatment pack needs to have at least a 60-month shelf life and be able to treat a minimum of 50 patients. A treatment pack also needs to incorporate the same supplies as available in the self-aid buddy care kit. The ANG needs two treatment kits for each of its 89 medical groups.

### 2. Program Details.

Quantity	Unit Cost	Program Cost
178 Mass Casualty Treatment Kits (3080)	\$2,100	\$373,800
Total		\$373,800

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# Search and Rescue

**Search and Rescue (ESF 9)** - The ANG performs search and rescue utilizing 62 Urban Search and Rescue (USAR) teams and three rescue squadrons distributed across all 10 Federal Emergency Management Agency regions. USARs are organized and trained to rapidly deploy and provide an initial search and rescue capability within hours of an incident or natural disaster. Following hurricanes, earthquakes, civil unrest, chemical spills, and forest fires, the ANG routinely provides teams to conduct civil search and rescue as well as disaster relief. ANG rescue wings perform search and rescue missions in a variety of environments to include long-range, over-water rescue operations in the East Pacific and West



Atlantic. The ANG also performs search and rescue operations in Alaska and, as the area becomes more accessible, the remote Arctic regions of North America.



# **ESF 9 - Search and Rescue**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Personal Protective Equipment for Urban Search and Rescue
- Urban Search and Rescue (USAR) Vehicles
- Urban Search and Rescue (USAR) Kit Modernization
- Guardian Angel Arctic Search and Rescue Capability
- Search and Rescue (SAR) Searchlight and Loudspeaker System

### ***Essential Capabilities List***

- Unclassified Multispectral Recon System (Wide Area)
- Communications for Search and Rescue to Military Air Assets
- Geospatial Information Interoperability Exploitation Portable (GIIEP)
- Inflatable Rescue Boats For Fire and Emergency Services (FES)
- Global Positioning System (GPS) Tracker

### ***Desired Capabilities List***

- None

**PERSONAL PROTECTIVE EQUIPMENT FOR URBAN SEARCH AND RESCUE**

**1. Background.** The ANG's 62 Fire and Emergency Services (FES) and Urban Search and Rescue (USAR) teams have to use their Airman Battle Uniform (ABU) when responding to search and rescue operations because they lack the appropriate Personal Protective Equipment (PPE). The ABU was identified by both industry and government experts as incompatible with USAR operations. The PPE needs to include: high visibility; water, bio-hazard, chemical, and abrasion-resistant clothing and footwear; portable decontamination equipment; and safety pads. The PPE will be dual certified to National Fire Protection Association 1951/1977 standards, and meet Occupational Safety & Health Administration and Underwriter Laboratories certification requirements. The ANG needs 15 USAR PPE sets per FES unit.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>930 USAR PPE sets (3080)</b>	<b>\$1,500</b>	<b>\$1,395,000</b>
<b>Total</b>		<b>\$1,395,000</b>

**URBAN SEARCH AND RESCUE (USAR) VEHICLES**

**1. Background.** USAR teams need heavy rescue vehicles to deliver specialized equipment to the disaster scene within the six hour response time identified in the ANG Search and Rescue Teams Concept of Operations. Specialized USAR vehicles will allow rescue teams to access locations by traversing flooded areas, rubble piles, and extremely rough terrain with these personnel and equipment necessary to provide rescue capabilities. Request one USAR heavy vehicle for each of the ANG's 62 Fire and Emergency Services units.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>62 USAR Vehicles (3080)</b>	<b>\$700,000</b>	<b>\$43,400,000</b>
<b>Total</b>		<b>\$43,400,000</b>

**URBAN SEARCH AND RESCUE (USAR) KIT MODERNIZATION**

**1. Background.** The ANG Fire and Emergency Service (FES) units have a limited ability to perform search and rescue in collapsed structures. A modernized USAR kit will provide FES units an improved capability to accomplish this dangerous activity. The USAR kit needs to include the following: one low-light camera to provide the ability to search for victims in the dark; two ruggedized computers to aid in command and control; a quick reference manual on the proper procedures in critical situations for each of the 15 members of an FES unit; a drill kit for concrete drilling and jackhammering to operate more successfully in rubble; a torch kit for cutting rebar and steel; a rope rescue kit to provide each unit a wide variety of rope equipment and advanced gear during operations; and a confined space rescue kit. The 62 ANG FES units need one improved USAR kit.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>62 Low-light Camera (3080)</b>	<b>\$3,500</b>	<b>\$217,000</b>
<b>124 Ruggedized computers (3080)</b>	<b>\$3,000</b>	<b>\$372,000</b>
<b>930 Field Operations Manuals (3080)</b>	<b>\$20</b>	<b>\$18,600</b>
<b>62 Cutting Kits (3080)</b>	<b>\$3,000</b>	<b>\$186,000</b>
<b>62 Confined Space Kits (3080)</b>	<b>\$5,000</b>	<b>\$310,000</b>
<b>62 Rope Rescue Kits (3080)</b>	<b>\$5,000</b>	<b>\$310,000</b>
<b>62 Drill Kits (3080)</b>	<b>\$4,000</b>	<b>\$248,000</b>
<b>62 Torch Kits (3080)</b>	<b>\$1,000</b>	<b>\$62,000</b>
<b>Total</b>		<b>\$1,723,600</b>



**GUARDIAN ANGEL ARCTIC SEARCH AND RESCUE CAPABILITY**

**1. Background.** The ANG Guardian Angel (GA) teams need equipment to respond to natural disasters, plane crashes, and combat rescue missions in severe cold weather. The ANG GA teams are first responders for Search and Rescue (SAR) missions at home and abroad, and could be tasked to respond in support of Arctic SAR operations. An Arctic survivability package and Arctic Mobility Vehicle (AMV) will provide emergency response and support capability for Arctic regions and other extreme cold weather environments. Two Arctic survivability packages and two AMVs are requested for each of the three GA units.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>6 Arctic Survivability Packages (3080)</b>	<b>\$200,000</b>	<b>\$1,200,000</b>
<b>6 Arctic Mobility Vehicles (3080)</b>	<b>\$40,000</b>	<b>\$240,000</b>
<b>Total</b>		<b>\$1,440,000</b>

**SEARCH AND RESCUE (SAR) SEARCHLIGHT AND LOUDSPEAKER SYSTEM**

**1. Background.** Search and Rescue (SAR) searchlight and loudspeaker systems would enable HH-60G aircrews to locate and communicate with survivors on the ground during day and night operations. Portable search lights with power packs will provide an HH-60G increased search capability at night. Furthermore, a hailing device and power pack would give aircrews an effective tool to communicate with people on the ground and allow aircrew greater efficiency in search and rescue operations. Individual HH-60G aircrew members do not have the ability to effectively search at night with the current HH-60G airframe-mounted searchlight because it lacks the agility and control authority to keep up with the aircrews' visual scanning ability. HH-60G aircrews need high powered overt searchlights to locate survivors quickly. Existing communication and search systems on the 18 ANG HH-60Gs were designed to be covert, limiting aircraft exposure by decreasing light and sound while conducting operations in combat. Request one hailing device and two portable search lights and power packs per each of the 18 HH-60G aircraft.

**2. Program Details.**

Quantity	Unit Cost	Program Cost
<b>36 Searchlights (3080)</b>	<b>\$9,500</b>	<b>\$342,000</b>
<b>36 Searchlight Battery Packs (3080)</b>	<b>\$2,050</b>	<b>\$73,800</b>
<b>18 Loud Hailing Devices (3080)</b>	<b>\$23,200</b>	<b>\$417,600</b>
<b>18 Hailing Device Portable Power Packs (3080)</b>	<b>\$4,100</b>	<b>\$73,800</b>
<b>Total</b>		<b>\$907,200</b>

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# Oil and Hazardous Materials Response

## Oil and Hazardous Materials Response

(ESF 10) - ANG emergency management, fire and emergency services, and chemical, biological, radiological, and nuclear response teams are among the experts available to detect, contain, and mitigate the effects of hazardous materials. ANG units have responded to hazardous material incidents with increasing frequency, particularly for large scale incidents. The wide variety of incidents involving ANG teams has highlighted



critical gaps in capability to respond quickly, communicate effectively with civil authorities, detect current and emerging characteristics of hazardous materials, protect personnel, and provide respite from the tempo of operations during an incident.

