

Foreword

us Us

The terrorist attacks on 9/11 and the devastation of Hurricane Katrina in 2005 highlighted the need for robust domestic-response capabilities to support homeland emergency operations. State and local leaders have accordingly looked to the National Guard as their first choice to augment state emergency responders. The Guard has postured itself to provide both lifesaving and high-tech solutions in support of civil authorities. Air National Guard capabilities include search and rescue, communications, emergency medical response, and broad-area situational awareness. Most of these capabilities are "dual-use" in that they can serve both the overseas missions and homeland operations.

The National Guard Bureau is building processes for transmitting homeland response needs from our states and field units into the federal resourcing process. The first step is to identify what is needed. The following pages hold the domestic-response equipping priorities forged by unit representatives from across the Air National Guard at our 2014 Domestic Capability Priorities Working Group. These priorities, when combined with the outcome of our Weapons and Tactics Working Group on war-fighting modernization priorities, will form the basis for the Air National Guard's allocation of limited procurement funds.

I am committed to squeezing the most from every taxpayer dollar entrusted to the Air National Guard, staying ready at home and prepared for tasking overseas. The modernization priorities outlined in this book are the starting point for equipping our units to provide that vital support to state and territorial communities, citizens, governors and our Nation when called.

STANLEY E. CLARKE III Lieutenant General, USAF Director, Air National Guard

Release Policy:

Information presented in this document is released to the public and may be distributed or copied; however, it is subject to change without notice. Neither the Air National Guard, nor any other Department of Defense agency, warrants the accuracy of any funding information contained in the document.

All photographs are the property of the US Government, or used with permission, and are copyright free. Use of appropriate photo and image credits is requested.

Cover Art: NGB Graphics



Table of Contents



| Table of Contents | iii |
|--|----------|
| Introduction | v |
| Contacts | vi |
| Domestic Capability Priorities Spreadsheet | vi |
| Domestic Capability Priorities Reference Tables by State and FEMA Region | X |
| TAB A - TRANSPORTATION (ESF 1) | 1 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 2 |
| Prime Power Package Vehicles and Trailers | 3 |
| Remotely Piloted Aircraft Sense and Avoid Systems | 4 |
| Debris Clearance and Route Opening Prime Movers | 5 |
| Security Forces Vehicles | 6 |
| Cargo and Utility Vehicles Fleet Modernization | 7 |
| TAB B - COMMUNICATIONS (ESF 2) | 9 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 10 |
| Tactical Interoperable Voice Communications | 11 |
| Tactical Communications Path Diversity | 12 |
| Joint Incident Site Communications Capability Block 3 Network Management Enhancement Tool | 13 |
| Response and Preparedness Integrated Domestic Training Advanced Capability | 14 |
| Ground-Based Mobile Communications Extension Capability | 15 |
| TAB C - PUBLIC WORKS AND ENGINEERING (ESF 3) | 17 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 18 |
| Prime Power Equipment | 19 |
| Portable Lighting Kits | 20 |
| Explosive Ordnance Disposal Equipment | 21 |
| Route Opening Package Augmentation | 22 |
| Potable Water Production, Storage, and Distribution Equipment | 23 |
| TAB D - FIREFIGHTING (ESF 4) 2014 Domestic Capability Priorities Conference Capabilities List | 25 26 |
| Firefighting Vehicles | 27 |
| Enhanced Situational Awareness and Communications for Firefighting - Air | 28 |
| Enhanced Situational Awareness and Communications for Firefighting - And Enhanced Situational Awareness and Communications for Firefighting - Ground | 29 |
| Aerial Firefighting Delivery System | 30 |
| TAB E - INFORMATION AND PLANNING (ESF 5) | 31 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 32 |
| Federal Emergency Management Agency Type II Mobile Emergency Operations Center Systems | 33 |
| Cross-Domain Transfer of Incident Awareness and Assessment Data | 34 |
| Unclassified Transportable Processing, Assessment, and Dissemination System & Network Architectur | |
| Incident Awareness and Assessment Virtual Collaboration Mission Execution Framework Toolkit | 36 |
| Command and Control Data Aggregator and Disseminator | 37 |
| TAB F - MASS CARE, EMERGENCY ASSISTANCE, HOUSING & HUMAN SERVICES (ESF 6) | 39 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 40 |
| Disaster Relief Mobile Kitchen Trailer | 41 |
| Disaster Relief Mobile Kitchen Trailer Prime Movers | 42 |
| Tactical Field Religious Support Kit | 43 |
| Tactical Field Religious Support Kit Prime Movers | 44 |
| Interoperable People Tracking System | 45 |

| TAB G – LOGISTICS (ESF 7) | 47 |
|--|----|
| 2014 Domestic Capability Priorities Conference Capabilities List | 48 |
| Remotely Piloted Aircraft Rapid Deployable Launch and Recovery Mission Support Kit | 49 |
| Total Asset Visibility | 50 |
| Vehicle Deployable Diagnostics Test Set | 51 |
| Deployable Fuel Support System | 52 |
| Mobile Loading dock | 53 |
| TAB H - PUBLIC HEALTH AND MEDICAL SERVICES (ESF 8) | 55 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 56 |
| Portable Patient Treatment Accountability System | 57 |
| Modernization of Expeditionary Medical Support Assemblages | 58 |
| Modernization of Chemical, Biological, Radiological, Nuclear and High-Yield Explosives E | |
| Response Force Package and Homeland Response Force Medical Elements | 59 |
| Field Deployment of Personal Protective Equipment | 60 |
| Modernization of Biological Hand Held Assay | 61 |
| TAB I - SEARCH AND RESCUE (ESF 9) | 63 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 64 |
| Urban Search and Rescue Vehicles | 65 |
| Retractable External Arm with Search and Rescue Missionized Pod | 66 |
| Search and Rescue Sensor Technology | 67 |
| Guardian Angel Extreme Environment Search and Rescue Equipment | 68 |
| Personal Protective Equipment for Urban Search and Rescue | 69 |
| TAB J - OIL AND HAZARDOUS MATERIALS RESPONSE (ESF 10) | 71 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 72 |
| Personal Protective Equipment Modernization | 73 |
| Chemical, Biological, Radiological, and Nuclear and Hazardous Material Detection Equipment | |
| Dedicated Chemical, Biological, Radiological, and Nuclear and Hazardous Material Respon- | |
| Responder Rehabilitation Shelter | 76 |
| Command and Control Liaison Kit | 77 |
| TAB K - PUBLIC SAFETY AND SECURITY (ESF 13) | 79 |
| 2014 Domestic Capability Priorities Conference Capabilities List | 80 |
| Less-than-Lethal Kits | 81 |
| Security Forces Vehicles | 82 |
| Incident Response Command and Control Kit | 83 |
| Emergency Vehicle Response Suite | 84 |
| Ultralight All-Terrain Utility Equipment | 85 |



Introduction



The 2015 Air National Guard (ANG) Domestic Capability Priorities (DCP) Book documents capability priorities identified during the Aug 2014 ANG DCP Conference in Albuquerque, New Mexico. The DCP Conference leveraged the 2012 Joint Domestic Operations Equipment Requirements (JDOERs) Conference design, with working groups for 11 National Response Framework Emergency Support Functions (ESF). The conference welcomed over 280 military and civilian attendees representing all 54 states and territories, other government agencies, civil partners, as well as the Air National Guard Readiness Center (ANGRC) staff. The objective of the ESF working groups was to identify capabilities needed by the ANG to effectively execute the domestic incident response mission, classified by urgency of need: Critical (crucial within the next 1 to 3 years), Essential (vital within the next 3 to 5 years), or Desired (enhances mission success in the 5-year timeframe).

| 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, and |
| Human Services |
| ESF 7 - Logistics |
| ESF 8 - Public Health and Medical Services |
| ESF 9 - Search and Rescue |
| ESF 10 - Oil and Hazardous Materials Response |
| ESF 11 - Agriculture and Natural Resource (not included in this book) |
| ESF 12 - Energy (not included in this book) |
| ESF 13 - Public Safety and Security |
| ESF 14 - Long-Term Community Recovery (not included in this book) |
| ESF 15 - External Affairs (not included in this book) |

The introductory section of the 2015 DCP book includes a spreadsheet summarizing estimated costs for each critical capability. The State/FEMA Matrix identifies states and FEMA regions projected to receive equipment. The book is organized into 11 ESF tabs; each begins with an ESF mission description followed by a summary page of critical, essential and desired capabilities identified at the DCP conference. An information paper describes each capability classified as "critical." Each information paper captures: Background (capability description); Source of Need (determines documented need); Units Impacted (units/states to receive the capability); and Program Details (remaining quantity of equipment needed, the estimated unit costs, and program costs).



Contacts





Col Christopher Will, NGB/A5 Director, Plans and Requirements 240-612-9366 (DSN 612-9366) Email: christopher.will@ang.af.mil



Mr. Frank Ballinger, NGB/A5 Associate Director, Plans and Requirements 240-612-9351 (DSN 612-9351) Email: frank.ballinger@ang.af.mil



Col Kevin Campbell, NGB/A5R Chief, Operational Requirements 240-612-9363 (DSN 612-9363) Email: kevin.campbell.2@ang.af.mil



Col Ian Bryan, NGB/A5P Chief, Program Integration 240-612-9367 (DSN 612-9367) Email: ian.bryan@ang.af.mil



Mr. Michael Regan, NGB/A5X Chief, Strategy and Plans 240-612-9356 (DSN 612-9356) Email: michael.regan.1@ang.af.mil



Col Michael Flanagan, NGB/A1 Director, Manpower, Personnel and Services 240-612-9455 (DSN 612-9455) Email: michael.flanagan@ang.af.mil



Col John Knabel, NGB/A2
Director, Intelligence, Surveillance and
Reconnaissance
240-612-9307 (DSN 612-9307)
Email: john.knabel@ang.af.mil



Col Dean Tremps, NGB/A3 Director, Operations 240-612-9454 (DSN 612-9454) Email: dean.tremps@ang.af.mil



Col Jeffrey Bozard, NGB/A4 Director, Logistics 240-612-8470 (DSN 612-8470) Email: jeffrey.bozard@ang.af.mil



Col Kevin Donovan, NGB/A6 Director, Communications 240-612-8602 (DSN 612-8602) Email: kevin.donovan.1@ang.af.mil



Col Peter Sartori, NGB/A7 Director, Installation & Mission Support 240-612-8060 (DSN 612-8060) Email: peter.sartori@ang.af.mil



Col Kirk Pierce, NGB/A8/9 Director, Plans and Programs 240-612-9382 (DSN 612-9382) Email: kirk.pierce.1@ang.af.mil



Col Matthew Manifold, AATC/CC Commander 520-295-6900 (DSN 844-6900) Email: matthew.manifold@.ang.af.mil

2015 Domestic Capability Priorities Book Credits:

Editor in Chief: Lt Col Tiffany Pasanen, NGB/A5PS



Domestic Capability Priorities



| 2015 DOMESTIC CAPABILIITY | PRIC | RITIES | 3 | |
|--|------|----------|-----------------|-------------------|
| ESF 1 Transportation | Туре | Quantity | Unit Cost | Program Cost |
| Prime Power Package Vehicles and Trailers | | | | |
| Semi-Trailer, Low Bed, 35-Ton | 3080 | 15 | \$ 48,000 | \$ 720,000 |
| Flatbed Trailers | 3080 | 30 | \$ 42,000 | \$ 1,260,000 |
| Cargo Trucks, 4x2, 4-Door | 3080 | 45 | \$ 140,000 | \$ 6,300,000 |
| All-Terrain Forklifts, 13K | 3080 | 15 | \$ 172,000 | \$ 2,580,000 |
| Fuel Truck,1200-Gal, 4x4 | 3080 | 15 | \$ 139,000 | \$ 2,085,000 |
| Tractor Trailer, 6x4, 55K | 3080 | 45 | \$ 146,000 | \$ 6,570,000 |
| Remotely Piloted Aircraft Sense and Avoid Systems | | | | |
| Non-Recurring Engineering | 3600 | 1 | \$ 200,000 | \$ 200,000 |
| Ground-Based Sense and Avoid Systems | 3080 | 9 | \$ 2,500,000 | \$ 22,500,000 |
| Debris Clearance and Route Opening Prime Movers | | 4=0 | | |
| Dump Trucks, 10-Ton | 3080 | 178 | \$ 72,000 | \$ 12,816,000 |
| Security Forces Vehicles | 0000 | | 6 55 000 | * 5000.000 |
| Crew Cab Trucks, 4X4 | 3080 | 92 | \$ 55,000 | \$ 5,060,000 |
| Cargo and Utility Vehicles Fleet Modernization Cargo and Utility Fleet Modernization | 3080 | 150 | \$ 41,000 | \$ 6,150,000 |
| ESF 1 TOTAL | 3000 | 150 | \$ 41,000 | \$ 66,241,000 |
| ESF 2 Communications | Туре | Quantity | Unit Cost | Program Cost |
| Tactical Interoperable Voice Communications | 71 | | | |
| BASIC Vehicle Systems | 3080 | 49 | \$ 165,000 | \$ 8,085,000 |
| APCO-25-Compliant Quad-Channel Handheld Radios | 3080 | 500 | \$ 10,000 | \$ 5,000,000 |
| Tactical Communications Path Diversity | | | | , , |
| Tactical Communications Suite | 3080 | 39 | \$1,200,000 | \$ 46,800,000 |
| JISCC Block 3 Network Management Enhancement Tool | | | | |
| JISCC Network Management Suites | 3080 | 40 | \$ 200,000 | \$ 8,000,000 |
| Response and Preparedness Integrated Domestic Training Advanced Capability | | | | |
| Cyber Training Internet Simulator Hubs | 3080 | 5 | \$ 393,000 | \$ 1,965,000 |
| Cyber Training Small Network Systems | 3080 | 10 | \$ 340,000 | \$ 3,400,000 |
| Advanced Capability Sets | 3080 | 5 | \$ 300,000 | \$ 1,500,000 |
| JIOR Pico Nodes | 3080 | 10 | \$ 110,000 | \$ 1,100,000 |
| Interconnection Fee | 3080 | 10 | \$ 42,000 | \$ 420,000 |
| Ground-Based Mobile Communications Extension Capability | | | | |
| Vehicle-Mounted Remote Communications Platforms | 3080 | 10 | \$1,100,000 | \$ 11,000,000 |
| ESF 2 TOTAL | | | | \$ 87,270,000 |
| ESF 3 Public Works and Engineering | Туре | Quantity | Unit Cost | Program Cost |
| Prime Power Equipment | | | | |
| Generators, 100 kW | 3080 | 104 | \$ 43,838 | \$ 4,559,152 |
| Generators, 60 kW | 3080 | 91 | \$ 33,900 | \$ 3,084,900 |
| Generators, 30 kW | 3080 | 65 | \$ 24,164 | \$ 1,570,660 |
| Wiring and Supplies | 3080 | 13 | \$ 30,835 | \$ 400,855 |
| Tools and Protective Equipment | 3080 | 13 | \$ 24,539 | \$ 319,007 |
| Portable Lighting Kits | | | | |
| Light Sets, 2000 W | 3080 | 498 | \$ 2,000 | \$ 996,000 |
| Generators, 3 kW | 3080 | 498 | \$ 800 | \$ 398,400 |
| Self Powered Light Sets, 4000 W | 3080 | 166 | \$ 10,000 | \$ 1,660,000 |
| Explosive Ordnance Disposal Equipment | | | | |
| EOD PPE Augmentation Sets | 3080 | 190 | \$ 5,000 | \$ 950,000 |
| Small Portable EOD Robots | 3080 | 19 | \$ 68,000 | \$ 1,292,000 |
| Route Opening Package Augmentation | | 400 | 4.500 | |
| Snow Plow Attachments | 3080 | 166 | \$ 1,500 | \$ 249,000 |
| Chipper Attachments | 3080 | 166 | \$ 2,500 | \$ 415,000 |
| Backhoes | 3080 | 83 | \$ 20,000 | \$ 1,660,000 |
| Potable Water Production, Storage, and Distribution Equipment | 0000 | 40 | A 050 55 | A 6 = 0 = 6 = 6 |
| ROWPU, 1500 GPH | 3080 | 10 | \$ 252,789 | \$ 2,527,890 |
| Storage Containers, 500-Gallon | 3080 | 400 | \$ 4,200 | \$ 1,680,000 |
| Container Liners | 3080 | 2000 | \$ 60 | \$ 120,000 |
| Distribution Containers, 2-Gallon | 3080 | 5000 | \$ 1 | \$ 5,000 |
| ROWPU Trailers | 3080 | 20 | \$ 4,000 | \$ 80,000 |
| ESF 3 TOTAL | | | | \$ 21,967,864 |

