

Domestic Capability Priorities Book

2023-2024



AIR NATIONAL
GUARD

FOREWORD



Readiness and modernization remain top priorities for the ANG, given the rapid pace of technological change and the many worldwide threats our Airmen face. For more than seventy years, the Air National Guard (ANG) has been **Ready Today** to meet any challenge, at home or abroad. Our relentless drive for improvement ensures we are also **Stronger Tomorrow** to overcome emerging challenges and threats. Finally, the dual role of the Air Guard supports the nation’s primary strategic priority: **Defend the Homeland.**

Multiple nation-state threats, and global terrorism continue to subvert the free and open international order. Our adversaries’ use of cyber-attacks and disinformation threaten our democracy. At the same time, the growing frequency and severity of hurricanes, wildfires, floods, and other domestic incidents challenge the safety of our citizens and communities.

Our whole-of-government approach reflects the constitutional basis for how we manage domestic incidents. The ANG understands the importance of this construct in planning and conducting the bi-annual Domestic Capability Priorities (DCP) Conference. The DCP conference allows representatives from the 54 states and territories to identify and prioritize capability gaps using the Federal Emergency Management Agency’s (FEMA’s) Emergency Support Functions (ESFs) as a framework. The product of the DCP conference is the ANG’s domestic capability priorities book that provides a foundation for allocating limited resources.

We are dedicated to the critical task of ensuring our Airmen have the right equipment to respond when called – at home and abroad. I want to thank our Airmen and the many mission partners from across the country who participated in this year’s DCP process. Your efforts ensure that our Airmen can accomplish their missions and serve our nation no matter what challenges lay ahead.

Your ANG – Always Ready, Always There

A handwritten signature in black ink, appearing to read "M. A. Loth".

MICHAEL A. LOH
Lieutenant General, USAF
Director, Air National Guard

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INTRODUCTION



The 2023 Air National Guard (ANG) Domestic Capability Priorities (DCP) Book documents capability priorities identified during the May 2022 ANG DCP Conference in Denver, Colorado. Over 330 military and civilian participants representing the 54 States, Territories and the District of Columbia from the ANG wings and state Joint Force Headquarters, other government agencies, civil partners, as well as National Guard Bureau (NGB) staff worked collaboratively to identify capabilities needed by the ANG to effectively support civil authorities during domestic incident response missions. The Emergency Support Function (ESF) Working Groups classified capability priorities 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)
Contingency Response (not an ESF, new addition for 2023 DCP Conference)

The introductory section of the 2023 DCP book includes a State/FEMA Matrix which identifies states and FEMA regions where working groups recommended fielding equipment. The book identifies domestic critical capability shortfalls valued at over \$490,000,000 organized into 12 tabs; each beginning with a mission description followed by a summary page of critical, essential and desired capabilities. An information paper describes each capability classified as critical. Each information paper captures: Background (i.e., capability description) and Program Details (I.e. quantity of equipment needed, estimated unit costs, and overall estimated program cost).

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 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 products and ground transportation, other life-saving commodities to assist civil and military authorities in response to domestic emergencies.



ESF 1 - Transportation

2022 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

- 13,000 Pound All-Terrain Forklift
- Deployable Aviation Refueling Point
- Ramps to Load Trailers on Aircraft
- Prime Mover for Prime Power
- Shop in a Box

Desired Capabilities List

- High Water Rescue Vehicle
- Remotely Piloted Aircraft Sense and Avoid System 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

CARGO AND UTILITY VEHICLE FLEET MODERNIZATION

1. Background:

The ANG lacks the ability to move emergency response equipment to incident sites due to an aging vehicle fleet. Per DODI 4500.36 and AFI 24-302, ANG vehicles replacement eligibility is based on the calendar year value flat line depreciation and sustainment costs. In turn, 50% of the ANG's 1,720 cargo and utility vehicles are beyond life and require replacement to include passenger buses, 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), Hazardous Materials (HAZMAT) response trailers, and Explosive Ordnance Disposal (EOD) prime movers, etc.).

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the aging fleet will continue to outpace recapitalization rate, which in turn, jeopardizes reliable vehicle support to ANG mission requirements e.g., natural disasters, Agile Combat Employment, etc.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Ronald Bennet / ronald.bennett.4@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
860 Cargo and Utility Vehicles Fleet Modernization	\$41,000	\$35,260,000
(45) 44 Passenger Buses	\$150,000	\$6,750,000
(45) 29 Passenger Buses	\$125,000	\$5,625,000
Total		\$47,635,000

DEBRIS CLEARANCE AND ROUTE OPENING PRIME MOVERS

1. Background:

The ANG lack's ability 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. The ANG requires one 2 ½ ton truck per wing.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the ANG risk's ability to deliver debris clearance packages to disaster locations in a time-sensitive manner.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Ronald Bennet / ronald.bennett.4@us.af.mil

5. Program Details:

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

HEAVY MOBILE EQUIPMENT MAINTENANCE TRUCK

1. Background:

The ANG lacks the ability to perform mobile maintenance in 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 potentially remote areas necessary to make repairs on-site. ANG wings require a one-ton service body truck, crew cab trucks equipped with four-wheel drive, a mobile crane, welder, air compressor, and hand tool kits.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG cannot perform heavy equipment maintenance remotely and sustain the current vehicle inventory.

3. Affected Units:

Every ANG wing that has an asset requirement for heavy equipment maintenance.

4. Info Paper Author/contact email (POC):

CMSgt Ronald Bennet / ronald.bennett.4@us.af.mil

5. Program Details:

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

HEAVY LIFT LOWBOY TRAILER

1. Background:

The ANG lacks the ability to safely and efficiently transport equipment in response to domestic missions due to the current trailer fleet not meeting mission requirements. Logistics Readiness Squadrons (LRS) are responsible for moving personnel, equipment, supplies and vehicles. Depending on mission requirements, ANG units may require one of two trailer types, a drop deck gooseneck trailer with a 35-ton capacity to expedite the movement of all rolling stock and other domestic response support materials or a rear-loading trailer with higher ground clearance to meet unique circumstances and operating environments. 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. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the current lack of trailers will hamper the ANG's ability to transport vehicles and equipment to areas affected by disasters, resulting in inefficient loading/offloading of equipment and vehicles at remote locations where ramps are unavailable. Ultimately, trailers provide logisticians a wider array of transportation capabilities, reducing man-hours and dependence on contract carriers to accomplish domestic mission.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Ronald Bennet / ronald.bennett.4@us.af.mil

5. Program Details:

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

MULTI-VEHICLE DRIVING SIMULATOR

1. Background:

The ANG lacks the ability to train and provide proper qualification training 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 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 types of vehicles operated in the ANG and provide immediate feedback to the student. Each of the ANG wings require one driving simulator.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the ANG risks supplying qualified vehicle operators to domestic operations resulting in failure to meet mission requirements.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Ronald Bennet / ronald.bennett.4@us.af.mil

5. Program Details:

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

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.

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

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Critical Capabilities List

- Rapid Deployable Communications Solution
- DOMOPS All Domain Network
- Airborne Communications Pod
- Low Earth Orbit Data Transport
- High Frequency Auxiliary Radio Network

Essential Capabilities List

- Hydra Quick Reaction Communication Vehicle kit
- Deathwatch

Desired Capabilities List

- None

RAPID DEPLOYABLE COMMUNICATIONS SOLUTION

1. Background:

The ANG lacks the ability to use satellite or cellular communications capabilities that include voice, data and video streaming to fill communications gaps when existing communications infrastructure has been degraded or disabled. Incident Awareness and Assessment (IAA) units require communications kits that are rapidly deployable, contain organic power generation, and provide basic cellular and Commercial Space Internet (CSI) connectivity in a localized area. The ANG requires one complete kit for each of the IAA units and Unclassified Processing, Assessment and Dissemination (UPAD) sites.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, communication during disaster event response risks being severely hindered, delayed, or prevented altogether which can significantly inhibit mission success.

3. Affected Units:

Each of 22 IAA/UPAD units, covering 10 FEMA regions.

4. Info Paper Author/contact email (POC):

Lt Col Dave Olds / david.olds@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
22 Cellular Endpoints	\$2,000	\$44,000
22 CSI Ground Terminals	\$4,500	\$99,000
22 Mobile Workstations	\$1,000	22,000
22 Protective Cases	\$350	\$7,700
22 Radio Interoperability Modules	\$7,000	\$154,000
66 Handheld Dual-Band Radio Systems	\$22,000	\$1,452,000
22 Four Ch H.264 Network Video Encoder HDMI/USBC	\$250	\$5,500
22 Generators	\$1,200	\$26,400
Total		\$1,656,754

DOMOPS ALL DOMAIN NETWORK

1. Background:

The ANG lacks the ability to provide secure network connectivity during disaster response missions due to a lack of small-scale All Domain Network (ADN) kits. ADN is a mobile platform that provides complete, unified communications (SATCOM, Radio, VoIP, MANET, Edge Server) infrastructure in places where existing communications are nonexistent or unusable. Domestic emergencies often involve the loss of critical communications infrastructure. Over a period of a few minutes, the demand for emergency services grows exponentially. Emergency services agencies tasked with responding must coordinate a response using disparate, often incompatible technologies and platforms.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the responsiveness to ANG Domestic Operations contingency activities will continue to be degraded.

3. Affected Units:

All 54 US state and territories with ANG units

4. Info Paper Author/contact email (POC):

Lt Col David Bell / David.bell.7@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
54 All Domain Network (ADN) – Small package	\$708,828	\$38,276,712
Total		\$38,276,712

AGILE AIRBORNE COMMUNICATIONS POD

1. Background:

The ANG lacks the ability to provide required communication support over an area impacted by natural disaster or during search and rescue operations due to the lack of rapidly deployable airborne communications relays. This capability gap includes an inability to provide the public and emergency services personnel access to 911 cellular services and FirstNet cellular services, respectively. Enabling a bridge for multiple radios to provide communications between various users during domestic contingency operations is vital to increasing interoperability and decreasing emergency services response time.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the public and first responders will not have access to emergency communications and data services during domestic contingency operations.

3. Affected Units:

This affects all units supporting Domestic Operations contingency operations using airborne assets.

4. Info Paper Author/contact email (POC):

Lt Col David Bell / David.bell.7@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
Non-Recurring Engineering	\$4,000,000	\$4,000,000
Ten Aircraft Data and Power Cabling kits	\$100,000	\$1,000,000
Ten Communication pods	\$3,000,000	\$30,000,000
Total		\$35,000,000

LOW EARTH ORBIT DATA TRANSPORT

1. Background:

The ANG lacks the ability to provide low latency, high bandwidth, and secure commercial internet service at disaster response locations due to not having Low Earth Orbit (LEO) data transport capability. Historically, domestic incident responses highlight cellular-based communications interference. Available high-speed data is critical for responders to ensure robust Command and Control (C2) capabilities and employment of forces to save lives and protect infrastructure. Secure high bandwidth, and low-cost satellite data transport service allows for a low latency connection that is agnostic of system type. Each ANG wing requires one LEO data transport kit.

2. Mission/Operational Impact if not funded.

C2 capabilities are increasingly dependent on readily accessible and reliable satellite communication. Without this capability, C2 operations are limited to current legacy MILSATCOM options with higher latency, lower bandwidth, and limited ability to meet primary, alternate, contingency and emergency communication plans.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Brandy Thanos / brandy.thanos.1@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
90 CSI Ground Terminal Standard Kit	\$2,500	\$225,000
Total		\$225,000

HIGH FREQUENCY (HF) AUXILIARY RADIO NETWORK

1. Background:

The ANG lacks the ability to provide reliable and effective Command and Control (C2) during domestic response operations due to the lack of a meshed, beyond line-of-sight high frequency (HF) auxiliary radio network. To have an effective, reliable and resilient C2 capability, each installation needs to have a HF/Very High Frequency (VHF) radio suite permanently installed in their Command Post or equivalent functional area. In addition to basic voice radio communications, the system will be enabled to send and receive email traffic via a global radio email service, WinLink and/or HF Data Link. This capability allows higher headquarters to reach all ANG installations regardless of weather, outages or from cyber effects degrading traditional telecommunications systems.

2. Mission/Operational Impact if not funded:

In the event of a cyber outage, forces will be ineffective in responding to domestic response missions. Furthermore, without the mesh data network, entire installations, Geographically Separated Units (GSUs), State Joint Force Headquarters (JFHQ) or the NGB could be cut off from orders and request for support indefinitely until traditional cyber resources become available.

3. Affected Units:

323 Total: 54 JFHQ, 92 ANG wings, 175 ANG GSU installations, 2 NGB crisis action team cells.

4. Info Paper Author/contact email (POC):

CMSgt Shawn Honea / shawn.honea.1@us.af.mil

5. Program Details.

Quantity Required	Unit Cost	Program Cost
323 HF/VHF Radio Suites (Complete Suite)	\$95,720	\$30,917,560
323 Laptop	\$600	\$193,800
Total		\$31,111,360

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, lifesaving 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

- Route Clearance Kit Modernization
- Route Clearance Kit Trailer Modernization
- Disaster Relief Bed-down System Modernization
- Overhead Cover Equipment Protection
- Engineering Assistant Equipment (Survey Equipment)

Essential Capabilities List

- Explosive Ordnance Disposal Standardized Utility Cargo Body
- Virtual Reality Readiness Equipment
- Facility Maintenance Management Software
- Atmospheric Water Generator
- Unmanned Aerial Vehicle

Desired Capabilities List

- None

ROUTE CLEARANCE KIT MODERNIZATION

1. Background:

The ANG lacks the ability to clear ingress and egress routes due to the lack of modernized route clearance capabilities. Each year route clearance kits provide critical support to local, state, and federal agencies. Following natural and man-made disasters, ANG members expediently clear roadways for emergency and utility vehicles. Several regions utilize this equipment multiple times per year which results in capabilities degrading rapidly. Additionally, the ANG Compact Track Loader (CTL) fleet is aging, increasing the time it takes to clear an emergency route. To restore this capability, approximately 10% of the current 144-skid-steer fleet must be modernized.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, route clearance capabilities will no longer be a viable asset in several regions. Current operational needs are at a critical point where a lack of safety features have been identified, in particular pertaining to the hose guides. Without kit modernization, grapple buckets will not be fully operational; tools and hoses will not be protected from environmental factors.

3. Affected Units:

72 of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Michael Keegan / michael.keegan.3@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
72 Sifting Grapple Buckets for CTL	\$2,699	\$194, 328
14 Compact Track Loaders	\$75,000	\$1,050,000
144 Hydraulic Hose Guides	\$50	\$7,200
72 Lightweight Container/Storage Systems	\$2500	\$180,000
Total		\$1,431,528

ROUTE CLEARANCE KIT TRAILER MODERNIZATION

1. Background:

The ANG lacks the ability to expediently clear roadways for emergency and utility vehicles due to antiquated route clearance kit trailers. The existing equipment package is one of the most utilized in the civil engineer Domestic Operations (DOMOPS) inventory. Many of the trailers are not properly rated for current mission load-outs, nor do they have sufficiently sized front landing gear. The current trailers are undersized; therefore, they are incapable of performing at full capacity for the debris clearance kit. Procurement of larger, more capable trailers fulfill the load requirements and meet Department of Transportation specifications.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, catastrophic accidents may occur when tasked to support disaster response efforts. Several critical issues have occurred, including hot brakes, multiple blown tires, and blown hubs. Stakeholders met several times to reduce trailer loads to meet minimum mission requirements, but at a reduced capability. From these meetings, it was determined that 25% of the fleet required more robust trailers

3. Affected Units:

18 wings are affected by these trailer limitations.

4. Info Paper Author/contact email (POC):

CMSgt Michael Keegan / michael.keegan.3@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
(18) 30 Foot Tandem Axle, Dual Wheel Flat-bed Trailer	\$25,000	\$450,000
Total		\$450,000

DISASTER RELIEF BEDDOWN SYSTEM MODERNIZATION

1. Background:

The ANG lacks the ability to continue supporting ANG personnel response to natural disasters due to the lack of adequate Disaster Relief Bed-down Systems (DRBS). DRBS was originally purchased in 2010 as a response to Hurricane Katrina. The DRBS fulfills the need to support military bed-down in response to natural disasters across the United States and its territories. One DRBS kit is capable of housing 150 military personnel, primarily used by medical and security forces. Lodging is rarely available as it is often occupied by locals and non-governmental organizations. Future planning of the kit should include equipment to prevent freezing when utilized in northern states. The tools, parts, and equipment in this modernization will allow full employment of the kit in freezing temperatures.

2. Impacts if Not Funded.

The current kits have three major components that are no longer manufactured, having reached the end-of-life production cycle, making repairs impossible. Major components that need modernized are shower/shave, laundry, and latrines. For northern tier states, these kits do not have sufficient heating capacity and are not functional during winter operations. The northern tier modernization kit would prevent freezing when utilized in potential sub-zero temperatures.

3. Affected Units:

NY, WA, PR, NH, CA, AR, KS, OH, PA, FL, VA, MO, and GU.

4. Info Paper Author/contact email (POC):

SMSgt Thomas Barron / thomas.barron@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
20 DRBS Modernization Kit	\$589,800	\$11,796,000
3 Northern Tier Modernization Kit	\$25,000	\$75,000
Total		\$11,871,000

OVERHEAD COVER EQUIPMENT PROTECTION

1. Background:

The ANG lacks the capability to provide overhead covered protection for all assigned vehicles and mobile equipment supporting domestic response due to the current inability for inside storage, the vehicles and mobile equipment are exposed to the outside elements causing degradation and reduced lifespan. Per AFI 32-1020, *Planning and Programming Built Infrastructure Projects*, an authorization for all 90 Wings to utilize a Relocatable Facility is requested as a temporary solution, as it does not affect the bases real property or square footage authorization. Some locations may require fully enclosed protection, while others may only need a sunshade. The overhead cover must have a minimum of two access points to provide easy movement of vehicles and equipment in and out of the overhead protection. Each overhead protection will need to be uniquely sized for the amount of domestic response vehicles and mobile equipment each unit has assigned, with the option to be professionally installed per each unit's requirements. A long-term solution is to increase/modify the square footage authorization.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, millions of dollars' worth of vehicles and mobile equipment will be exposed to the elements and continue to degrade, reducing the overall lifespan and jeopardizing mission support.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

Katrina Wetzel / katrina.wetzel@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
90 Overhead Covers for vehicles/mobile equipment	\$90,000	\$8,100,000
Total		\$8,100,000

ENGINEERING ASSISTANT EQUIPMENT (SURVEY EQUIPMENT)

1. Background:

ANG lacks the capability to properly conduct civil engineer surveys due to having outdated equipment. Survey equipment in the Air National Guard (ANG) is grossly outdated, with industry standards making rapid gains. The Army National Guard was able to recently update their assets, catching up to the current industry standards, providing a real mission asset. RED HORSE and Regional Training Sites (RTS) require a full upgrade of GPS equipment and a partial update of the optical survey equipment. Each RTS requires three GPS kits consisting of a base station, radio transmitter, and a rover, with one kit containing an additional rover with all-terrain capability. The optical survey equipment package would consist of a total station and a rover. The survey equipment is multi-capable, supporting Agile Combat Employment missions, Aircraft Mishap Surveys and additionally decreases manpower need.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the survey capability of 3E5X1s will become non-existent as they will not have functional equipment to perform training or DOMOPS. Having this capability within RED HORSE units and at RTS locations increases training opportunities and accessibility to equipment thereby providing mission ready airmen.

3. Affected Units:

All Civil Engineering units in the ANG.

4. Info Paper Author/contact email (POC):

SMSgt Thomas Barron / thomas.barron@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
9 RED HORSE GPS and Optical	\$358,000	\$3,222,000
5 RTS Equipment	\$1,253,000	\$6,265,000
Total		\$9,487,000

Firefighting

Firefighting (ESF 4) – Firefighting capabilities include detecting and suppressing wild land, 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 fire fighter provide hazardous materials response to include Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) events. Proper personnel protective equipment (PPE), tools, and training are needed for each firefighting specialty to reduce the inherent risks of fighting fires.

The ANG firefighting enterprise consists of 62 FES units, three C-130 units and three HH-60 units for airborne firefighting. The three Mobile Aircraft Fire Fighting System (MAFFS) units are utilized every year 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

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Structural Firefighting Vehicles
- Personal Protective Equipment (PPE) Modernization
- Individual Wildland Firefighting Kits
- Cascade Air System
- Aircraft and Structural Live Fire Training Equipment

Essential Capabilities List

- Aerial Firefighting Modernization

Desired Capabilities List

- None

Firefighting

STRUCTURAL FIREFIGHTING VEHICLES

1. Background:

ANG Fire and Emergency Services (FES) units lack the required number of fire engines for mission requirements. 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.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

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. Without a second engine, fire departments would be extremely limited on their ability to respond on mutual aid emergencies with local fire departments.

3. Affected Units:

The ANG's 62 FES units.

4. Info Paper Author/contact email (POC):

SMSgt David Ferris / david.ferris.1@us.af.mil

5. Program Details.

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

PERSONAL PROTECTIVE EQUIPMENT MODERNIZATION

1. Background:

The ANG lacks the capability to protect fire fighters conducting missions due to not replenishing personal protective equipment (PPE). The Air Force converted from proximity gear to structure gear in 2012 and ANG departments started receiving structure gear between 2012 and 2013. This puts our current first set of gear at 8-9 years of age. Per NFPA 1851, 10.1.2. “Structural firefighting ensembles and ensemble elements shall be retired IAW 10.2.1 or 10.2.2, no more than 10 years from the date the ensemble or ensemble elements were manufactured. Per NFPA 1851, 3.3.32 an Ensemble Element is “The compliant products that provide protection to the upper and lower torso, arms, legs, head, hands and feet.”

2. Mission(s)/Operational Impact(s), if not funded/addressed:

ANG first set of gear is set to expire in 2022. PPE are essential in performing ANGs firefighting DOMOPS mission. It is vital that ANG Firefighters have PPE that meet standards.

3. Affected Units:

The ANG’s 62 FES units

4. Info Paper Author/contact email (POC):

SMSgt Ryan Baker / firefighter4892@gmail.com

5. Program Details.

Quantity	Unit Cost	Program Cost
1,674 Turnout Coats	\$1,325	\$2,218,050
1,674 Turnout Trousers	\$878	\$1,469,772
1,674 Helmets	\$258	\$431,892
1,674 Gloves	\$90	\$150,660
1,674 Nomex Hoods	\$98	\$164,052
1,674 Boots	\$450	\$753,300
Total		\$5,187,726

INDIVIDUAL WILDLAND FIREFIGHTING KITS

1. Background:

The ANG lacks the capability to properly train firefighters due to having firefighting kits that do not meet federal training requirements. ANG fire and emergency services (FES) flights are required through AFI 32-2001 section 3.2.3.1 to provide initial response to wildland fires and provide Wildland Urban Interface protection to their installation. Recent updates to AFI 32-7064, Integrated Natural Resources Management, also provides a means for firefighters to receive additional free training through the National Wildland Coordinating Group (NWCG) that allows firefighters to respond on large scale wildland fires in their State and across the nation. All ANG FES flights must first complete the free NWCG training either through the DOD certification system or through their local Bureau of Land Management or Forest Service NWCG trainers. Once firefighters are trained, they must be properly equipped in accordance with NFPA 1977. In 2018 the purchase of dual compliant Wildland/USAR personal protective equipment (PPE) was approved but the individual equipment piece was overlooked. In 2020 the dual compliant PPE was sent out to all units so that portion is no longer needed. With the purchase of 10 kits for each of the 63 FES units plus 5 non-FES units (68 total units), the ANG would have a fully equipped teams of wildland firefighters to meet this critical state and Defense Support to Civil Authorities missions.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If the Wildland Firefighting Kits are not funded individual units responding to wildland fires may not have the appropriate equipment or training to properly fight these fires putting the community and firefighters at risk.

3. Affected Units:

All 63 FES units plus 5 non-FES units (68 total units).

4. Info Paper Author/contact email (POC):

MSgt Tim Tollefson / timothy.tollefson@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
680 Wildland Firefighting Kits (Includes fire shelter, line pack, leg protection, eye protection, neck shroud, helmet, and gloves.)	\$850	\$578,000
680 Dual Compliant Wildland Boots	\$349	\$237,320
Total		\$815,320

HIGH PRESSURE BREATHING AIR SYSTEM (CASCADE)

1. Background:

The ANG lacks the capability to protect fire fighters due to the inability to fill the new self-contained breathing apparatus (SCBA). Firefighters and Emergency Management personnel must breathe air through a Self-Contained Breathing Apparatus (SCBA) when entering a hazardous or toxic environment which includes rooms that could potentially be filled with smoke such as during a fire alarm investigation or whenever they are within 75 feet or less of an aircraft that has declared an emergency. To fill these air bottles after a real-world event or training we must use an air compressor-based fill station. The ANG current system is outdated and the new generation SCBA will require higher capacity fill stations. The system fielding plan calls for one system for each ANG wing with a fulltime fire department that supports on-site flying.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If the “Cascade Systems” are not funded and the current system failed, the ANG would be unable to fill the new self-contained breathing apparatus (SCBA). ANG Fire departments would be unable to enter toxic environments that occur during aircraft emergencies and facility fires.

3. Affected Units:

The 58 ANG Unit with full time firefighting capabilities

4. Info Paper Author/contact email (POC):

TSgt Matthew Harrington / matthew.harrington.1@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
High Pressure Breathing Air System (58 units)	\$86,875	\$5,038,750
Total		\$5,038,750

AIRCRAFT AND STRUCTURAL LIVE FIRE TRAINING EQUIPMENT

1. Background:

The ANG lacks the capability to meet unit annual training needs due to the lack of modernized portable live-fire training equipment to support Fire and Emergency Services (FES). 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 (RTS) and Combat Readiness Training Centers (CRTC) possess live-fire training assets, but they are routinely out of service and are increasingly obsolete. With the introduction of new technologies, ARFF personnel have had the option to train on both mobile as well as fixed training facilities. 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. This process should start with modernizing existing trainers at the RTS and CRTC sites followed by the purchase of mobile trainers at units within the remaining FEMA regions.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

With new training requirements and aging existing trainers, there will be a sharp decline in trained firefighters required to perform assigned missions until training requirements are met.

3. Affected Units:

The ANG requires a mobile aircraft and structural burn training system in each of the ten FEMA regions.

4. Info Paper Author/contact email (POC):

SMSgt David Ferris / david.ferris.1@us.af.mil

5. Program Details.

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

Information and Planning

Information and Planning (ESF 5) –

Information and Planning has grown due to the sheer volume of information available to responders and incident commanders 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 available resources. 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 ability to receive ground truth information from responders and communicate it accurately to decision makers.

ESF 5 - Information and Planning

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- All-Hazard Response Trailer Modernization
- Unified Common Operational Picture Integration
- Secure Portable Chemical Biological Radiological Nuclear Sensor Integration
- Integrated Unmanned Situational Awareness System
- Engineer Multi-Craft Training Simulator

Essential Capabilities List

- Airborne Full Motion Video Downlink Kit
- All Hazards Synthetic Aperture RADAR Imagery
- Wide Area Multi-Spectrum Imagery
- Hardening Resiliency for Generators
- HSEEP Compliant Exercise Toolkit

Desired Capabilities List

- Tempest Container for Classified Systems

ALL-HAZARD RESPONSE TRAILER MODERNIZATION

1. Background:

The ANG lacks the capability to support complex/long duration Chemical, Biological, Radiological and Nuclear (CBRN) missions due to outdated an CBRN trailer fleet. Retro-fitting existing trailers into a multi-capable incident response trailer will provide data connections, increased work area and improved environment controls to support incident command and Joint Task Force teams. Installing additional cooling and heating, along with increasing the insulation allows for sustaining interior trailer temperatures. To increase the workspace footprint by 600 square feet, a collapsible, ruggedized, and weather resistant shelter that attaches to the trailer is required. The ANG requires modernization of existing trailers located at 65 Emergency Management Flights.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the current response trailers are not capable of supporting a complex or long duration incident. Additionally, weather/extreme temperatures will continue to limit the mission effectiveness and employment of the response trailer.

3. Affected Units:

65 ANG Wings that currently possess the CBRN Response Trailer that need the upgrade.

4. Info Paper Author/contact email (POC):

CMSgt Jeremy Bethke / jeremy.bethke@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
65 Trailer Skin Refurbishment	\$5,000	\$325,000
65 Insulation Kits	\$4,000	\$260,000
65 Heating Kits	\$4,500	\$292,500
65 Air Conditioner Upgrade	\$3,500	\$227,500
65 Expansion Shelters	\$75,000	\$4,875,000
65 Communications Plug-In Kits	\$5,000	\$325,000
65 Sway Control Bar Systems	\$1,500	\$97,500
Total		\$6,402,500

UNIFIED COMMON OPERATING PICTURE INTEGRATION

1. Background:

The ANG lacks the capability to provide seamless, timely digital data integration with our first responder mission partners due to the lack of a unified common operating picture. Without a common operating picture (COP), there are delays and lost data/information on incident status, accountability of resources and shared situational awareness needed to make effective, efficient, life-saving decisions and coordination during an emergency. ANG capabilities that do not have dynamic interoperable data exchange between military and civilian COPs have burdened many of our partners and dissuaded them from maximizing some of our capabilities. We require a single “middleware” tool that ingests data of various open-architecture and proprietary formats from approved users, converts those formats into other open-architecture formats-of-choice, then disseminates as a persistent data feed to approved mission partner weapon system, intelligence analysis, airspace monitoring, or friendly-force tracking systems.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG units will continue lacking critical near-real-time situational awareness as our mission partners and prevent actionable intelligence/information from reaching decision-makers at the speed of relevance. Mission partners may continue to marginalize some ANG capabilities due to integration challenges.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

Lt Col Jason Flowers / jason.flowers@us.af.mil;
Maj Megan Stromberg / megan.stromberg.2@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
Non-recurring engineering (NRE) for data hub design & development	\$920,000	\$920,000
NRE for Tactical Assault Kit (TAK) optimization	\$230,000	\$230,000
Network hosting (for three years)	\$700,000	\$700,000
Integration for field level data input	\$500,000	\$500,000
Total		\$2,350,000

**SECURE PORTABLE CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR
SENSOR INTEGRATION**

1. Background:

The ANG Emergency Management career field cannot rapidly deploy and monitor currently fielded detection equipment due to a lack of specialized equipment. All ANG Emergency Management units require a rapidly deployable Chemical, Biological, Radiological and Nuclear detection grid suite that facilitates the rapid flow of information from field level sensors to the team lead. This suite will use Government off the Shelf software as the backbone and have its own independent wireless mesh network for data transfer. Currently fielded sensors are incompatible with the fielded software and mesh network and require non-recurring engineering or replacement. End user devices are also needed to provide situational awareness and to control sensors remotely. This suite will provide the near real-time data needed for Emergency Management personnel to provide rapid, accurate Mission Oriented Protective Posture recommendations for decision makers and determining other lifesaving actions. Integration will be needed for the inclusion of data into the current Common Operational Picture for the ANG.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG units will continue to lack the same critical near-real-time situational awareness as our mission partners and prevent actionable intelligence/information from reaching decision-makers at the speed of relevance.

3. Affected Units:

Each of the 90 ANG Wings

4. Info Paper Author/contact email (POC):

CMSgt Jared Hiles / jared.hiles.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
NRE for integration of existing systems of record	\$500,000	\$500,000
NGB leadership update system enhancements	\$500,000	\$500,000
NRE for currently fielded equipment integration	\$300,000	\$300,000
400 End User Devices for Integration	\$25,000	\$10,000,000
400 Tactical Gear for End User Devices	\$4,000	\$1,600,000
400 Mobile Ad-Hoc Network Radios	\$15,000	\$6,000,000
Total		\$18,900,000

INTEGRATED UNMANNED SITUATIONAL AWARENESS SYSTEM

1. Background:

The ANG lacks the capability to provide real-time situational assessments due to a lack of unmanned systems that can be used to simultaneously provide situational awareness to a single node of users. These unmanned systems include ground and aerial assets. Each asset, regardless of ground or air must, be capable of transporting multiple sensors that also provide live data back to the same single node of users. These sensors include, but are not limited to, visual, thermal, chemical, and radiological. Additionally, all sensor feeds will need to have the ability to be controlled through a Government off the Shelf software. One Integrated Unmanned Situational Awareness System will be placed regionally to support 92 Civil Engineer Prime Base Engineer Emergency Force (BEEF) units.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the ANG's unit's ability to provide decision makers with real-time assessments, and safe unmanned rapid ground surveys for emergency recovery operations will be hindered.

3. Affected Units:

92 ANG Civil Engineer Prime BEEF Units

4. Info Paper Author/contact email (POC):

SMSgt Ross Chappell / ross.chappell.1@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
10 Unmanned Ground System	\$100,000	\$1,000,000
10 Unmanned Aerial System	\$50,000	\$500,000
Non-recurring engineering (NRE) software integration	\$675,000	\$675,000
20 Mobile Ad-Hoc Network Radios	\$15,000	\$300,000
Total		\$2,475,000

ENGINEER MULTI-CRAFT TRAINING SIMULATOR

1. Background:

The ANG lacks the capability to maintain civil engineer readiness due to the lack of training equipment. The ANG Civil Engineer community requires realistic CBRN and equipment training simulation systems to increase Mission Ready Airman (MRA) proficiency at the tactical level. Training simulation devices increase Agile Combat Employment (ACE) Support and National Guard operational readiness to provide Airman centralized cross-functional training for wartime skills when equipment is not available locally. Training simulator packages will be placed regionally to support 92 Civil Engineer Prime Base Engineer Emergency Force (BEEF) and 9 Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE) units.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, the Air National Guard Civil Engineer enterprise will continue to encounter reduced readiness due to the lack of training equipment for over 10,000 Civil Engineers and 7,000 specialized team members.

3. Affected Units:

92 ANG Prime BEEF Units and 9 ANG RED HORSE Units

4. Info Paper Author/contact email (POC):

CMSgt Noah Flick / noah.flick@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
10 Heavy Equipment Simulator (Equipment & Software)	\$100, 000	\$1,000, 000
10 Simulator Equipment Packages (Quantity 92)	\$1,500	\$138,000
Simulator Software	\$550,000	\$5,500,000
Total		\$6,638,000

Mass Care, Emergency Assistance, Temporary Housing & Human Services

Mass Care, Emergency Assistance, Temporary Housing, & Human Services (ESF 6) – During a disaster, mass care assistance includes the delivery of mass shelter, feeding, and first aid for disaster survivors, fatality management, religious support and systems to distribute emergency relief. 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 2019, 2020 and 2021 hurricane seasons. During these events, thousands of Soldiers and Airmen were called upon to provide emergency assistance and temporary housing. Additionally, the severe 2021 wildfire season in California 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 scene, and achieve a more effective response to a mass care situation.



ESF 6 - Mass Care, Emergency Assistance, Temporary Housing & Human Services

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- CBRN Protective Suits
- CBRN Generator Modernization
- Disaster Relief Mobile Kitchen Trailer (DRMKT)
- Ultra-Light Tactical Vehicle (ULTV)
- Purified Water Generation

Essential Capabilities List

- Expandable Kitchen
- FSRT Tactical Hearing Protection

Desired Capabilities List

- None

CBRN PROTECTIVE SUITS

1. Background:

The ANG struggles to perform fatality search and rescue recovery team missions due to the lack of personal protective gear (PPE). Current MT94 suits are expiring. A lighter more flexible suit is needed for continued recovery operation. The MT94 suit is a heavily constructed suit which causes the service member to exhaust their energy rapidly creating burnout at an accelerated pace. ANG service members in the current suits are only able to work in one-hour increments before transitioning out. FEMA has recommended three days in MT94 for recovery and two days in a less restricted ensemble. Using the current MT94 suits the Fatality Search and Recovery Teams (FSRT) cannot expedite the recovery process being hampered by cumbersome equipment.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

The mission to recover remains, in a contested environment, shall be delayed. If not funded, FSRT will not be able to refresh the critical PPE required to execute the mission.

3. Affected Units:

27 ANG FSRT Units

4. Info Paper Author/contact email (POC):

Robert Kaczorowski / robert.kaczorowski.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
1188 Lightweight CBRN Suits	\$580.00	\$689,040
Total		\$689,040

CBRN GENERATOR MODERNIZATION

1. Background:

The ANG lacks the capability to generate electrical power at incident response sites due to aging power generators. Generator modernization enhances the Chemical, Biological, Radiological, and Nuclear (CBRN) Enhanced Response Force Package (CERF-P) and CBRN Task Force (CBRN TF) Medical Elements (MEDEL) ability to provide triage, emergency medicine, patient stabilization, and life-saving medicine to mitigate the effects of a terrorist incident or natural/man-made disaster. These ANG teams are a component of the CBRN Response Enterprise (CRE) and provide Defense Support of Civil Authorities (DSCA) support. The current 17.5 kW gas generators are between 8 to 10 years old. Modernization of the ANG's current generator sets is critical towards ensuring the ANG's ability to save lives and mitigate human suffering.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, medical equipment and environmental controls will be at risk of not being available due to aging generators.

3. Affected Units:

27 States that have CBRN TF Medical Element Mission.

4. Info Paper Author/contact email (POC):

Mr. Daniel Smith, JSG / daniel.smith.225.ctr@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
150 x 17.5 kW Gas Generators	\$6,000	\$900,000
Total		\$900,000

DISASTER RELIEF MOBILE KITCHEN TRAILER

1. Background:

The ANG lacks the capability to provide mass field feeding due to the lack of disaster relief mobile kitchen trailers (DRMKT). The ANG requires additional DRMKTs to support domestic emergencies, National Special Security Events (NSSEs), and large-scale/catastrophic domestic incidents requiring a robust ANG response effort. 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. This capability would delete the use of Unitized Group Rations (UGR's) in the field. The amount of UGR's available is not an indefinite supply and a need to prepare fresh rations is greatly needed. The capability must be highly mobile as ANG missions can rapidly change. The ANG needs 30 additional DRMKTs to provide one DRMKT in every state and territory

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, States will continue to compete for limited DRMKT availabilities.

3. Affected Units:

30 ANG Wings currently without DRMKT

4. Info Paper Author/contact email (POC):

Robert Kaczorowski / robert.kaczorowski.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
30 DRMKT's	\$750,000	\$22,500,000
Total		\$22,500,000

ULTRA LIGHT TERRAIN VEHICLE

1. Background:

The ANG lacks the capability to safely and effectively transport Fatality Search and Recovery Teams (FSRT) into a mass fatality incident due to outdated equipment. The current equipment is 10 years old and almost every team in the nation has reduced capabilities due to the degradation of these machines. The modernization of the Ultra Light Terrain Vehicles (ULTVs) and trailers is essential to mission success in mass fatality incidents. The ANG FSRT requires a full modernization to the 3 FSRT ULTVs and 2 trailers located at each of the 27 FSRT deployable units

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, mission success is compromised given the need to safely and effectively transport FSRT members tasked to recover remains following a terrorist incident or man-made/natural disaster

3. Affected Units:

All 27 ANG FSRT

4. Info Paper Author/contact email (POC):

MSgt Sheryl Lomonaco / Sheryl.Lomonaco@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
81 ULTV	\$52,000.00	\$4,212,000.00
81 Recovery Skid	\$8,000.00	\$648,000.00
54 Tandem Trailers	\$58,000.00	\$3,132,000.00
Total		\$7,992,000.00

PURIFIED WATER GENERATION

1. Background:

The ANG Civil Engineers require a purified water generation capability in the event local utilities are unable to produce potable water for base populations and specialized limited use applications within the community following natural and man-made disasters. Most Air Force installations have no capabilities for water filtration or generating potable water. These installations are solely reliant on the local utility companies to provide potable water for their base population. This requirement further extends to the National Guard's capability to help civilian emergency services in the event of a disaster that may cripple or disable the local utilities capability to provide potable water for life saving services such as medical, CBRN, or for first responders. Atmospheric Water Generation (AWG) will greatly increase the ANG's ability to provide water to regions with limited surface water resources or principal aquifers. Reverse Osmosis Water Purification Units (ROWPU) can only be used where there is surface water available. An AWG is capable of pulling water from the humidity in the air, condensing it, and purifying it. Without potable water the ANG cannot provide aid to first responders and cannot continue its mission. This capability bolsters the ANG's missions whether it be supporting the Agile Combat Employment mission in austere locations or helping the civil authorities during domestic operations. Two units are required at each FEMA region.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, Airmen cannot perform the mission due to the lack of potable water.

3. Affected Units:

All 10 FEMA regions

4. Info Paper Author/contact email (POC):

Maj. Nathan Brock / nathan.brock.1@us.af.mil

5. Program Details.

Quantity	Unit Cost	Program Cost
20 Atmospheric Water Generation	\$400,000	\$8,000,000
Total		\$8,000,000

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

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Transportable Fuel Storage and Pump Capability
- Mobile Loading Dock and Trailer Ramps
- Modular Aircraft Loading Ramps
- Hard Sided Expandable Small Air Mobile Shelter
- Stackable Modular Agile Storage Solution (ISU 90 Size)

Essential Capabilities List

- Self-Loading 8,000 Pound Forklift and Trailer Combination
- Stackable Modular Agile Storage Solution (ISU 90 Size)
- 25K Pound High Reach Aircraft Loader

Desired Capabilities List

- None

TRANSPORTABLE FUEL STORAGE AND PUMP CAPACITY

1. Background:

The ANG lacks the ability to store and deliver motor gas and diesel fuel due to the lack of transportable fuel storage and pumps. A reliable, transportable, and consolidated motor gas and diesel fuel storage/delivery capability for fueling a wide range of vehicles and equipment to include rescue and recovery vehicles, ground debris removal equipment, and generators enables the ANG to remain ready for a wide range of missions. The capability must be environmentally safe, self-contained, securable, and designed to be easily loaded onto stake bed trucks or service trailers with standard Material Handling Equipment (MHE) for quick response and transportation to urban, semi urban, and remote sites. Northern tier bases require units with integrated heaters to maintain fuel integrity and prevent diesel gelling. Alaska requires suitability for operating in arctic conditions down to -60 degrees Fahrenheit for extended periods of time. Each ANG wing requires a quantity of four (up to 300 gallon capacity) transportable and consolidated fuel storage/delivery systems capable of transporting and storing diesel or gasoline for domestic and Agile Combat Employment missions.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Units will be forced to rely on aging, unreliable, and often non-mission capable legacy C-300 refuelers, civilian infrastructure (which may be compromised by the event prompting the response) or forced to request support from other agencies to meet ground fuel needs. Without ground fuel, mission tasks are slowed or entirely stopped.

3. Affected Units:

All 90 ANG Wings.

4. Info Paper Author/contact email (POC):

Capt Jacob Knutson / jacob.knutson.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
148 300-gallon diesel transportable fuel containers with pumps	\$9,900	\$1,465,000
148 300-gallon gasoline transportable fuel containers with pumps	\$9,900	\$1,465,000
80 300-gallon diesel transportable fuel containers with pumps with heater	\$19,500	\$1,560,000
80 300-gallon gasoline transportable fuel containers with pumps with heater	\$11,000	\$880,000
Total		\$5,370,000

MOBILE LOADING DOCK AND TRAILER RAMPS

1. Background:

The ANG lacks the ability to enable cargo transfer operations in a variety of configurations and geographic locations due to the lack of mobile loading docks and trailer ramps. 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 disbursement of supplies and equipment to disaster-stricken areas. Mobile loading docks better equip 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 set.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Responders will be limited by existing civil/military infrastructure capable of offloading tractor-trailers rather than having the flexibility to offload at incident sites. The mission will be slowed without this autonomous capability as these locations may be damaged, inaccessible, or at significant distance from the actual incident site.

3. Affected Units:

All 90 ANG Wings.

4. Info Paper Author/contact email (POC):

Capt Jacob Knutson / jacob.knutson.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
48 Mobile Loading Docks	\$81,601	\$3916894
48 Trailer Ramp Sets	\$7,000	\$630,000
Total		\$2,880,000

MODULAR AIRCRAFT LOADING RAMPS

1. Background:

The ANG lacks the capability to off-load and on-load critical cargo during both domestic and ACE (Agile Combat Employment) missions. Logistics units are responsible for moving personnel, large equipment, supplies and over sized vehicles at home and abroad during disaster relief efforts but lack loading docks to allow rapid off-load and on-load of supplies and equipment. The lack of loading docks hinders response efforts to receive and disperse critical relief supplies in disaster locations. Modular aircraft loading ramps allow time sensitive equipment and supplies to be rapidly delivered to the incident site.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, critical cargo movement operations in time sensitive DOMOPS scenarios, will continue to be hampered by the slow and highly inefficient method currently employed.

3. Affected Units:

26 ANG units require modular aircraft loading ramps.

4. Info Paper Author/contact email (POC):

SMSgt George Ehrlichman / george.ehrlichman.1@us.af.mil

5. Program Details

Quantity	Unit Cost	Program Cost
26 Modular Aircraft Loading Ramps	\$61,000	\$1,586,000.00
Total		\$1,586,000.00

HARD SIDED MOBILE SHELTER

1. Background:

The ANG lacks a portable hard-sided mobile operations center hindering the efficient movement of personnel, equipment, and supplies during cargo deployment operations. This is particularly acute during operations in austere locations. Portable work centers provide the incident commander a central, self-sufficient location from which to conduct operations in disaster stricken areas with minimal impact on mission success. During cargo movement operations the portable work centers can be used for flight line visibility, load planning, in-transit visibility, joint inspection, cargo and passenger manifesting. 32 ANG units, plus one additional at each wing with a Contingency Response Groups (CRG), will receive a portable work center.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, critical cargo movement operations in time sensitive domestic operations overseas and Agile Combat Employment missions will be hampered by the slow and highly inefficient method currently employed.

3. Affected Units:

This affects each of the 32 CRG ANG Units.

4. Info Paper Author/contact email (POC):

SMSgt George Ehrlichman / george.ehrlichman.1@us.af.mil

5. Program Details

Quantity	Unit Cost	Program Cost
36 Work Centers	\$235,245	\$8,468,820
Total		\$8,468,820

STACKABLE MODULAR AGILE STORAGE SOLUTION (ISU 90 SIZE)

1. Background:

The ANG lacks the ability to safely and correctly store assets needed to successfully complete domestic and overseas missions primarily due to a lack of proper storage space. Modular Stackable Storage in an ISU 90 size provide Wings an additional capability to store needed equipment out of the elements without significantly increasing the storage footprint or requiring additional warehouse space. Currently Wings are storing equipment in warehouse space not calculated to include that equipment. This results in equipment being exposed to the elements resulting in increased maintenance costs or mission degradation.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Items acquired for DOMOPS will continue to be stored ad hoc and/or exposed to the sun, rain and inclement weather. This negatively affect the storage and warehouse operations for a Wing's primary mission and results in premature weathering and mission degradation. Each Wing will require six units of modular storage allowing 12 ISUs to be stored.

3. Affected Units:

All 90 Wings.

4. Info Paper Author/contact email (POC):

Capt Jacob Knutson / jacob.knutson.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
540 Modular Storage Units	\$25,000	\$13,500,000
Total		\$13,500,000

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

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Rapid Response Shelters
- Tactical Combat Casualty Care Medical Training Kits
- Critical Care Air Transport Team (CCATT) / En Route Patient Staging System (ERPSS) Training Kits
- Oxygen Generation System
- Aeromedical Evacuation Assemblage

Essential Capabilities List

- None

Desired Capabilities List

- None

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) lacks rapid response shelters from which to provide prompt medical care. Currently the CERFP deploys pole and A-frame tents which are slow to deploy, place members at risk for injuries, and requires numerous team members several hours to deploy.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Declining to fund rapid response shelters negatively impacts the ANG’s ability to rapidly provide medical assets required to save lives and prevent suffering after a terrorist incident or natural/manmade disaster.

3. Affected Units:

All CBRNE/CERFP units.

4. Info Paper Author/contact email (POC):

Mr. Dan Smith / daniel.r.smith56.ctr@army.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
162 Rapid Response Shelters	\$20,804	\$3,370,240
162 Air Shelter Anchor Sets w/Water Bladders	\$625	\$101,250
162 Air Shelter Radiant Barrier Insulation Kits with HVAC Plenum	\$3,200	\$518,400
162 LED Lighting System/Control Box Kits for Shelters	\$5,527	\$895,374
162 Equipment Fastening Rod Kits/Equipment GFCI Outlet	\$500	\$81,000
Total		\$4,966,272

CRITICAL CARE AIR TRANSPORT TEAM/ ENROUTE PATIENT STAGING SYSTEM KITS

1. Background:

The ANG lacks the ability to safely execute patient movement from one level of care to another due to the lack of critical care air transport team/enroute patient staging system kits. En Route Care (ERC) systems include Aeromedical Evacuation (AE), En-Route Patient Staging Systems (ERPSS), and Critical Care Air Transport Teams (CCATTs). The ANG ERC assets also support the Defense Support of Civil Authorities (DSCA) missions as determined by the scope of the event as well as Agile Combat Employment missions. CCATTs maintain and enhance the standard of care for critically ill/injured patients who require continuous stabilization and advanced care during transport. CCATTs can continuously monitor and maintain the stabilization of critically ill/injured patients during ERC in either an inter- or intra-theater mission support role. CCATTs should conduct regular currency training, on current equipment sets to maintain critical familiarization with equipment, teammates, and clinical practice standards. ANG CCATTs do not maintain real-world or training equipment. When activated, ANG CCATTs fall in on equipment managed by the Active Component. It is cost-prohibitive for ANG Medical Groups to purchase, store, and maintain equipment independently. To overcome ANG CCATT training barriers, the ANG Surgeon is developing regional CCATT training centers for ANG CCATTs for high fidelity simulation training. Regional training offers significant cost savings and higher fidelity training versus unit-based training. Support of CCATT training equipment sets by USAF and ANG senior leadership increases the readiness of CCATTs and life-saving competencies in real-world critical care scenarios.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

In addition to stated planning and readiness requirements outlined in Air Force Instruction 41-106 “Air Force Medical Readiness Program”, Air Mobility Command (AMC) has levied additional readiness requirements for CCATT teams. Following their advanced team certification, the unit must maintain readiness at 100% and recertify on a 4-year rotation. These additional requirements will further compound already existing readiness shortfalls due to a lack of course training seats available to individuals as well as a lack of training equipment at the unit level. Not funding this initiative will result in continued struggles with CCATT-qualified units.

3. Affected Units:

All CCATT assigned units within the 10-region configuration.

4. Info Paper Author/contact email (POC):

Lt Col Penny Glenn / penny.glenn.2@us.af.mil

5. Program Details:

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

TACTICAL COMBAT CASUALTY CARE

1. Background:

The ANG lacks the capability to properly train members in tactical combat casualty care due to the lack of modernized tactical casualty care training kits. In February 2021, Tactical Combat Casualty Care (TCCC) replaced Self Aid Buddy Care (SABC) as the Department of the Air Force (DAF) standard of care for first responders (medical and non-medical; Tiers 1-4). All Air National Guard (ANG) personnel will require initial TCCC training before deployment. The Air Force Medical Service (AFMS) will also require more in-depth, role-based (clinical/non-clinical) courses. The Defense Health Agency (DHA) is responsible for developing the standardized, role based TCCC curricula, and the Services are responsible for implementation. DHA will provide the necessary educational infrastructure to increase the quality of TCCC training in the DoD and, as a result, improve the outcome for our nation’s combat wounded. 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 94 ANG Medical Units.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded the ANG will lack the skills learned from TCCC and will not be able to bring these skill sets to deployments nor apply them to daily operations. TCCC is beneficial to unit safety, readiness, and traumatic event survivability. If not funded, the ANG will continue to struggle to meet the required deadline for a 100% TCCC-trained force due to a lack of necessary equipment to accomplish these requirements.

3. Affected Units:

94 Air National Guard Medical Units

4. Info Paper Author/contact email (POC):

CMSgt Barbara Maglaqui / barbara.maglaqui@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
188 TCCC Course Materials (NREMT)	\$12,618	\$2,372,184
188 TMK – IFAK Pouch & Insert Supplies	\$8,984	\$1,688,992
188 Medical Supplies	\$19,088	\$3,588,540
188 Manikin	\$134,200	\$25,229,600
Total		\$32,879,316

OXYGEN GENERATION SYSTEM

1. Background:

The ANG lacks the ability to produce critical supplies of oxygen due to current equipment being at end of its life cycle. The manufacturer no longer supports the current oxygen distribution system and replacement parts are no longer available. This current system uses high-pressure oxygen cylinders, which create unacceptable logistical burdens as well as safety concerns related to transportation, cylinder refill, and storage. A modernized self-contained oxygen generation system producing 93% oxygen from ambient air eliminates resupply requirements and ensures that in mass casualty events oxygen is available to the Chemical, Radiological, Nuclear, and Explosives Response Enterprise (CBRNE) responders in for domestic and Agile Combat Employment missions.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

The present oxygen supply system has reached its end-of-life cycle and must be replaced. Failure to fund this critical priority will lead to units that cannot meet Air Force readiness requirements due to inoperable systems and inability to produce their own high flow oxygen for life saving missions during a domestic all-hazards response.

3. Affected Units:

27 ANG Homeland Response Force Air National Guard Medical Elements.

4. Info Paper Author/contact email (POC):

Mr. Dan Smith / daniel.r.smith56.ctr@army.mil

5. Program Details:

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

AEROMEDICAL EVACUATION EQUIPMENT KITS

1. Background:

The ANG lacks the ability to safely move critical and non-critical patients due to the lack of aeromedical evacuation equipment kits. Aeromedical Evacuation (AE) units require additional In-Flight Equipment Kits (IFK) used during AE Missions. During mass civilian evacuations, the ANG is tasked with supporting the air transport of non-critical and critically ill patients located in hospitals in the affected area. An AE IFK, consisting of a defibrillator, vital signs monitor, intravenous (IV) infusion pump, suction pump, airway management kit, and patient care supplies will significantly improve a patient's chances of survival during transport. Based on historical data from previous disaster relief efforts, the ANG requires enough AE IFKs to move up to 560 patients in 24 hours. AE crews and IFKs are required for all patient movement including for critically ill patients. One AE IFK is required at each of the 10 ANG AE units.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If equipment is not funded the ANG AE mission will be degraded and patients' lives will be placed in jeopardy.

3. Affected Units:

10 ANG AE units

4. Info Paper Author/contact email (POC):

Lt Col Jason Arndt / jason.arndt.1@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
10 Aeromedical Evacuation Kits	\$350,000	\$3,500,000
Total		\$3,500,000

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 FEMA 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

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Urban Search & Rescue Kit Modernization
- Structural Stabilization Modernization Package
- Integrated Active Shooter Body Armor
- Asset Data Tracking & Hazard Communication
- Video Dissemination Capability

Essential Capabilities List

- Urban Search & Rescue Mobility Package
- Extreme Cold Weather Personal Protective Equipment
- Agile Airborne Communication Pod
- Water Rescue Package
- sUAS Search Capabilities

Desired Capabilities List

- None

URBAN SEARCH & RESCUE KIT MODERNIZATION

1. Background:

The ANG lacks the capability to conduct responsive Urban Search & Rescue (USAR) missions due to the lack of modernized equipment. USAR teams require a cache of equipment suitable to support training and rescue requirements. Breaching/breaking, saw, E-draulic and rope rescue kits allows for cutting, breaking, and drilling of concrete and metals along with allowing teams to access trapped victims in difficult locations, common to USAR events. The breaching breaking, saw and E-draulic kit enables the ability to gain access into light and heavy construction collapse scenarios. In accordance with National Fire Protection Association (NFPA) 1006, 1670, this breaching breaking rescue package will remedy existing breaching breaking short falls. The rope rescue kit enables the ANG’s ability to perform high-line, high-angle, and low-angle rescues. In accordance with NFPA 1858, this rope rescue kit will remedy existing rope rescue compliance shortfalls.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Without this equipment cache, USAR team’s efficiency and effectiveness shall degrade when performing mission tasks and negatively impacts interoperability when working with other USAR entities.

3. Affected Units:

62 USAR teams

4. Info Paper Author/contact email (POC):

MSgt Erik Roddy / erik.rodny@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
62 Breaching Breaking Kits	\$4,570	\$283,340
62 Saw Kits	\$3,714	\$230,268
62 “e-DRAULIC” Kits	\$45,000	\$2,790,000
62 Rope Rescue Kits	\$16,233	\$1,006,446
Total		\$4,310,054

STRUCTURAL STABILIZATION MODERNIZATION PACKAGE

1. Background:

The ANG lacks the capability to perform Urban Search & Rescue (USAR) missions, in compromised structures, due to the lack of a modernized structural stabilization packages. ANG USAR teams require a cache of equipment suitable to support training and rescue requirements. A structural stabilization package will enable USAR teams to have the ability to perform in light and heavy construction collapse scenarios. In accordance with National Fire Protection Association (NFPA) 1006, 1670, this structural stabilization rescue package will remedy existing structural stabilization short falls.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Without this equipment cache, it compromises the ANG's ability to efficiently and effectively conduct USAR missions and compromises the ANG's interoperability when working with other USAR entities.

3. Affected Units:

62 USAR teams

4. Info Paper Author/contact email (POC):

MSgt Erik Roddy /erik.rodgy@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
62 Structural Stabilization Packages	\$76,105	\$4,718,510
Total		\$4,718,510

INTEGRATED ACTIVE SHOOTER BODY ARMOR

1. Background:

The ANG emergency response forces lack the capability to respond to active shooter incidents due to the lack of integrated body armor. ANG emergency response force requires integrated body armor to provide personal protection equipment during active shooter incidents. Emergency responders currently lack protective equipment to prevent injury while responding to active shooter incidents. The system should include a ballistic vest, ballistic helmet, and individual first aid kit (IFAK) for personal protection. In accordance with National Fire Protection Association (NFPA) 3000 guidance, this personal protective package satisfies this compliance requirement.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

The ANG’s ability to respond during Active Shooter Hostile Event Response (ASHER) will be negatively impacted by not enabling agile rescue of victims from the warm zone and slows required mitigation efforts by ANG Defenders.

3. Affected Units:

62 USAR teams

4. Info Paper Author/contact email (POC):

CMSgt Brian Stiteler / brian.stiteler@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
372 Ballistic Vests with Level III Plates	\$3,000	\$1,116,000
372 Ballistic Helmets	\$800	\$297,600
372 IFAKs	\$80	\$29,760
Total		\$1,443,360

ASSET DATA TRACKING & HAZARD COMMUNICATION KIT

1. Background:

The ANG’s emergency response forces lack the ability to conduct real time asset tracking, area mapping, communications, and internet connectivity due to the lack of asset data tracking and hazard communication kits. The kit would include a non-networked laptop and barcode system giving the logistics officer the ability to continuously track equipment, as well as keeping inventory accurate and up to date. The administration kit would include a non-networked laptop, desktop printer/copier/scanner, laminator, and Low Earth Orbit (LEO) kit allowing download of offline maps to the laptop as a visual of what an area looked like before the disaster. While connected, users can access the Dom-ops Awareness and Assessment Response Tool (DAART) which can give an overhead visual of what the area looks like currently. Users will have the capability to print and laminate before and after maps so rescue squads can track current weather and news about the affected area and to push real time situation reports to the incident commander. The hazardous communication kit would allow rescue teams to communicate between each other and the incident commander during difficult rescues where the environment noise levels are extreme.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

The ANG’s ability to respond during Active Shooter Hostile Event Response (ASHER) will be negatively impacted by not enabling agile rescue of victims from the warm zone and slow rapid mitigation efforts by ANG Defenders.

3. Affected Units:

62 USAR teams

4. Info Paper Author/contact email (POC):

CMSgt Brian Stiteler / brian.stiteler@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
62 Logistic Kits	\$7,400	\$458,800
62 Administration Kits	\$1,700	\$105,400
62 Hazard Communication Kits	\$10,000	\$620,000
Total		\$1,184,200

VIDEO DISSEMINATION EQUIPMENT

1. Background:

The ANG lacks the ability to properly disseminate MQ-9 data and video due to the lack of video dissemination equipment. The current MQ-9 enterprise of 12 MQ-9 units currently relies on a single site for video dissemination that is operating on a limited budget and capability. The California ANG has provided this service as a proof of concept for the rest of the MQ-9 community to emulate. The current video dissemination capacity is well below the level necessary to adequately provide for ongoing the domestic operations (DOMOPS), as well as training and operational requirements of all states that share emergency response assets through Emergency Management Assistance Compact (EMAC) processes.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

The ANG’s ability to support domestic and federal mission training will be negatively impacted. Effectiveness of MQ-9 integration into Search and Rescue operations and training will be inhibited.

3. Affected Units:

ANG MQ-9 units in AZ, CA, TX, ND, IA, AR, TN, OH, MI, PA, and NY.

4. Info Paper Author/contact email (POC):

Capt John Barber / john.barber.6@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
12 MQ-9 Video Dissemination Kits	\$235,000	\$2,820,000
Total		\$2,820,000

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

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Logistics Resources Vehicle
- Tethered Live Feed Camera System
- Utility Task Vehicle Modernization
- Multi-Threat Detection Upgrade
- Hazmat ABC Training Kits

Essential Capabilities List

- Small Portable Decontamination System
- Foam Rapid Resupply and Attack Trailer
- Multi-Layer Portable Power Bank
- Virtual Reality Incident Command Training System

Desired Capabilities List

- None

MULTI-USE PORTABLE SHELTER

1. Background:

The ANG lacks the ability to set up a rapidly deployable, pre-set formal decontamination shelter for hazardous materials responses due to the lack of a modern multi-use portable shelter. ANG Fire and Emergency Services (F&ES) flights lack a rapidly deployable shelter system used for first responder rehabilitation, Incident Command Post (ICP) operations, or patient treatment areas. Current formal decontamination systems consist of several aging shelters that require multiple personnel to field and staff and are not multi-capable to conduct decontamination operations for first responders as well as ambulatory and non-ambulatory victims and patients. Current shelters used for ICP operations, first responder rehabilitation, and/or patient treatment consist of small tent-like structures that do not generally have sides, are extremely temporary in nature, and are not compatible with environmental control units. A multi-use shelter can be used for ICP operations, first responder rehabilitation, and patient treatment, with little to no reconfiguration. The shelter is rapidly deployable by two personnel or less, has a small footprint when stored, and is capable for multiple long-term operations. Additionally, this multi-use portable shelter can be used as a drive through shelter, can be mated with environmental control units, and can be expanded, or connected to with other same-type shelters.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG hazardous materials responses will be inefficiently extended due to the requirement to establish a formal decontamination system before, making entry into the hot zone, as the current aging systems are difficult to deploy with limited personnel, do not have non-ambulatory patient capability in the first response setting, and cannot do mass casualty decontamination scenarios.

3. Affected Units:

62 ANG Wings with F&ES flights and 4 CRTCs.

4. Info Paper Author/contact email (POC):

CMSgt Brian Rozick / brian.rozick@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
66 Multi-Use Portable Shelters	\$57,800	\$3,814,800
Total		\$3,814,800

TETHERED LIVE FEED CAMERA

1. Background:

ANG Fire & Emergency Services (F&ES) and Emergency Management (EM) teams lack the ability to provide aerial emergency scene situational awareness due to the lack of a tethered “Live Feed” camera. A tethered live-feed camera system with night vision and infrared capabilities that can provide a one-touch recorded video feed into Emergency Operations Centers (EOCs) would be a force multiplier for small emergency response teams. A tethered camera would provide total emergency scene visualization to improve; situational awareness, first responder accountability, and Incident Commander (IC) decision making. Additionally, this would provide real-time emergency scene information to EOCs and wing leadership, as well as create a historical video record from time of asset deployment. A tethered live feed camera that is rapid deployable will provide mission critical situational awareness information that allows teams to make increasingly information-driven decisions through a simple, straightforward interface. Having a quick 360 picture of an emergency scene is vital when seconds matter.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Not procuring this capability forces incident commanders to reallocate manpower for providing a critical situational awareness picture before responders are put in danger areas. The lack of this asset results in increased emergency response times and increased risk to first responders and other personnel.

3. Affected Unit.

All 90 ANG wings and 4 Combat Readiness Training Centers (CRTCs)

4. Info Paper Author/contact email (POC):

CMSgt Jeremy Wohlford / jeremy.wohlford@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
55 Truck Mounted	\$56,000	\$3,080,000
94 Portable	\$50,000	\$4,700,000
Total		\$7,780,000

UTILITY TASK VEHICLE MODERNIZATION

1. Background:

The ANG lacks the ability to transport equipment and personnel through austere environments due to the lack of modernized utility task vehicles. Standardization of the Emergency Management Counter Weapons of Mass Destruction Utility Vehicle (UTV) fleet is required. Currently all wings have a wide assortment of vehicles in varying depths of disrepair. The UTV would not add to the fleet only replace vehicles one-for-one at the unit level. The primary purpose would be mounted reconnaissance and surveillance responding to Chemical, Biological, Radiological, and Nuclear (CBRN) incidents. Additionally, uses of this vehicle would include response to natural and manmade disasters at the local, state, and federal levels. Modernized UTVs also allow responders to transport equipment safely and effectively through damaged and/or austere areas. Lastly, the vehicle would offer an on-scene rest and recovery via a climate-controlled environment.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG emergency responders will not have a safe, functioning, or properly equipped emergency response vehicle which unnecessarily increases emergency response times and capabilities.

3. Affected Units:

90 ANG Wings and 4 CRTC

4. Info Paper Author/contact email (POC):

MSgt Aaron Vetter / aaron.vetter@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
94 ULTVs	\$36,000	\$3,384,000
Total		\$3,384,000

MULTI-THREAT DETECTION UPGRADE

1. Background:

The ANG lacks the ability, to properly detect hazardous materials for domestic response and federal warfighting missions due to the lack of multi-threat detection upgrades. All 90 ANG wings and four Combat Readiness Training Centers (CRTC)s currently have outdated threat detection capabilities. This capability has aged beyond its useful life and requires immediate upgrade to make it usable for first responders again. Upgraded multi-threat detection would increase capabilities by making ANG units capable of detecting trace level vapors, aerosols, explosives, fentanyl's, and opioids.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

If not funded, ANG units will be unable to detect trace level vapors and aerosols. Explosives, fentanyl, and opioid detection capabilities will be limited or not within the on-base first responders' use during emergencies. This lack of detection will result in longer emergency times, increased risk to first responders and the public, and the potential for improper actions taken because of inadequate threat detection.

3. Affected Units:

All 90 ANG wings and four Combat Training Readiness Centers (CRTC)s.

4. Info Paper Author/contact email (POC):

CMSgt Brian Rozick / brian.rozick@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
94 Multi-Threat Detector Upgrades	\$83,000	\$7,802,000
Total		\$7,802,000

HAZARDOUS MATERIALS ABC KITS WITH TRAINING AIDS

1. Background:

ANG Emergency Management (EM) and Fire and Emergency Services (FES) flights lack the ability to properly combat Hazardous Material (HAZMAT) situations due to the lack of HAZMAT ABC Response Kits and associated training aids. EM and FES personnel suffer from limited capacity to provide essential equipment to contain a HAZMAT spill. These kits will allow EM and FES to effectively manage a HAZMAT spill in accordance with National Fire Protection Association 472 with US Department of Transportation 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 on these kits in a controlled environment. ANG EM and FES requires one A, B, and C kit, plus one training aid per each of its 90 flights.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Decreased ability to train first responders to the Hazardous Materials Technician level, resulting in a lack of capability to respond to hazardous materials emergencies and conduct offensive mitigation operations.

3. Affected Units:

All 90 ANG wings and four Combat Readiness Training Centers (CRTCs)

4. Info Paper Author/contact email (POC):

CMSgt Brian Rozick / brian.rozick@us.af.mil

5. Program Details:

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

Public Safety and Security

Public Safety and Security (ESF 13) – ANG security forces comprise over 7,750 Defenders from the 50 States, 3 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 2021, ANG security forces personnel responded to multiple natural disasters from wildfires to hurricanes along the east coast; and assisted in the COVID-19 pandemic response. In addition, ANG Defenders assisted local and federal law enforcement agencies with civil disturbance operations throughout the nation. With the help of Congress, the ANG fielded critical equipment and vehicles that directly enhanced the ANG’s effectiveness during these events.



ESF 13 - Public Safety and Security

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Logistics Resources Vehicle
- Conducted Electrical Device Modernization
- Less than Lethal Equipment Modernization
- Enhanced Hearing Protection and Communications
- Compressed Air Launcher System

Essential Capabilities List

- Utility Task Vehicle
- Response Force Personnel Location System
- Radio Repeater/Antenna Mast
- Sustainment Equipment Load System
- Augmented Reality Use of Force Simulator

Desired Capabilities List

- Truck Bed Storage System
- Long Range Acoustic Device/ Multi-Speaker System Modernization
- Mobile Traffic Control Kit
- Small Unmanned Aircraft System
- High Water Capable Vehicle

LOGISTIC RESOURCE VEHICLE

1. Background:

The ANG Security Forces (SF) currently lack the ability to effectively support domestic missions due to the lack of logistic resource vehicles. Logistic resource vehicles need to be equipped with a law enforcement package designed for transporting equipment, supplies, weapons, and ammunition to ensure units are capable of responding to training mission, domestic incidents, and wing Agile Combat Employment requirements. Each of the remaining 56 ANG SF squadrons require on logistics resource vehicle.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Failure to fund the logistic resource vehicle requirement will significantly degrade ANG SF domestic response capabilities, as well as the wings agile combat response for federal overseas missions.

3. Affected Units:

This effects 56 ANG Wings and 45 States, and territories

4. Info Paper Author/contact email (POC):

SMSgt Patrick W. Judy / patrick.judy@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
56 SF Logistic Resource Vehicle	\$54,000	\$3,024,000
Total		\$3,024,000

CONDUCTED ELECTRICAL DEVICE MODERNIZATION

1. Background:

The ANG Security Forces (SF) currently lack the ability to use conducted electrical devices due to diminished manufacturing sources for the TASER X26E replacement parts. Modernized cartridges and batteries will support federal warfighting and, and domestic operations. The conducted electrical device training kit includes training cartridges, targets, training suits, downloading cables, and software. Each of the 101 ANG SF squadrons require conducted electrical devices for each of their Security Force Less than Lethal Kit (QFLLL) Unit Type Codes (UTC).

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Failure to fund the conducted electrical device modernization will significantly degrade ANG SF domestic response capabilities, as well as the wings agile combat response.

3. Affected Units:

This affects all 90 ANG Wings

4. Info Paper Author/contact email (POC):

SMSgt Patrick W. Judy / patrick.judy@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
2,200 Conducted Electrical Devices	\$1,700	\$3,740,000
100 Conducted Electrical Device Training Kits	\$12,000	\$1,200,000
Total		\$4,940,000

LESS THAN LETHAL EQUIPMENT MODERNIZATION

1. Background:

The ANG Security Forces (SF) lack the ability to perform domestic operations, and support wing federal and state missions due to the lack of modernized less than lethal equipment. The existing less than lethal kit equipment is more than a decade old, and limits on scene response options. Riot Shields, modern and light weight personal protective equipment, as well as laser eye protection will safeguard airmen from the growing emerging threats. Portable solar power canopies, self-contained lighting systems, AV Kits, and generators will allow for better command and control and extend field operations for each of the 188 ANG SF Security Forces Less Than Lethal Kit QFLLL Unit Type Codes.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Failure to fund the less then lethal equipment modernization will significantly degrade ANG SF domestic response capabilities, will risk to ANG defenders.

3. Affected Units:

This affects all 90 ANG Wings

4. Info Paper Author/contact email (POC):

SMSgt Kimberlee Ice / kimberlee.ice@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
188 Domestic Operations Modernization Kits	\$80,000	\$15,040,000
Total		\$15,040,000

ENHANCED HEARING PROTECTION AND COMMUNICATION

1. Background:

ANG Security Forces (SF) lack the ability to use hearing protection while simultaneously using communications equipment due to the lack of enhanced hearing protection and communication equipment. During domestic operations (DOMOPS), SF units operate in various scenarios and environments where it is crucial to protect hearing while also needing to communicate with law enforcement agencies. During civil disturbance operations, ANG SF units were activated around the nation to support local law enforcement where less than lethal munitions, to include flash bangs, and acoustic devices were regularly used. This new system must be adaptable to current and future handheld radios, Android and IOS cell phones, feature noise canceling, situational awareness, and be both gas mask and helmet compatible. The current headset system is not interchangeable with various radios, is not gas mask compatible and does not provide the amount of hearing protection necessary for SF operations. SF requires a model that would assist with increased hearing protection without sacrificing clear communication within their team and working alongside local civil agencies. All of the 7600 ANG SF defenders require an enhanced hearing protection and communication headset.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Failure to fund will continue to be at an increased risk of hearing injuries to our Defenders and potential increase in confusion operating multiple radios.

3. Affected Units:

This affects all 90 ANG Wings

4. Info Paper Author/contact email (POC):

MSgt Joshua Aleprete / joshua.aleprete.1@us.af.mil
MSgt Christopher Brors / christopher.brors@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
7600 Dual-Ear Headset	\$940	\$7,144,000
7600 Single-Ear Headset	\$390	\$2,964,000
7600 Push to Talk (PTT) Control Device	\$690	\$5,244,000
7600 Bluetooth Connector	\$245	\$1,862,000
Total		\$16,987,500

COMPRESSED AIR LAUNCHER

1. Background:

The ANG Security Forces (SF) currently lack the ability to provide less than lethal force due to the lack of a hand-held, direct-fire, low-hazard, non-penetrative system. The less than lethal system should include chemical deterrence/incapacitation or marking effects upon impact with a target up to 100 meters. ANG SF require a Compressed Air Launcher (CAL) Kit to be paired with the SF less than lethal kits to provide additional security and deterrence for our frequently deploying SF personnel in support of operations such as confrontation management, civil disturbance/unrest, border security, inaugurations, and counterdrug operations. This less than lethal system is capable of delivering reduced force, but still allows enough power to subdue and discourage any further escalation. Each of the 188 ANG SF QFLLL Kits require a minimum of two systems .

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Failure to fund the compressed air launcher requirement will significantly degrade ANG SF domestic response capabilities, as well as the wings agile combat response.

3. Affected Units:

This affects all 90 ANG Wings

4. Info Paper Author/contact email (POC):

SMSgt Christopher Distel / christopher.distel@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
188 Compressed Air Launcher Kits	\$6,000	\$1,128,000
188 Compressed Air Launcher Training Kits	\$1,800	\$33,840
91 Compressed Air Stations	\$1,000	\$91,000
Total		\$3,024,000

CONTINGENCY RESPONSE

Contingency Response (CR) – The ANG Contingency Response Enterprise provides rapidly deployable, multi-skilled, expeditionary air mobility teams that can assess, open, and operate contingency airbases across the spectrum of air operations from permissive to uncertain environments for both international and domestic support. ANG Contingency Response provides C2, airfield management, communications, weather forecasting, and airfield security. These capabilities packaged together quickly opens austere airfields and air bases to support the initial movement of personnel and material in contingency operations in pre and post domestic disaster operations. ANG CR is embedded for Agile Combat



Employment and arctic airfield operations.



CR personnel come with a myriad of skill sets such as airfield survey and assessment, pavement evaluation, landing zone, air drop zone survey and operations duties, air advisors, air traffic controllers, rotary sling load, force bed down, and security forces sniper teams.

CR team sizes vary, from Contingency Response Elements, which provide over 100 personnel and 40 specialties, to a CR Team that is comprised of over 30 personnel with more than 15 specialties.



Contingency Response

2022 Domestic Capability Priorities Conference

Critical Capabilities List

- Man-portable Satellite Communication Device, Low Earth Orbit Capable
- 10,000 lb. All-terrain Forklift
- Solar Power/Battery Back-up Capability
- Airfield Security Detection System
- Personal Communications and Hearing Protection System

Essential Capabilities List

- Hard Sided Mobile Shelter System
- Mobile Fuel Dispensing and Storage Kit
- Special Fueling Operations Kit
- Mobile Atmospheric Water Production System
- Airfield Landing Zone Operations Kit

Desired Capabilities List

- Air Traffic Control Squadron Modernization Kit

**MAN-PORTABLE SATELLITE COMMUNICATIONS, LOW EARTH ORBIT
CAPABLE**

1. Background:

The ANG Contingency Response (CR) Enterprise lacks the ability to rapidly set up data/communications in austere environments due to the lack of a man-portable communications low earth orbit satellite. The ANG requires ground access to Low Earth Orbit Satellite Commercial Internet or Commercial Space Internet (CSI) to include command and control of assets through CSI. Rapid and robust data passage is critical to the needs of the CR Commander. With CSI ground terminals, decision makers will be able to receive and provide information in a fraction of the time required to set up legacy systems. Terminals need to be light, rugged and mobile, enhancing rapid set up of the airfield. The ANG requires one terminal per Contingency Response Element (2) and one terminal per Contingency Response Team (8).

2. Mission/Operational Impacts, if not funded/addressed.

If not funded the communication capability of CR personnel supporting Domestic Operations (DOMOPS) and Agile Combat Employment (ACE) mission personnel will be hindered. The sheer volume of information available to contingency responders has exponentially increased with the wide-scale fielding of new technology and communication devices. Doctrinal Command and Control (C2) requirement cannot be supported by current SATCOM platforms.

3. Affected Units:

MS, CA, MN, TX, PR, KY

4. Info Paper Author/contact email (POC):

SMSgt Michael Miller / michael.miller.106@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
10 Ground Terminals	\$1,500	\$15,000
Total		\$15,000

DEPLOYABLE MATERIAL HANDLING EQUIPMENT

1. Background:

The ANG Contingency Response (CR) enterprise lacks the ability to perform vital offloading of air transported supplies due to the lack of deployable material handling equipment. CR is required to open airbases and bring in the initial operating materials, emergency food and water, and sustainment equipment. To meet mission requirements, they require all terrain forklifts capable of lifting 10,000 lbs.

2. Mission(s)/Operational Impact(s), if not funded/addressed:

Without these forklifts the process of opening air bases and airfields will be significantly slowed, impacting the ability to rapidly bring in essential equipment and download them off of aircraft. They also cannot load the aircraft with evacuee’s baggage and equipment.

3. Affected Units:

MN, TX, CA, MS, KY, PR

4. Info Paper Author/contact email (POC):

SMSgt Michael Miller / michael.miller.106@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
11x 10,000 lbs. All Terrain Forklift	\$230,000	\$2,530,000
Total		\$2,530,000

RESERVE SOLAR POWER CAPABILITY

1. Background:

The ANG Contingency Response (CR) Enterprise lacks the ability to provide redundant power capabilities outside of generator power in an austere environment due to the lack of a reserve solar power capacity. A solar powered system augments and/or replace standalone, fuel-driven power generators that generally lead to single points of power failure and large logistical burdens associated with fueling and maintaining generators in the field. These systems employ power management, energy storage, and renewable power input to reduce or eliminate generator runtime, ensure critical loads have power even when prime power fails, and guarantee all power is regulated for sensitive electronic devices.

2. Mission(s)/Operational Impact(s), If not funded/addressed.

If not funded, ANG will not have mobile domestic post disaster/austere alternative power sources that can supply redundant power options.

3. Affected Units:

MN, TX, CA, MS, KY, PR

4. Info Paper Author/contact email (POC):

SMSGT John W Huffman / john.huffman@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
10 Alternative Energy Systems (AES)	\$77,944	779,440
Total		779,440

AIRFIELD SECURITY DETECTION SYSTEM

1. Background:

The ANG Contingency Response (CR) Enterprise lacks the ability to properly secure airfield locations due to the lack of a modernized airfield security detection system. CR elements currently have 26 security forces members (6 fire teams and 2 squad leaders, one for each shift) which spreads security teams thin for securing an airfield in a deployed environment. The lighter, leaner CR team concept only has six security forces members and a smaller footprint but retains the need for a smaller scale detection kit. The CR enterprise requires a security forces detection kit to enable joint-all domain command and control for contingency response missions. The products available today meet, exceed, and enhance the capabilities of the initial kits the CR Enterprise instituted.

2. Mission(s)/Operational Impact(s) – If not funded/addressed.

CR will have no detection sensors or operational picture solution for securing the airfield, ramp or operational area. If not funded, CR will continue to use outdated legacy systems and risk compromising security of an airfield and/or team during domestic responses and overseas deployments.

3. Affected Units:

MN, TX, CA, MS, KY, PR

4. Info Paper Author/contact email (POC):

2d Lt Jason Sanderson / jason.sanderson.2@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
2 CRE-level Detection Kits	\$695,000	\$1,390,000
8 CRT-level Detection Kits	\$475,000	\$3,800,000
Total		\$5,190,000

PERSONAL COMMUNICATIONS AND HEARING PROTECTION SYSTEM

1. Background:

The ANG Contingency Response (CR) Enterprise lacks the ability to communicate and protect members hearing in austere environments due to the lack of a personal communication and hearing protection system. CR small team setting such as opening airbases and engine running operations have negative impacts on communications. Loud noises and bulky personal gear degrade effectiveness. ANG CR elements require a system that consists of headsets and advanced control units that interface to a wide range of communication devices. The system provides hearing protection while maintaining the natural level of situational awareness.

2. Mission(s)/Operational Impact(s) – If not funded/addressed.

ANG CR teams will not be able to effectively communicate in loud environments and it increases risk of hearing loss to members.

3. Affected Units:

MN, TX, CA, MS, KY, PR

4. Info Paper Author/contact email (POC):

SMSGT John W Huffman / john.huffman@us.af.mil

5. Program Details:

Quantity	Unit Cost	Program Cost
500 Communication and Hearing Protection Kits	\$2,709	1,354,500
Total		1,354,500

Non-Materiel Capabilities

As a steward of taxpayer-provided resources, the Air National Guard has a duty to examine non-material solutions that may involve changes in doctrine, organization, training, material, leadership and education, personnel, facilities, and or policy (DOTmLPF-P) before developing or purchasing new systems and equipment. Every working group examined non-material solutions to satisfy their capability requirements. The below chart summarizes the results of their assessments and identifies proposed non-material solutions.

Working Group	Non-Materiel Solution	DOTmLPF-P Category
ESF-1	<ul style="list-style-type: none"> Update Air Force policy to include storage space for domestic operations equipment 	Policy
ESF-2	<ul style="list-style-type: none"> Incorporate Cybersecurity into future DCP Conference frameworks Senior leadership advocacy for prime movers Update Air Force policy to include storage space for domestic operations equipment 	Organization Leadership/Education Policy
ESF-3	<ul style="list-style-type: none"> Right-sized vehicle authorization list review by NGB Update Air Force policy to include storage space for domestic operations equipment Streamline software acquisition and implementation Update unmanned aerial system requirements and restrictions 	Organization Policy Policy
ESF-4	<ul style="list-style-type: none"> Training and certifications for wildland firefighting and live fire trainer operators Catalog and package ANG firefighting assets into Mission Ready Packages (MRPs) Pursue additional mutual aid agreements 	Training Organization Policy
ESF-5	<ul style="list-style-type: none"> Update Air Force policy to include storage space for domestic operations equipment Right-sized vehicle authorization list review by NGB Ensure Air Force policy includes ANG needs for a common operating picture 	Policy Organization Policy
ESF-6	<ul style="list-style-type: none"> Update Air Force policy to include storage space for domestic operations equipment Establish Mission Ready Packages (MRPs) to promote interoperability with partners 	Policy Organization
ESF-7	<ul style="list-style-type: none"> Update Air Force policy to include storage space for domestic operations equipment 	Policy
ESF-8	<ul style="list-style-type: none"> Change doctrine to allow trailers for medical elements of CBRN Response Enterprise Update Air Force policy to include storage space for domestic operations equipment 	Doctrine Policy
ESF-9	<ul style="list-style-type: none"> Update Air Force policy to include storage space for domestic operations equipment Promote use of ANG urban search and rescue capabilities with mission partner Water rescue training Increase integration of ANG units into joint/interagency exercises 	Policy Leadership/Education Training Training
ESF-10	<ul style="list-style-type: none"> Right-sized vehicle authorization list review by NGB 	Organization

ESF-13	<ul style="list-style-type: none"> • Authorization for fire retardant uniforms • Increase options for less-than-lethal munitions on Air Force authorization lists • Update Air Force policy to include storage space for domestic operations equipment • Authorization for tactical vehicle procurement • Revise manpower authorizations to account for domestic operations mission sets 	<p>Organization Policy</p> <p>Policy</p> <p>Organization Organization</p>
CR	<ul style="list-style-type: none"> • Update Air Force policy to include storage space for domestic operations equipment • Update Air Force policy to allow CR forces to perform specialized fueling operations 	<p>Policy</p> <p>Policy</p>