# **ESF 10 - Oil and Hazardous Material Response 2017 Domestic Capability Priorities Conference**

## ***Critical Capabilities List***

- Cellular Data and Radio Interoperability System
- Chemical, Biological, Radiological, and Nuclear (CBRN) Prime Mover Upgrade
- Chemical, Biological, Radiological, and Nuclear (CBRN) Response Trailer
- Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Detection Robot
- HAZMAT Personal Protective Equipment (PPE) Modernization

## ***Essential Capabilities List***

- Automated Bioenvironmental Detection
- Down Range Live Feed Camera
- Emergency Management Lightweight Inflatable Decontamination System
- Powered Air Purifying Respirator
- Cascade Air System

## ***Desired Capabilities List***

- Chemical, Biological, Radiological, and Nuclear (CBRN) Detection for Base Gate
- Mercury Clean-up Kit

**CELLULAR DATA AND RADIO INTEROPERABILITY SYSTEM**

**1. Background.** Emergency Management (EM) flights do not have an immediately available communications platform for hazardous material first responders and incident commanders. They need the ability to communicate, during initial response operations, with Incident Commanders, Liaison Officers, and Field Responders, and enable interagency operations. A kit, including a cellular data modem with Wi-Fi capability and a radio interoperability module with two to five interoperable ports, is requested. Request one cellular data and radio interoperability system for each of the 90 EM flights in the ANG.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>90 Cellular Data and Radio Interoperability Systems (3080)</b>	<b>\$10,000</b>	<b>\$900,000</b>
<b>Total</b>		<b>\$900,000</b>

**CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) PRIME  
MOVER UPGRADE**

**1. Background.** The vehicles assigned to the ANG's Emergency Management units lack the capability to tow their 15,400 pound CBRN trailers. A larger capacity truck is needed to replace the currently fielded vehicles. The truck should include: at least a 6.7 liter, 330 horsepower, 750 foot pounds of torque, V8 turbo diesel engine; four-wheel drive; dual rear wheels; 8-foot truck bed; the capability to tow a 15,400 pound trailer; and the ability to carry six personnel. One vehicle is requested for each of the ANG's 62 units with a Homeland CBRN Response (4F9WM) Unit Type Code.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>62 Six Passenger Trucks (3080)</b>	<b>\$70,000</b>	<b>\$4,340,000</b>
<b>Total</b>		<b>\$4,340,000</b>

**CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) RESPONSE TRAILER**

**1. Background.** ANG Emergency Management (EM) and Fire and Emergency Services (FES) units tasked for CBRN and hazardous material response possess a limited capability to transport associated CBRN equipment and a limited capability to conduct initial command and control operations (C2). They need a CBRN Response Trailer with the ability to store equipment, space to conduct medical screening for pre- and post-entry, and an area for C2 personnel to operate. Additionally, the CBRN Response Trailer must have: outside area lighting; on-board power generation; a heating ventilation and air conditioning unit; and the capability for C2 integration in support of 24-hour operations. One CBRN Response Trailer is requested for each of the 28 ANG EM flights not tasked with the Homeland CBRN Response (4F9WM) Unit Type Code.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>28 CBRN Response Trailers (3080)</b>	<b>\$70,000</b>	<b>\$1,960,000</b>
<b>Total</b>		<b>\$1,960,000</b>



**CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, AND EXPLOSIVE  
(CBRNE) DETECTION ROBOT**

**1. Background.** Fire and Emergency Management Services need the capability to remotely monitor and detect Hazardous Material (HAZMAT) and CBRNE. A lightweight, man portable robot capable of operating in confined spaces such as laboratories, culverts, ditches, sewers, attics, crawl spaces, and rooftops will enable the rapid survey and analysis of HAZMAT/CBRNE sites while mitigating risk and minimizing exposure of first responders. The robot should be capable of carrying existing detectors and sensors and have the ability to transmit the data from these sensors to first responders. One robot is requested for each of ANG's 62 units with a Homeland CBRN Response (4F9WM) Unit Type Code.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>62 Lightweight CBRNE Response Robot (3080)</b>	<b>\$180,000</b>	<b>\$11,160,000</b>
<b>Total</b>		<b>\$11,160,000</b>

**HAZMAT PERSONAL PROTECTIVE EQUIPMENT (PPE) MODERNIZATION**

**1. Background.** The Hazardous Materials (HAZMAT) PPE used by ANG Fire and Emergency Services (FES) Flights has reached the manufacturers' recommended shelf life. The currently fielded PPE cannot be used after the expiration date, thereby preventing FESs from responding to a HAZMAT situation. Modern encapsulating Level A (highest level of protection) and Level B (reduced level) suits provide vital lifesaving detection and mitigation capabilities. HAZMAT responder safety and effectiveness will be increased with the procurement of National Fire Protection Association 1991 certified Level A (with flash protection) and Level B encapsulating suits. Fifteen Level A and Level B suits are requested for each of the 62 FES flights and 3 Combat Readiness Training Center fire departments in the ANG.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>975 Level A Suits (3080)</b>	<b>\$2,200</b>	<b>\$2,145,000</b>
<b>975 Level B Suits (3080)</b>	<b>\$500</b>	<b>\$487,500</b>
<b>Total</b>		<b>\$2,632,500</b>

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# Public Safety and Security

**Public Safety and Security (ESF 13) - ANG Security Forces (SF) units work in full cooperation with law and enforcement, public safety, and security organizations to support a full range of incident management. Security Forces provide installation force protection and law enforcement operations, including access control, presence patrols, and force protection. ANG SF is increasingly called upon to help support our federal, state and local authorities to assist with natural disasters, civil unrest, response to acts of domestic terrorism, border security,**



**, Presidential inaugurations, and counter-drug operations. The SF units are equipped with “less-than-lethal” use of force options, explosive detection kits, and traffic control/crowd management equipment that can support local authorities during events like natural disasters, civil unrest, and major high visibility crowd control events. ANG Security Forces are continuing to update and improve response capabilities.**

# **ESF 13 - Public Safety and Security**

## **2017 Domestic Capability Priorities Conference**

### ***Critical Capabilities List***

- Security Forces Vehicles
- Security Forces Emergency Vehicle Response Kit
- Security Forces Interoperable Radios
- Security Forces Less-than-Lethal Kit Trailer
- Security Forces Law Enforcement Ensemble Kit

### ***Essential Capabilities List***

- Tactical Force Protection Tracking
- Less-than-Lethal Modernization Kit
- Communications Dish
- Ultra-Light Vehicle
- Counter-Small Unmanned Aerial System

### ***Desired Capabilities List***

- 40 Millimeter Less-than-Lethal Launcher
- Personal Protective Equipment

**SECURITY FORCES VEHICLES**

**1. Background.** ANG Security Forces (SF) assigned vehicles are programmed for replacement after 14-20 years of use and are now in critical need of modernization or replacement. New vehicles need to include a law enforcement package designed for a patrol, response, and transporting equipment to ensure units are capable of responding to incidents. This will provide a standardized vehicle fleet, in accordance with Headquarters Air Force (HAF)/A4S Joint Service Law Enforcement Vehicle Standardization document dated 21 Jul 2015. Each of the ANG's 74 stand-alone SF squadrons will receive between one and three vehicles depending upon unit mission for a total of 439 vehicles.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>439 Mid-Sized Vehicles (3080)</b>	<b>\$50,000</b>	<b>\$21,950,000</b>
<b>Total</b>		<b>\$21,950,000</b>

**SECURITY FORCES EMERGENCY VEHICLE RESPONSE KIT**

**1. Background.** When ANG Security Forces (SF) surge to full capability, more vehicles are required than are routinely assigned to the squadrons. SF units acquire these additional vehicles through their parent wing’s vehicle fleet management office, rental vehicles, or other military vehicles. These vehicles need temporary equipment modifications to include: emergency lighting; high visibility markings; tactical equipment racks and mounts; acoustic hailing device for mass notification and crowd dispersal; basic first aid kits; and traffic warning / traffic control kits. This equipment is removed from the vehicle once the mission has been completed, and is subsequently reused when required. Each of the 74 stand-alone ANG SF units needs to be equipped with three (3) kits each; or a total of 222 kits. Each of the 22 co-located ANG SF units needs to receive five (5) kits each; totaling 110 kits. Each kit will equip one vehicle, for a total of 332 vehicles overall.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>332 Emergency Response Kits (3080)</b>	<b>\$4,000</b>	<b>\$1,328,000</b>
<b>Total</b>		<b>\$1,328,000</b>

**SECURITY FORCES INTEROPERABLE RADIOS**

**1. Background.** ANG Security Forces (SF) are currently unable to effectively communicate with civilian law enforcement agencies with organically owned radio assets. SF radios must be able to operate on all civil networks (UHF/VHF/700/800) and be compliant with Association of Public-Safety Communications Officials-International’s Project 25 requirements in both line-of-sight and trunked modes. Modernized radios will allow communications on common military and civilian VHF/UHF, AM/FM civil bands and grant automatic, instant connectivity among personnel entering the operational area. Each of the ANG’s 186 Security Forces Less-than-Lethal Kit (QFLLL) Unit Type Codes needs to equip 13 SF personnel with one Less-than-Lethal Handheld Radio Set. Each of the ANG’s 74 standalone Base Defense Operations Centers needs one console radio set plus 28 Operations Handheld Radio Sets for SF personnel. All 439 SF vehicles must be equipped with radios as well.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>2,418 Less than Lethal Handheld Radio Sets (3080)</b>	<b>\$6,500</b>	<b>\$15,717,000</b>
<b>2,072 Flight Operations Handheld Radio Sets (3080)</b>	<b>\$6,500</b>	<b>\$13,468,000</b>
<b>74 Base Defense Operations Center Console Radio Sets (3080)</b>	<b>\$6,500</b>	<b>\$481,000</b>
<b>439 Mobile Radio Sets (3080)</b>	<b>\$6,000</b>	<b>\$2,634,000</b>
<b>Total</b>		<b>\$32,300,000</b>



**SECURITY FORCES LESS-THAN-LETHAL KIT TRAILER**

**1. Background.** The requested trailers would haul the less-than-lethal kit’s ISU-90 container. This trailer could haul any ISU-90 container. Dedicated trailers are requested to meet the eight hour response requirement (ANGI 10-208, Chapter 7, 7-1 (c) (1) GR 500-5)). Each of the 93 Security Forces (SF) units are postured with two less–than-lethal domestic operation kits, configured in ISU-90 containers. Two trailers per SF unit are desired to transport the kits.

**2. Program Details.**

<b>Quantity</b>	<b>Unit Cost</b>	<b>Program Cost</b>
<b>186 Less-than-Lethal Kit Trailers (3080)</b>	<b>\$18,000</b>	<b>\$3,348,000</b>
<b>Total</b>		<b>\$3,348,000</b>

**SECURITY FORCES LAW ENFORCEMENT ENSEMBLE KIT**

**1. Background:** ANG Security Forces (SF) do not have the equipment and body armor to fully employ in all the Graduated Uniform Postures (GUP). As currently equipped, SF can only respond to Civilian Law Enforcement Agencies operations in GUP levels 1, 4, and 5. Civilian authorities and Incident Site Commanders often prefer ANG personnel to not portray an “armed military camp” appearance for many incident response operations, which require GUP level 2 or 3. The five GUP uniform levels are: 1) Airman Battle Uniform (ABU) only; 2) ABU with Concealable Body Armor (CBA); 3) ABU, Law Enforcement Ensemble Kit (LEEK) and CBA; 4) ABU, outer vest, and Defensor Fortis Load-Carrying System (DF-LCS); and 5) ABU, outer vest, DF-LCS, and Advanced Combat Helmet. SF personnel need Law Enforcement Ensemble Kits, which include LEEK and CBA equipment. All 7,258 ANG authorized Security Forces Defenders need one kit each.

**2. Program Details.**

Quantity	Unit Cost	Program Cost
7,258 Law Enforcement Ensemble Kits (3080)	\$900	\$6,532,200
<b>Total</b>		<b>\$6,532,200</b>