| Firefighting Vehicles | ESF 4 Firefighting | Туре | Quantity | Unit Cost | Program Cost |
|--|--|------|----------|---------------------------------------|---|
| ABFF Vehicles 3080 10 \$ 800,000 \$ 5,000,000 | | Турс | Quantity | Omit Cost | 1 Togram Cost |
| CRS Variones 3000 \$ \$ \$1,000,000 \$ \$0,000,000 | | 3080 | 10 | \$ 200,000 | \$ 9,000,000 |
| Enhanced Situational Awareness and Communications for Firefighting - Air 350,000 \$ 5,950,000 \$ 1,975,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,275,000 \$ 1,000,000 | | | | | |
| Communications Platform 3010 17 \$ 35,000 \$ 5,980,000 Non-Recorning Engineering 3010 17 \$ 75,000 \$ 1,0275,000 Non-Recorning Engineering 3010 17 \$ 175,000 \$ 1,000,000 \$ 1,000,000 Non-Recorning Engineering 3080 1650 \$ 4,500 \$ 7,425,000 Non-Recorning Engineering 3080 55 \$ 1,120 \$ 1,000,000 \$ 1,000,000 Non-Recorning Engineering 3080 55 \$ 1,120 \$ 1,000,000 \$ 1,000,000 Non-Recorning Engineering 3080 \$ 5 \$ 1,120 \$ 1,000,000 \$ 1,000, | | 3000 | | ψ1,000,000 | Ψ 3,000,000 |
| Multi Spectrum Antenras Non-Recurring Egriptioning Enhanced Situational Awareness and Communications for Firefighting - Ground Multi Band Radios Werkinds Commencial Internet Capability 3080 1650 \$ 4,500 \$ 7,425,000 Verkinds Commencial Internet Capability 3080 55 \$ 11,200 \$ 161,000 Verkinds Commencial Internet Capability 3080 55 \$ 11,200 \$ 161,000 Verkinds Commencial Internet Capability 3080 55 \$ 11,200 \$ 161,000 Verkinds Commencial Internet Capability 3080 55 \$ 11,200 \$ 7,425,000 Verkinds Commencial Internet Capability 3080 55 \$ 11,200 \$ 7,425,000 Verkinds Commencial Internet Capability 3080 700 \$ 100,000 Verkinds Commencial Internet Capability 3080 700 \$ 100,000 S 170,000,000 | | 3010 | 17 | \$ 350.000 | \$ 5.950.000 |
| Non-Recurring Engineering 3010 1 \$ 100,000 \$ | | | | | . , , |
| Enhanced Situational Awareness and Communications for Firefighting - Ground Mikh Band Radio S. 4,500 \$ 7,425,000 Vehicle Commercial tremet Capability 3880 55 \$ 11,200 \$ 11,200 \$ 161,000 \$ 170,000 \$ | | 3010 | 1 | | |
| Verbick Commercial Internet Capability | | | | | • |
| Avarial FireInghting Delivery System | Multi Band Radios | 3080 | 1650 | \$ 4,500 | \$ 7,425,000 |
| Fixed fring facility of CDS 100,000 1700 100,000 1700,000 120,00 | Vehicle Commercial Internet Capability | 3080 | 55 | \$ 11,200 | \$ 616,000 |
| Fireflighting Buckets, 660-Gallon 3010 12 \$24,000 \$24,00 | | | | | |
| Fireflighing Bucket Navierhance Kits | 0 0 | | 1700 | | \$ 170,000,000 |
| Firediphing Bucket Power Packs | U U I | | | . , | *, |
| Linc. 150-Foot 3010 12 \$ 5,000 \$ 60,000 | ŭ ŭ | | | | |
| Remote Hooks, 9000-Pound S \$ 0,000 \$ 0,000 | | | | . , | . , |
| ST ST ST ST ST ST ST ST | | | | • | |
| Section Type Quantity Unit Cost Program Cost Federal Emergency Management Agency Type IMEOC Systems Federal Emergency Management Agency Type IMEOC 3080 10 \$800,000 \$8,000,000 \$8,000,000 \$6,000,000 | , | 3010 | 12 | \$ 5,000 | |
| Federal Emergency Management Agency Type II MEOC Systems | ESF 4 TOTAL | | | | \$ 198,804,000 |
| FEMA Type II ME/COS \$80,000 \$8,000,000 \$8,000,000 ME/CO Modernization Equipment \$900 \$1 \$250,000 \$5,250,000 ME/CO Prime Movers \$900 \$10 \$5,250,000 \$5,250,000 ME/CO Prime Movers \$900 \$10 \$5,250,000 \$5,250,000 ME/COS-Domain Transfer of Incident Awareness and Assessment Data Cross-Domain Systems \$900 \$13 \$450,000 \$5,850,000 ME/CO Prime Movers \$900 \$13 \$450,000 \$5,850,000 ME/CO Prime Movers \$900 \$13 \$600,000 \$7,260,000 ME/CO Prime Movers \$900 \$13 \$600,000 \$7,260,000 \$7 | ESF 5 Information and Planning | Туре | Quantity | Unit Cost | Program Cost |
| MECC Prime Movers | | | | | |
| MECC Prime Movers | | | | · · · · · · · · · · · · · · · · · · · | |
| Cross-Domain Transfer of Incident Awareness and Assessment Data | • • | | | · · · · · · · · · · · · · · · · · · · | . , , |
| Cross-Domain Systems | | 3080 | 10 | \$ 75,000 | \$ 750,000 |
| Unclassified Transportable PAD System and Network Architecture | | | | A | <u> </u> |
| MAP Portable Receiver/ Analysis Work Centers 3080 13 \$250,000 \$3,250,000 Video Downlirk Receivers 3080 13 \$60,000 \$7,826,000 Video Downlirk Receivers 3080 13 \$200,000 \$2,2600,000 Video Downlirk Receivers 3080 13 \$200,000 \$2,2600,000 Video Downlirk Receivers 3080 13 \$30,000 \$455,000 Video Downlirk Receivers 3080 13 \$35,000 \$455,000 Video Downlirk Receivers 3080 13 \$50,000 \$455,000 Video Downlirk Receivers 3080 13 \$50,000 \$650,000 Video Downlirk Receivers 3080 Vitral Collaboration Mission Execution Framework Toolkit Virtal Collaborative Execution Toolkit Vir | | 3080 | 13 | \$ 450,000 | \$ 5,850,000 |
| TPAD Hardware and Software Suites 3080 13 \$ 602,000 \$ 7,265,000 | | 2000 | 40 | A 050 000 | * 0.050.000 |
| Victor Downlink Receivers 3080 13 \$ 200,000 \$ 2,600,000 Tactical Radios (PRC-117) 3080 13 \$ 5,000 \$ 455, | , | | | . , | . , , |
| Tactical Radios (PRC-117) 3080 13 | | | | | |
| Upgraded Prime Movers 3080 13 \$ 50,000 \$ 650,000 AA Virtual Collaboration Mission Execution Framework Toolkit 3080 1 \$2,400,000 \$ 2,400,000 Command and Control Data Aggregator and Disseminator 3080 36 \$ 11,375 \$ 409,500 Server Hardware 3080 36 \$ 200,000 \$ 7,200,000 GIS Software 3080 36 \$ 50,000 \$ 7,200,000 GIS Software 3080 36 \$ 50,000 \$ 7,200,000 GIS Software 3080 36 \$ 50,000 \$ 7,200,000 GIS Sorvers 3080 36 \$ 50,000 \$ 7,200,000 ESF 6 Mass Care, Emergency Assistance, Temporary Housing, and Human Services 7 | | | | . , | . , , |
| IAA Virtual Collaboration Mission Execution Framework Toolkit | , | | | | |
| Virtual Collaborative Execution Toolkit | 10 | 3000 | 13 | ψ 30,000 | Ψ 030,000 |
| Command and Control Data Aggregator and Disseminator 3080 36 \$ 11,375 \$ 409,500 \$ 500,000 \$ 7,200,00 | | 3080 | 1 | \$2,400,000 | \$ 2.400.000 |
| GIS Software | | | - | + 2,:00,000 | + =,100,000 |
| Server Hardware 3080 36 \$ 200,000 \$ 7,200,000 | | 3080 | 36 | \$ 11.375 | \$ 409.500 |
| Servers Serv | | | | | |
| ESF 6 Mass Care, Emergency Assistance, Temporary Housing, and Human Services | GIS Servers | 3080 | 36 | | |
| Disaster Relief Mobile Kitchen Trailers | ESF 5 TOTAL | | | | \$ 46,440,500 |
| Disaster Relief Mobile Kitchen Trailers 3080 8 \$625,000 \$5,000,000 | | Туре | Quantity | Unit Cost | Program Cost |
| Disaster Relief Mobile Kitchen Trailers Prime Movers 3080 20 | | | | | |
| Disaster Relief Mobile Kitchen Trailers Prime Movers 3080 20 \$ \$50,000 \$ 1,000,000 | | 3080 | 8 | \$ 625,000 | \$ 5,000,000 |
| Tactical Field Religious Support Kit Furnishing Packages 3080 50 \$ 7,500 \$ 375,000 USAF Small Shelter System 3080 50 \$ 20,000 \$ 1,000,000 Enclosed Over-the-Road Trailers 3080 60 \$ 10,000 \$ 600,000 Tactical Field Religious Support Kit Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking System 3080 27 \$ 200,000 \$ 5,400,000 Interoperable Person Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 ESF 6 TOTAL | | 0000 | | A 50.000 | A 1000000 |
| Furnishing Packages 3080 50 \$ 7,500 \$ 375,000 USAF Small Shelter System 3080 50 \$ 20,000 \$ 1,000,000 Enclosed Over-the-Road Trailers 3080 60 \$ 10,000 \$ 600,000 Tactical Field Religious Support Kit Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking System 3080 27 \$ 200,000 \$ 5,400,000 Interoperable Person Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable LRE MSKS 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Fuel Support System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | 3080 | 20 | \$ 50,000 | \$ 1,000,000 |
| USAF Small Shelter System 3080 50 \$ 20,000 \$ 1,000,000 Enclosed Over-the-Road Trailers 3080 60 \$ 10,000 \$ 600,000 Tactical Field Religious Support Kit Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking System 3080 27 \$ 200,000 \$ 5,400,000 ESF 6 TOTAL \$ 15,775,000 ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable LRE MSKS 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | 2000 | FA | ¢ 7500 | ¢ 275.000 |
| Enclosed Over-the-Road Trailers 3080 60 \$ 10,000 \$ 600,000 Tactical Field Religious Support Kit Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking System 3080 27 \$ 200,000 \$ 5,400,000 Interoperable Person Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable LRE MSKs 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | | | | |
| Tactical Field Religious Support Kit Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking System 3080 27 \$ 200,000 \$ 5,400,000 Interoperable Person Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable LRE MSKs 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 Tactical Field Religious System 3080 89 \$ 17,417 \$ 1,550,113 Tactical Field Religious System 3080 89 \$ 17,417 \$ 1,550,113 Tactical Field Religious System 3080 89 \$ 17,417 \$ 1,550,113 Tactical Field Religious System 3080 89 \$ 17,417 \$ 1,550,113 Tactical Field Religious System 3080 89 \$ 17,417 \$ 1,550,113 | | | | | |
| TFRSK Prime Movers 3080 60 \$ 40,000 \$ 2,400,000 Interoperable People Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 ESF 6 TOTAL Type Quantity Unit Cost Program Cost ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable Launch and Recovery Mission Support Kit RPA Deployable Launch and Recovery Mission Support Kit 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock Mobile Loading Docks 3080 89 \$ 17,417 \$ 1,550,113 | | 3000 | UU | φ 10,000 | φ ουυ,υυυ |
| Interoperable People Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 | | 3080 | 60 | \$ 40,000 | \$ 2 400 000 |
| Interoperable Person Tracking Systems 3080 27 \$ 200,000 \$ 5,400,000 | | 5500 | | ¥ 40,000 | ÷ 2,400,000 |
| ## Type Quantity Unit Cost Program Cost | | 3080 | 27 | \$ 200.000 | \$ 5.400.000 |
| ESF 7 Logistics Type Quantity Unit Cost Program Cost RPA Rapid Deployable Launch and Recovery Mission Support Kit | | | | | |
| RPA Rapid Deployable Launch and Recovery Mission Support Kit RPA Deployable LRE MSKs 3080 12 \$5,000,000 \$60,000,000 Total Asset Visibility TAV Systems 3080 89 \$500,000 \$44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$250,000 \$22,250,000 Deployable Fuel Support System Deployable Fuel Support System 3080 89 \$150,000 \$13,350,000 Mobile Loading Dock Mobile Loading Docks 3080 89 \$17,417 \$1,550,113 | | Type | Quantity | Unit Cost | * -, -, |
| RPA Deployable LRE MSKs 3080 12 \$ 5,000,000 \$ 60,000,000 Total Asset Visibility TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock Mobile Loading Docks 3080 89 \$ 17,417 \$ 1,550,113 | | 770 | | 2 331 | |
| Total Asset Visibility 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set 500,000 \$ 22,250,000 Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 500,000 \$ 150,000 \$ 13,350,000 Mobile Loading Docks 3080 89 \$ 17,417 \$ 1,550,113 | | 3080 | 12 | \$ 5,000.000 | \$ 60.000.000 |
| TAV Systems 3080 89 \$ 500,000 \$ 44,500,000 Vehicle Deployable Diagnostics Test Set Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock Mobile Loading Docks 3080 89 \$ 17,417 \$ 1,550,113 | . , | | | | |
| Vehicle Deployable Diagnostics Test Set Sepoloyable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | 3080 | 89 | \$ 500.000 | \$ 44,500.000 |
| Deployable Vehicle Diagnostics System 3080 89 \$ 250,000 \$ 22,250,000 Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | • | | | | , |
| Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | 3080 | 89 | \$ 250,000 | \$ 22,250,000 |
| Deployable Fuel Support System 3080 89 \$ 150,000 \$ 13,350,000 Mobile Loading Dock 3080 89 \$ 17,417 \$ 1,550,113 | | | | | |
| Mobile Loading Docks 3080 89 \$ 17,417 \$ 1,550,113 | Deployable Fuel Support System | 3080 | 89 | \$ 150,000 | \$ 13,350,000 |
| <u> </u> | | | | | |
| ESF 7 TOTAL \$ 141,650,113 | | 3080 | 89 | \$ 17,417 | \$ 1,550,113 |
| | ESF 7 TOTAL | | | | \$ 141,650,113 |

| ESF 8 Public Health and Medical Services | Туре | Quantity | Unit Cost | Program Cost |
|---|--------------|----------|--------------------------|-------------------------------|
| Portable Patient Treatment Accountability System | | | | - |
| Patient Treatment Accountability System | 3080 | 89 | \$ 120,000 | \$ 10,680,000 |
| Field Network Extension Kits | 3080 | 3 | \$ 15,100 | \$ 45,300 |
| Modernization of Expeditionary Medical Support Assemblages | | | | |
| Deployable Oxygen Systems | 3080 | 2 | \$ 215,000 | \$ 430,000 |
| Patient Ventilator Systems | 3080 | 4 | \$ 24,000 | \$ 96,000 |
| EMEDS Modernization Equipment | 3080 | 2 | \$ 1,150,000 | \$ 2,300,000 |
| Modernization of National Guard CERFP and HRF Medical Elements | | | | |
| Patient Ventilator Systems | 3080 | 27 | \$ 24,000 | \$ 648,000 |
| Ultrasound Equipment | 3080 | 17 | \$ 57,600 | \$ 979,200 |
| Equipment Calibration Sets | 3080 | 27 | \$ 44,000 | \$ 1,188,000 |
| Portable Sinks Tent Repair Kits | 3080 3080 | 27 27 | \$ 400 | \$ 10,800 \$ 18,900 |
| Infection Control Supplies | 3080 | 27 | \$ 700 \$ 600 | \$ 18,900 \$ 16,200 |
| Field Deployment of Personal Protective Equipment | 3000 | 21 | \$ 000 | \$ 10,200 |
| PPE Sets | 3080 | 89 | \$ 500 | \$ 44,500 |
| JFAK Kits | 3080 | 44913 | \$ 284 | \$ 12,755,292 |
| Modernization of Biological Hand Held Assay | 3000 | 44310 | Ψ 204 | Ψ 12,700,232 |
| Biological Hand Held Assay | 3080 | 89 | \$ 80,000 | \$ 7,120,000 |
| ESF 8 TOTAL | | | 7 00,000 | \$ 36,332,192 |
| ESF 9 Search and Rescue | Туре | Quantity | Unit Cost | Program Cost |
| | Type | Quantity | Offic Cost | Frogram Cost |
| Urban Search and Rescue Vehicles | 2000 | | * 700.000 | * 00 500 000 |
| USAR Heavy Rescue Vehicles GA USAR Vehicles | 3080 3080 | 55 10 | \$ 700,000 \$ 320,000 | \$ 38,500,000 \$ 3,200,000 |
| Retractable External Arm with Search and Rescue Missionized Pod | 3000 | 10 | \$ 320,000 | \$ 3,200,000 |
| Retractable Arm Systems | 3010 | 4 | \$ 1,350,000 | \$ 5,400,000 |
| AS-4 Rescue Missionized Pods | 3010 | 4 | \$ 750,000 | \$ 3,000,000 |
| Component Integration | 3010 | 1 | \$ 100,000 | \$ 100,000 |
| Search and Rescue Sensor Technology | | - | 100,000 | 100,000 |
| SAR Sensor Devices | 3080 | 24 | \$ 30,000 | \$ 720,000 |
| UROV Vehicles | 3080 | 4 | \$ 60,000 | \$ 240,000 |
| Guardian Angel Extreme Environment Search and Rescue Equipment | | | | |
| Arctic Survivability Packages | 3080 | 6 | \$ 200,000 | \$ 1,200,000 |
| Arctic Mobility Vehicles | 3080 | 6 | \$ 40,000 | \$ 240,000 |
| Swift Water Equipment | 3080 | 4 | \$ 45,000 | \$ 180,000 |
| Swift Water Mobility Boats | 3080 | 4 | \$ 100,000 | \$ 400,000 |
| Personal Protective Equipment for Urban Search and Rescue | | | | |
| USAR PPE Sets | 3080 | 825 | \$ 1,500 | \$ 1,237,500 |
| ESF 9 TOTAL | | | | \$ 54,417,500 |
| ESF 10 Oil and Hazardous Materials Response | Type | Quantity | Unit Cost | Program Cost |
| Personal Protective Equipment Modernization | | | | |
| Level A HAZMAT Suits | 3080 | 1550 | \$ 2,000 | \$ 3,100,000 |
| Level B HAZMAT Suits | 3080 | 1550 | \$ 500 | |
| CBRN and Hazardous Material Detection Equipment | | | | |
| CBRN and HAZMAT Detection Kits | 3080 | 62 | \$ 150,000 | \$ 9,300,000 |
| Dedicated CBRN and Hazardous Material Detection Response Trailer | | | | |
| CBRN Response Trailers | 3080 | 62 | \$ 80,000 | \$ 4,960,000 |
| Responder Rehabilitation Shelter | | | | |
| Responder Rehabilitation Shelters | 3080 | 124 | \$ 60,000 | \$ 7,440,000 |
| Command and Control Liaison Kit | | | | |
| C2 Liaison Kits | 3080 | 36 | \$ 35,000 | \$ 1,260,000 |
| ESF 10 TOTAL | | | | \$ 26,835,000 |
| ESF 13 Public Safety and Security | Type | Quantity | Unit Cost | Program Cost |
| Less-than-Lethal Kits | | | | |
| Less-than-Lethal Kits | 3080 | 146 | \$ 57,200 | \$ 8,351,200 |
| Security Forces Vehicles | | | | |
| Crew Cab Trucks, 4X4 | 3080 | 92 | \$ 55,000 | \$ 5,060,000 |
| Incident Response Command and Control Kit | | | | |
| Command and Control Kits | 3080 | 92 | \$ 6,400 | \$ 588,800 |
| Emergency Vehicle Response Suite | | | | |
| Emergency Response Kits | 3080 | 92 | \$ 74,300 | \$ 6,835,600 |
| | | i . | ĺ | 1 |
| Ultralight All-Terrain Utility Equipment | | | | A |
| Ultralight All-Terrain Utility Equipment Ultralight All-Terrain Equipment | 3080 | 184 | \$ 18,000 | \$ 3,312,000 |
| Ultralight All-Terrain Utility Equipment | 3080 | 184 | \$ 18,000 | \$ 3,312,000 \$ 24,147,600 |
| Ultralight All-Terrain Utility Equipment Ultralight All-Terrain Equipment | 3080 | 184 | \$ 18,000 | |

| FEMA & State Region / FEMA Region 1 Emergency Support Function CT MA ME NH RI VT NJ ESF 1 - Transportation | | gion 2 PR VI | DC | | MA Regio | n 3 | | | | | | | - | | | |
|--|------|-----------------|----|----|----------|-----|----|----|----|-----|-------|----------|----|----|----|--|
| ESF 1 - Transportation | | PR VI | DC | | | | | | | - + | EMA I | Region 4 | | | | |
| | • • | | | DE | MD PA | VA | WV | AL | FL | GA | KY | MS | NC | SC | TN | |
| | • • | | | | | _ | | | | | | | | | | |
| Prime Power Pkg Vehicles/Trailers | | | | | | | • | | | • | | | | | • | |
| RPA SAA System | • | | | | | | | | | | | | | | | |
| Debris Clearance Prime Movers | • • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | |
| Security Forces Vehicles | • • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | |
| Cargo/Utility Vehicle Fleet Mod ● ● ● ● ● ● | • • | • • | • | • | • • | • | • | • | • | • | • | • | • | • | • | |
| ESF 2 - Communications | | | | | | | | | | | | | | | | |
| Tactical Interoperable Voice Comm ● ● ● ● ● ● | • • | • • | • | • | • • | • | • | • | • | • | • | • | • | • | • | |
| Tactical Comms Path Diversity | • | • | | | • | • | • | • | • | • | • | | • | | • | |
| JISCC Network Management Tool | • | • | | | • | • | • | • | • | • | • | | • | | • | |
| RAPIDTAC • • • | | | | • | • | | | | | | | | | | | |
| Ground Mobile Comms Extension | • | | | | • | | | | | • | | | | | | |
| ESF 3 - Public Works & Engineering | | | | • | | | | | | | | | | | | |
| Prime Power Equipment ● ● | • • | | | | | | • | | | • | | | | | | |
| Portable Lights Kits | • • | • • | • | • | • • | • | • | • | • | • | • | • | • | • | • | |
| EOD Equipment ● ● ● | • | | | • | | | | | • | • | • | | | | | |
| Route Opening Pkg Augmentation | • • | • | • | • | • • | • | • | • | • | • | • | • | • | • | • | |
| Potable Water Equipment | | • | | | | | • | • | | | | | | | | |
| ESF 4 - Firefighting | | | | | | | | | | | | | | | | |
| Firefighting Vehicles | • • | • | | • | • • | | • | • | • | • | • | • | • | • | • | |
| Enhanced SA & Comms – Ground • • • • • • • | • • | • | | • | • • | | • | • | • | • | • | • | • | • | • | |
| Enhanced SA & Comms − Air ■ | • | • | | • | • | | • | | | • | • | | • | | | |
| Airborne Firefighting Delivery Sys | • | • | | • | • | | • | | | • | • | | • | | | |
| ESF 5 - Information & Planning | | | | • | | | | | | | | | | | | |
| FEMA Type II MEOC | | | | | • | | | | | | | | | | • | |
| Cross-Doman Transfer of IAA Data | • | | | | | | | | | | | | | | • | |
| Unclass TPAD Sys & Network | | | | | | • | | • | • | | | | | | • | |
| IAA Virtual Collaboration Toolkit | • | | | | | | | | | | | | | | • | |
| C2 Data Aggregator/Disseminator | • | | | | • | | • | • | • | | | • | | | • | |
| ESF 6 - Mass Care, Emergency Assistance, Temporary Housing & Human Service | ices | | | | | | | | | | | | | | | |
| DRMKTs • | | | | | • | | | | | | | | | | | |

Х

•

ullet

•

ullet

•

ullet

DRMKTs Prime Movers

TFRSK Prime Movers

Tactical Field Religious Support Kits

Interoperable People Tracking Sys

ullet

ullet

| | | | | | St | ate | / F | EN | ΊΑΙ | Ma | trix | , | | | | | | | | | |
|---------------------------------------|---------|-------|--------|--------|-------|--------|--------|-----|---------|-------|------|----|-------|--------|----|----|----|-------|--------|----|----|
| FEMA & State Region / | | F | EMA F | Region | 5 | | | FEN | 1A Regi | ion 6 | | F | EMA I | Region | 7 | | F | EMA I | Region | 8 | |
| Emergency Support Function | IL | IN | МІ | MN | ОН | WI | AR | LA | NM | ОК | TX | IA | KS | МО | NE | со | МТ | ND | SD | UT | WY |
| ESF 1 - Transportation | | | | | | | | | | | | | | | | | | | | | |
| Prime Power Pkg Vehicles/Trailers | | | • | | • | | | • | • | | | • | | | | | • | | | | |
| RPA SAA System | | | | | | | | | | | • | | | | | | | • | | | |
| Debris Clearance Prime Movers | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Security Forces Vehicles | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Cargo/Utility Vehicle Fleet Mod | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| ESF 2 - Communications | | | | | | | | | | | | | | | | | | | | | |
| Tactical Interoperable Voice Comm | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Tactical Comms Path Diversity | • | • | | • | • | • | | • | | | • | | | • | | • | | | | • | |
| JISCC Network Management Tool | • | • | | • | • | • | | • | | | • | | | • | | • | | | | • | |
| RAPIDTAC | | | | | | | | | | | | • | • | | | | | | | | |
| Ground Mobile Comms Extension | | | | | • | | | | | | • | | | • | | | | | | • | |
| ESF 3 - Public Works & Engineering | | | | | | | | | | | | | | | | | | | | | |
| Prime Power Equipment | | | • | | • | | | • | | | | • | | | | | • | | | | |
| Portable Lights Kits | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| EOD Equipment | | | | • | | • | | | | | • | | | | • | • | • | • | | • | |
| Route Opening Pkg Augmentation | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Potable Water Equipment | • | | | | | | | | | • | | | | • | | | | | | | • |
| ESF 4 - Firefighting | | | | | | | | | | | | | | | | | | | | | |
| Firefighting Vehicles | • | • | • | • | • | • | • | | | • | • | • | • | • | • | | • | • | • | • | • |
| Enhanced SA & Comms – Ground | • | • | • | • | • | • | • | | | • | • | • | • | • | • | | • | • | • | • | • |
| Enhanced SA & Comms – Air | | | | | | | | | | | | | | | | | | | | | |
| Airborne Firefighting Delivery Sys | • | | | • | • | | • | | | | • | | | • | | | • | | | | • |
| ESF 5 - Information & Planning | | | | | | | | | | | | | | | | | | | | | |
| FEMA Type II MEOC | | | | | • | • | | | • | | • | | | | | | • | | | | |
| Cross-Doman Transfer of IAA Data | | | | | • | | | | | | • | | | | | | | • | | | |
| Unclass TPAD Sys & Network | | • | | | • | | • | | • | | | | • | | | | | | | | |
| IAA Virtual Collaboration Toolkit | | | | | • | | | | | | • | | | | | | | • | | | |
| C2 Data Aggregator/Disseminator | • | • | | | • | • | • | | • | | • | | • | | | | | • | | | |
| ESF 6 - Mass Care, Emergency Assist | ance, 1 | Гетро | rary H | ousing | & Hur | nan Se | rvices | | | | | | | | | | | | | | |
| DRMKTs | | | | | | • | | | | • | | | • | | | | • | | | | |
| DRMKTs Prime Movers | | | | | • | • | | | | • | • | • | • | | | • | • | | | | |
| Tactical Field Religious Support Kits | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| TFRSK Prime Movers | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Interoperable People Tracking Sys | • | • | | • | • | • | | • | • | | • | • | | • | | • | | | | | |

| State / FEMA Matrix | | | | | | | | | | | | |
|--|-------|-------|---------|---------|--------|-------|---------|-------|----|--|--|--|
| FEMA & State Region / | | FFM | IA Regi | ion 9 | | l FI | EMA R | egion | 10 | | | |
| Emergency Support Function | AZ | CA | GU | HI | NV | AK | ID | OR | WA | | | |
| ESF 1 – Transportation | | | | | | | | | | | | |
| Prime Power Pkg Vehicles/Trailers | • | | | | • | | | • | | | | |
| RPA SAA System | • | • | | | | | | | | | | |
| Debris Clearance Prime Movers | • | • | • | • | • | • | • | • | • | | | |
| Security Forces Vehicles | • | • | • | • | • | • | • | • | • | | | |
| Cargo/Utility Vehicle Fleet Mod | • | • | • | • | • | • | • | • | • | | | |
| ESF 2 - Communications | | | | | | | | | | | | |
| Tactical Interoperable Voice Comm | • | • | • | • | • | • | • | • | • | | | |
| Tactical Comms Path Diversity | | • | | • | • | | | • | • | | | |
| JISCC Network Management Tool | | • | | • | • | | | • | • | | | |
| RAPIDTAC | | • | | | | | | | • | | | |
| Ground Mobile Comms Extension | | • | | | | | | | • | | | |
| ESF 3 - Public Works & Engineering | | • | | • | • | - | | • | | | | |
| Prime Power Equipment | • | | | | • | | | • | | | | |
| Portable Lights Kits | • | • | • | • | • | • | • | • | • | | | |
| EOD Equipment | | • | | | | | | • | | | | |
| Route Opening Pkg Augmentation | • | • | • | • | • | • | • | • | • | | | |
| Potable Water Equipment | | | | • | | | | | • | | | |
| ESF 4 - Firefighting | | | | | | | | | | | | |
| Firefighting Vehicles | • | • | | | • | • | • | • | | | | |
| Enhanced SA & Comms – Ground | • | • | | | • | • | • | • | | | | |
| Enhanced SA & Comms – Air | | | | | | | | | | | | |
| Airborne Firefighting Delivery Sys | | • | | | • | • | | | | | | |
| ESF 5 - Information & Planning | | | | | | | | | | | | |
| FEMA Type II MEOC | | | | | • | | • | | | | | |
| Cross-Doman Transfer of IAA Data | • | • | | | | | | | | | | |
| Unclass TPAD Sys & Network | | • | | | • | | | | • | | | |
| IAA Virtual Collaboration Toolkit | • | • | | | | | | | | | | |
| C2 Data Aggregator/Disseminator | • | • | | | • | | | | • | | | |
| ESF 6 - Mass Care, Emergency Assist | ance, | Tempo | orary H | lousing | g & Hu | man S | ervices | s | | | | |
| DRMKTs | | • | | | | | | • | | | | |
| DRMKTs Prime Movers | | • | | • | | | | • | • | | | |
| Tactical Field Religious Support Kits | • | • | • | • | • | • | • | • | • | | | |
| TFRSK Prime Movers | • | • | • | • | • | • | • | • | • | | | |
| Interoperable People Tracking Sys | • | • | | • | | | | • | • | | | |

State / FEMA Matrix FEMA & State Region / **FEMA Region 1 FEMA Region 2 FEMA Region 3 FEMA Region 4** DE MD PA VA **Emergency Support Function** MA ME NH RI VT NJ NY PR VI DC wv AL FL GA KY MS NC SC TN **ESF 7 - Logistics RPA Deployable Launch & Recovery** • • • • **Total Asset Visibility** • lacktrianglelacktriangle• • • • \bullet • • • • • lacktriangle• • • • **Vehicle Diagnostics Test Set** • • • \bullet \bullet \bullet • \bullet • \bullet \bullet • \bullet \bullet • \bullet \bullet **Deployable Fuel Support System** \bullet **Mobile Loading Dock** ESF 8 - Public Health & Medical Services **Patient Treatment Accountability** lacktrian• • • • • • **Modernization of CERFP & HRF** • • lacktriangle• lacktriangle• • • lacktriangleullet• • lacktriangle• • lacktrian• • • • • ullet• • • Modernization of EMEDS Modernization of Biological HHA lacktrianglelacktrianglelacktrianglelacktriangle• ulletullet**Field Deployment of PPE** ESF 9 - Search & Rescue **USAR Vehicles** ullet• lacktriangleRetractable Arm & SAR Pod • **SAR Sensor Technology** lacktriangle \bullet • \bullet • **GA Extreme Environment SAR Equip** lacktrianglelacktriangle• • **PPE for USAR** • • • ullet• • • ESF 10 - Oil & Hazardous Materials Response **PPE Modernization** • • • • • • **CBRN/HAZMAT Detection Equip** • • • lacktriangle• • • **Dedicated CBRN/HAZMAT Trailer** lacktriangle• • **Responder Rehabilitation Shelter** • • • • • \bullet • \bullet \bullet \bullet lacktriangle \bullet • \bullet \bullet • lacktriangle• • • • • • • • • • • • • C2 Liaison Kit lacktriangleESF 13 - Public Safety & Security **Less-than-Lethal Kits** \bullet • • • lacktrian• • • • • lacktrian• • • • • **Security Forces Vehicles** • • **Incident Response C2 Kit** lacktrianglelacktrianglelacktriangle• lacktriangle• **Emergency Vehicle Response Suite** lacktrianglelacktrianlacktrianglelacktrianglelacktrianglelacktrianlacktriangle• lacktrianglelacktrianglelacktriangleulletlacktrianglelacktrianullet• • lacktrianglelacktriangle**Ultralight All-Terrain Utility Equip** • • • lacktrian• • • • lacktrian• •

| | | | | | | S | tat | e / | 'FE | MA | A N | lat | rix | | | | | | | | |
|---------------------------------------|-------|----|-------|---------|----|----|-----|-----------------------------|-----|----|-----|-----|-----|----|---------------|----|----|----|----|----|----|
| FEMA & State Region / | | F | EMA R | egion ! | 5 | | | FEMA Region 6 FEMA Region 7 | | | | | | | FEMA Region 8 | | | | | | |
| Emergency Support Function | IL | IN | MI | MN | ОН | WI | AR | LA | NM | ОК | TX | IA | KS | МО | NE | СО | MT | ND | SD | UT | WY |
| ESF 7 - Logistics | | | | | | | | _ | | | | | | _ | _ | | | | _ | | |
| RPA Deployable Launch & Recovery | | | • | | • | | • | | | | • | • | | | | | | • | | | |
| Total Asset Visibility | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Vehicle Diagnostics Test Set | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Deployable Fuel Support System | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Mobile Loading Dock | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| ESF 8 - Public Health & Medical Servi | ces | | | | | | | | | | | | | | | | | | | | |
| Patient Treatment Accountability | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Modernization of EMEDS | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Modernization of CERFP and HRF | • | • | | • | • | • | | • | | | • | | | • | • | • | | | | • | |
| Field Deployment of PPE | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Modernization of Biological HHA | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| ESF 9 - Search & Rescue | | | | | | | | | | | | | | | | | | | | | |
| USAR Vehicles | • | • | • | • | • | • | • | • | • | • | | • | • | • | • | • | • | • | • | • | • |
| Retractable Arm & SAR Pod | | | | | | | | | | | | | | | | | | | | | |
| SAR Sensor Technology | • | | | | • | | • | | | • | | • | | | • | | • | | | | • |
| GA Extreme Environment SAR Equip | | | | | | | | | | | | | | | | | | | | | |
| PPE for USAR | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| ESF 10 - Oil & Hazardous Materials R | espon | se | | | | | | | | | | | | | | | | | | | |
| PPE Modernization | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| CBRN/HAZMAT Detection Equip | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Dedicated CBRN/HAZMAT Trailer | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Responder Rehabilitation Shelter | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| C2 Liaison Kit | • | • | • | • | • | • | | | | • | • | | • | • | | | | | | | |
| ESF 13 - Public Safety & Security | | | | | | | | | | | | | | | | | | | | | |
| Less-than-Lethal Kits | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Security Forces Vehicles | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Incident Response C2 Kit | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Emergency Vehicle Response Suite | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Ultralight All-Terrain Utility Equip | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

| State | / F | ΕM | Αľ | Иa | trix | | | | | | |
|---------------------------------------|--------|-----|--------|-------|------|----------------|----|----|----|--|--|
| FEMA & State Region / | | FEM | A Regi | ion 9 | | FEMA Region 10 | | | | | |
| Emergency Support Function | ΑZ | CA | GU | НІ | NV | AK | ID | OR | WA | | |
| ESF 7 - Logistics | | | | | | | | | | | |
| RPA Deployable Launch/Recovery | • | • | | | | | | | | | |
| Total Asset Visibility | • | • | • | • | • | • | • | • | • | | |
| Vehicle Diagnostics Test Set | • | • | • | • | • | • | • | • | • | | |
| Deployable Fuel Support System | • | • | • | • | • | • | • | • | • | | |
| Mobile Loading Dock | • | • | • | • | • | • | • | • | • | | |
| ESF 8 - Public Health & Medical Serv | vices | | | | | | | | | | |
| Patient Treatment Accountability | • | • | • | • | • | • | • | • | • | | |
| Modernization of EMEDS | • | • | • | • | • | • | • | • | • | | |
| Modernization of CERFP and HRF | | • | | • | • | | | • | • | | |
| Field Deployment of PPE | • | • | • | • | • | • | • | • | • | | |
| Modernization of Biological HHA | • | • | • | • | • | • | • | • | • | | |
| ESF 9 - Search & Rescue | | | | | | | | | | | |
| USAR Vehicles | • | • | • | • | • | • | • | • | • | | |
| Retractable Arm & SAR Pod | | • | | | | • | | | | | |
| SAR Sensor Technology | | • | | | • | • | • | • | | | |
| GA Extreme Environment SAR Equip | | • | | | | • | | | | | |
| PPE for USAR | • | • | • | • | • | • | • | • | • | | |
| ESF 10 - Oil & Hazardous Materials I | Respor | ıse | | | | | | | | | |
| PPE Modernization | • | • | • | • | • | • | • | • | • | | |
| CBRN/HAZMAT Detection Equip | • | • | • | • | • | • | • | • | • | | |
| Dedicated CBRN/HAZMAT Trailer | • | • | • | • | • | • | • | • | • | | |
| Responder Rehabilitation Shelter | • | • | • | • | | • | • | • | • | | |
| C2 Liaison Kit | • | • | | • | | • | | | • | | |
| ESF 13 - Public Safety & Security | | | | | | | | | | | |
| Less-than-Lethal Kits | • | • | • | • | • | • | • | • | • | | |
| Security Forces Vehicles | • | • | • | • | • | • | • | • | • | | |
| Incident Response C2 Kit | • | • | • | • | • | • | • | • | • | | |
| Emergency Vehicle Response Suite | • | • | • | • | • | • | • | • | • | | |
| Ultralight All-Terrain Utility Equip | • | • | • | • | • | • | • | • | • | | |

This page intentionally left blank.

Transportation

Transportation (ESF 1) - The transportation functions facilitate the management of transportation systems and infrastructure during domestic incidents. It includes intermodal transportation, aviation and airspace management, transportation safety, restoration and recovery of transportation infrastructure, movement restrictions, and impact assessment.



A major disaster may severely damage the civil transportation

system. ANG assistance may be required to move essential resources, as well as for clearing and restoring the transportation system. When transportation systems or infrastructure are damaged, unavailable, or overwhelmed, the ANG can provide temporary alternative transportation solutions.



Transportation capabilities support the air and ground transport of units, personnel, and materiel, including heavy equipment, medical patients, bulk and palletized cargo, fire suppression systems, water, petroleum, oil and lubricants (POL), and ground transport across unimproved, damaged, obstructed, and flooded surfaces.



ESF 1 - Transportation 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Prime Power Package Vehicles and Trailers
- Remotely Piloted Aircraft Sense and Avoid Systems
- Debris Clearance and Route Opening Prime Movers
- Security Forces Vehicles
- Cargo and Utility Vehicles Fleet Modernization

Essential Capabilities List

None

Desired Capabilities List

None

Transportation

PRIME POWER PACKAGE VEHICLES AND TRAILERS

- 1. Background. Prime power teams consist of personnel and equipment that deploy during a disaster relief operation to provide stable power support, advice, and technical assistance in all aspects of emergency electrical power and distribution systems. The team provides installation, operation and maintenance of emergency power generation systems up to 1370 kW with the initial 4F9LG and the 4F9LH follow-on Unit Type Code (UTC) equipment packages. This capability powers local shelters, small hospitals and clinics, and police and fire stations indefinitely. Prime Power Packages require cargo trucks, flat bed tractor-trailers, and low bed tractor-trailers for transportation of their personnel, generators, and support equipment. The packages also require forklifts to place the generators and tanker trucks to keep them fueled for the duration of the event. Fifteen Prime Power Packages are needed.
- **2. Source of Need.** Lessons learned from Hurricanes KATRINA and RITA in 2006, Hurricanes GUSTAV, HANNA, and IKE in 2008, Port au Prince, Haiti Earthquake in 2010, and Superstorm SANDY in 2012; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 104 FW | Westfield-Barnes, MA | 108 ARW | JB McGuire, NJ | 118 AW | Nashville IAP, TN |
|---------|----------------------|---------|--------------------|--------|-----------------------|
| 120 AW | Great Falls IAP, MT | 127 WG | Selfridge ANGB, MI | 132 RW | Des Moines IAP, IA |
| 150 SOW | Kirtland AFB, NM | 152 AW | Reno-Tahoe IAP, NV | 159 FW | New Orleans JRB, LA |
| 162 FW | Tucson IAP, AZ | 165 AW | Savannah IAP, GA | 167 AW | Eastern WV RAP, WV |
| 173 FW | Klamath Falls AP, OR | 174 ATW | Syracuse IAP, NY | 180 FW | Toledo Express AP, OH |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 15 Semi-Trailer, Low Bed, 35-Ton (3080) | \$48,000 | \$720,000 |
| 30 Flatbed Trailers (3080) | \$42,000 | \$1,260,000 |
| 45 Cargo Trucks, 4x2, 4-Door (3080) | \$140,000 | \$6,300,000 |
| 15 All-Terrain Forklifts, 13K (3080) | \$172,000 | \$2,580,000 |
| 15 Fuel Truck, 1200-Gal, 4x4 (3080) | \$139,000 | \$2,085,000 |
| 45 Tractor Trailer, 6x4, 55K (3080) | \$146,000 | \$6,570,000 |
| Total | | \$19,515,000 |

REMOTELY PILOTED AIRCRAFT SENSE AND AVOID SYSTEMS

- 1. Background. The current Remotely Piloted Aircraft (RPA) configuration and equipment, along with international and Federal Aviation Administration (FAA) safety requirements, limit the ability to operate RPAs in international and domestic airspace. RPA flight operations require specific, International Civil Aviation Organization (ICAO), FAA, or foreign approvals which restrict aircraft airspace routing and altitude. These restrictions inhibit aircrew training and degrade operational flexibility during federal and state missions. The FAA requires RPAs to operate with a level of safety equal to manned aircraft before approving unrestricted flight operations. Federal Aviation Regulation (FAR) 91.113 Right-of-Way Rules requires all pilots to "see-and-avoid" other aircraft. The FAA will, however, authorize an equivalent "sense-andavoid" solution for RPAs once one is certified. An RPA operating with a Ground-Based Sense and Avoid (GBSAA) system meets the requirement of collision-avoidance contained in the ICAO Rules of the Air and FAA FARs. GBSAA systems incorporate low cost commercial offthe-shelf active radar sensors to provide the Air National Guard with an affordable, scalable, and transportable sense and avoid system. The ANG GBSAA solution integrates into the future Air Force Air-Based Sense and Avoid (ABSAA) system to provide true "file and fly" operations. Unrestricted access to the National Airspace System is critical for Title 32 civil support missions as well as Title 10 Defense Support of Civil Authorities missions. Each RPA Launch and Recovery Element (LRE) unit requires two GBSAA systems, one for home station operations and one for off-station response efforts.
- **2. Source of Need.** FAR 91.113 Right-of-Way Rules; ICAO Rules of the Air, July 2005; 2011 and 2012 Air Reserve Component Weapons and Tactics Conference; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** Ten GBSAA systems are required. The ongoing GBSAA Research, Development, Test, and Evaluation effort results in one operational unit. The objective is to provide each LRE unit with one GBSAA system as a permanent installation and one to rapidly deploy for a regional incident.

119 WG Hector IAP, ND 147 RW Ellington IAP, TX 163 RW March ARB, CA

174 ATW Syracuse IAP, NY 214 RG Davis-Monthan AFB, AZ

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-------------|--------------|
| 1 Non-Recurring Engineering (3600) | \$200,000 | \$200,000 |
| 9 Ground-Based Sense and Avoid Systems (3080) | \$2,500,000 | \$22,500,000 |
| Total | | \$22,700,000 |

Transportation

DEBRIS CLEARANCE AND ROUTE OPENING PRIME MOVERS

- 1. Background. Following many disasters, roads and airfields are cleared of debris to permit the emergency response and recovery process. Heavy equipment such as bulldozers, front-end loaders, dump trucks, and cranes ensure rapid clearing of critical access roads and airfields. This heavy equipment complements the light airfield and route clearance equipment (previously procured) which includes chain saws, chop saws, hand tools, personal protective equipment, rope ladders, and other light clearance equipment. Each of the 89 Air National Guard (ANG) wings has these equipment sets bundled into large steel containers with trailers, but no vehicles capable of transporting them to an incident site. These dump trucks also transport route clearance personnel.
- **2. Source of Need.** 2010 Domestic Operations Equipment Requirements Conference; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All 89 ANG wings.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|-----------|--------------|
| 178 Dump Trucks, 10-Ton (3080) | \$72,000 | \$12,816,000 |
| Total | | \$12,816,000 |

SECURITY FORCES VEHICLES

- 1. Background. Security Forces (SF) provide civil disturbance response and force protection. Federal mission requirements not off-base domestic emergencies determine SF vehicle assignment. The wing's motor pool issues these vehicles based upon SF-unique security and law enforcement requirements. Fleet vehicles are programmed for replacement after 20 years or if they have met or exceeded the economic one-time repair limit in accordance with Air Force Instruction 24-302 and Technical Order 36-1-191. SF vehicles typically experience higher levels of wear and tear by 24/7 operational use in law enforcement resulting in an increased need for modernization. SF require more robust vehicles than those available in the vehicle fleet to execute both the federal and domestic missions. Additionally, SF vehicles provide capability beyond the transportation requirements of moving personnel and equipment. The vehicles provide a mobile mission platform that enables SF personnel to conduct their daily operations, and provide an initial on-scene command and control capability during an incident. SF vehicles also provide a staging capability for checkpoints, road closures, traffic control points, civil disturbance operations, town patrols, and serve as a blocking force and barricade protection if required.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, Washington State mudslide in 2014, Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 92 ANG SF squadrons. A unit's mission design and status as a standalone or co-located unit determines distribution of vehicles.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|-----------|--------------|
| 92 Crew Cab Trucks, 4X4 (3080) | \$55,000 | \$5,060,000 |
| Total | | \$5,060,000 |

CARGO AND UTILITY VEHICLES FLEET MODERNIZATION

- 1. Background. The Air National Guard (ANG) has limited capability during domestic operations to provide cargo and utility vehicles. To be effective transporting medium-to-heavy loads. ANG units require ½-to-1½-ton vehicles (i.e., trucks) with features such as crew cab. diesel engine, four-wheel drive, dual rear wheels, heavy-duty tow, and suspension kits. The ANG also requires light-to-medium prime movers for towing a minimum 10,000-20,000 pounds. The number of ANG vehicles requiring replacement increases each year while the vehicle fleet program remains historically underfunded. The modernized cargo and utility vehicles replace or upgrade existing vehicles in a local motor pool. During domestic incidents where the response is time-critical, motor pool vehicles capable of towing a trailer system may not be available within the current fleet configuration. The current motor pool fleet of "prime mover" vehicles does not always accommodate the transport of trailers when needed to support real-world incidents, exercises, and training events; and on-scene relocation as rapidly changing incident conditions dictate. These vehicles are the prime movers to transport personnel and critical capabilities in support of a domestic incident response, including Disaster Relief Beddown Sets (DRBS), Transportable Processing Analysis and Dissemination (TPAD) trailers, Fatality Search and Recovery Trailers (FSRT), Reverse Osmosis Water Purification Units (ROWPU), Tactical Field Religious Support Kits (TFRSK), and Disaster Relief Mobile Kitchen Trailers (DRMKT).
- **2. Source of Need.** 2014 Air Force Vehicle Efficiencies and Modernization Initiative; lessons learned from Hurricanes KATRINA and RITA in 2006, Hurricanes GUSTAV, HANNA, and IKE in 2008, California wildfires in 2007-2013, Port au Prince, Haiti Earthquake in 2010, Gulf of Mexico Oil Spill in 2010, Superstorm SANDY in 2012; USAF Homeland Defense Conference Briefs, 27 Feb 1 Mar 2007; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** The vehicle management sections at all ANG wings and geographically separated units; and those ANG organizations requiring personnel and cargo transport to support incident responses.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|------------------|--------------|
| 150 Cargo and Utility Fleet Modernization (3080) | \$41,000 | \$6,150,000 |
| Total | | \$6,150,000 |

This page intentionally left blank.

Communications

Communications (ESF 2) - The communications functions cover all capabilities for interconnection of voice, imagery, and data over telecommunications and data networks to establish shared situational awareness among federal, state, and local agencies for response to disasters and recovery efforts. Communications capabilities include reestablishing critical communications infrastructure, facilitating coordination of response operations, and acting as a bridge among disparate capabilities. The communications functions include coordination with telecommunications and information technology industries; repair of telecommunications and network infrastructure; protection, reestablishment, and sustainment of national cyber and information technology resources; and oversight of communications within the federal, state, and local incident management and response structures.

The Air National Guard has extensive expertise, communications equipment and networks, and cyber resources for use during homeland operations. To address gaps in capability, ANG field representatives identified the need for equipment allowing them to function more efficiently when supporting civil authorities, share situational awareness through a common operational picture, sustain operations, ensure security of communications resources and networks, and enhance connectivity among responders within an incident command system.



ESF 2 - Communications 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Tactical Interoperable Voice Communications
- Tactical Communications Path Diversity
- Joint Incident Site Communications Capability Block 3 Network Management Enhancement Tool
- Response and Preparedness Integrated Domestic Training Advanced Capability
- Ground-Based Mobile Communications Extension Capability

Essential Capabilities List

- Airborne Mobile Broadband and Full Motion Video Enhancement
- Common Operating Picture

Desired Capabilities List

• Joint Incident Site Communications Capability Airborne Transportation Enhancement

TACTICAL INTEROPERABLE VOICE COMMUNICATIONS

- 1. Background. Military first responders are often unable to communicate with civilian emergency responders with fielded radios. Air National Guard (ANG) responders need to establish voice communications immediately with interagency partners, even before communication nodes such as the Joint Incident Site Communications Capability and the Mobile Emergency Operations Center are functional or when operating outside the range of these systems. ANG emergency responders include firefighters, security forces, search and rescue, explosive ordnance disposal, Homeland Response Force, Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Enhanced Response Force Package, special tactics, and tactical air control party members. All of these "first responders" require systems that are organic to their units, enabling rapid establishment of interoperable communications. Potential solutions include handheld radios that operate on the majority of civil networks (including 700-800 MHz), and cross-banding solutions (vehicle-mounted or hand carried), to establish gateways between military and civil networks and facilitate communications with unit command posts. These solutions enable communications on common VHF/UHF, AM/FM civil bands, as well as emerging standards, such as the Association of Public-Safety Communications Officials-International's Project 25 (APCO-25), in both line-of-sight and trunked modes. Type 1 encryption and coverage of military UHF/VHF bands for dual-use is desired. A vehicle solution incorporates the Battlefield Airman System of Integrated Communications (BASIC) capability. Solutions are field programmable. Cross-banding solutions are capable of bridging disparate civil and military voice networks through existing beyond line-of-sight means, to include high frequency and satellite communications. Without this dual-use capability, responders risk mission failure during domestic disaster response due to limitations with current communication equipment.
- **2. Source of Need.** Presidential Policy Directive 8 National Preparedness, 30 Mar 2011; System Requirements Document TACP Mobile Communications System (MCS) version 6.31, 27 Jun 2014; 2013 Air Reserve Component Weapons and Tactics Conference; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All ANG rescue, ST, SF, EOD, firefighting and TACP units.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 49 BASIC Vehicle Systems (3080) | \$165,000 | \$8,085,000 |
| 500 APCO-25-Compliant Quad-Channel Handheld Radios (3080) | \$10,000 | \$5,000,000 |
| Total | | \$13,085,000 |

TACTICAL COMMUNICATIONS PATH DIVERSITY

- 1. Background. Air National Guard communications units need a capability that diversifies connectivity to SECRET Internet Protocol Router Network (SIPRNET) with command and control elements using regional, beyond line-of-sight microwave communications technology in environments where satellite communications signals are obstructed, impaired, or denied. The current AN/TRC-170 tropospheric scatter system is outdated and no longer fully supported. The proposed next-generation tropospheric system leverages significant advancements in technology, utilizing Everything Over Internet Protocol as its baseband interface and offers an aggregate data rate up to 50 Mbps (a six-fold improvement). Additionally, separation of antennae in both space and operating frequencies, or space and polarization, produces lower bit rate errors, increasing the nominal signal range. This mitigates or reduces network congestion and preserves quality of service. Logistically, the next-generation system reduces the air deployable cargo from six pallets to one. The lack of diversified transmission capabilities for both domestic and overseas missions impairs command and control networks when satellite systems operate in a contested environment.
- **2. Source of Need.** Presidential Policy Directive 8 National Preparedness, 30 March 2011; Integrated Security Constructs (ISC)-A and -B; Program Action Directive 12-07; 2013 Air Reserve Component Weapons and Tactics Conference Essential Capability; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 104 CS Westfield, MA | 107 CF Niagara Falls, NY | 115 CS Madison, WI |
|-------------------------------------|----------------------------|---------------------------------------|
| 119 CACS Knoxville, TN | 123 CF Louisville, KY | 130 CF Charleston, WV |
| 130 EIS Salt Lake City, UT | 133 CF St. Paul, MN | 140 CF Aurora, CO |
| 141 CF Spokane, WA | 142 CF Portland, OR | 147 CBCS San Diego, CA ¹ |
| 151 CF Salt Lake City, UT | 152 CF Reno, NV | 156 CF Carolina, PR |
| 174 CF Syracuse, NY | 181 CF Terre Haute, IN | 192 CF Hampton, VA |
| 221 CBCS Dallas, TX ¹ | 232 CBCS Montgomery, AL | 236 CBCS Hammond, LA |
| 239 CBCS St. Louis, MO ¹ | 242 CBCS Spokane, WA | 263 CBCS New London, NC |
| 264 CBCS Peoria, IL | 265 CBCS S. Portland, ME | 269 CBCS Springfield, OH ¹ |
| 271 CBCS Annville, PA ¹ | 282 CBCS N. Smithfield, RI | 283 CBCS Marietta, GA ¹ |
| 290 JCSS MacDill AFB, FL | 291 CBCS Hilo, HI | 292 CBCS Kahului, HI |
| Note 1: Denotes two JISCC termi | inals assigned. | |
| | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|------------------|--------------|
| 39 Tactical Communications Suite (3080) | \$1,200,000 | \$46,800,000 |
| Total | | \$46,800,000 |

JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY BLOCK 3 NETWORK MANAGEMENT ENHANCEMENT TOOL

- 1. Background. The Joint Incident Site Communications Capability (JISCC) Block 3 (B3) network management enhancement tool provides Air National Guard communications units with military command and control and National Incident Management System compatible site information using a mobile, standardized, modular, and commercial off-the-shelf communications platform. The JISCC B3 provides communications services at the incident site leveraging a bring-your-own-device approach to service access. However, there are two capability gaps: (1) monitoring and managing authorized network traffic at the incident site; and (2) defending the JISCC B3 network against cyber threats. Adding a network management enhancement tool with information protection and intrusion detection services mitigates these gaps. Additionally, due to wide-area network bandwidth limitations, network traffic is prioritized for services susceptible to latency limitations, such as voice and video. A network management enhancement tool improves command and control capabilities, and possibly, averts catastrophic failure of a network. The units impacted and quantities required account for the Army National Guard JISCC investment.
- **2. Source of Need.** Presidential Policy Directive 8 National Preparedness, 30 Mar 2011; Northern Command Communications Plan 6-02, Deployable Communications Standards; Initial Capabilities Document for Command, Control, Communications, and Computers Gateway Capabilities to Support Homeland Defense and Defense Support of Civil Authorities; Air Force Instruction 33-210 Air Force Certification and Accreditation Program; Department of Defense Instruction 10-01 Risk Management Framework for DoD; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 104 CS Westfield, MA | 107 CF Niagara Falls, NY | 115 CS Madison, WI |
|---------------------------------------|------------------------------------|-------------------------------------|
| 119 CACS Knoxville, TN | 123 CF Louisville, KY | 130 EIS Salt Lake City, UT |
| 130 CF Charleston, WV | 133 CF St. Paul, MN | 140 CF Aurora, CO |
| 141 CF Spokane, WA | 142 CF Portland, OR | 147 CBCS San Diego, CA ¹ |
| 151 CF Salt Lake City, UT | 152 CF Reno, NV | 156 CF Carolina, PR |
| 174 CF Syracuse, NY | 181 CF Terre Haute, IN | 192 CF Hampton, VA |
| 221 CBCS Dallas, TX ¹ | 232 CBCS Montgomery, AL | 236 CBCS Hammond, LA |
| 239 CBCS St. Louis, MO ¹ | 242 CBCS Spokane, WA | 263 CBCS New London, NC |
| 264 CBCS Peoria, IL | 265 CBCS S. Portland, ME | 267 CBCS Otis ANGB, MA |
| 269 CBCS Springfield, OH ¹ | 271 CBCS Annville, PA ¹ | 282 CBCS N. Smithfield, RI |
| 283 CBCS Marietta, GA ¹ | 290 JCSS MacDill AFB, FL | 291 CBCS Hilo, HI |
| 292 CBCS Kahului, HI | | |

Note 1: Denotes two JISCC terminals assigned.

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|------------------|--------------|
| 40 JISCC Network Management Suites (3080) | \$200,000 | \$8,000,000 |
| Total | | \$8,000,000 |

RESPONSE AND PREPAREDNESS INTEGRATED DOMESTIC TRAINING ADVANCED CAPABILITY

- 1. Background. Air National Guard (ANG) communications and cyberspace operations units require an unclassified training environment and operationally advanced capability to conduct domestic operations and prevent cyber-attacks against Critical Infrastructure and Key Resources (CIKR) and public works. Response and Preparedness Integrated Domestic Training and Advanced Capability (RAPIDTAC) is a single system that allows integrated training with state and local cyber defense partners. Protecting the integrity and security of the network connecting these mission areas is critical to supporting implementation of the domestic operations mission. RAPIDTAC is a configurable and scalable solution utilizing hardware-in-the-loop to virtually simulate connections between government and commercial networks and the World Wide Web. RAPIDTAC simulates a wide variety of Department of Defense Information Network environments and communications platforms. This capability operates as a stand-alone training environment or is connected to the 132nd Attack Wing Detachment 1, Distributed Training Operations Center and the Joint Information Operations Range to provide more realistic threats, targets, and cyberspace terrain. Lack of RAPIDTAC limits communications personnel in integration, training, and preparedness to respond to national disasters and cyberspace attacks.
- **2. Source of Need.** Presidential Policy Directive 8 National Preparedness, 30 Mar 2011; 2013 Air Reserve Component Weapons and Tactics Conference; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| <u>=</u> | | |
|--------------------------|---------------------------|------------------------|
| 102 NWS Quonset ANGB, RI | 143 IOS Camp Murray, WA | 166 NWS New Castle, DE |
| 175 NWS Martin State, MD | 177 IAS McConnell AFB, KS | 261 NWS Sepulveda, CA |
| 262 NWS McChord AFB, WA | 265 CBCS S. Portland, ME | 267 CBCS Otis ANGB, MA |
| DTOC Des Moines, IA | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 5 Cyber Training Internet Simulator Hubs (3080) | \$393,000 | \$1,965,000 |
| 10 Cyber Training Small Network Systems (3080) | \$340,000 | \$3,400,000 |
| 5 Advanced Capability Sets (3080) | \$300,000 | \$1,500,000 |
| 10 JIOR Pico Nodes (3080) | \$110,000 | \$1,100,000 |
| 10 Interconnection Fee (3080) | \$42,000 | \$420,000 |
| Total | | \$8,385,000 |

GROUND-BASED MOBILE COMMUNICATIONS EXTENSION CAPABILITY

- 1. Background. Cross-banding permits Air National Guard responders to use civilian and military radio frequency bands, but cross-banding is severely limited because most deployed systems operate under line-of-sight conditions only. In ideal terrain, there is an average effective range of not more than 2.7 miles. Recent domestic operations exercises have demonstrated distribution of ground forces routinely extends beyond the effective line-of-sight range for most deployed handheld radio systems, making cross-banding ineffective. A ground-based mobile communications extension capability significantly improves communication range and enables effective cross-banding. Without this capability for domestic and overseas missions, radio communications and interagency cross-banding is inadequate for many scenarios.
- **2. Source of Need.** Presidential Policy Directive 8 National Preparedness, 30 Mar 2011; Lessons learned from Exercises PATRIOT 2014 and VIBRANT RESPONSE 2014; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** One platform is to be located per Federal Emergency Management Agency region in states with a Homeland Response Force headquarters and assigned to existing Joint Incident Site Communications Capability units.

| 107 CF Niagara Falls, NY | 130 EIS Salt Lake City, UT | 147 CBCS San Diego, CA |
|--------------------------|----------------------------|----------------------------|
| 221 CBCS Dallas, TX | 239 CBCS St. Louis, MO | 242 CBCS Spokane, WA |
| 269 CBCS Springfield, OH | 271 CBCS Annville, PA | 282 CBCS N. Smithfield, RI |
| 283 CBCS Marietta GA | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-------------|--------------|
| 10 Vehicle-Mounted Remote Communications Platforms (3080) | \$1,100,000 | \$11,000,000 |
| Total | | \$11,000,000 |

This page intentionally left blank.

Public Works and Engineering

Public Works and Engineering (ESF 3) - The Air National Guard (ANG) provides public works and engineering support during emergencies. These capabilities include technical assistance, engineering, and construction management resources. The ANG also provides pre-

and post-incident assessments of public works and infrastructure, road clearing and airfield recovery, electrical power generation and distribution, emergency lighting, and potable water production (including storage and distribution). The ANG executes contracts for emergency repair of damaged public infrastructure and critical facilities, real estate services, life-saving and life-sustaining actions, and expedient bridging following a major disaster.





After a major disaster, homes, public buildings, bridges, and other facilities need to be inspected to determine if they are safe. Roads and runways may need to be cleared of debris to facilitate recovery operations. Public utilities including power, water, and wastewater systems may be partially or fully inoperable. Rapidly deployable shelters and portable utilities provided by the ANG are often required to save lives and enable recovery actions. Furthermore, if a manmade disaster involves improvised explosive devices, the services of Explosive Ordnance Disposal teams may be needed.



ESF 3 - Public Works and Engineering 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Prime Power Equipment
- Portable Lighting Kits
- Explosive Ordnance Disposal Equipment
- Route Opening Package Augmentation
- Potable Water Production, Storage, and Distribution Equipment

Essential Capabilities List

- High Efficiency Sand Bag Filling Machine
- High Capacity Water Pump
- Personal Protective Equipment for Public Works and Engineering
- Refrigeration Trailer to Support Fatality Search and Recovery Team

Desired Capabilities List

- Low Altitude Persistent Incident Awareness and Assessment (Multispectral and Full Motion Video) for Damage Assessment
- Bucket Truck for Search and Rescue as well as Damage Assessment
- Containerized Ice Making System to Support Chemical, Biological, Radiological, Nuclear, High-Yield Explosives Enhanced Response Force Package and Contingency Operations
- Expedient Bridging Kit

PRIME POWER EQUIPMENT

- 1. Background. A prime power team consists of equipment and 15 Airmen that deploy during a disaster relief operation to provide stable, reliable electrical power as well as advice and technical assistance in all aspects of emergency electrical power, electrical distribution systems, and restoration of the power grid. The team provides limited installation, operation, and maintenance of emergency power generation systems. A prime power team needs 20 generators (i.e., eight 100 kW, seven 60 kW, and five 30 kW generators), wiring, supplies, tools, and protective equipment. This equipment enables the team to maintain and increase emergency power available to civilian and military emergency facilities (temporary evacuation shelters, clinics, nursing homes, police stations, command centers, and Joint Reception, Staging, Onward Movement, and Integration (JRSOI)) over extended periods of time. Two pilot prime power teams have been established and equipped at the 150th Special Operations Wing, Kirtland AFB, NM and the 118th Air Wing, Nashville IAP, TN. A set of prime power equipment is needed at 13 additional sites to cover all 10 Federal Emergency Management Agency (FEMA) Regions. Five smaller FEMA Regions (I, III, VII, VIII, X) have one equipped team, and the other five FEMA Regions (II, IV, V, VI, and IX) have two equipped teams. Note: the ESF 1 (Transportation) tab identifies the vehicles to transport the prime power team and equipment as critical capability.
- **2. Source of Need.** 2010 Domestic Operations Equipment Requirements Conference; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 104 FW | Westfield-Barnes RAP, MA | 108 ARW | JB McGuire-Dix, NJ | 120 FW | Great Falls IAP, MT |
|--------|--------------------------|---------|--------------------|---------|--------------------------|
| 127 WG | Selfridge ANGB, MI | 132 FW | Des Moines IAP, IA | 152 AW | Reno IAP, NV |
| 159 FW | NAS New Orleans, LA | 162 FW | Tuscon IAP, AZ | 165 AW | Savannah IAP, GA |
| 167 AW | Eastern WV RAP, WV | 173 FW | Kingsley Field, OR | 174 ATW | Syracuse-Hancock IAP, NY |
| 180 FW | Toledo Express AP, OH | | | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 104 Generators, 100 kW (3080) | \$43,838 | \$4,559,152 |
| 91 Generators, 60 kW (3080) | \$33,900 | \$3,084,900 |
| 65 Generators, 30 kW (3080) | \$24,164 | \$1,570,660 |
| 13 Wiring and Supplies (3080) | \$30,835 | \$400,855 |
| 13 Tools and Protective Equipment (3080) | \$24,539 | \$319,007 |
| Total | | \$9,934,574 |

PORTABLE LIGHTING KITS

- **1. Background.** During disaster relief operations, portable lighting equipment for off-base domestic response is not available. Portable lighting supports 24-hour operations and is particularly useful during power outages. This lighting lights areas and improves visibility during search and rescue missions, debris clearing and removal activities, and excavation operations. Each kit includes six 2,000-watt light sets and 3000 kilowatt generators capable of illuminating areas up to 16,000 square feet, and two 4000-watt stand-alone light sets with built-in generators that are capable of illuminating a 130,000 square-foot area, which is roughly the size of a football field.
- 2. Source of Need. 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 89 ANG wings.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 498 Light Sets, 2000 W (3080) | \$2,000 | \$996,000 |
| 498 Generators, 3 kW (3080) | \$800 | \$398,400 |
| 166 Self Powered Light Sets, 4000 W (3080) | \$10,000 | \$1,660,000 |
| Total | | \$3,054,400 |

EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT

- 1. Background. Presidential Policy Directive (PPD) 17, Countering Improvised Explosive Devices (C-IED), mandates the development and sustainment of deployable and scalable C-IED capabilities. The PPD 17 requires Explosive Ordnance Disposal (EOD) units to maintain capabilities that are deployable and scalable to a C-IED threat. At this time, Air National Guard (ANG) EOD units have identified gaps in their ability to deploy scalable capabilities in response to C-IED threats. These gaps exist in Personal Protective Equipment (PPE) and in not having a small man-portable robotic platform. ANG EOD units possess the F6 and the Air Force Medium Size Robot robotic platforms. The F6 and the AF Medium Size Robot robotic platforms are too heavy to be man-portable and are too large to operate in small confined spaces, such as culverts, ditches, sewers, attics, crawl spaces, rooftops, and confined spaces. Without access to a small man-portable robotic platform these areas are required to be cleared manually by EOD operators. This exposes the EOD operator to a high level of risk. The F6 and the Air Force Medium Size Robot robotic platforms also require vehicle transport to the incident site. A small man-portable robotic platform also provides ANG EOD units a robotic platform suited to conduct dismounted C-IED operations in areas inaccessible to vehicles. Commercial off-the-shelf robotic platforms exist that meet the majority of short-term needs today, mitigating the risk to the EOD operators. PPE enables EOD operators to respond to a variety of C-IED threats. EOD PPE is necessary to maintain a scalable C-IED capability. EOD PPE includes but is not limited to flame resistant clothing, cold weather gear, personal safety equipment, night vision goggles, life support equipment for extended dismount operations, and emergency medical field care items. EOD PPE enables the EOD operator to respond, detect, and defeat IED threats safely in a variety of environments.
- **2. Source of Need.** Presidential Policy Directive 17, C-IED; lessons learned from the Boston Marathon bombing in 2013; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 104 FW | Westfield-Barnes MA | 115 FW | Truax Field, WI | 116 ACW | Robins AFB, GA |
|---------|--------------------------|---------|-------------------------|---------|--------------------|
| 119 WG | Fargo IAP, ND | 120 FW | Great Falls IAP, MT | 123 AW | Louisville IAP, KY |
| 125 FW | Jacksonville IAP, FL | 140 WG | Buckley AFB, CO | 142 FW | Portland IAP, OR |
| 144 FW | Fresno IAP, CA | 147 RW | Ellington Field JRB, TX | 148 FW | Duluth IAP, MN |
| 151 ARW | Salt Lake City IAP, UT | 155 ARW | Lincoln MAP, NE | 158 FW | Burlington IAP, VT |
| 166 AW | New Castle County AP, DE | 177 FW | Atlantic City IAP, NJ | | - |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------------|-----------|--------------|
| 190 EOD PPE Augmentation Sets (3080) | \$5,000 | \$950,000 |
| 19 Small Portable EOD Robots (3080) | \$68,000 | \$1,292,000 |
| Total | | \$2,242,000 |

Public Works and Engineering

ROUTE OPENING PACKAGE AUGMENTATION

- 1. Background. Roads and airfields are rapidly cleared during disasters to facilitate the emergency response and recovery process, and allow access to the affected areas. All 83 Civil Engineer (CE) units across the United States have been equipped with route opening packages consisting of two compact front-end skid-steer loaders, attachments (bucket, grappler, and sweeper), trailers, chain saws, hand tools, storage container, and Personal Protective Equipment (PPE). Each front-end loader still needs snow plow and chipper attachments. In addition to snow and ice removal, the snow plow is also useful for clearing debris, mud, and sand. The chipper breaks down large stacks of brush interfering with operations into smaller piles of debris, and eliminates the manpower and equipment needed to transport or stack brush. Each augmentation package also includes a backhoe and trailer to load dump trucks with sand or gravel, feed sandbagging machines, rapidly dig a trench, and unload supplies from trucks and flat beds.
- 2. Source of Need. 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 83 CE units.

| Remaining Quantity Required | Unit Cost | Program Cost |
|----------------------------------|------------------|--------------|
| 166 Snow Plow Attachments (3080) | \$1,500 | \$249,000 |
| 166 Chipper Attachments (3080) | \$2,500 | \$415,000 |
| 83 Backhoes (3080) | \$20,000 | \$1,660,000 |
| Total | | \$2,324,000 |

POTABLE WATER PRODUCTION, STORAGE, AND DISTRIBUTION EQUIPMENT

- 1. Background. Potable water is the most critical supply in many disasters. Reverse Osmosis Water Purification Units (ROWPU) provide an expedient water purification and desalination processing capability, and yields 1,500 gallons of potable water per hour each. The ANG has a limited ROWPU capability and it has been proven extremely effective. As a result, more ROWPU capability is required to ensure availability of the equipment across each Federal Emergency Management Agency (FEMA) region. Additionally, 500-gallon portable storage containers, disposal liners, and 2-gallon water jugs are necessary to store and distribute the potable water from ROWPUs. Trailers for moving the ROWPU and containers are also needed. Ten ROWPUs provide potable water capability in each FEMA region.
- **2. Source of Need.** 2010 Domestic Operations Equipment Requirements Conference; 2012 Joint Domestic Operations Equipment Requirements Conference; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 102 IW | Otis ANGB, MA | 130 AW | Charleston ANGB, WV | 131 BW | Whitman AFB, MO |
|--------|----------------------------|---------|---------------------|--------|------------------|
| 138 FW | Tulsa ANGB, OK | 141 ARW | Fairchild AFB, WA | 153 AW | Cheyenne MAP, WY |
| 154 WG | JB Pearl Harbor-Hickam, HI | 156 AW | Muñiz AB, PR | 182 AW | Peoria IAP, IL |
| 187 FW | Montgomery RAP AL | | | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 10 ROWPU, 1500 GPH (3080) | \$252,789 | \$2,527,890 |
| 400 Storage Containers, 500-Gallon (3080) | \$4,200 | \$1,680,000 |
| 2000 Container Liners (3080) | \$60 | \$120,000 |
| 5000 Distribution Containers, 2-Gallon (3080) | \$1 | \$5,000 |
| 20 ROWPU Trailers (3080) | \$4,000 | \$80,000 |
| Total | | \$4,412,890 |

This page intentionally left blank.

Firefighting (ESF 4) – Firefighting capabilities include detecting and suppressing wildland, rural, and urban fires from the ground and air, and 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. Fire resulting from or occurring coincidentally with a major disaster may place extraordinary demands on available resources and logistics support systems. A catastrophic fire or event involving multiple disasters will exceed local firefighting capabilities.



Air National Guard (ANG) Fire and Emergency Services (FES) personnel can augment local firefighting resources because ANG firefighters maintain the same certifications as their civilian counterparts. The team consists of managers, incident commanders, and firefighters. In addition to traditional fire and rescue capabilities, ANG firefighters provide hazardous materials response to include Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) events. The ANG firefighting enterprise consists of 55 Fire and Emergency Services units and three C-130 units configured for airborne firefighting.

Current ANG firefighting operations require rapid decision making. Interoperable communications provide a capability for ANG firefighters to operate on multiple bands with real-time programmability providing flexibility to the incident commander while providing situational awareness and safety to the incident responders. This was the situation during the California wildfires from 2008 through 2013, Hurricane KATRINA in 2005, Hurricane IKE in 2008, and Superstorm SANDY in 2012.



ESF 4 - Firefighting 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Firefighting Vehicles
- Enhanced Situational Awareness and Communications for Firefighting Air
- Enhanced Situational Awareness and Communications for Firefighting Ground
- Aerial Firefighting Delivery System

Essential Capabilities List

None

Desired Capabilities List

None

FIREFIGHTING VEHICLES

- 1. Background. The Air National Guard (ANG) Fire and Emergency Services (FES) units are modernizing their firefighting vehicle fleet to respond to domestic operations missions more effectively. Updated rescue pumper trucks are for current on-base missions as well as an increasing number of off-base calls. A rescue pumper provides the storage required to hold normal firefighting equipment as well as Emergency Medical Service (EMS) equipment. Heavy rescue vehicles carry the Urban Search and Rescue (USAR) tool kits and decrease response times in life-saving rescue situations. These kits share vehicles to move USAR kits with other base organizations. This delays response, especially if the call comes in after hours or on a non-drill weekend. Updated Aircraft Rescue Fire Fighting (ARFF) vehicles, like the Ultra-High Pressure (UHP) P-19, and the Crash Recovery and Structure (CRS) vehicles, like the UHP P-23, are more reliable for day-to-day missions and help establish forward operating locations for contingency airfields as well as other domestic operations missions. Additionally, ARFF vehicles are suited to handle crude oil emergencies and could easily be called out for railroad crashes and hazard material spills.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, and day-to-day mutual aid calls; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 51 Fire and Emergency Services (FES) units.

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------|------------------|--------------|
| 10 ARFF Vehicles (3080) | \$800,000 | \$8,000,000 |
| 5 CRS Vehicles (3080) | \$1,000,000 | \$5,000,000 |
| Total | | \$13,000,000 |

ENHANCED SITUATIONAL AWARENESS COMMUNICATIONS FOR FIREFIGHTING - AIR

- 1. Background. Domestic operations require HH-60 aircrew to process fragmented information from civilian and military systems to rapidly make decisions while flying in busy airspace. Communications with civil authorities is routinely a problem. An increasing number of calls require HH-60 aircrews to communicate with Army National Guard (ARNG), civilians and other organizations on the ground. Interoperable radios, including simultaneous voice, data, and multilink video waveforms are needed. The ability to operate on multiple cross-bands with real-time re-programmability provides flexibility to the incident commander while providing situational awareness and safety to the aircrew. A secure, multi-spectrum radio capable of supporting Soldier Radio Waveform (SRW) increases the probability that rescue helicopters are ready for any relief operation. This capability already exists among ARNG Emergency Management (EM) personnel.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, California Wildfires in 2008, 2010, and 2012; Superstorm SANDY in 2012; Yosemite Rim Fire in 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** The 17 ANG HH-60s are directly impacted by the capability. 106 RQW Gabreski AP, NY 129 RQW Moffett FAF, CA 176 WG JB Elmendorf, AK

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------------|------------------|--------------|
| 17 Communications Platform (3010) | \$350,000 | \$5,950,000 |
| 17 Multi Spectrum Antenna (3010) | \$75,000 | \$1,275,000 |
| 1 Component Integration (3010) | \$100,000 | \$100,000 |
| Total | | \$7,325,000 |

ENHANCED SITUATIONAL AWARENESS COMMUNICATIONS FOR FIREFIGHTING - GROUND

- 1. Background. Problems communicating with civilian authorities and even other military organizations are routinely cited in disaster response and exercise after-action reports. Meanwhile, the number of off-base calls continue to increase. Civilian fire departments operate on a wide range of frequency bands (UHF, VHF, 700 MHz, and 800 MHz). Most ANG Fire and Emergency Services (FES) units have access to local partner emergency services radio frequencies; but problems arise outside the local area. FES need the capability to operate on multiple bands, be field programmable, and provide real-time communication flexibility to the incident commander. Additionally, this capability expands access to commercial Internet, real-time updates, and video feeds from additional assets (to include airborne systems) in the FES command vehicle, and enhances firefighter safety by providing the incident commander access to a vast amount of emergency response information. This aids in both on-base and off-base calls.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005; and 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 55 ANG units with FES organizations.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 1650 Multi Band Radios (3080) | \$4,500 | \$7,425,000 |
| 55 Vehicle Commercial Internet Capability (3080) | \$11,200 | \$616,000 |
| Total | | \$8,041,000 |

AERIAL FIREFIGHTING DELIVERY SYSTEM

- 1. Background. Existing Air National Guard (ANG) C-130 aerial firefighting systems consist of water tanks and release mechanisms that allow the firefighting agent to freefall or be pumped overboard from the aircraft. Effective delivery is dependent upon releasing the firefighting agent approximately 300 feet above the target to ensure minimal evaporation prior to the agent reaching the wildfire. Aerial firefighting aircraft typically need to "dive-bomb" the target. This tactic requires unobstructed visibility and a safe climb out path, leaving little room for error or recovery from downdrafts or turbulence. The ANG has only eight aerial firefighting systems available. Utilizing a Containerized Delivery System (CDS) airdrop capable disposable container for water or fire retardant for aerial firefighting dramatically increases the number of airlift assets available to respond to wildfire emergencies. No additional training is required since an existing pool of CDS-qualified airdrop aircrew is available. The CDS creates the capability to directly attack and extinguish wildfires utilizing single or multi-ship formations. Current systems do not allow multiple aircraft in formation; however, a CDS allows multiple aircraft to fight fires. This capability is substantially less expensive than current aerial firefighting operations. Additionally, a CDS is flown day or night at 500 feet Above Ground Level (AGL) during the day and 1000 AGL at night. These higher altitudes and commonality to normal CDS airdrop procedures increases safety. The Army National Guard utilizes sling-load water buckets with UH-60 and CH-47 helicopters, a capability that ANG rescue units do not have. Equipping ANG rescue unit's HH-60s with sling-load buckets increases the ability to use helicopters in wildland fire responses.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, California Wildfires in 2008, 2010, and 2012, Superstorm SANDY in 2012, and Yosemite Rim Fire in 2013; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All C-130 tactical airdrop units.106 RQW Gabreski AP, NY 129 RQW Moffett FAF, CA 176WG JB Elmendorf, AK

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|---------------|
| 1700 Fixed Wing Aerial Firefighting CDS (3080) | \$100,000 | \$170,000,000 |
| 12 Firefighting Buckets, 660-Gallon (3010) | \$24,000 | \$288,000 |
| 12 Firefighting Bucket Maintenance Kits (3010) | \$2,000 | \$24,000 |
| 3 Firefighting Bucket Power Packs (3010) | \$2,000 | \$6,000 |
| 12 Line, 150-Foot (3010) | \$5,000 | \$60,000 |
| 12 Remote Hooks, 9000-Pound (3010) | \$5,000 | \$60,000 |
| Total | | \$170,438,000 |

Information and Planning

Information and Planning (ESF 5) - Information and planning capabilities include collecting, analyzing, processing, and disseminating information and conducting planning activities. These capabilities encompass the coordination incident situational awareness and the development of plans to support incident activities. These functions are critical to support multiagency planning and coordination for all types of incident response operations. This includes crisis and incident planning, and information collection, analysis, and management. These rely heavily on information generated from Incident Awareness and Assessment (IAA) systems and platforms.

Additionally, the information and planning functions support the staff functions contained in the National Incident Management System (NIMS) for all the federal multiagency coordination centers and incident operations (e.g., National Response Coordination Center, Regional Response Coordination Centers, and Joint Field Offices).



Effective incident response activities rely on information and planning systems that provide a Common Operating Picture (COP) of what is happening to everyone engaged in a response. Several Air National Guard (ANG) assets support building the COP, including the Distributed Common Ground System (DCGS) in use by Intelligence Squadrons where information is processed, analyzed and dissemination; various airborne assets providing still and Full Motion Video (FMV) imagery; and the local-COP systems in use by ANG wings. These ANG assets have been used extensively overseas and proven their ability to provide deployed commanders and task forces the situational awareness necessary in today's battlespace. The challenge is incorporating those assets and technology into Homeland Operations with local, state, and federal agencies and organizations so that they can provide IAA during domestic incidents.



ESF 5 - Information and Planning 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Federal Emergency Management Agency Type II Mobile Emergency Operations Center Systems
- Cross-Domain Transfer of Incident Awareness and Assessment Data
- Unclassified Transportable Processing, Assessment, and Dissemination System and Network Architecture
- Incident Awareness and Assessment Virtual Collaboration Mission Execution Framework Toolkit
- Command and Control Data Aggregator and Disseminator

Essential Capabilities List

• Static Cyber Environment Vulnerability Assessment Capability and Mobile Cyber Environment Vulnerability Assessment Capability

Desired Capabilities List

None

FEDERAL EMERGENCY MANAGEMENT AGENCY TYPE II MOBILE EMERGENCY OPERATIONS CENTER SYSTEMS

- 1. Background. Homeland Security Presidential Directive (HSPD) 5 directs military, state, and other federal government response agencies to meet communications interoperability requirements. This guidance mandates the provision of Command and Control (C2) capabilities to support a Common Operating Picture (COP) to aid in accountability and decision support of Air Force Emergency Response Operations (AERO). Air National Guard (ANG) Emergency Management (EM) units possess 21 Federal Emergency Management Agency (FEMA) Type II communications criteria, self-contained, immediate, rapid response Mobile Emergency Operation Centers (MEOC). They provide mobile C2 platforms capable of broad interoperability among responders for on-scene incident management and long-term recovery. They are distributed two per FEMA region plus one for the National Capital Region (NCR). These MEOC systems include the full spectrum of voice, data, and imaging capabilities that are compatible with local emergency responders. This continuing initiative provides 10 additional MEOC platforms designed to meet National Incident Management System (NIMS) standardization and US Northern Command (NORTHCOM) communications rules of engagement, to bring the total to 31 (three per FEMA region plus one for the NCR). This additional requirement helps the ANG to meet mutual aid agreements and interoperability requirements. Additionally, modernizing each of the current 21 MEOCs improves mission capability. Finally, each of the 10 additional MEOCs require prime mover vehicle upgrades to transport the trailers to incident sites. The current vehicle assigned to the EM functional area is inadequate to tow the trailers.
- **2. Source of Need.** Air Force Instruction (AFI) 10-2501 Emergency Management Program Planning and Operations, 24 Jan 2007; HSPD 5 Management of Domestic Incidents, 28 Feb 2003; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 115 FW | Truax Fld, WI | 120 AW | Great Falls IAP, MT | 124 FW | Gowen Fld, ID |
|---------|--------------------|---------|---------------------|---------|-------------------|
| 134 ARW | McGee Tyson AP, TN | 147 RW | Ellington IAP, TX | 150 SOW | Kirtland AFB, NM |
| 152 AW | Reno IAP, NV | 157 ARW | Pease ITAP, NH | 179 AW | Mansfield RAP, OH |
| 193 SOW | Harrisburg IAP, PA | | | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|------------------|--------------|
| 10 FEMA Type II MEOCs (3080) | \$800,000 | \$8,000,000 |
| 21 MEOC Modernization Equipment (3080) | \$250,000 | \$5,250,000 |
| 10 MEOC Prime Movers (3080) | \$75,000 | \$750,000 |
| Total | | \$14,000,000 |

CROSS-DOMAIN TRANSFER OF INCIDENT AWARENESS AND ASSESMENT DATA

- 1. Background. Joint Force Headquarters, Joint Operations Centers, and Joint Task Force operators and planners require daily use of multiple-domain networks to conduct domestic operations and training. The security protocols of these networks vary from commercial Internet, Nonsecure Internet Protocol Router Network (NIPRNET), SECRET Internet Protocol Router Network (SIPRNET), and even higher levels of classification. Incident commanders access data and video provided by Incident Awareness and Assessment (IAA) platforms which use a variety of these networks to distribute their information. A multi-purpose cross-domain solution enables data to flow bi-directionally between unclassified and classified networks, enabling the secure and rapid transfer of data. Civilian agencies use unclassified commercial Internet, while US Northern Command (NORTHCOM) data from most IAA platforms and state Air and Space Operations Centers is restricted to NIPRNET or SIPRNET. There is a critical need for a solution that enables data to be accessible across all network domains. This allows military commanders, civilian leadership, and field-level operators to have access to the critical information needed during operations and training. The system handles various types of data to include e-mail (with and without attachments), bulk file transfer, mission software applications, direct communications, web services, and live and recorded full motion video from IAA platforms and sensors. This web-based system is accessible by all units contributing to IAA operations. The servers necessary to create the network architecture required for the system are initially located at all Air National Guard Remotely Piloted Aircraft (RPA) locations.
- **2. Source of Need.** Lessons learned from Hurricanes KATRINA and RITA in 2005, California Wildfires in 2007-2014, Haiti Earthquake in 2010, and Gulf of Mexico Oil Spill in 2010; US Air Force Homeland Defense Briefs, 27 Feb 1 Mar 2007; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 118 AW | Nashville IAP, TN | 119 WG | Hector IAP, ND | 147 RW | Ellington IAP, TX |
|--------|-----------------------|----------|------------------|--------|---------------------|
| 163 RW | March AFB, CA | 174 ATKW | Syracuse IAP, NY | 178 FW | Springfield MAP, OH |
| 214 RG | Davis-Monthan AFB, AZ | | | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|-----------|--------------|
| 13 Cross-Domain Systems (3080) | \$450,000 | \$5,850,000 |
| Total | | \$5,850,000 |

UNCLASSIFIED TRANSPORTABLE PROCESSING, ASSESSMENT, AND DISSEMINATION SYSTEM AND NETWORK ARCHITECTURE

- 1. Background. Air National Guard Distributed Common Ground System (DCGS) units, targeting units, and Air and Space Operations Centers need an unclassified, Transportable Processing, Assessment, and Dissemination (TPAD) system and network architecture to provide access to collected information to those responding to a domestic event. TPAD allows Intelligence Squadrons (IS) to produce and disseminate unclassified assessment products and information derived from video and imagery, from civilian and military space- and ground-based systems, and manned and remotely piloted aircraft. Current intelligence systems lack the ability to produce efficient, effective, and timely unclassified assessments in support of domestic incidents. An unclassified TPAD system and network architecture that operates both line-ofsight and beyond line-of-sight enables unit personnel to process and analyze full motion video and various types of imagery (electro-optical, infrared, hyper- and multi-spectral, and synthetic aperture radar). TPADs enable the rapid creation and dissemination of unclassified intelligence products (e.g., video clips, video stills, 360° annotated imagery, graphics, story boards, reports, etc.) to first responders, incident commanders, state Joint Force Headquarters, state emergency operations centers, and others for enhanced Incident Awareness and Assessment (IAA) and decision support. Additionally, the weight of these trailers requires upgraded prime mover vehicles to be available at the base motor pool to ensure TPAD transportation to an incident site.
- **2. Source of Need.** Lessons learned from Hurricanes KATRINA and RITA in 2005, Hurricane GUSTAV in 2008, Hurricane HANNA in 2008, Hurricane IKE in 2008, California Wildfires in 2007-2013, Port au Prince, Haiti Earthquake in 2010; Gulf of Mexico Oil Spill in 2010; USAF Homeland Defense Conference Briefs, 27 Feb 1 Mar 2007; 2012 Joint Domestic Operations Equipment Requirements Conference; 2013 Air Reserve Component Weapons and Tactics Conference; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 101 IS | Otis ANGB, MA | 152 IS | Reno, NV | 194 IS | Tacoma, WA |
|----------|-----------------|----------|-----------------|--------|-----------------|
| 101 AOG | Tyndall AFB, FL | 178 ISRG | Springfield, OH | 234 IS | Sacramento, CA |
| 117 IS | Birmingham, AL | 181 IW | Terre Haute, IN | 250 IS | Albuquerque, NM |
| 118 ISRG | Nashville, TN | 184 IW | Wichita, KS | | |
| 123 IS | Little Rock, AR | 192 IS | Langley AFB, VA | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 13 IAA Portable Receiver / Analysis Work Centers (3080) | \$250,000 | \$3,250,000 |
| 13 TPAD Hardware and Software Suites (3080) | \$602,000 | \$7,826,000 |
| 13 Video Downlink Receivers (3080) | \$200,000 | \$2,600,000 |
| 13 Tactical Radios (PRC-117) (3080) | \$35,000 | \$455,000 |
| 13 Upgraded Prime Movers (3080) | \$50,000 | \$650,000 |
| Total | | \$14,781,000 |

INCIDENT AWARENESS AND ASSESSMENT VIRTUAL COLLABORATION MISSION EXECUTION FRAMEWORK TOOLKIT

- 1. Background. First responders and operations center personnel need robust, redundant, and flexible digital network architectures to optimize situational awareness. The current Incident Awareness and Assessment (IAA) enterprise lacks a multi-level, collaborative, fused framework that supports the incident commander. The lack of a unified tactical display framework to present, share, transfer, and filter mission-critical data has caused mission degradation. The mission execution framework toolkit is Internet Protocol-based, comprehensive, real-time, and dynamic solution that is be accessed via desktop computer and mobile device applications by any incident response personnel from any Air National Guard (ANG) unit, agency, or organization. This virtual toolkit allows the tracking of incident personnel and assets from a mobile application, and provide the complete air and ground picture (i.e., including inputs such as Link-16 and Federal Aviation Administration radar data). These tools build a unified common operating picture by allowing every mission participant to be a "sensor" (uploading pictures, videos, and data points). Further development of the mobile version of this capability enables citizens to assist with their own rescue. It allows full access to all information by aircrew, analysts, supported units, and higher headquarters decision makers. This system is accessible via the Global Information Grid from austere locations with limited bandwidth or connectivity. This system adheres to common standards including, but not limited to, the Unmanned Aerial System Command and Control Initiative, the Motion Imagery Standards Board, and the North American Treaty Organization Standardization Agreement, with development potential to meet emerging needs. The servers necessary to create the network architecture required for the system are initially be located at appropriate locations with access to necessary data. This web-based system is accessible by all units contributing to IAA operations and hosted by all ANG Remotely Piloted Aircraft units.
- **2. Source of Need.** Lessons learned from Operations STRONG SAFETY, ARDENT SENTRY, EMERALD WARRIOR, and PATRIOT GUARD in 2014; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 118 AW | Nashville IAP, TN | 119 WG | Hector IAP, ND | 147 RW | Ellington IAP, TX |
|--------|-----------------------|----------|------------------|--------|---------------------|
| 163RW | March AFB, CA | 174 ATKW | Syracuse IAP, NY | 178 FW | Springfield MAP, OH |
| 214 RG | Davis-Monthan AFB, AZ | | | | |

4. Program Details.

Remaining Quantity Required Unit Cost Program Cost 1 Virtual Collaborative Execution Toolkit (3080) \$2,400,000 \$2,400,000 Total \$2,400,000

COMMAND AND CONTROL DATA AGGREGATOR AND DISSEMINATOR

- 1. Background. Units, military planners, intelligence analysts, and decision makers lack the ability to effectively manage, visualize process, assess, and disseminate geospatial data. There are disparities between National Geospatial-Intelligence Agency (NGA) geodatabases, Air National Guard (ANG) Eagle Vision geodatabases, other military and civilian geodatabases, and the industry standard used for access to civilian and military geospatial data. A single repository is needed for all incident guidance and incoming data inquiries (to include data search functions) from all responders to deliver a powerful set of functionality in a flexible, standards-based, open framework across thin, web, and cloud architectures (using web services) to support domestic operations. Without the integration and fusion of the various datasets and information streams, the ability of intelligence analysts to provide and maintain decision-quality, all-source intelligence preparation of the environment to higher headquarters and civilian leadership is significantly degraded. Additionally, the system acts as a baseline Geographic Information System (GIS) for other military components and most government agencies. Establishing this capability prevents unnecessary information exchange barriers and limits to interoperability. Analysts need an interchangeable, real-time, cloud-based solution that enhances situational awareness by providing on-demand access to critical geospatial intelligence data and reducing the time from collection to decision through a flexible platform deployable on cloud-based systems, mobile devices, and desktop computers.
- **2. Source of Need.** Lessons learned from Operations STRONG SAFETY, ARDENT SENTRY, EMERALD WARRIOR, and PATRIOT GUARD in 2014; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

| 102 IW | Otis ANGB, MA | 111 FW | Horsham ANGS, PA | 115 FW | Truax Fld, WI |
|----------|-------------------------|--------|----------------------|---------|---------------------|
| 117 ARW | Birmingham IAP, AL | 118 AW | Nashville IAP, TN | 119 WG | Hector IAP, ND |
| 123 IS | Little Rock AFB, AR | 125 FW | Jacksonville IAP, FL | 141 ARW | Fairchild AFB, WA |
| 144 FW | Fresno IAP, CA | 147 RW | Ellington IAP, TX | 150 SOW | Kirtland AFB, NM |
| 152 IS | Reno-Tahoe IAP, NV | 162 FW | Tucson IAP, AZ | 163 RW | March AFB, CA |
| 174 ATKW | Syracuse IAP, NY | 178 FW | Springfield IAP, OH | 181 IW | Terre Haute IAP, IN |
| 183 FW | Lincoln Capital IAP, IL | 184 IW | McConnell AFB, KS | 186 ARW | Meridian RAP, MS |
| 187 FW | Montgomery RAP, AL | 214 RG | Davis-Mothan AFB, AZ | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|-------------------------------|------------------|--------------|
| 36 GIS Software (3080) | \$11,375 | \$409,500 |
| 36 Server Hardware (3080) | \$200,000 | \$7,200,000 |
| 36 GIS Servers (3080) | \$50,000 | \$1,800,000 |
| Total | | 9,409,500 |

This page intentionally left blank.

Mass Care, Emergency Assistance, Temporary Housing, and Human Services

Mass Care, Emergency Assistance, Temporary Housing, and Human Services (ESF 6) - Mass care needs during a disaster include the delivery of mass shelter, feeding, and first aid to disaster victims, fatality management, and religious support to responders, as well as systems to distribute emergency relief supplies to disaster victims. Personnel check-in and status reporting systems are used to coordinate rescuers, report on victim status, and assist families to reunite.

During response efforts, the magnitude of damage to buildings and infrastructure can rapidly overwhelm the capacity of state and local governments to assess the disaster and respond effectively to basic and emergency needs. Additionally, damage to roads, airports, and communications systems often hamper emergency response efforts.





The Air National Guard (ANG) has provided key services in past mass care events, including the 2011 Presidential Inauguration. During this event over 1,500 soldiers were called upon to provide security and the ANG provided the mobile kitchens that feed them during the event, ensuring an effective security force. Additionally, events like annual PATRIOT Exercise and the 2014 Oso, Washington landslide have demonstrated how ANG resources can mobilize to assist federal, state, and local authorities.

However, they have also highlighted shortfalls in the ANG ability to respond within the first key hours necessary to sustain life in the immediate aftermath of a disaster. Once on scene, the need to track people and assets in the field is a challenge, with no one system capable of providing overall awareness. Chaplains are also required as they provide compassionate care to help both the victims and responders deal with the emotions and trauma generated by a disaster.



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

ESF 6 - Mass Care, Emergency Assistance, Temporary Housing, and Human Services 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Disaster Relief Mobile Kitchen Trailer
- Disaster Relief Mobile Kitchen Trailer Prime Movers
- Tactical Field Religious Support Kit
- Tactical Field Religious Support Kit Prime Movers
- Interoperable People Tracking System

Essential Capabilities List

None

Desired Capabilities List

None

DISASTER RELIEF MOBILE KITCHEN TRAILER

- 1. Background. Disasters such as Hurricane KATRINA, the Haiti earthquake, and other Special Security Events (SSE) have shown a need for support to civilian and military responders with food. Disaster Relief Mobile Kitchen Trailers (DRMKT) are capable of serving all types of civilian and military meals, to include heat-and-serve Unitized Group Rations (UGR) and UGR-A (includes frozen vegetables). They provide meals at a rate of 700 per hour as long as supplies are available. The Air National Guard (ANG) has the ability to deliver these kitchens quickly with 12 fielded DRMKTs. This mass field-level feeding capability increases with eight additional DRMKTs. The objective is to pre-position two DRMKTs in each of the 10 Federal Emergency Management Agency (FEMA) regions.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Haiti earthquake in 2010, Presidential Inauguration in 2008 and 2012; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** The objective is to field two DRMKTs in each FEMA region. Twelve DRMKTs are fielded and eight additional DRMKTs complete the capability for the ANG Force Support Sustainment Service Flights.

| 115 FW | Truax Fld, WI | 120 AW | Great Falls IAP, MT | 137 ARW | Tinker AFB, OK |
|--------|-------------------|---------|---------------------|---------|----------------|
| 142 FW | Portland IAP, OR | 146 AW | Channel Is ANGS, CA | 157 ARW | Pease ITAP, NH |
| 184 IW | McConnell AFB, KS | 193 SOW | Harrisburg IAW, PA | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 8 Disaster Relief Mobile Kitchen Trailers (3080) | \$625,000 | \$5,000,000 |
| Total | | \$5,000,000 |

DISASTER RELIEF MOBILE KITCHEN TRAILER PRIME MOVERS

- 1. Background. Disasters such as Hurricane KATRINA, the Haiti earthquake, and other Special Security Events (SSE) have shown a need for support to civilian agencies with meals. The Air National Guard (ANG) Disaster Relief Mobile Kitchen Trailers (DRMKT) lack dedicated prime movers to deliver meals quickly. Each empty trailer weighs approximately 10,600 pounds and requires a larger prime mover than that available in the base motor pool at ANG installations. The ANG method for transporting DRMKTs is renting commercial vehicles, which are often in short supply during disaster relief efforts, causing delays in delivering the DRMKT capability. Pre-positioning prime movers with each DRMKT allows the kitchens to be delivered and utilized quickly. The objective is to pre-position two DRMKTs with prime movers at each of the 10 Federal Emergency Management Agency (FEMA) regions.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Haiti earthquake in 2010, Presidential Inaugurations in 2008 and 2012; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** The objective is to field two DRMKTs with a dedicated prime mover in each FEMA region. The vehicles are to be located with the 20 ANG Force Support Sustainment Services Flights with DRMKTs.

| 105 AW | Stewart ANGB, NY | 108 ARW | JB McGuire, NJ | 113 FW | JB Andrews, MD |
|---------|--------------------|---------|--------------------|---------|---------------------|
| 115 FW | Truax Fld, WI | 116 ACW | Robins AFB, GA | 120 AW | Great Falls IAP, MT |
| 123 AW | Louisville IAP, KY | 132 RW | Des Moines IAP, IA | 136 AW | Fort Worth JRB, TX |
| 137 ARW | Tinker AFB, OK | 140 WG | Buckley AFB, CO | 141 ARW | Fairchild AFB, WA |
| 142 FW | Portland IAP, OR | 143 AW | Quonset SAP, RI | 146 AW | Channel Is ANGS, CA |
| 154 WG | Hickam AFB, HI | 157 ARW | Pease ITAP, NH | 179 AW | Mansfield RAP, OH |
| 184 IW | McConnell AFB, KS | 193 SOW | Harrisburg IAP, PA | | |

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 20 Disaster Relief Mobile Kitchen Trailers Prime Movers (3080) | \$50,000 | \$1,000,000 |
| Total | | \$1,000,000 |

TACTICAL FIELD RELIGIOUS SUPPORT KIT

- 1. Background. Recent natural disasters such as the Oso, WA landslide, numerous hurricanes, floods, and tornadoes have shown the need for field support to Airmen responding in highly stressful operations and exposed to severe trauma. The Tactical Field Religious Support Kit (TFRSK) provides, in an austere environment, dedicated climate-controlled space for decompression, Critical Incident Stress Management (CISM) intervention, religious observance, and private counseling with a Chaplain. This save lives as Airmen continue their response efforts, helping to reduce their own operational stress and alleviate diminished capability due to trauma exposure. Ten partial kits, including a furnishing-package (two desks, literature, altar, linens, etc.) are currently stored alongside other pre-packed disaster response kits near Lexington, KY. These initial 10 kits require a trailer and prime mover to be mobile. An additional 50 full kits are needed to position these assets in every state, with two or more in certain states based on population and geography. This enables Religious Support Teams to employ the kits where and when needed, increasing tactical field-level religious support capability.
- **2. Source of Need.** Lessons learned from Oso, WA landslide in 2014; Superstorm SANDY in 2012; Hurricane IRENE in 2011; Hurricane KATRINA 2005; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted**. Ten partial kits are stored at a facility near Lexington, KY. Sixty ANG Chaplain Corps sections with wing-level Religious Support Teams require the TFRSK.

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 50 Furnishing Packages (3080) | \$7,500 | \$375,000 |
| 50 USAF Small Shelter Systems (3080) | \$20,000 | \$1,000,000 |
| 60 Enclosed Over-the-Road Trailers (3080) | \$10,000 | \$600,000 |
| Total | | \$1,975,000 |

TACTICAL FIELD RELIGIOUS SUPPORT KIT PRIME MOVERS

- 1. Background. Upgraded vehicles are to transport Tactical Field Religious Support Kits (TFRSK). Recent natural disasters such as the Oso, WA landslide, numerous hurricanes, floods, and tornados have shown the need for field support to Airmen responding in highly stressful operations and exposed to severe trauma. The Air National Guard (ANG) vehicle fleet lacks the vehicles capable of delivering these kits in a timely manner. Prepositioning the kits ensures Religious Support Teams (RST) at selected ANG wings are ready to employ within their state or Federal Emergency Management Agency (FEMA) region via Emergency Management Assistance Compact (EMAC). Field-level religious support capability increases with procurement and pre-positioning of TFRSKs in each state or territory (some states have authorization for two). The weight of each trailer is approximately 7,000 pounds which requires a larger prime mover vehicle than is available at ANG installations.
- **2. Source of Need.** Lessons learned from Oso, WA landslide in 2014, Superstorm SANDY in 2012, Hurricane IRENE in 2011, Hurricane KATRINA in 2005, and other domestic responses and exercises; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** Sixty ANG Chaplain Corps sections with wing-level Religious Support Teams require the TFRSK with access to vehicles capable of transporting them.

| Remaining Quantity Required | Unit Cost | Program Cost |
|------------------------------|------------------|--------------|
| 60 TFRSK Prime Movers (3080) | \$40,000 | \$2,400,000 |
| Total | | \$2,400,000 |

INTEROPERABLE PEOPLE TRACKING SYSTEM

- 1. Background. The Army National Guard (ARNG) and Air National Guard (ANG) use different systems to track people receiving medical care. Medical Communications for Combat Casualty Care (MC4), the military personnel tracking system used by the ARNG, does not have the ability to track civilian casualties. The ANG Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Enhanced Response Force Package (CERFP) Medical Element uses the Evacuee Tracking and Accountability System (ETAS), which does not allow Fatality Search and Recovery Teams (FSRT) to track partial human remains or Nuclear, Biological, and Chemical (NBC) contaminated remains. There is no process other than utilizing individual Global Positioning System (GPS) devices, photography, and informal documentation to account for remains collected in an NBC contaminated zone. Unifying existing systems provides cohesive tracking of NBC contaminated casualties and human remains. Additionally, there is no standard system used during the initial effort of a domestic response, known as Joint Reception, Staging, Onward Movement, and Integration (JRSOI), to track the location and status of personnel entering a response scenario. Accurate reporting and duty status accountability is required for personnel entering the Joint Task Force (JTF) Commander's Area of Responsibility (AOR) and then moving to duty locations within the disaster area. To prevent congestion at a JRSOI station, this system includes a scanner for common access cards and driver's licenses, along with software to interface with a centralized storage server. Personnel tracking programs and hardware track civilians in shelters and Airmen entering into Title 32 or State Active Duty to support domestic response activities. The system is interoperable with multiple domains. including the ANG network, ARNG network, and commercial internet connections. Hardware is ruggedized and includes a minimum of one computer and one scanning unit. These capabilities, incorporated into an interoperable system, greatly increase JTF awareness of personnel and casualty status, enhancing the overall efficiency of response efforts.
- **2. Source of Need.** 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All states with Homeland Response Force (HRF) and CERFP units.

| 104 FW | Westfield RAP, MA | 107 AW | Niagara Falls ARS, NY | 113 FW | JB Andrews, MD |
|---------|---------------------|---------|-----------------------|---------|----------------------|
| 115 FW | Truax Fld, WI | 117 ARW | Birmingham IAP, AL | 121 ARW | Rickenbacker IAP, OH |
| 123 AW | Louisville IAP, KY | 125 FW | Jacksonville IAP, FL | 130 AW | Yeager AP, WV |
| 132 RW | Des Moines, IAP, IA | 139 AW | St. Joseph AP, MO | 140 WG | Buckley AFB, CO |
| 141 ARW | Fairchild AFB, WA | 142 FW | Portland IAP, OR | 146 AW | Channel Is ANGS, CA |
| 148 FW | Duluth IAP, MN | 149 FW | Kelly Fld, TX | 150 SOW | Kirtland AFB, NM |
| 154 WG | Hickam AFB, HI | 156 AW | Luis Munoz IAP, PR | 157 ARW | Pease ITAP, NH |
| 159 FW | New Orleans JRB, LA | 162 FW | Tucson IAP, AZ | 165 AW | Savannah IAP, GA |
| 171 ARW | Pittsburg IAP, PA | 181 IW | Terre Haute IAP, IN | 182 AW | Peoria IAP, IL |

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 27 Interoperable Person Tracking Systems (3080) | \$200,000 | \$5,400,000 |
| Total | | \$5,400,000 |

This page intentionally left blank.

Logistics (ESF 7) - The logistics function encompasses those capabilities necessary for the timely and efficient delivery of supplies, equipment, services, and facilities. This includes logistics planning, technical assistance, training, education, exercises, incident response, and sustainment. These capabilities consider the capability and resources of federal logistics partners, public and private stakeholders, and nongovernmental organizations in



support of responders and disaster survivors.



Logistics includes centralized management of supply chain functions in support of local, state, and federal governments during domestic incidents. It includes coordination of resource sourcing; acquisition; delivery of supplies, equipment, and services; resource tracking; facility space acquisition; transportation coordination; and management of other administrative services. This includes integration of community logistics partners through

prior planning and crisis collaboration to reestablish local and state self-sufficiency as rapidly as possible. Logistics capabilities include conducting assessments, training, education, and exercise programs for regional entities and local governments.



ESF 7 - Logistics 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Remotely Piloted Aircraft Rapid Deployable Launch and Recovery Mission Support Kit
- Total Asset Visibility
- Vehicle Deployable Diagnostics Test Set
- Deployable Fuel Support System
- Mobile Loading Dock

Essential Capabilities List

- Material Handling Equipment
- Portable Modular Shelter with Storage and Climate Controls
- Temporary Barriers
- Pallet Jacks with Scales

Desired Capabilities List

- Aircraft Maintenance Stand Deployable
- Highline Dock
- Solar Powered Wheel Lock Scales

REMOTELY PILOTED AIRCRAFT RAPID DEPLOYABLE LAUNCH AND RECOVERY MISSION SUPPORT KIT

- 1. Background. The ability of Remotely Piloted Aircraft (RPA) to provide persistent infrared, day television, low light television, and full motion video to first responders and incident command posts is critical to the Air National Guard's (ANG) execution of domestic operations. Rapidly deployable Launch and Recovery Element (LRE) Mission Support Kits (MSK) enable RPAs to be deployed anywhere in the nation within 48 hours and to fly within 72 hours of notification. The ability to fly RPAs from deployed locations rather than home station increases time spent over the incident instead of traveling to and from a distant home airfield. The RPA rapid deployable launch and recovery mission support kit enables the ANG to conduct critical Incident Awareness and Assessment (IAA) anywhere in the nation in an effective, persistent, and timely manner. The kit includes a deployable Ground Control Station (GCS) containing dual connectivity and communication relays, imagery data distribution, and tactical-level interface capabilities, along with a web-based near real-time common operation picture.
- **2. Source of Need.** Lessons learned from Operation ARDENT SENTRY in 2012, Operation ANGEL THUNDER in 2013, California Air National Guard's Operation RIMFIRE in 2013, firefighting efforts in Yosemite National Park, Exercise GRIZZLY in 2012, Exercise AMALGAM DART in 2011 and 2012; 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 12 ANG RPA units are impacted. The objective is to field deployable LREs at each RPA unit in order to limit the logistics footprint of providing RPA capability during a domestic incident.

| 107 AW | Niagara Falls, NY | 119 WG | Fargo, ND | 174 ATKW | Syracuse, NY |
|--------|-------------------|--------|----------------|----------|-----------------|
| 110 AW | Battle Creek, MI | 132 RW | Des Moines, IA | 178 FW | Springfield, OH |
| 111 AW | Willow Grove, PA | 147 RW | Houston, TX | 188 RW | Ft. Smith, AR |
| 118 AW | Nashville, TN | 163 RW | March, CA | 214 RG | Tucson, AZ |

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------------|-------------|--------------|
| 12 RPA Deployable LRE MSKs (3080) | \$5,000,000 | \$60,000,000 |
| Total | | \$60,000,000 |

TOTAL ASSET VISIBILITY

- 1. Background. A Total Asset Visibility (TAV) capability in the Air National Guard (ANG) improves knowledge of asset location and status for ANG leaders responding to domestic incidents. These assets include consumables, equipment, and vehicles. The ANG TAV system is compatible with the Army National Guard (ARNG) TAV system to allow for seamless and efficient response to any disaster. The ARNG is equipped with a TAV tool called the Battle Command Support and Sustainment System (BCS3). BCS3 utilizes Radio Frequency Identification (RFID) technology to monitor movement and maintain inventory of assets coming into and within a disaster area. The ANG uses numerous automated tracking systems and manual processes to provide a limited tracking capability to headquarters elements. The ANG does not have a means to integrate with the ARNG BCS3 or provide responders or headquarters decision makers the detailed situational awareness that current off-the-shelf technology allows. Using RFID tags for items, RFID interrogators, and blue force tracking for personnel and vehicles gains real-time reporting of asset movement on the ground or in the air. Additionally, an unclassified standalone network system allows communication with assets utilizing the existing Internet protocol technologies for e-mail, text, and voice.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Superstorm SANDY in 2012; 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 89 ANG wings.

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------|------------------|--------------|
| 89 TAV Systems (3080) | \$500,000 | \$44,500,000 |
| Total | | \$44,500,000 |

VEHICLE DEPLOYABLE DIAGNOSTICS TEST SET

- 1. Background. The Air National Guard (ANG) vehicle maintenance personnel do not have a vehicle diagnostic testing capability to diagnose disabled vehicles while deployed for overseas operations or domestic incidents. Modern vehicles with computerized engine controls require electronic diagnostics for repairs. The ANG is only able to tow or remove most disabled vehicles when responding to a domestic incident because there is no deployable diagnostic test set to identify malfunctions and required repairs. The ANG could dramatically improve its ability to support civil authorities with one deployable vehicle diagnostic test set in each vehicle maintenance shop.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Superstorm SANDY in 2012; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All 89 ANG wings.

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 89 Deployable Vehicle Diagnostics System (3080) | \$250,000 | \$22,250,000 |
| Total | | \$22,250,000 |

DEPLOYABLE FUEL SUPPORT SYSTEM

- 1. Background. The Air National Guard (ANG) does not have a deployable fuel testing capability to identify solid or liquid contaminants. During Hurricane KATRINA, Hurricane IKE, and Superstorm SANDY there was fuel available but it could not be used due to the inability to verify its quality. ANG units supporting a domestic incident response are unable to verify the quality of fuel being provided or used in ANG vehicles, equipment, and aircraft. The deployable fuel support system includes the fuel testing device, fuel distribution nozzles, and fuel containment system. This testing capability mitigates the possible introduction of contaminated fuel and prevents subsequent mishaps. The ANG could better respond during a disaster with one deployable test set per fuels management flight. Additionally, many ANG fuel distribution vehicles do not have nozzles that are able to refuel civilian vehicles. ANG fuel trucks could add significantly to fuel distribution in a domestic incident at relatively low cost by adapting the ANG R-11 and C-300 fleet to refuel civilian vehicles. Lastly, when these fuel trucks are relocated either in support of domestic operations fuel distribution or when displaced by catastrophic conditions at home station, there are no portable containment systems available to protect against environmental damage in the event of a fuel leak or spill.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Superstorm SANDY in 2012; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** Each of the 89 ANG wings receives one deployable fuel support system per fuels management flight.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 89 Deployable Fuel Support System (3080) | \$150,000 | \$13,350,000 |
| Total | | \$13,350,000 |

MOBILE LOADING DOCK

- 1. Background. Logistics Readiness Squadrons (LRS) are responsible for moving personnel, equipment, supplies, and vehicles at home and abroad. Mobile loading docks allow for the loading and off-loading of equipment, supplies, and vehicles without permanent, stationary loading docks. Mobile loading docks and yard ramps allow point of distribution missions for the distribution of supplies and equipment to disaster-stricken areas. LRS units do not have mobile loading docks or yard ramps but do have loading dock capabilities at each of the base's material management facilities. Mobile loading docks capable of supporting 10,000 pounds to 30,000 pounds and with manual height adjustment from 45 to 62 inches better equips LRS units to support domestic incidents. During domestic operations, these mobile loading docks are used to load and off-load trailers and vehicles, ranging in size from commercial semi-trailers to Light Medium Tactical Vehicles (LMTV). In addition to supporting the ANG's domestic mission, mobile loading docks are capable of supporting overseas deployments.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricanes GUSTAV and IKE in 2008, Hurricane ISAAC in 2014, Superstorm SANDY in 2012; and Operation DEEPWATER HORIZION; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All 89 ANG wings.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|------------------|--------------|
| 89 Mobile Loading Docks (3080) | \$17,417 | \$1,550,113 |
| Total | | \$1,550,113 |

This page intentionally left blank.

Public Health and Medical Services

Public Health and Medical Services (ESF 8) - Public health and medical services capabilities include responding to an emergency or disaster. This type of federal assistance is directed by the Department of Health and Human Services through the Assistant Secretary for Preparedness and Response.

Public health and medical services include emergency medical management of health service resources, such as preventive and curative health measures, triage of injured or sick, evacuation of the injured or sick, fatality management, blood management, medical supply, equipment, stress



control, medical, dental, veterinary, laboratory, optometric, nutrition therapy, bioenvironmental health, and medical intelligence services. These services also include civilian emergency medical system support and Crisis Intervention Stress Management in coordination with religious support teams. Public health and medical services support the public health system in the distribution and administration of vaccines and antidotes; implementation of state emergency



medical response plans; protection of critical force health; and delivery of mortuary support.

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

Over the last several years, the ANG has developed a robust Chemical, Biological, Radiation, Nuclear, and 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 have highly skilled medical personnel and capabilities, and are equipped and trained to respond to hazards, to include specialized skills needed at CBRNE-type events.

ESF 8 - Public Health and Medical Services 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Portable Patient Treatment Accountability System
- Modernization of Expeditionary Medical Support Assemblages
- Modernization of National Guard Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Enhanced Response Force Package and Homeland Response Force Medical Elements
- Field Deployment of Personal Protective Equipment
- Modernization of Biological Hand Held Assay

Essential Capabilities List

None

Desired Capabilities List

None

PORTABLE PATIENT TREATMENT ACCOUNTABILITY SYSTEM

- 1. Background. Medical responders need a portable patient treatment accountability system to track and monitor the care of in-transit patients. The accountability system tracks care as patients move from care provided by different agencies to include Department of Defense, state, and civilian agencies. In a mass casualty event, patient treatment at the incident site prior to transportation is documented on paper (e.g., triage tag) and losing this documentation complicates continued medical treatment and cost lives. A digital tracking system at the incident site that is interoperable with Emergency Medical Services (EMS), receiving facilities, and local hospitals is needed to communicate lifesaving treatment actions performed before transport of the patients to the next location. This improves patient survivability during a mass casualty event where large numbers of patients are rapidly passed through the treatment center. A digital system with a field-level network extension kit communicates casualty information to the incident command center and other agencies. Encrypted electronic communications are Health Insurance Portability and Accountability Act (HIPAA)-compliant. It has the ability to document medical care, print reports, and provide an intuitive user interface that requires minimal training. The system shares information with other systems such as the Joint Patient Assessment and Tracking System (JPATS). The system reviews medical data in a real-time, web-based, and Geographic Information System (GIS)-enabled environment. Additionally, the system provides timely and accurate information on the location, movement, status, and identity of equipment, supplies, and personnel. On-scene automated handheld devices capture multimedia data, such as photos, and are compatible with responders wearing personal protective equipment.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Hurricane GUSTAV in 2008, Joplin Missouri tornado in 2011, Exercise PATRIOT in 2013, and Exercise VIGILANT GUARD in 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 89 Guard Medical Units (GMU).

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 89 Patient Treatment Accountability System (3080) | \$120,000 | \$10,680,000 |
| 3 Field Network Extension Kits (3080) | \$15,100 | \$45,300 |
| Total | | \$10,725,300 |

MODERNIZATION OF EXPEDITIONARY MEDICAL SUPPORT ASSEMBLAGES

- 1. Background. Expeditionary Medical Support (EMEDS) sets require equipment and infrastructure modernization to maintain currency with EMEDS equipment authorizations. Upgrades include deployable oxygen systems, tents, and other medical equipment. Air Combat Command's (ACC) Manpower and Equipment Force Packaging (MEFPAK) teams are modernizing the EMEDS sets' equipment authorizations, increasing, decreasing, and upgrading assets to rapidly deploy for a federal mission or a domestic response. Upgrading Air National Guard EMEDS with new equipment prevents misalignment of resources with the active component and enables the medical units to continue providing the necessary lifesaving, patient care, and treatment tools for medical first responders and the patients in their care
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Hurricane GUSTAV in 2008, Joplin Missouri tornado in 2011, Exercise PATRIOT in 2013, and Exercise VIGILANT GUARD in 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** EMEDS sets deploy to support all 89 Guard Medical Units (GMU). The plan is to store the EMEDS assemblages at the three Consolidated Storage and Deployment Centers.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-------------|--------------|
| 2 Deployable Oxygen Systems (3080) | \$215,000 | \$430,000 |
| 4 Patient Ventilator Systems (3080) | \$24,000 | \$96,000 |
| 2 EMEDS Modernization Equipment (3080) | \$1,150,000 | \$2,300,000 |
| Total | | \$2,826,000 |

MODERNIZATION OF NATIONAL GUARD CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, AND HIGH-YIELD EXPLOSIVES ENHANCED RESPONSE FORCE PACKAGE AND HOMELAND RESPONSE FORCE MEDICAL ELEMENTS

- **1. Background.** The Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) medical elements require modernization to include new equipment to maintain currency with evolving medical technology. Modernization includes patient ventilator systems, ultrasound units, equipment calibration sets, portable sinks, tent repair kits, and infection control supplies. These upgrades also prevent misalignment of Air National Guard resources with the active component and enables the medical units to continue providing the necessary lifesaving patient care and treatment tools.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, Hurricane GUSTAV in 2008; Joplin, Missouri tornado in 2011, Exercise PATRIOT in 2013, and Exercise VIGILANT GUARD in 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 27 ANG CERFP and HRF units. The ultrasound equipment is for the 17 legacy CERFPs to match the configuration of the 10 HRFs with ultrasound capabilities. The 89 Guard Medical Units (GMU) rotate responsibilities and support the CERFP and HRF missions with personnel packages.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------------|-----------|--------------|
| 27 Patient Ventilator Systems (3080) | \$24,000 | \$648,000 |
| 17 Ultrasound Equipment (3080) | \$57,600 | \$979,200 |
| 27 Equipment Calibration Sets (3080) | \$44,000 | \$1,188,000 |
| 27 Portable Sinks (3080) | \$400 | \$10,800 |
| 27 Tent Repair Kits (3080) | \$700 | \$18,900 |
| 27 Infection Control Supplies (3080) | \$600 | \$16,200 |
| Total | | \$2,861,100 |

Public Health and Medical Services

FIELD DEPLOYMENT OF PERSONAL PROTECTIVE EQUIPMENT

- 1. Background. Air National Guard (ANG) service members are postured to respond on short notice to a broad spectrum of disaster scenarios. Most units lack Personal Protective Equipment (PPE) necessary to respond to many likely incidents. Service members need general purpose PPE to prevent casualties. PPE includes chest waders, gloves, helmets, safety glasses, life vests, and first aid kits. The Air Force's Individual First Aid Kit (IFAK) has a 36-month shelf life. It is undergoing a modernization to being replaced, through attrition by a tri-service Joint First Aid Kit (JFAK). The intent is to replace thirty percent of each wing's requirement over each of the next 3 years, thereby staggering the expiration and replacement cycle. The JFAK contains lifesaving supplies applicable to domestic and overseas contingencies. The JFAK is a medical commodity associated with the Air Force mobility bag program. The mobility bag program is managed at the wing-level. The quantity requested is driven by mobility bag requirements that are calculated by wing positions assigned to deployable Unit Type Codes.
- 2. Source of Need. 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 89 Guard Medical Units (GMU).

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|-----------|--------------|
| 89 PPE Sets (3080) | \$500 | \$44,500 |
| 44,913 JFAK Kits (3080) | \$284 | \$12,755,292 |
| Total | | \$12,799,792 |

Public Health and Medical Services

MODERNIZATION OF BIOLOGICAL HAND HELD ASSAY

- 1. **Background.** Air National Guard (ANG) units need an expeditions means of determining if a substance is a biological, chemical, or other dangerous compound. The Department of Defense (DoD) and the ANG utilize a biological sampling kit, but need an easier to use and rapidly deployable tester to identify all known biological warfare agents of concern. The Hand Held Assay (HHA) only has a limited biological detection capability. The device is a simple smart ticket, array, film array, or other assay that is credentialed for use in the DoD and provides the correct data. A biological HHA leads to a faster, more accurate and reliable detection of biological threats in a domestic operation environment.
- **2. Source of Need.** 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 89 Guard Medical Units (GMU).

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------------|-----------|--------------|
| 89 Biological Hand Held Assay (3080) | \$80,000 | \$7,120,000 |
| Total | | \$7,120,000 |

This page intentionally left blank.

Search and Rescue

Search and Rescue (ESF 9) - One third of all domestic operations performed by the National Guard involve the search and rescue of civilians. In fact, search and rescue ranks second only to natural disaster response in terms of the total number of missions performed across all 54 states and territories each year.



The Air National Guard (ANG) search and rescue capabilities fulfill a dual-purpose role providing rescue capability and interoperability in support of both state and federal taskings. ANG forces have saved thousands of lives, often in austere or difficult conditions, when no other means was available for the rescue effort.

The ANG performs the search and rescue mission utilizing three rescue wings and 55 urban search and rescue teams distributed across all 10 Federal Emergency Management Agency regions. All are organized and trained to rapidly deploy and provide initial response search and rescue capability within hours of an incident or natural disaster. Urban search and rescue and Guardian Angel (combat rescue officers and pararescuemen) teams lack special purpose vehicles that are appropriately rated and equipped to fully enable their domestic operations mission.

ANG rescue units have been among the first responders across the entire spectrum of domestic operations since the 1970s. These missions involve civil search and rescue following hurricanes, earthquakes, civil unrest, chemical spills, and forest fires. Missions also include long-range, over-water rescue operations in the East Pacific, West Atlantic, and Gulf regions. US Northern Command recently requested that the ANG additionally perform search and rescue operations in remote arctic regions of the northern territories which are now accessible to maritime vessels due to the warming climate.



ESF 9 - Search and Rescue 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Urban Search and Rescue Vehicles
- Retractable External Arm with Search and Rescue Missionized Pod
- Search and Rescue Sensor Technology
- Guardian Angel Extreme Environment Search and Rescue Equipment
- Personal Protective Equipment for Urban Search and Rescue

Essential Capabilities List

- Urban Search and Rescue Quad-Band Radio
- Illumination Capabilities
- Portable Hyperbaric Chamber
- Capability to Communicate Directly with Potential Rescuees
- Military to Civilian Cross-Band Capability

Desired Capabilities List

- Capability to Quickly Map an Incident Environment
- Man-Portable Remotely Operated Vehicle Quadcopter
- Rescue Hoist with 600-Pound Capacity
- HH-60 Large Capacity Rescue Extraction Device

URBAN SEARCH AND RESCUE VEHICLES

- 1. Background. The Air National Guard (ANG) dedicated rescue teams include Guardian Angels (GA) from three Rescue Wings (RW), pararescuemen assigned to one Special Tactics Squadron (STS), and 55 Fire and Emergency Services (FES) organizations. They cannot deliver their Urban Search and Rescue (USAR) equipment to the scene of a natural or man-made disaster. Specialized USAR vehicles allow rescue teams to access locations by traversing flooded areas, rubble piles, and extremely rough terrain with the personnel and equipment necessary to provide rescue capabilities other responders are not able to provide. This equipment fills capability gaps for travel in adverse urban terrain and travel in rough off-road terrain. Two types of vehicles are needed: a heavy rescue vehicle, equipped with specialized rescue equipment possessed by ANG FES organizations; and an all-terrain light rescue vehicle for GAs. If not funded, ANG USAR teams are unable to meet the 6-hour response time identified in the ANG Search and Rescue (SAR) Teams Concept of Operations (CONOPS).
- **2. Source of Need.** ANG SAR Teams CONOPS, 20 Sep 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 55 ANG FES organizations require USAR heavy rescue vehicles. Three Rescue Squadrons (RQS) and one STS receive GA USAR vehicles, with the STS receiving two vehicles.

103 RQS Gabreski ANGB, NY 123 STS Standiford Field, KY 131 RQS Moffett Field, CA 212 RQS Elmendorf AFB, AK

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------------|-----------|--------------|
| 55 USAR Heavy Rescue Vehicles (3080) | \$700,000 | \$38,500,000 |
| 10 GA USAR Vehicles (3080) | \$320,000 | \$3,200,000 |
| Total | | \$41,700,000 |

RETRACTABLE EXTERNAL ARM WITH SEARCH AND RESCUE MISSIONIZED POD

- 1. Background. Dedicated Air National Guard (ANG) rescue forces rapidly respond to locate and recover isolated or distressed personnel during civil Search and Rescue (SAR) operations when civilian authorities are unable to rescue them. As such, ANG SAR forces are more effective with a self-contained, independent means of executing time-sensitive tasks during the report, locate, support, and recover phases of personnel recovery. Digital management of multiple survivors, which includes electronic tracking and monitoring, and resources via data link, is paramount during wide-area incidents when voice networks are saturated. The SARmissionized AS-4 Pod includes capabilities such as: wide area multispectral Electro-Optical-Infrared (EO-IR) sensor optimized for survivor detection and geolocation; inter-team air-toground and air-to-air voice, and data repeater with cross-band trunking; mesh network and WiFi wide area network extension node for dismounted rescue forces: millimeter wave X-band synthetic aperture radar for maritime, flood, and swift water environments; cellular communications base station for interrogation and line-of-sight communication with cell phoneenabled survivors; Blue Force Tracker Two (BFT2) domestic gateway and line-of-sight, multiband Full Motion Video (FMV) and Video Down Link (VDL) capability. The pod is attached by a retractable arm to any ANG C-130 aircraft with an appropriate dual-rail cargo adapter. A Guardian Angel (GA) Combat Rescue Officer (CRO) seated at a collapsible AS-T4 workstation located in the left paratroop-door of the H/M/C-130 aircraft operates the SAR missionized pod. The AS-4 missionized pod utilizes government furnished sensor equipment and aircraft power from existing receptacles in the cargo compartment. This capability supports all 55 ANG crash and fire rescue teams by providing improved situational awareness when operating in the vicinity of SAR missionized pod-equipped aircraft.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, California Wildfires in 2008, 2010, and 2012, Superstorm SANDY in 2012, and Yosemite Rim Fire in 2013; 2014 Domestic Capability Priorities Conference.

3. Units Impacted.

106 RQW Gabreski Airport, NY 129 RQW Moffett Field, CA 176 WG Elmendorf AFB, AK 123 AW Louisville, KY

| 11 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | |
|--|-------------|--------------|
| Remaining Quantity Required | Unit Cost | Program Cost |
| 4 Retractable Arm Systems* (3010) | \$1,350,000 | \$5,400,000 |
| 4 AS-4 Rescue Missionized Pods (3010) | \$750,000 | \$3,000,000 |
| 1 Component Integration (3010) | \$100,000 | \$100,000 |
| Total | | \$8,500,000 |

^{*} Unit cost includes related accessory support equipment.

SEARCH AND RESCUE SENSOR TECHNOLOGY

- 1. Background. During a mass casualty event, the speed of search is critical to saving the greatest number of victims during the "golden hour." The golden hour is the critical hour following traumatic injury during which lifesaving measures are most effective. In collapsed structures, confined spaces, limited visibility aquatic environments, avalanches, or mudslides, performing the search is time consuming and dangerous for both the rescue team and survivors. In these environments, it is often unknown where survivors are, or if there are survivors in the search area. Therefore, the ability to search for survivors trapped in areas where rescue teams are unable to make visual contact is critical. The Search and Rescue (SAR) sensor technology is remotely controlled and contains methods of detection to include RADAR, SONAR, magnetic and metallic detection, thermal detection, and high resolution, low-light visual cameras. In addition, SAR teams need the capability to search for victims underwater, in flood, river, lake, or maritime environments, with an Underwater Remotely Operated Vehicle (UROV) where conditions otherwise are too hazardous for the rescuers. To date, Air National Guard (ANG) rescue forces, to include Guardian Angels (GA) and Fire and Emergency Services (FES) organizations, rely on manual search procedures and limited technological solutions. The ability to field advanced commercial off-the-shelf technology that is commonplace in civilian rescue organizations greatly enhances the speed and thoroughness of the search. Non-invasive search systems reduce risk to searchers and survivors.
- **2. Source of Need**. Lessons learned from Hurricane KATRINA in 2005, Hurricane IKE in 2008, and Superstorm SANDY in 2012; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. Two FES organizations per Federal Emergency Management Agency region receive SAR sensor devices. The rescue units below receive one UROV each.
 103 RQS Gabreski ANGB, NY 123 STS Standiford Field, KY 131 RQS Moffett Field, CA 212 RQS Elmendorf AFB, AK

| Remaining Quantity Required | Unit Cost | Program Cost |
|------------------------------|-----------|--------------|
| 24 SAR Sensor Devices (3080) | \$30,000 | \$720,000 |
| 4 UROV Vehicles (3080) | \$60,000 | \$240,000 |
| Total | | \$960,000 |

GUARDIAN ANGEL EXTREME ENVIRONMENT SEARCH AND RESCUE EQUIPMENT

- 1. **Background**. For the Air National Guard (ANG), Guardian Angel (GA) teams are first responders for Search and Rescue (SAR) missions at home and abroad. Responses range from natural disasters, plane crashes, combat rescue missions, and other rescues requiring specialized training anywhere in the world. Beginning in 2011, commercial traffic increased significantly over the Arctic. In turn, this increased the likelihood of a major air or maritime disaster in the arctic region. While GA teams are equipped to respond to events in the Arctic, they are not equipped to respond to large-scale disasters. The extreme environment SAR equipment package, including the Arctic survivability packages and Arctic Mobility Vehicle (AMV), closes this gap. The addition of this capability provides emergency response and support in parallel with both Canadian and Russian capabilities. This equipment also enables rescue personnel to provide capability in other extreme cold weather environments outside the Arctic. The ability to perform rescues in aquatic environments is a fundamental requirement of both the Arctic mission and domestic missions throughout the United States. An advanced swift water boat capability allows GAs greater mobility and flexibility in performing rescues in floods, hurricanes, oceans, and other natural disasters resulting in high water levels. Swift Water Mobility (SWM) boats include both man-powered and motorized boats. Swift Water Equipment (SWE) includes rescue equipment and personal protective equipment for diverse aquatic environments.
- **2. Source of Need**. Lessons learned from previous Arctic SAR missions and Hurricane Katrina in 2005; US Northern Command (NORTHCOM) Theater Strategy End State 5 Bullets #1 and #3; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted**. The geographic locations of the rescue units determine the quantity of equipment required. Those units in Alaska and New York receive two Arctic packages; while those units in California and Kentucky receive one each. All units receive the swift water packages.

103 RQS Gabreski ANGB, NY 123 STS Standiford Field, KY 131 RQS Moffett Field, CA 212 RQS Elmendorf AFB, AK

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 6 Arctic Survivability Packages (3080) | \$200,000 | \$1,200,000 |
| 6 Arctic Mobility Vehicles (3080) | \$40,000 | \$240,000 |
| 4 Swift Water Equipment (3080) | \$45,000 | \$180,000 |
| 4 Swift Water Mobility Boats (3080) | \$100,000 | \$400,000 |
| Total | | \$2,020,000 |

PERSONAL PROTECTIVE EQUIPMENT FOR URBAN SEARCH AND RESCUE

- 1. Background. Air National Guard (ANG) Fire and Emergency Services (FES) Urban Search and Rescue (USAR) teams use their Airman Battle Uniform (ABU) in lieu of mission-appropriate clothing because they lack the appropriate Personal Protective Equipment (PPE). The ABU has been identified by both industry and government experts as incompatible with USAR operations. USAR PPE provides ANG firefighters the needed protection to support domestic operations within the Concept of Operations (CONOPS) that includes responding to natural and man-made disasters. PPE includes, at a minimum, high-visibility clothing; water, bio-hazard, chemical, and abrasion-resistant clothing and footwear; portable decontamination equipment; and safety pads.
- **2. Source of Need.** ANG Search and Rescue Teams CONOPS, 20 Sep 2013; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 55 ANG FES units with 15 individuals per unit.

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------|-----------|--------------|
| 825 USAR PPE Sets (3080) | \$1,500 | \$1,237,500 |
| Total | | \$1,237,500 |

This page intentionally left blank.

Oil and Hazardous Materials Response

Oil and Hazardous Materials Response (ESF 10) - The scope of oil and hazardous materials



response functions includes responding to a threat to public health, welfare, or the environment caused by oil and hazardous materials incidents. Hazardous materials is a general term intended to mean hazardous substances, pollutants, and contaminants to include chemical, biological, radiological, and nuclear substances. This Emergency Support Function (ESF) includes actions to prevent, minimize, or mitigate the release of hazardous materials; stabilize the release and prevent the

spread of contamination; store, treat, and dispose of oil, hazardous materials, and contaminated debris; and monitoring debris disposal. Efforts to detect and assess the extent of environmental contamination includes environmental monitoring and sampling and analysis of contaminated media, such as air, water, soil, sediments, buildings, and structures. Analysis of options for environmental cleanup and waste disposition includes options for cleanup and disposal of contaminated debris. Implementation of environmental cleanup includes collection of orphaned oil and hazardous materials containers, collection of household hazardous waste, removal of contaminated soil, and decontamination of buildings and structures.

Air National Guard (ANG) Emergency Management (EM) and Fire and Emergency Services (FES) Chemical, Biological, Radiological, and Nuclear (CBRN) response teams fall within ESF 10 while responding to local and federal incidents. These teams are increasingly called upon to supplement local and federal response to off-base incidents where a large response is required. The increased use of ANG response teams has accelerated the wear and tear on equipment, and highlighted critical capability gaps in the ANG's ability to quickly respond, effectively communicate, rapidly detect current and emerging hazardous material threats, properly protect response personnel, and provide appropriate mental recovery in a high casualty incident.





ESF 10 - Oil and Hazardous Materials Response 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Personal Protective Equipment Modernization
- Chemical, Biological, Radiological, and Nuclear and Hazardous Material Detection Equipment
- Dedicated Chemical, Biological, Radiological, and Nuclear and Hazardous Material Response Trailer
- Responder Rehabilitation Shelter
- Command and Control Liaison Kit

Essential Capabilities List

- Quad-Band Radio with Field Programmability
- Military-to-Civilian Cross-Band Capability

Desired Capabilities List

None

PERSONAL PROTECTIVE EQUIPMENT MODERNIZATION

- 1. Background. Level A (fully enclosed, highest level of protection) and Level B (reduced level) suits offer protection to Hazardous Material (HAZMAT) technician first responder personnel. The National Fire Protection Association (NFPA) 1991 standard on "Vapor-Protective Ensembles for Hazardous Materials Emergencies" mandates enhancements to Level A and Level B suits to ensure first responder safety. The majority of suits fielded for ANG Fire and Emergency Services (FES) and Emergency Management (EM) personnel expire in Fiscal Year 2015 and no longer meet NFPA 1991 standards. Lack of proper Level A and Level B suits significantly impacts the ability to respond to HAZMAT incidents. Each Chemical, Biological, Radiological, and Nuclear (CBRN) and HAZMAT response team needs 25 Level A and 25 Level B suits. This targeted quantity allows FES and EM personnel to effectively respond to a HAZMAT incident with necessary spares.
- **2. Source of Need**. NFPA 1991 Standard on "Vapor-Protective Ensembles for Hazardous Materials," 2005; lessons learned from domestic operations; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 62 Air National Guard installations with CBRN and HAZMAT response teams.

| Remaining Quantity Required | Unit Cost | Program Cost |
|----------------------------------|-----------|--------------|
| 1550 Level A HAZMAT Suits (3080) | \$2,000 | \$3,100,000 |
| 1550 Level B HAZMAT Suits (3080) | \$500 | \$775,000 |
| Total | | \$3,875,000 |

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR AND HAZARDOUS MATERIAL DETECTION EQUIPMENT

- 1. Background. Air National Guard (ANG) Emergency Management (EM) and Fire and Emergency Services (FES) Chemical, Biological, Radiological, and Nuclear (CBRN) response teams need standardized, robust, and field-ready CBRN, Hazardous Material (HAZMAT), and Toxic Industrial Chemical / Toxic Industrial Material (TIC/TIM) agent detection capabilities. The Occupational Safety and Health Administration (OSHA) requires the active detection of contaminants in the environment to ensure Personal Protection Equipment (PPE) for responders is adequate for the hazards present. CBRN response operations involving any HAZMAT incident require immediate HAZMAT identification to allow for the correct response.
- **2. Source of Need**. OSHA Standard 1910.120, Appendix B; lessons learned from domestic operations; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 62 ANG installations with CBRN and HAZMAT response teams.

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|-----------|--------------|
| 62 CBRN and HAZMAT Detection Kits (3080) | \$150,000 | \$9,300,000 |
| Total | | \$9,300,000 |

DEDICATED CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR AND HAZARDOUS MATERIAL RESPONSE TRAILER

- 1. Background. Air National Guard (ANG) