



DOMESTIC CAPABILITY PRIORITIES



2020



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INTRODUCTION



The 2020 Air National Guard (ANG) Domestic Capability Priorities (DCP) Book documents capability priorities identified during the April 2019 ANG DCP Conference in Colorado Springs, Colorado. This location was retained to continue enhanced NORTHCOM 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).

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ESF 14 – Long-Term Community Recovery (Superseded by National Disaster Recovery Framework)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

The introductory section of the 2020 DCP book includes a State/FEMA Matrix which identifies states and FEMA regions where working groups recommended fielding equipment. The book identifies nearly \$470,000,000 worth of domestic critical capability shortfalls 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 program costs).

State and FEMA Matrix

Current and potential locations for capabilities identified in this book

	ESF 1 Transportation	ESF 2 Communications	ESF 3 Public Works and Engineering	ESF 4 Firefighting	ESF 5 Information and Planning	ESF 6 Mass Care	ESF 7 Logistics	ESF 8 Public Health	ESF 9 Search and Rescue	ESF 10 Oil and HAZMAT Response	ESF 13 Public Safety and Security
	Cargo and Utility Vehicles Fleet Modernization	Rapid Deployable Communications Solution	High Frequency Military Auxiliary Radio System	Aerial Firefighting Modernization	Mobile Emergency Operations Center Modernization	Disaster Relief Mobile Kitchen Trailer	Hard-Sided Expandable Small Air Mobile Shelter	Rapid Response Shelters	Water Rescue Package	HAZMAT PPE Modernization	Security Forces Less Than Lethal Enclosed Trailer
	Heavy Lift Lowboy Trailer	Domestic Cyber Mission System	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Standardized Triage Mobile Pack	Modular Aircraft Loading Ramps	Oxygen Generation System	USAR Kit Modernization	Trailer Mounted Cascade Air System	Security Forces Scalable Emergency Kit
	Heavy Mobile Equipment Maintenance Truck	JISCC Modernization	EOD Mast and Camera Upgrade	Personal Protective Equipment Cleaning Capability	Network and Servers for IS Outside Military Domains	Generator Modernization	Mobile Loading Dock and Trailer Ramps	Tactical Combat Casualty Care Medical Kits	Integrating Active Shooter Body Armor	Small Unmanned Aerial System	Security Forces Conducted Electrical Device Mod
	Debris Clearance and Route Opening Prime Movers	JISCC Transportation	High Capacity Water Pump Kits	Aerial Firefighting Modernization	Mobile Emergency Operations Center Modernization	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	Aeromedical Evacuation Equipment Kits	Water Rescue Package	Hazardous Materials ABC Kits with Training Aids	Security Forces Utility Task Vehicle
	ESF 13	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Scalable Emergency Logistics Resource Vehicle
	ESF 10	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 7	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 6	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 5	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 4	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 3	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 2	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
	ESF 1	JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
		JISCC Modernization	Prime Power Modernization	Structural Firefighting Vehicles	Deployable Incident Commander Liaison Kit	Service Member Bed Down	All-Terrain 13,000 Pound Fordlift	HAZMAT PPE Modernization	USAR Kit Modernization	Multi-Layer Portable Power Bank	Security Forces Less Than Lethal Enclosed Trailer
FEMA Region I											
CT											
MA											
ME											
NH											
RI											
VT											
FEMA Region II											
NJ											
NY											
PR											
VI											
FEMA Region III											
DC											
DE											
MD											
PA											
VA											
WV											

State and FEMA Matrix

Current and potential locations for capabilities identified in this book

	ESF 1 Transportation	ESF 2 Communications	ESF 3 Public Works and Engineering	ESF 4 Firefighting	ESF 5 Information and Planning	ESF 6 Mass Care	ESF 7 Logistics	ESF 8 Public Health	ESF 9 Search and Rescue	ESF 10 Oil and HAZMAT Response	ESF 13 Public Safety and Security
	Cargo and Utility Vehicles Fleet Modernization	Heavy Lift Lowboy Trailer Heavy Mobile Equipment Maintenance Truck Debris Clearance and Route Opening Prime Movers	Multi-Vehicle Driving Simulator Prime Power Modernization	Aerial Firefighting Modernization Individual Wildland Firefighting Kits	Deployable Incident Commander Liaison Kit Mobile Emergency Operations Center Modernization Network and Servers for IS Outside Military Domains Multi-layer Interoperable Cloud-based COP Enhancements Wide Area Multi-Spectral Imagery	Disaster Relief Mobile Kitchen Trailer Temperature Control Trailers Service Member Bed Down Generator Modernization Standardized Triage Mobile Pack	Hard-Sided Expandable Small Air Mobile Shelter Modular Aircraft Loading Ramps Standardized Triage Mobile Pack Generator Modernization Service Member Bed Down Temperature Control Trailers Disaster Relief Mobile Kitchen Trailer	Rapid Response Shelters Oxygen Generation System Tactical Combat Casualty Care Medical Kits Aeromedical Evacuation Equipment Kits	Water Rescue Package USAR Kit Modernization	Multi-Layer Portable Power Bank Trailer Mounted Cascade Air System Small Unmanned Aerial System	Security Forces Less Than Lethal Enclosed Trailer Scalable Emergency Logistics Resource Vehicle Security Forces Utility Task Vehicle Security Forces Conducted Electrical Device Mod Security Forces Scalable Emergency Kit
FEMA Region IV											
AL	*	*	*	*	*	*	*	*	*	*	*
FL	*	*	*	*	*	*	*	*	*	*	*
GA	*	*	*	*	*	*	*	*	*	*	*
KY	*	*	*	*	*	*	*	*	*	*	*
MS	*	*	*	*	*	*	*	*	*	*	*
NC	*	*	*	*	*	*	*	*	*	*	*
SC	*	*	*	*	*	*	*	*	*	*	*
TN	*	*	*	*	*	*	*	*	*	*	*
FEMA Region V											
IL	*	*	*	*	*	*	*	*	*	*	*
IN	*	*	*	*	*	*	*	*	*	*	*
MI	*	*	*	*	*	*	*	*	*	*	*
MN	*	*	*	*	*	*	*	*	*	*	*
OH	*	*	*	*	*	*	*	*	*	*	*
WI	*	*	*	*	*	*	*	*	*	*	*
FEMA Region VI											
AR	*	*	*	*	*	*	*	*	*	*	*
LA	*	*	*	*	*	*	*	*	*	*	*
NM	*	*	*	*	*	*	*	*	*	*	*
OK	*	*	*	*	*	*	*	*	*	*	*
TX	*	*	*	*	*	*	*	*	*	*	*

State and FEMA Matrix

Current and potential locations for capabilities identified in this book

	ESF 1 Transportation	ESF 2 Communications	ESF 3 Public Works and Engineering	ESF 4 Firefighting	ESF 5 Information and Planning	ESF 6 Mass Care	ESF 7 Logistics	ESF 8 Public Health	ESF 9 Search and Rescue	ESF 10 Oil and HAZMAT Response	ESF 13 Public Safety and Security
	Cargo and Utility Vehicles Fleet Modernization	Multi-Vehicle Driving Simulator Heavy Lift Lowboy Trailer	Rapid Deployable Communications Solution	Self-Contained Lighting System EOD Standardized Utility Cargo Body EOD Mast and Camera Upgrade High Capacity Water Pump Kits Prime Power Modernization	Individual Wildland Firefighting Kits Aerial Firefighting Modernization Personal Protective Equipment Cleaning Capability Structural Firefighting Vehicles	Disaster Relief Mobile Kitchen Trailer Temperature Control Trailers Service Member Bed Down Generator Modernization Standardized Triage Mobile Pack	Modular Aircraft Loading Ramps Hard Sided Expandable Small Air Mobile Shelter Mobile Loading Dock and Trailer Ramps All-Terrain 13,000 Pound Fordlift	CCATT / EPSS Equipment Kits Rapid Response Shelters Oxygen Generation System Tactical Combat Casualty Care Medical Kits	USAR Kit Modernization Water Rescue Package Integrated Active Shooter Body Armor	Multi-Layer Portable Power Bank USAR Mobility Package MQ-9 National Airspace Integration	Security Forces Scalable Emergency Kit Security Forces Conducted Electrical Device Mod Security Forces Utility Task Vehicle Scalable Emergency Logistics Resource Vehicle Security Forces Less Than Lethal Enclosed Trailer
FEMA Region VII											
IA
KS
MO
NE
FEMA Region VIII											
CO
MT
ND
SD
UT
WY
FEMA Region IX											
AZ
CA
GU
HI
NV
FEMA Region X											
AK
ID
OR
WA

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 supports 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

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Cargo and Utility Vehicle Fleet Modernization
- Debris Clearance and Route Opening Prime Movers
- Heavy Mobile Equipment Maintenance Truck
- Heavy Lift Lowboy Trailer
- Multi-Vehicle Driving Simulator

Essential Capabilities List

- Deployable Aviation Refueling Point
- High Water Rescue Vehicle
- Prime Mover for Prime Power
- Ramps to Load Trailers on Aircraft
- Remotely Piloted Aircraft Sense and Avoid System

Desired Capabilities List

- 13,000 Pound All-Terrain Forklift
- Shop in a Box
- Unmanned Aircraft System Sustainment Capability
- Prime Mover and Trailer to Make Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Enhanced Response Force Package Modular
- High-Reach Aircraft Loaders

Transportation

CARGO AND UTILITY VEHICLE FLEET MODERNIZATION

1. Background. The ANG requires medium-duty class ½-to-2 ½ ton vehicles capable of towing 10,000-20,000 pound Disaster Relief Bed-down Sets (DRBS), Fatality Search and Recovery Trailers (FSRT), Reverse Osmosis Water Purification Units (ROWPU), Disaster Relief Mobile Kitchen Trailers (DRMKT), Joint Incident Site Communications Capability trailers (JISCC), and Hazardous Materials (HAZMAT) response trailers, and serve as Explosive Ordnance Disposal (EOD) prime movers. Features such as a crew cab, diesel engine, four-wheel drive, dual rear wheels, heavy-duty towing package and suspension enable a more timely and effective response to an array of emergency situations. The ANG needs to replace half of the 1,720 cargo and utility vehicles currently eligible for replacement with tow-capable vehicles that meet the ANG needs.

2. Program Details.

Quantity	Unit Cost	Program Cost
860 Cargo and Utility Vehicles Fleet Modernization (3080)	\$41,000	\$35,260,000
Total		\$35,260,000

Transportation

DEBRIS CLEARANCE AND ROUTE OPENING PRIME MOVERS

1. Background. The ANG requires 2 ½ ton trucks to provide transportation for debris clearance and route opening equipment packages. During disaster response missions, roads and airfields must be cleared of debris to facilitate the movement of emergency response vehicles, equipment, and personnel. The ANG vehicle inventory lacks adequate trucks for this purpose. Each of the ANG's 90 wings requires one 2 ½ ton truck.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 2 ½ Ton Trucks (3080)	\$74,000	\$6,660,000
Total		\$6,660,000

Transportation

HEAVY MOBILE EQUIPMENT MAINTENANCE TRUCK

1. Background. The ANG requires one-ton, four-wheel drive, crew cab trucks to perform mobile maintenance support of heavy equipment, emergency vehicles, and large trucks. During domestic response scenarios, quickly and effectively addressing heavy equipment and vehicle breakdown is difficult without specialized systems that can access remote areas in order to make significant repairs on-site. All 90 ANG wings require a service body truck equipped with a mobile crane, welder, air compressor, and hand tool kits.

2. Program Details.

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

Transportation

HEAVY LIFT LOWBOY TRAILER

1. Background. The ANG trailer fleet requires modernization to enhance domestic response capabilities. Logistics Readiness Squadrons (LRS) are responsible for moving personnel, equipment, supplies, and vehicles. Some ANG units require a drop deck gooseneck trailer with a 35 ton capacity to expedite the movement of all rolling stock and other domestic response support materiel. Other ANG units require a rear-loading trailer with higher ground clearance more advantageous to their unique circumstances and operating environments. Both types of trailers enable logisticians to transport vehicles and equipment to areas affected by disasters, facilitating more efficient onloading/offloading of equipment and vehicles at remote end-use locations where ramps are unavailable. Ultimately, these trailers afford LRS a wider array of transportation options and capabilities to transport equipment safely and efficiently, reducing man-hours of loading and offloading equipment and delivering products to users. The ANG has 45 units that need a drop deck gooseneck trailer and 45 units that need a non-hydraulic, rear-loading lowboy trailer.

2. Program Details.

Quantity	Unit Cost	Program Cost
45 Drop Deck Gooseneck Trailers (3080)	\$35,779	\$1,610,055
45 Non-Hydraulic Rear Loading Trailers (3080)	\$46,335	\$2,085,075
Total		\$3,695,130

Transportation

MULTI-VEHICLE DRIVING SIMULATOR

1. Background. The ANG requires driving simulators to train and provide all personnel operating government vehicles with the proper mechanics for safe and effective driving in all weather and traffic conditions. Many vehicle operators are not familiar with the basics of driving a manual transmission vehicle, which are present in approximately 80% of all ANG units. A driving simulator provides a safe environment for learning basic vehicle handling, shifting, and braking in all types of weather and traffic conditions. The simulator should replicate all types of vehicles operated in the ANG and should provide immediate feedback to the student. Each of the ANG's 90 wings requires one driving simulator.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Multi-Vehicle Driving Simulators (3080)	\$8,000	\$720,000
Total		\$720,000

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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 federal, state, and local agencies. The communications functions encompass close coordination with the commercial information technology industry, reestablishment, and sustainment of communications. Also included in communications is the defense and oversight of information technology resources, incident management, and response operations centers.



The ANG has 62% of the AF communications capability. Field representatives from the ANG addressed operational shortfalls and proposed 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 security of communications devices and networks, support cyber defense and mitigation activities, and increase interoperability among responders while reducing response times.



ESF 2 - Communications

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Rapid Deployable Communications Kit
- Joint Incident Site Communications Capability Modernization
- Domestic Cyber Mission System
- Joint Incident Site Communications Capability Prime Mover
- High Frequency Auxiliary Radio System

Essential Capabilities List

- Intermediate Command and Control Capability
- Airborne Interoperability Communications Node
- Air Jetted Fiber Capability

Desired Capabilities List

- None

RAPID DEPLOYABLE COMMUNICATIONS KIT

1. Background. The ANG requires a rapid deployable communications solution to fill communication gaps for Incident Awareness and Assessment (IAA) and Unclassified Processing, Assessment and Dissemination (UPAD). Forward based personnel need access to satellite voice, cellular, data and video streaming in environments where the communications infrastructure is nonexistent or disabled. The solution must be lightweight with a set-up time of less than 15 minutes and easily deployable by aircraft or helicopter to an incident site. The kit must combine the use of aggregated cellular and satellite bandwidth in a balanced and prioritized fashion to ensure maximum efficiency. In areas with no cellular service, the system must be capable of creating its own cellular network without disruption. The kit must include an onboard dual-band Wi-Fi network. The ANG requires one Rapid Deployable Communications Kit for each of the 35 IAA/UPAD units and one for 5 remote locations.

2. Program Details.

Quantity	Unit Cost	Program Cost
35 Rapid Deployable Communications Kits (3080)	\$55,000	\$1,925,000
5 Remote Rapid Deployable Communications Kits (3080)	\$70,000	\$350,000
35 Workstations (3080)	\$3,057	\$106,995
35 Power Sources (3080)	\$1,000	\$35,000
Total		\$2,416,995

JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY MODERNIZATION

1. Background. The ANG requires a Joint Incident Site Communications Capability (JISCC) Block III Modernization Kit to support Defense Support of Civil Authorities (DSCA) operations, to include Homeland Response Force, Chemical, Biological, Radiological, and Nuclear (CBRN) Enhanced Response Force Package (CERFP), wildfires, hurricanes, and blizzards. The current JISCC Block III requires multiple C-130s for airlift to the incident site. The modernized kit, should be modular, light-weight, and deployable by a single C-130. The new terminal will make use of solid-state electronics to modernize the core network stacks, Wi-Fi access points, radio support, and remote switches. The modernized system must project wireless mesh networks to multiple locations within the incident site footprint. Modernization of this kit must also reduce power, heating, ventilation, air conditioning, and space requirements. The ANG requires one JISCC Modernization Kit for each of the 41 JISCC Block III units.

2. Program Details.

Quantity	Unit Cost	Program Cost
41 JISCC Modernization Kits (3080)	\$400,000	\$16,400,000
Total		\$16,400,000

DOMESTIC CYBER MISSION SYSTEM

1. Background. ANG Cyberspace Operations units and Mission Defense Teams require the Domestic Cyber Mission System (DCMS) to provide domestic cyber support for state missions. The DCMS is a cost-effective solution that provides increased operational capability to ensure protection of state, tribal, and local systems. Presidential Policy Directive 41, as well as the National Guard Cyber Strategic Plan outline the involvement of the National Guard in support of domestic cyber operations. The DCMS is a mobile system that can be scaled to support any cyber mission. The system provides the ability to conduct network enumeration, forensic assessments, vulnerability assessments, and penetration testing. A rapidly-deployable defense and networked storage system should be provided to ensure proper backup and maintenance of critical systems. The ruggedized DCMS should be transportable in a hardened case that can be palletized or placed on a commercial aircraft as checked baggage. The ANG requires one DCMS system for each of the 90 Cyberspace Operations units.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Domestic Cyber Mission Systems (3080)	\$210,000	\$18,900,000
Total		\$18,900,000

JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY PRIME MOVER

1. Background. The ANG Joint Incident Site Communications Capability (JISCC) Block III requires a prime mover. Transportation of the JISCC Block III equipment/trailer is currently limited by vehicle availability. The prime mover needs to be transportable via C-130 and Air Transportability Test Loading Activity (ATTLA) certified. The prime mover should have an eight foot bed with a locking weather tight cap, four wheel drive, single rear axle, turbo diesel engine, seating for six personnel, and up to an 1,800 pounds (lbs) tongue weight capacity. The vehicle needs to safely tow up to 10,000 lbs with an appropriate commercial towing package and braking system allowing it to interface with the assigned trailer systems. The ANG requires one JISCC prime mover for each of the 41 JISCC Block III units.

2. Program Details.

Quantity	Unit Cost	Program Cost
41 JISCC Prime Movers (3080)	\$65,000	\$2,665,000
Total		\$2,665,000

HIGH FREQUENCY AUXILIARY RADIO SYSTEM

1. Background. The ANG requires a High Frequency (HF) Auxiliary Radio System capable of radio communications beyond line of site. Currently units rely on line of site, space-based satellites or other long-haul transmission means to communicate. In addition to basic voice radio communications, the system needs to send and receive email traffic via a global radio email service, WinLink and/or HF Data Link. The HF capability will require minimal equipment including a radio, tuner, modem, laptop, antenna, small generator, cables, and operable by a small two-person team. The base system will be transported in two ruggedized transit cases and have a total set-up time of less than two hours. The ANG requires one HF Auxiliary Radio capability for each of the 90 wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 High Frequency Auxiliary Radio Systems (3080)	\$6,000	\$540,000
Total		\$540,000

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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 the public works and engineering emergency support function technical assistance, engineering, and construction management resources during response activities. ESF 3 provides road clearing, airfield recovery, electrical power generation and distribution, and emergency repair of water treatment facilities (potable water, ice, and wastewater).

Contracting support is provided for construction management, 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. Public utilities may be partially or fully inoperable. A major disaster may affect the lives of many state and local response personnel and their facilities, preventing them from performing their prescribed emergency response duties. Similarly, emergency response equipment in

the immediate disaster area may be damaged or inaccessible; therefore, sufficient resources may not be available to state and local agencies to meet emergency response requirements. Federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, coordinated, and effective response.

ESF 3 - Public Works and Engineering

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Critical Capabilities List

- Prime Power Modernization
- High Capacity Water Pump Kits
- Explosive Ordnance Disposal Bomb Squad Emergency Response Vehicle Stabilized Mast and Camera Upgrade
- Explosive Ordnance Disposal Standardized Utility Cargo Body
- Self-Contained Lighting System

Essential Capabilities List

- All-Terrain Utility Vehicle
- Outdoor Shelters for Civil Engineering Equipment
- Flood Control Barrier System
- Towable Snow Melting Equipment
- 4.0 Cubic Yard Front End Loader

Desired Capabilities List

- Outdoor Covers for Civil Engineering Equipment
- Potable Water Production Equipment
- Small Unmanned Aircraft System for Incident Area Assessment

PRIME POWER MODERNIZATION

1. Background. ANG requires modernized, transportable power generation capabilities. Almost every major domestic disaster requires additional sources of power along with technical assistance for power generation and distribution. Prime power teams provide backup power for emergency operations. Employment of both prime power teams during the 2017 hurricane season demonstrated the need for a reconfiguration of the equipment set. Existing generator sets have a limited ability to support the variety of possible employment scenarios. The 30 kilowatt (kW) and 60 kW generators cannot supply sufficient power to structures unless connected in parallel, which is cost-prohibitive using the currently fielded assets. The 100 kW generators have sufficient capacity, but lack the ability to configure in parallel. All existing prime power generators need to be replaced with trailer-mounted, air-transportable 100 kW and 230 kW parallel-capable generator sets, creating a total output capacity of 1,460 kW per team. Additionally, each generator must be attached to its own trailer that is ground and airlift-certified to increase portability since fork lift assets may not be available. Each of the two ANG prime power teams, the 118th Civil Engineering Squadron and 150th Civil Engineering Flight, require the portable power generation package upgrade.

2. Program Details.

Quantity	Unit Cost	Program Cost
20 125kw Trailer-Mounted Generators (3080)	\$76,415	\$1,528,300
4 230kw Trailer-Mounted Generators (3080)	\$141,763	\$567,052
2 100kw Load Banks (3080)	\$8,959	\$17,918
Total		\$2,113,270

HIGH CAPACITY WATER PUMP KITS

1. Background. The ANG requires rapidly deployable, self-contained, high capacity water pump kits to assist base, local, and state authorities with rapid water removal operations in key infrastructure such as tunnels and densely populated metropolitan areas. Additionally, these pumps can be outfitted with a firefighting manifold enabling the rapid pumping of water from lakes, rivers, and ponds to be utilized in extinguishing forest fires. Each water pump kit needs to include one 6 inch pump (2,500 gallons per minute), one 8 inch pump (6,000 gallons per minute), and one 12 inch pump (8,000 gallons per minute), each with a tandem axle trailer, firefighting manifold, and accessories to include input/output hoses. The ANG needs one high-capacity water pump kit for each of the 10 FEMA regions.

2. Program Details.

Quantity	Unit Cost	Program Cost
10 High-Capacity Water Pump Kits (3080)	\$250,000	\$2,500,000
Total		\$2,500,000

**EXPLOSIVE ORDNANCE DISPOSAL BOMB SQUAD EMERGENCY RESPONSE
VEHICLE STABILIZED MAST AND CAMERA UPGRADE**

1. Background. ANG Explosive Ordnance Disposal (EOD) forces require the ability to conduct long range reconnaissance and monitor downrange incident sites for known or suspected hazards to maintain situational awareness during emergency responses in support of domestic operations. The existing cameras on the Bomb Squad Emergency Response Vehicle (BSERV) lack infrared (IR) and thermal capabilities, reducing their effectiveness in inclement weather and during hours of darkness. The existing cameras also lack stabilization, rendering them nearly useless during moderately windy conditions, and when utilizing the onboard generator. Each of the ANG's 17 EOD flights need an enhanced, stabilized electro-optical (EO), IR and thermal camera system for their BSERV.

2. Program Details.

Quantity	Unit Cost	Program Cost
17 Vehicle Mounted EO/IR/Thermal Stabilized Cameras (3080)	\$175,000	\$2,975,000
Total		\$2,975,000

EXPLOSIVE ORDNANCE DISPOSAL STANDARDIZED UTILITY CARGO BODY

1. Background. The ANG Explosive Ordnance Disposal (EOD) six-passenger vehicle fleet requires a standardized, enclosed utility cargo body to effectively store, move, and protect required emergency response equipment and explosives in adverse environmental conditions. Currently, EOD gear is carried in an open bed pickup truck with little standardized organization or environmental protection. The EOD vehicle that will carry this enclosed utility bed is a critical capability for Emergency Support Function 1 (ESF 1) in the 2020 Domestic Capability Priorities book. Each of the ANG's 17 EOD flights needs a standardized utility cargo body.

2. Program Details.

Quantity	Unit Cost	Program Cost
17 Standardized EOD Utility Cargo Bodies (3080)	\$60,000	\$1,020,000
Total		\$1,020,000

SELF-CONTAINED LIGHTING SYSTEM

1. Background. The ANG requires a self-contained, light emitting diode (LED), lighting system capable of illuminating at least 10,000 square feet. Current self-contained lighting systems are very noisy, gas or diesel powered requiring frequent refueling, and provide limited lighting support. The new system needs to be battery powered, capable of recharging using an integrated solar power system, and be able to trickle charge from shore power or a generator when solar power is unavailable. The system also needs to be transportable using two or less pickup trucks. Each of the 90 ANG wings needs two self-contained lighting systems.

2. Program Details.

Quantity	Unit Cost	Program Cost
180 Self-Contained Lighting Systems (3080)	\$16,250	\$2,925,000
Total		\$2,925,000

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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 high-yield Explosives (CBRNE) events.

Proper personnel protective equipment (PPE), tools, and training are needed for each firefighting specialty in order to reduce the inherent risks of fighting fires.

The ANG firefighting enterprise consists of 62 FES units, and three C-130 and three HH-60 units for airborne firefighting. The three Mobile Aircraft Fire Fighting System (MAFFS) units are utilized annually in support of the United States Forest Service for wildland firefighting when civilian resources are exhausted. The rotary wing resources are in constant demand for quick deployment to assist with perimeter control and spot fire elimination.



ESF 4 - Firefighting

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Individual Wildland Firefighting Kits
- Aerial Firefighting Modernization
- Personal Protective Equipment Cleaning Capability
- Structural Firefighting Vehicles
- Aircraft and Structural Live-Fire Training Equipment

Essential Capabilities List

- Full Motion Video Direct Feeds from Aerial Assets
- All-In-One Trauma Aid Kit for First Responders
- Ultrasonic Mask Cleaner

Desired Capabilities List

- Fire Responders Rehab Saunas
- High Resolution Thermal Viewer

Firefighting

INDIVIDUAL WILDLAND FIREFIGHTING KITS

1. Background. ANG Firefighting and Emergency Services (FES) flights require fully equipped wildland firefighting kits to provide an initial response to wildland fires and provide Wildland Urban Interface protection. Firefighters must be trained and equipped to National Wildland Coordinating Group standards. The standardized wildland firefighting kits include fire shelters, hand tools and personal protection equipment (PPE). The PPE sets include a Nomex shirt and pants. Each of the 63 ANG FES units, plus five additional units engaged in wildland firefighting, requires 10 wildland firefighting kits and associated PPE sets.

2. Program Details.

Quantity	Unit Cost	Program Cost
680 Wildland Firefighting Kits (3080)	\$850	\$578,000
680 Wildland PPE Sets (3080)	\$450	\$306,000
Total		\$884,000

Firefighting

AERIAL FIREFIGHTING MODERNIZATION

1. Background. The ANG Mobile Aircraft Fire Fighting System (MAFFS) units require fixed fire retardant storage tanks, compressors, Integrated MAFFS (I-MAFFS) and sling-loaded fire-bucket systems to enhance airborne firefighting capabilities. The Aerial Firefighting community consists of three C-130 MAFFS units and three HH-60 rotary wing units. The C-130 MAFFS units each require a 100,000 gallon fixed fire retardant storage tank and associated pump equipment. This capability reduces response times from 24 hours to 3 hours. In addition to the fixed pits, C-130 units require two new compressor systems with a spare at one location. The compressors need to be a self-driven and self-contained compressor assembly with a capacity of 350 cubic feet per minute (cfm) at full load pressure rating of 1200 pounds per square inch (psi). The compressor will be capable of filling a 57 cubic foot reservoir to 1200 psi in less than 15 minutes. The ANG requires an enhanced I-MAFFS system to increase retardant capacity by decreasing the current systems empty weight. The I-MAFFS system will provide a constant flow 3,300 gallon capacity, roll-on and roll-off aerial firefighting capability for the C-130H and C-130J aircraft. The three HH-60 ANG units require a sling-loaded fire-bucket system that provides helicopters the ability to fight wildland fires and eliminate spot fires. Rapid response with precision helicopter water drops are part of the reason that over 80% of wildfires are contained in the Continental United States before they threaten any structures or dwellings. 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.) will enhance firefighting effectiveness. Each of the three ANG C-130 MAFFS units requires one fixed fire retardant storage tanks, two I-MAFFS, and two compressors, plus one spare compressor. Each of the three ANG HH-60 units requires four sling-loaded fire-bucket systems.

2. Program Details.

Quantity	Unit Cost	Program Cost
3 MAFFS Tanker Base Fixed Pits (3080)	\$550,000	\$1,650,000
7 MAFFS Ground Based Compressor (3080)	\$300,000	\$2,100,000
6 I-MAFFS Systems (3080)	\$6,000,000	\$36,000,000
12 Aerial Firefighting Bucket Systems, 530-Gallon (3080)	\$48,200	\$578,400
Total		\$40,328,400

Firefighting

PERSONAL PROTECTIVE EQUIPMENT CLEANING CAPABILITY

1. Background. The ANG requires upgraded personal protective equipment (PPE) cleaning and testing kits for its Fire and Emergency Services (FES) units. An updated extractor (washer), dryer, and water penetrator tester will provide FES units the ability to conduct proper post-emergency cleaning of PPE. Routine contact with chemicals, fuel, and the products of combustion require decontamination which can take weeks without in-house capability. With the addition of the water penetrator tester, all FES units will have the capability to conduct in-house annual advanced cleaning in accordance with National Fire Protection Association (NFPA) 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*. Currently, FES units utilize a one million dollar, 3-year contract to conduct advanced inspections for one set of gear per ANG Firefighter. An in-house upgraded cleaning and testing kit can be used for structural, wildland, and rescue PPE decontamination and annual advanced cleaning, eliminating the requirement for contract cleaning. Each of the ANG's 62 FES units requires one cleaning and testing kit, as well as equipment training for three personnel.

2. Program Details.

Quantity	Unit Cost	Program Cost
62 Extractor (3080)	\$20,000	\$1,240,000
62 Gear Dryer (3080)	\$8,000	\$496,000
62 Water Penetrator Tester (3080)	\$2,000	\$124,000
Total		\$1,830,000

Firefighting

STRUCTURAL FIREFIGHTING VEHICLES

1. Background. ANG Fire and Emergency Services (FES) units require an additional fire engine. ANG FES flights are provided fire apparatus according to Allowance Standard Code (ASC) 010, which is based on the assigned aircraft at a given location. All ANG FES flights require to be equipped with two P-22 fire engines, but currently only have one. Structural firefighting capability on ANG installations is dramatically reduced when the single P-22 fire engine is out of service. Additionally, a second P-22 will provide force projection capacity for off-base missions into the local community during times of disaster, while maintaining mission-essential levels of service at ANG bases. One additional P-22 fire engine is required at each of the ANG's 62 FES units.

2. Program Details.

Quantity	Unit Cost	Program Cost
62 Fire Engine P-22 Vehicles (3080)	\$275,000	\$17,050,000
Total		\$17,050,000

Firefighting

AIRCRAFT AND STRUCTURAL LIVE-FIRE TRAINING EQUIPMENT

1. Background. The ANG requires modernized portable live-fire training equipment to support Fire and Emergency Services (FES) unit annual training needs. ANG FES personnel are required to conduct annual aircraft and structural live-fire training for Aircraft Rescue Fire Fighters (ARFF), under 14 Code of Federal Regulations part 139. The vast majority of ANG FES flights do not possess this capability on-site, and must travel to accomplish their annual certifications. ANG Regional Training Sites and Combat Readiness Training Centers possess live-fire training assets, but they are routinely out of service and are increasingly obsolete. Mobile live-fire trainers located in each Federal Emergency Management Agency (FEMA) region would be shared between all ANG FES units, allowing for flexible training options and the ability to conduct training with assigned firefighting resources at the home station. The ANG requires 10 mobile structural burn trailers, five large frame mobile aircraft burn trailers and five small frame aircraft burn trailers.

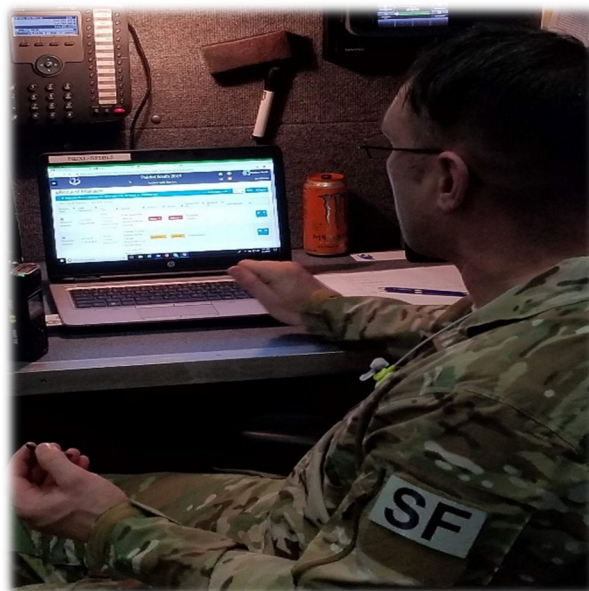
2. Program Details.

Quantity	Unit Cost	Program Cost
10 Mobile Structural Burn Trailers (3080)	\$550,000	\$5,500,000
5 Mobile Aircraft Burn Trailers Large Frame (3080)	\$750,000	\$3,750,000
5 Mobile Aircraft Burn Trailers Small Frame (3080)	\$750,000	\$3,750,000
Total		\$13,000,000

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Information and Planning

Information and Planning (ESF 5) – Information and Planning has grown tremendously as the sheer volume of information available to responders and incident commanders has exponentially increased with the wide-scale fielding of new technology and communication devices. ESF 5 encompasses the Processing, Analyzing, and Dissemination (PAD) of information needed for coordinating responses and utilizing the resources available. This effort relies on the information generated from ground and air assets used for Incident Awareness and Assessment (IAA). The Command and Control and PAD effort is supported by the ANG Mobile Emergency Operation Centers (MEOC) and the airborne imagery available from the ANG airborne IAA assets.



ESF 5 - Information and Planning

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Deployable Incident Commander Liaison Kit
- Mobile Emergency Operations Center Modernization
- Network and Servers for Information Sharing Outside Military Domains
- Multi-layer Interoperable Cloud-based Common Operational Picture Enhancements
- Wide-Area Multi-Spectral Imagery

Essential Capabilities List

- Synthetic Aperture Radar for Intelligence, Surveillance, and Reconnaissance Aircraft
- Cellular and Wi-Fi Signal Boosters

Desired Capabilities List

- None

DEPLOYABLE INCIDENT COMMANDER LIAISON KIT

1. Background. ANG Emergency Management (EM) flights require cellular data and interoperable radio systems for hazardous material first responders, incident commanders, and Emergency Operations Centers during initial disaster response operations. Incident commanders need access to still and full motion video imagery of a site to enhance decision-making. The communication kits include a cellular data modem with Wi-Fi capability, a radio interoperability module with a minimum of two interoperable ports to enable effective interagency communications and the ability share video feed via Internet Protocol. The kits should be capable of rapidly deploying via ground vehicle or aircraft. Each kit should contain an upgraded Global Positioning System enabled camera, laser rangefinder, infrared camera, video receiver for tactical airborne sensors, and a ruggedized tablet with video capture equipment. Included as a separate item is a Pelco compatible 1 channel H264 based video encoder capable of compressing a single video input into two streams, each up to D1 (720 x 480 for National Television Standards Committee [NTSC] and 720 x 576 for Phase Alternating Line [PAL]) and 30/25 ips. Each channel of the encoder can be configured to meet differing bandwidth, resolution, and frame rate requirements with individually configurable streams. The ANG requires one cellular data and radio interoperability system with video encoder for each of the 90 EM flights.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Incident Commander Kits (3080)	\$1,000,000	\$90,000,000
6 MEOC Prime Mover Upgrades (3080)	\$80,000	\$480,000
Total		\$25,480,000

MOBILE EMERGENCY OPERATIONS CENTER MODERNIZATION

1. Background. ANG Emergency Management (EM) flights require mobile Command and Control (C2) capabilities to support federal and state disaster response mission sets. ANG EM flights require 25 Mobile Emergency Operation Centers (MEOCs) to support the incident commander. MEOCs provide mobile C2 capable of broad interoperability among responders for on-scene incident management and long-term recovery. They are distributed regionally and can be mobilized within 24 hours of notification. ANG MEOCs provide the full spectrum of voice, data, full motion video exploitation and imaging capabilities that are compatible with local emergency responders. These MEOC platforms should be designed to meet National Incident Management System requirements and US Northern Command communications rules of engagement. Recent national disasters demonstrate a need to make the MEOC fleet air transportable by C-17. Technical refresh is needed for information technology equipment to be modernized and Defense Information Systems Agency compliant. These additional MEOCs would enable the ANG to meet mutual aid agreements and interoperability requirements. Each of the ANG's six locations requiring fifth-wheel MEOCs need a prime mover upgrade to transport the trailers to incident sites.

2. Program Details.

Quantity	Unit Cost	Program Cost
25 MEOCs (3080)	\$1,000,000	\$25,000,000
6 MEOC Prime Mover Upgrades (3080)	\$80,000	\$480,000
Total		\$25,480,000

NETWORK AND SERVERS FOR INFORMATION SHARING OUTSIDE MILITARY DOMAINS

1. Background. The ANG requires modern commercial open-architecture networks, cybersecurity equipment, Host Based Security System (HBSS), and enterprise security hardware to support Defense Support of Civil Authorities (DSCA) requirements. GUARDNET and AFNET connections provide insufficient bandwidth for participation in DSCA Unclassified Processing, Assessment and Dissemination (UPAD) operations. This capability is necessary to manage, analyze, and disseminate large volumes of video, voice, and data in support of UPAD sites. These sites require a minimum of 100 megabit per second commercial internet connections to permit timely analysis of disasters and dissemination of information. Modernized UPAD capability will allow active communications with the DSCA Common Operating Picture. Each of the ANG's 14 UPAD sites requires commercial internet access contracts for three years, an additional two workstations, one server, and one site kit (commercial internet router, switch, firewall, and other standard networking equipment).

2. Program Details

Quantity	Unit Cost	Program Cost
14 Commercial Internet Access (3080)	\$172,500	\$2,415,000
14 Servers (3080)	\$2,000	\$28,000
14 Site Kits (3080)	\$92,000	\$1,288,000
28 Client Workstations (3080)	\$2,000	\$56,000
Total		\$3,787,000

**MULTI-LAYER INTEROPERABLE CLOUD-BASED COMMON OPERATIONAL
PICTURE ENHANCEMENT**

1. Background. The ANG domestic operations enterprise requires a commercial-off-the-shelf based Common Operating Platform (COP) that facilitates crisis management and collaboration on and off ANG installations. To provide a holistic sight picture of response actions taking place across the enterprise, existing data collection programs must be enhanced and upgraded to allow aggregation of response information into the fielded single COP. Field users, Wings, Joint Force Headquarters-Joint Operation Centers, the ANG Crisis Action Team and the National Guard Coordination Center all use different systems to track the same data and information. These legacy data collection systems do not share data and require redundant data entry from system to system at all levels. Non-recurring engineering is needed to link and enhance these legacy systems to streamline actions taken by users and responders in the field. By aggregating data, systems, and procedures from disparate platforms into a common enterprise system, situational awareness is enhanced. Advancements in cloud-based technology have aided in integration of sensors used to track personnel and equipment. These advances allow for integration of existing fielded communication systems to provide location-based data and tracking information. Integration is also needed to pull Hazardous Material Detection information from existing fielded detection devices into the COP. This sensor data ingestion will provide the near real-time data needed for Incident Command and decision makers to determine lifesaving actions. The ANG requires a single COP with system enhancements for currently fielded equipment and 2,700 COBRA locators.

2. Program Details.

Quantity	Unit Cost	Program Cost
NRE for integration of existing systems of record (3080)	\$990,000	\$990,000
NGB leadership update system enhancements (3080)	\$675,000	\$675,000
NRE for currently fielded equipment integration (3080)	\$1,080,000	\$1,080,000
2700 COBRA Locators (3080)	\$1,077	\$2,907,900
Total		\$5,652,900

WIDE AREA MULTI-SPECTRAL IMAGERY

1. Background. The ANG requires unclassified, near real-time, high resolution, wide-area, multispectral imagery data collection. Rapid analysis and assessment of incident information is crucial to multiple elements of disaster response, quickly enabling responders to accurately direct resources against the most critical areas. A highly capable, pod-mounted sensor carried on multiple fixed-wing platforms is required. The ANG requires three pods to cover the US regionally with an asset in the eastern, central, and western portions of the country.

2. Program Details.

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

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Mass Care, Emergency Assistance, Temporary Housing & Human Services



Mass Care, Emergency Assistance, Temporary Housing, & Human Services (ESF 6) – During a disaster, mass care response includes the delivery of mass shelter, feeding, and first aid to disaster survivors, fatality management, religious support to responders, and 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 with reuniting.

The ANG provided key services in past mass care events, including the first major hurricane to make landfall in nearly two decades during the 2018 and 2019 hurricane seasons. During these events, thousands of soldiers and airmen were called upon to provide emergency assistance and temporary housing. Additionally, another severe wildfire season in California in 2019 demonstrated how ANG mass care 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 requiring assistance, 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
2019 Domestic Capability Priorities Conference**

Critical Capabilities List

- Disaster Relief Mobile Kitchen Trailer
- Temperature Control Trailers
- Service Member Bed Down
- Generator Modernization
- Standardized Triage Mobile Pack

Essential Capabilities List

- Airman Support Kit
- Physiological Monitors
- Personal Tracking Scanners

Desired Capabilities List

- None

DISASTER RELIEF MOBILE KITCHEN TRAILER

1. Background. The ANG requires additional Disaster Relief Mobile Kitchen Trailers (DRMKT) to support emergency operations. DRMKTs were deployed in support of hurricane relief efforts such as Hurricanes Michael, Harvey, Irma, and Maria, as well as Operation Campfire to assist with the California wildfires. The DRMKT provides a mass field feeding capability, and has been tasked and continually requested for Presidential Inaugurations, Innovative Readiness Training, Deployments for Training, Patriot Exercises, and numerous temporary deployments across the nation. The ANG needs 30 new DRMKTs to provide one DRMKT in every state and territory.

2. Program Details.

Quantity	Unit Cost	Program Cost
30 DRMKTs (3080)	\$750,000	\$22,500,000
Total		\$22,500,000

TEMPERATURE CONTROL TRAILERS

1. Background. The ANG Fatality Search and Recovery Teams (FSRT) require temperature-controlled trailers for the storage and preservation of human remains recovered from a mass fatality incident in support of civil authorities. The temperature-controlled trailer should include an embedded temperature control unit, four human remains racks (1,000 pound, 16 body capacity), human remains trays, internal aluminum covered walls for efficient and complete contamination mitigation, non-skid/removable rubber matted flooring, portable human remains hoist, vinyl curtains, and internal/external light emitting diode (LED) lighting for safe operations during non-daylight hours. The ANG requires two FSRT temperature control trailers for each of its 27 deployable units.

2. Program Details.

Quantity	Unit Cost	Program Cost
54 Refrigerated Trailers (3080)	\$80,000	\$4,320.000
Total		\$4,320.000

SERVICE MEMBER BED DOWN

1. Background. The ANG requires rapidly deployable emergency bed down sets for its first responders. ANG units tasked by their state for initial response forces or disaster response do not have the capability to self-billet. Response forces burden local relief efforts because service members bed down in local shelters. Each requested bed down set must shelter 30 service members on cots, and be self-sustainable with power, air conditioning, heat, and lighting. The ANG requires one bed down set, consisting of three 10-man shelters and associated equipment, for each of its 94 Civil Engineering Units.

2. Program Details.

Quantity	Unit Cost	Program Cost
282 10-Man Shelters (3080)	\$14,595	\$4,115,790
2,820 Cots (3080)	\$85	\$239,700
94 Generators (3080)	\$25,073	\$2,356,862
282 Environmental Control Units (3080)	\$33,849	\$9,545,418
282 Lighting Kits (3080)	\$1,095	\$308,790
Total		\$16,566,560

GENERATOR MODERNIZATION

1. Background. The ANG requires generator modernization to effectively respond to domestic incidents. Chemical, Biological, Radiological, and Nuclear (CBRN) Enhanced Response Force Package (CERF-P) Medical Elements and Fatality Search and Recovery Teams (FSRT) respond to mass casualty incidents and provide triage, emergency medicine, patient stabilization, and storage/transportation of human remains to mitigate the effects of a terrorist incident or natural/man-made disaster. These teams are a component of the CBRN Enhanced Response Force and provide Defense Support to Civil Authorities. Disasters such as Hurricane Katrina, Hurricane Ike/Gustav, Washington landslides, Haiti earthquakes, and 9/11 have shown a consistent need for quick and efficient emergency care to mitigate human suffering. It is well established that the patient's chances of survival are greatest if he/she receives care within a short period of time after a severe injury. The availability of powered medical equipment at the incident location is a prime factor in saving the lives of critical patients, preserving human remains, and increasing the quality of care. The current 17.5 kW gas generators are outdated and need modernization. Each of the ANG's 27 FSRT and 27 CERF-P units requires four new generators.

2. Program Details.

Quantity	Unit Cost	Program Cost
216 17.5 kW Generators (3080)	\$3,500	\$756,000
Total		\$756,000

STANDARDIZED TRIAGE MOBILE PACK

1. Background. The ANG Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise (CRE) Medical Element (MEDEL) Hot Zone Triage teams require standardized grab and go triage packs during mission operations. While conducting mission activities downrange, personnel use assemblage supplies in large bags or other transportable totes provided by the unit. A standardized pack designed for medical supplies, manufactured to be operated with bulky gloves on, offers a consistent, reliable, and flexible configuration for the CRE MEDEL Hot Zone Triage Teams. Each of the ANG's 27 Hot Zone Triage teams needs 12 Standardized Triage Mobile Packs each.

2. Program Details.

Quantity	Unit Cost	Program Cost
324 Standardized Triage Packs (3080)	\$460	\$149,040
Total		\$149,040

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Logistics

Logistics (ESF 7) – The logistics function encompasses those capabilities necessary for the delivery of supplies, equipment, services, and facilities. Integral to logistics is the coordination of supply sources, acquisition, resource tracking, facility space acquisition, and transportation coordination. Logistics includes a centralized management of supply chain functions in support of local, state, and federal governments during domestic incidents. Logistical planning requires integration with community logistics partners through prior planning and crisis collaboration to reestablish local and state self-sufficiency as rapidly as possible.



ESF 7 - Logistics

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Modular Aircraft Loading Ramps
- Hard-Sided Expandable Small Air Mobile Shelter
- Mobile Loading Dock and Trailer Ramps
- All-Terrain 13,000 Pound Forklift
- 25,000 Pound High-Reach Aircraft Loader

Essential Capabilities List

- Self-Loading 8,000 Pound Forklift and Trailer Combination
- Track and Trace Personnel and Equipment Solution
- Universal Tow Kit
- Mobile Aviation Refueling System
- Shop In-A-Box (Portable Vehicle Maintenance Tool Container/Shop)

Desired Capabilities List

- High-Reach Wide-Body Aircraft Loader
- 500 Gallon Mobile Fuel Tanks

MODULAR AIRCRAFT LOADING RAMPS

1. Background. The ANG needs modular aircraft loading ramps. The ANG currently uses pre-cut wood shoring to meet the Air Transportability Test Loading Activity (ATTLA) requirements for loading specialized equipment. Often, the wood shoring requires several aircraft pallets for air transport along with the specialized cargo, and adds several thousand pounds of weight. Modular aircraft loading ramps will significantly reduce the number of pallets required and the weight of the shoring. Each ANG wing requires eight sets of modular aircraft loading ramps.

2. Program Details.

Quantity	Unit Cost	Program Cost
27 Modular Aircraft Ramps (3080)	\$12,000	\$288,000
Total		\$288,000

HARD-SIDED EXPANDABLE SMALL AIR MOBILE SHELTER

1. Background. The ANG requires a standardized, portable operations center to receive and coordinate critical supplies and personnel in both austere and domestic locations. During domestic operations, the portable work centers can be used for flight line visibility, load planning, in-transit visibility, joint inspection, cargo and passenger manifesting. This shelter needs to be portable and transportable utilizing one 463L pallet position. Additionally, it needs to be able to be uploaded/downloaded with a 10,000 pound forklift. All 90 ANG wings, plus one additional at each of the 5 wings with a Contingency Response unit, needs a hard-sided expandable small air mobile shelter.

2. Program Details.

Quantity	Unit Cost	Program Cost
95 Small Air Mobile Shelters (3080)	\$239,445	\$22,747,275
Total		\$22,747,275

MOBILE LOADING DOCK AND TRAILER RAMPS

1. Background. The ANG requires mobile loading docks and trailer ramps to enable cargo transfer operations in a variety of configurations and geographic locations to support contingency operations. Mobile loading docks and ramps allow for the transfer of equipment, supplies, and vehicles from commercial transport assets without the need for permanent, stationary loading docks. They also allow Point of Distribution missions for the disbursal of supplies and equipment to disaster-stricken areas. Mobile loading docks capable of supporting up to 100,000 pounds, with manual height adjustment from 32 to 56 inches, better equips ANG units to support domestic incidents. Both loading docks and trailer ramps should be of adequate width to accommodate a variety of typical cargo and equipment loads. During domestic operations, these mobile loading docks and ramps can be used to transfer 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 and trailer ramps are capable of supporting overseas deployments. Each of the 90 ANG wings requires one mobile loading dock and one mobile trailer ramp.

2. Program Details.

Quantity	Unit Cost	Program Cost
16 Mobile Loading Docks (3080)	\$25,000	\$400,000
6 Trailer Ramps (3080)	\$7,000	\$42,000
Total		\$442,000

Logistics

ALL-TERRAIN 13,000 POUND FORKLIFT

1. Background. The ANG requires a modernized 13,000 pound (13K) All-Terrain (AT) Forklift that meets current Air Force loading equipment standards to quickly and safely load/unload cargo and equipment. The 13K AT Forklift enables Point of Distribution missions for the dispersal of supplies and equipment to disaster stricken areas to support and equip ANG units. The 13K AT Forklift is also used to support home station requirements to load heavy equipment on cargo aircraft. One 13K AT Forklift is needed at each of the 90 ANG Wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 13,000 Pound All Terrain Forklifts (3080)	\$250,000	\$22,500,000
Total		\$22,500,000

25,000 POUND HIGH-REACH AIRCRAFT LOADER

1. Background. The ANG requires modern 25,000 pound high-reach loaders (K-loaders) that meet or exceed current Air Force loading equipment standards in order to quickly load heavy cargo and equipment onto wide-body aircraft to support domestic response and Combatant Command mobility operations. Modern K-loaders are disbursed throughout the ANG, mainly across 44 heavy lift aircraft wings (C-130, C-17, and KC-135); however, eight ANG units are still equipped with outdated K-loaders approaching the end of their useful design life. These K-loaders present maintenance challenges due to frequent malfunctions and growing parts obsolescence, costing each unit approximately \$25,000 per year for upkeep. These outdated K-loaders prevent ANG airmen from training on the same equipment they are expected to operate during deployed contingency operations. Replacing these eight aging assets will greatly enhance the ANG’s ability to rapidly support state missions during domestic response operations as well as Combatant Command taskings.

2. Program Details.

Quantity	Unit Cost	Program Cost
8 25,000 Pound High Reach Aircraft Loaders (3080)	\$264,472	\$2,115,776
Total		\$2,115,776

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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 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 upon to support medical emergencies independently or cooperatively, depending on the emergency. These 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, Radiological, Nuclear, and High-Yield 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 are equipped and trained to respond to

hazards, to include specialized skills needed at CBRNE-type events.

ESF 8 - Public Health and Medical Services
2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Critical Care Air Transport Team / Enroute Patient Staging System Assemblage
- Rapid Response Shelters
- Oxygen Generation System
- Tactical Combat Casualty Care Medical Kits
- Aeromedical Evacuation Equipment Kits

Essential Capabilities List

- Bariatric Litters
- Tactical Interoperable Radios
- Infectious Disease Patient Movement
- Patient Tracking System
- Telemedicine

Desired Capabilities List

- None

**CRITICAL CARE AIR TRANSPORT TEAM / ENROUTE PATIENT STAGING
SYSTEM ASSEMBLAGE**

1. Background. The ANG requires both Critical Care Air Transport Team (CCATT) and Enroute Patient Staging System (ERPSS) equipment kits to safely move patients. The CCATTs are utilized as a supplemental package to the primary medical Aeromedical Evacuation (AE) crew. CCATTs enhance the standard of care provided to critically ill/injured/burned patients who require continuous stabilization and advanced care during transport to the next level of care. CCATTs are a limited, rapidly deployable resource available in selected situations to supplement the AE system. A CCATT training equipment set located at a centralized training site is required to conduct proficiency training for CCATT personnel. The ERPSS has a two-fold mission: provide support and continuity of medical care for patient movement and serve as an integral patient interface to the Air Force components of the Global AE system and the ANG's Defense Support of Civil Authorities mission. Equipment kits are required for each of the ANG's 10 CCATT units and 2 ERPSS units.

2. Program Details.

Quantity	Unit Cost	Program Cost
10 CCATT Equipment Kits (3080)	\$250,000	\$2,500,000
1 CCATT Training Equipment Set (3080)	\$1,636,000	\$1,636,000
2 ERPSS Equipment Kits (3080)	\$2,200,000	\$4,400,000
Total		\$8,536,000

RAPID RESPONSE SHELTERS

1. Background. The ANG medical element of the Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Enhanced Response Force Package (CERFP) requires rapid response shelters to provide medical care in a timely manner. The new medical shelters must be designed to network together through a simple connection process and must not require tools, ladders or equipment to deploy. The interior frame should allow support bars capable of suspending up to 50 pounds of medical equipment and 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 and a flame retardant vinyl that is resistant to ultraviolet light, mildew and abrasion is required. The rapid response shelter should have anchor sets with water bladders; a heating, ventilation and air conditioning (HVAC) system; light emitting diode (LED) lighting; and ground fault circuit interrupter (GFCI) outlets. The ANG needs six rapid response tents for each of its 27 CERFP teams.

2. Program Details.

Quantity	Unit Cost	Program Cost
162 Rapid Response Shelters (3080)	\$20,804	\$3,370,248
162 Air Shelter Anchor Sets w/Water Bladders (3080)	\$625	\$101,250
162 Air Shelter Radiant Barrier Insulation Kits with HVAC Plenum (3080)	\$3,200	\$518,400
162 LED Lighting System/Control Box Kits for Shelters (3080)	\$5,527	\$895,374
162 Equipment Fastening Rod Kits/Equipment GFCI Outlets (3080)	\$500	\$81,000
Total		\$4,966,272

OXYGEN GENERATION SYSTEM

1. Background. The ANG requires a lightweight, self-contained, deployable oxygen generation system capable of producing medical-grade, 93% oxygen from ambient air at the point of use. The availability of medical oxygen in a mass casualty incident is a prime factor in saving the lives of critical patients. The ANG's current oxygen distribution system is no longer supported by the manufacturer and replacement parts are no longer available. In addition, the use of high-pressure oxygen cylinders creates an unacceptable logistical burden associated with transportation, refill, and storage. A self-contained oxygen generation system eliminates these resupply requirements. Each of the ANG's 27 Homeland Response Force / Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Enhanced Response Force Package (CERFP) medical elements needs an oxygen generation system.

2. Program Details.

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

TACTICAL COMBAT CASUALTY CARE MEDICAL KITS

1. Background. The ANG requires Tactical Combat Casualty Care (TCCC) medical kits at each ANG medical unit to replace Self Aid Buddy Care as the new standard of initial response medical treatment and care. All ANG personnel require TCCC training on a recurring basis and prior to deployment. A strategic partnership with the National Association of Emergency Medical Technicians (NAEMT), in conjunction with the Military Training Network at the Uniformed Services University of the Health Sciences, will provide the necessary educational infrastructure to increase the quality of TCCC training in the DoD. The ANG does not currently possess the equipment needed for all members to be instructed in TCCC. Two TCCC medical kits are required at each of the 90 ANG Medical Units.

2. Program Details.

Quantity	Unit Cost	Program Cost
180 TCCC Course Materials (NAEMT) (3080)	\$12,618	\$2,271,240
180 Tactical Medical Kits – Individual First Aid Kit Pouches & Insert Supplies (3080)	\$8,984	\$1,617,120
180 Medical Supplies (3080)	\$19,088	\$3,435,840
180 Manikins (3080)	\$134,200	\$24,156,000
Total		\$31,480,200

AEROMEDICAL EVACUATION EQUIPMENT KITS

1. Background. The ANG Aeromedical Evacuation (AE) units require in-flight equipment kits (IFK) to support AE missions. During mass civilian evacuations, the ANG is tasked with supporting the air transport of patients located in hospitals in the affected area. An AE IFK, consisting of a defibrillator, vital signs monitor, intravenous infusion pump, suction pump, airway management system, and patient care supplies, will significantly improve a patient’s chances of survival during transport. AE crews and IFKs are required for all patient movement to include critically ill patients. Based on previous disaster relief efforts, the ANG requires enough AE IFKs to move up to 560 patients in 24 hours. One AE IFK is needed at each of the ten ANG AE units.

2. Program Details.

Quantity	Unit Cost	Program Cost
10 Aeromedical Evacuation Equipment Kits (3080)	\$250,000	\$2,500,000
Total		\$2,500,000

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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 distributed across the 10 Federal Emergency Management Agency regions. All teams are organized and trained to rapidly deploy and provide an initial search and rescue capability within hours of an incident or natural disaster. These teams provide Land Search and Rescue (SAR), Maritime/Coastal/Waterborne SAR, and structural collapse USAR. SAR services include distress monitoring, incident communications, locating distressed personnel, coordination, and execution of rescue operations including extrication and/or evacuation, along with providing medical assistance and civilian services. Recent natural disasters which the ANG units responded to include, but are not limited to, hurricanes, earthquakes, civil unrest, chemical spills, and forest fires.



Three ANG Rescue Wings perform long-range, over-water rescue operations in the East Pacific, West Atlantic, and Gulf Coast regions. Additionally, the ANG 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

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Urban Search and Rescue Kit Modernization
- Water Rescue Package
- Integrated Active Shooter Body Armor
- MQ-9 National Airspace Integration and Freedom of Movement
- Urban Search and Rescue Mobility Package

Essential Capabilities List

- Communications for Search and Rescue to Military Air Assets
- Helicopter Sling-Load Harness Kit
- Global Positioning System Tracker
- Extreme Cold Weather Personal Protective Equipment

Desired Capabilities List

- None

Search and Rescue

URBAN SEARCH AND RESCUE KIT MODERNIZATION

1. Background. The ANG Fire and Emergency Services (FES) units require modernized Urban Search and Rescue (USAR) kits to provide improved capability to perform their mission in confined environments and collapsed structures. 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; cutting and confined space kits to remove debris and operate effectively in tight spaces; rope rescue kits to raise and lower personnel; a drill kit for concrete drilling in rubble; and a torch kit for cutting rebar and steel. Each of the 62 ANG FES units needs one modernized USAR kit.

2. Program Details.

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

Search and Rescue

WATER RESCUE PACKAGE

1. Background. The ANG Fire and Emergency Services (FES) units require the proper equipment to execute search and rescue operations in areas affected by flood water from hurricanes and heavy storms. The ANG Technical Urban Search and Rescue teams have missed requested deployments because they lacked the ability to operate in flooded areas prior to and with their Federal Emergency Management Agency counterparts. Providing this capability will enable the ANG to rescue people from flood stricken areas. This program will outfit each of the 62 ANG FES units with two inflatable boats, two Rapid Intervention Team (RIT) craft, one aluminum boat with trailer, and 18 sets of Personal Protective Equipment (PPE).

2. Program Details.

Quantity	Unit Cost	Program Cost
124 Inflatable Boats (3080)	\$11,053	\$1,370,572
62 Aluminum Boats w/ Trailers (3080)	\$30,516	\$1,891,992
124 RIT Craft (3080)	\$1,800	\$223,200
1116 Water PPE (3080)	\$1468	\$1,638,288
Total		\$5,124,052

Search and Rescue

INTEGRATED ACTIVE SHOOTER BODY ARMOR

1. Background. The ANG emergency response force requires integrated body armor to provide personal protection and communications equipment to provide situational awareness during active shooter incidents and natural disaster responses. Emergency responders currently lack protective equipment to prevent injury while responding to active shooter incidents and situational awareness tools to enhance capabilities in response to domestic emergencies. The system should include a ballistic vest, ballistic helmet, and individual first aid kit (IFAK) for personal protection. Additionally, the team leaders' systems should include end user devices, communication and power distribution hubs, and the necessary cables for Team Awareness Kits (TAK). To ensure TAKs can operate in remote locations and locations with stressed or disabled communications infrastructure, a communications hub and mesh backup network capability are required. This system will improve personal safety and enable improved life-saving capabilities across all domestic response situations from an active shooter to natural disasters. ANG emergency responders require eight active shooter body armor kits for each of the 62 response units, and two of the eight kits should be equipped with domestic operations TAK kits. Additionally, each of the 62 response units will require a TAK communications hub to ensure reliable communications.

2. Program Details.

Quantity	Unit Cost	Program Cost
496 Ballistic Vests with Level III Plates (3080)	\$3,000	\$1,488,000
496 Ballistic Helmets (3080)	\$800	\$396,800
496 IFAKs (3080)	\$80	\$39,680
124 Domestic Operations TAK Systems (3080)	\$5,500	\$682,000
62 TAK Communications Hubs (3080)	\$600	\$37,200
Total		\$2,643,680

Search and Rescue

MQ-9 NATIONAL AIRSPACE INTEGRATION AND FREEDOM OF MOVEMENT

1. Background. ANG MQ-9 units require both ground-based and air-based detect and avoid radar solutions to fulfill Federal Aviation Administration (FAA) requirements to safely operate within domestic airspace alongside civilian aircraft. ANG MQ-9 units also require an agile launch-and-recovery system to enable expeditionary operations including an auto take-off and land capability to mitigate transitory airspace challenges and extend airframe reach. ANG MQ-9 units are not authorized to launch without a “chase plane” during Visual Flight Rules conditions, resulting in delays of up to 24 hours to coordinate for support; and ANG MQ-9 units are currently not authorized to launch at all during Instrument Flight Rules conditions, resulting in many mission cancellations and delays. ANG MQ-9 units also lack the ability to stage within the vicinity of a domestic emergency similar to other aircraft, resulting in excessive daily transit times and additional airspace challenges, impacting on-station direct-support times by as much as 50%, or over six hours per day. This modernization effort will minimize weather-related delays and cancellations, and negate the need to fund annual service contracts for chase planes. Radar installations and launch-and-recovery systems are required for all five ANG MQ-9 wings, and airborne detect and avoid systems are required for each of the 30 ANG MQ-9 aircraft.

2. Program Details.

Quantity	Unit Cost	Program Cost
5 Ground-Based Detect and Avoid (GBDAA) Sites (3010)	\$3,200,000	\$16,000,000
30 Airborne-Based Detect and Avoid System (3010)	\$2,200,000	\$66,000,000
5 Expeditionary Launch and Recovery Element (3010)	\$500,000	\$2,500,000
Total		\$84,500,000

Search and Rescue

URBAN SEARCH AND RESCUE MOBILITY PACKAGE

1. Background. ANG Urban Search and Rescue (USAR) teams need mobility options to deliver specialized equipment to disaster response areas within the 6-hour response time identified in the ANG Search and Rescue concept of operations. An USAR utility all-terrain vehicle (UTV) is needed when a full-sized vehicle cannot access austere terrain. A specialized USAR trailer is also needed to transport equipment, including the UTV, to the incident scene. The UTV capabilities must include: 1) gasoline powered; 2) all weather capability with a climate controlled cab; 3) capacity to transport 6 personnel; and 4) be equipped with a firefighting package. Trailer capabilities must include: 1) weight capacity of 15,000 pounds to meet the needs of USAR equipment, UTV, personal protective equipment (PPE), and incidental supplies; 2) rear drop-down ramp with the ability to load a UTV; 3) modular shelving system to store tools and equipment; and 4) towable by existing 1 ½ ton pickups. Request one USAR mobility package for each of the ANG’s 62 Fire and Emergency Services units.

2. Program Details.

Quantity	Unit Cost	Program Cost
62 USAR Trailers (3080)	\$160,000	\$9,920,000
62 UTVs (3080)	\$28,000	\$1,736,000
62 UTV Firefighting Packages (3080)	\$21,200	\$1,314,400
Total		\$12,970,400

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Oil and Hazardous Materials Response

Oil and Hazardous Materials Response (ESF 10) – ANG Emergency Management (EM), Fire and Emergency Services (FES), and response teams are among the experts available to detect, contain, and mitigate the effects of hazardous materials and Chemical, Biological, Radiological, and Nuclear (CBRN) incidents. ANG units have responded to hazardous material incidents with increasing frequency, particularly for large scale incidents. Through the Domestic Capability Priorities conference process, EM and FES personnel identified capability gaps for detection modernization, CBRN initial response equipment, and responder rehabilitation shelters which were purchased and provided to the field. This equipment provides initial response teams the capability to accurately and safely identify and contain hazardous materials. EM and FES personnel continue to identify capability gaps which will make them more effective and increase their capability to train and respond when required.



ESF 10 - Oil and Hazardous Material Response 2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Multi-Layer Portable Power Bank
- Hazardous Materials ABC Kits with Training Aids
- Trailer Mounted Cascade Air System
- Small Unmanned Aerial System
- Hazardous Materials Structural Personal Protective Equipment Modernization

Essential Capabilities List

- Multiagency Environmental Protection Integration Kit
- Automated Bioenvironmental Detection
- Down Range Live Feed Camera
- Emergency Management Lightweight Inflatable Decontamination System
- Powered Air Purifying Respirator

Desired Capabilities List

- Chemical, Biological, Radiological, and Nuclear Detection for Base Gate
- Mercury Clean-Up Kit

MULTI-LAYER PORTABLE POWER BANK

1. Background. ANG domestic operations incident response teams require an industrial, commercial off-the-shelf, rechargeable power bank to meet specialized equipment needs. This equipment often stays in use for multiple hours or days at a time. Since the majority of this equipment does not have redundancy, it usually requires multiple battery charges during a single shift. A multi-layer portable power bank will alleviate these limitations and meet the following requirements: 1250 kilowatts capacity battery; four 110 volt plug-in ports; 8 IP66 rated universal serial bus (USB) ports; 3000 charges before battery degradation; 75 minute re-charging speed with fast charger; weigh under 55 pounds; and be weather and shock-resistant. The ANG requires one multi-layer portable power bank for each Emergency Management flight and each Fire Department across all 90 wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
180 Multi-Layer Portable Power Banks (3080)	\$10,500	\$1,890,000
Total		\$1,890,000

HAZARDOUS MATERIALS ABC KITS WITH TRAINING AIDS

1. Background. ANG Emergency Management (EM) and Fire and Emergency Services (FES) flights require Hazardous Material (HAZMAT) A, B, and C Response Kits and associated training aids. EM and FES personnel have limited capacity to adequately provide essential equipment to contain a HAZMAT spill. These kits will allow EM and FES to effectively manage a HAZMAT spill with National Fire Protection Association and US Department of Transportation (DOT) approved equipment. Additionally, hands-on training aids for each of the A, B, and C kits will provide the capability for personnel to be properly trained in a controlled environment. The ANG requires one each A, B, and C kit, plus one training aid at each of its 90 Wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Chlorine Institute Cylinder Emergency Kits (3080)	\$2,475	\$222,750
90 Chlorine Institute Emergency Kits for US DOT 106A500X Ton Containers (3080)	\$2,495	\$224,550
90 Chlorine Institute Tank Car/Truck Emergency Kits (3080)	\$2,850	\$256,500
90 Chlorine Training Cylinders (3080)	\$995	\$89,550
90 Chlorine One Ton Training Ends with Wheels (3080)	\$2,945	\$265,050
90 Chlorine Rail Car/Tank Truck Training Domes (3080)	\$3,530	\$317,700
Total		\$1,376,100

TRAILER MOUNTED CASCADE AIR SYSTEM

1. Background. ANG Emergency Management (EM) and Fire and Emergency Services (FES) flights, and their associated domestic operations incident response teams, require an industrial, trailer mounted, mobile cascade air system. EM and FES flights currently have only a limited capability to resupply self-contained breathing air during hazardous material situations while downrange. The mobile cascade air system must be mounted on a tandem-axle, heavy-duty trailer with hydraulic surge brakes and a breakaway activator. The system requires a 6000 psi compressor capable of a charging rate of at least 13 cubic feet per minute and an onboard air purification system. Additionally, this system should include a two position containment fill station for self-contained breathing apparatus (SCBA) cylinders, including a dual function control panel with air direction valves for an onboard four cylinder storage bank. The system needs a SCBA storage capability for up to 12 cylinders. Lastly, the mobile cascade air system must have outside area lighting to support 24-hour operations. The ANG requires one mobile cascade air system for each of its 90 wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Trailer Mounted Cascade Air Systems (3080)	\$123,200	\$11,088,000
Total		\$11,088,000

Oil and Hazardous Material Response

SMALL UNMANNED AERIAL SYSTEMS

1. Background. ANG Emergency Management (EM) and Fire and Emergency Services (FES) flights require a Hazardous Material (HAZMAT) small unmanned aircraft system (sUAS) to provide immediate aerial visual and air quality situational awareness for an on-scene commander. This Department of Defense approved and currently inventoried sUAS provides instantaneous visual assessment via live feed electro-optical, infrared, and low-light imaging of disasters and HAZMAT incidents. When coordinated with ANG Mobile Emergency Operations Centers (MEOCs), the system will be capable of projecting live feeds. The incident commander can also acquire air samples for HAZMAT release by installing detection equipment on the sUAS. The sUAS will be fielded with ANG EM MEOC units. The ANG requires one sUAS at each of its 90 Wings.

2. Program Details.

Quantity	Unit Cost	Program Cost
90 Small Unmanned Aircraft Systems (3080)	\$320,000	\$28,800,000
Total		\$28,800,000

**HAZARDOUS MATERIALS STRUCTURAL PERSONAL PROTECTIVE EQUIPMENT
MODERNIZATION**

1. Background. ANG Fire and Emergency Services (FES) units require a second set of structural Personal Protective Equipment (PPE) to maintain a 100% firefighter response capability. Per National Fire Protection Association 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*, firefighting protective equipment must be cleaned and decontaminated every time there is contact with a hazardous material or bodily fluid. The cleaning, decontamination, and drying process can take several hours to several days, depending upon the severity of soiling and contamination. While this gear is out of service, a second set of structural PPE will provide firefighters the ability to respond to an emergency while the primary set is being repaired or cleaned. This gear will also replace damaged and/or PPE that has met shelf life. The ensemble should include pants, coats, gloves, and hood. Each of the ANG's 62 FES units requires one set of PPE per assigned firefighter.

2. Program Details.

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

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Public Safety and Security

Public Safety and Security (ESF 13) – ANG security forces comprise over 7,400 Defenders from the 54 states, territories, and District of Columbia. ANG security forces units work in cooperation with local, state and federal public safety and security organizations to support a full range of incident management activities. Security forces provide law enforcement operations, access control, presence patrols, and protection of personnel and equipment.



ANG security forces units are equipped with “less-than-lethal” use of force, explosive detection, and traffic control/crowd management equipment. These items are used to support local, state and federal authorities during events like natural disasters, civil unrest, as well as high visibility crowd control events.



In 2018, ANG security forces personnel responded to multiple natural disasters from the California wildfires, hurricanes along the east coast, Midwest flooding, and snow emergencies in the northeast. In addition, ANG Defenders assisted local and federal law enforcement agencies along the southern border and in support of special events in the northeast. Critical equipment and vehicles procured, as a result of past Domestic Capabilities Priorities Conferences, directly enhanced Defenders effectiveness during these events.

ESF 13 - Public Safety and Security

2019 Domestic Capability Priorities Conference

Critical Capabilities List

- Security Forces Less Than Lethal Enclosed Trailer
- Security Forces Logistics Resource Vehicle
- Security Forces Utility Task Vehicle
- Security Forces Conducted Electrical Device Modernization
- Security Forces Scalable Emergency Vehicle Response Kit

Essential Capabilities List

- Robotic Camera
- Law Enforcement Ensemble Kit
- Less-Than-Lethal Trailer
- Personnel Tracking
- Crowd Control Person Protective Equipment

Desired Capabilities List

- Mobile Entry Control Point
- Less-Than-Lethal Modernization Kit
- Counter Small Unmanned Aerial Vehicle
- Communication Dish
- Radio Repeater

SECURITY FORCES LESS THAN LETHAL ENCLOSED TRAILER

1. Background. ANG Security Forces (SF) require a Less-Than-Lethal (LTL) enclosed trailer. Currently, SF LTL kits are contained in an Internal Airlift/Helicopter Slingable Container Unit (ISU) 90 mobility equipment container specially configured for the equipment assigned to each kit. The kits cannot be moved without a 10,000 pound forklift and flatbed trailer. A dedicated enclosed trailer for the LTL kit is required, which must be towable by current ANG SF vehicles. The LTL trailer must also provide the capability to act as a temporary armory and control center. Each of the 94 ANG SF squadrons requires one trailer for each of their two QFLLL Unit Type Codes.

2. Program Details.

Quantity	Unit Cost	Program Cost
188 Modernized LTL Trailers (3080)	\$30,000	\$5,640,000
Total		\$5,640,000

SECURITY FORCES LOGISTICS RESOURCE VEHICLE

1. Background. ANG Security Forces (SF) require logistics resource vehicles to perform domestic operations wing support for federal and state missions. New vehicles will include a law enforcement package designed for transporting equipment, supplies, weapons, and ammunition to ensure units are capable of responding to real-world incidents and training mission requirements. This capability provides a standardized vehicle fleet that will allow diversified mission capability opportunities and meet hauling requirements for weapons qualifications at each wing. Each of the ANG's 94 SF squadrons requires one logistics resource vehicle.

2. Program Details.

Quantity	Unit Cost	Program Cost
94 SF Logistics Resource Vehicles (3080)	\$70,000	\$6,580,000
Total		\$6,580,000

SECURITY FORCES UTILITY TASK VEHICLE

1. Background. ANG Security Forces (SF) require a diesel powered, fully contained, crew-sized Utility Task Vehicle (UTV). The UTV will be equipped with a light emitting diode light bar, SF patrol vehicle markings, and winch. The UTV will provide SF Defenders with a rapid, mobile response vehicle capable of transporting up to six personnel and their equipment in austere environments. This vehicle will transport Defenders during natural disasters or other Defense Support to Civil Authorities missions when a full-size vehicle cannot operate in austere terrain. Each of the 94 ANG SF squadrons requires one UTV for each of their two QFLLL Unit Type Codes.

2. Program Details.

Quantity	Unit Cost	Program Cost
188 SF Utility Task Vehicles (3080)	\$32,000	\$6,016,000
Total		\$6,016,000

SECURITY FORCES CONDUCTED ELECTRICAL DEVICE MODERNIZATION

1. Background. ANG Security Forces (SF) require replacement of the TASER X26E due to diminished manufacturing sources. Modernized cartridges and batteries will support both Federal and Domestic Operations missions. The conducted electrical device training kit includes training cartridges, live cartridges, targets, training suites, downloading cables, and software. Each of the 94 ANG SF squadrons requires 13 conducted electrical devices for each of their two QFLLL Unit Type Codes, plus one training kit.

2. Program Details.

Quantity	Unit Cost	Program Cost
2,444 Conducted Electrical Devices (3080)	\$1,500	\$3,666,000
94 Conducted Electrical Device Training Kits (3080)	\$3,500	\$329,000
Total		\$3,995,000

SECURITY FORCES SCALABLE EMERGENCY VEHICLE RESPONSE KIT

1. Background. ANG Security Forces (SF) require emergency vehicle response kits to surge to full capability. SF units currently acquire additional vehicles through their parent wing’s vehicle fleet management office, or by utilizing rental or other military vehicles. These vehicles need temporary equipment modifications to include: emergency lighting; high visibility markings; tactical equipment racks and mounts; an acoustic hailing device for mass notification and crowd dispersal; basic first aid kit; 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 squadrons requires three kits, and each of the 22 tenant ANG SF units requires five kits.

2. Program Details.

Quantity	Unit Cost	Program Cost
332 SF Emergency Response Kits (3080)	\$9,500	\$3,154,000
Total		\$3,154,000

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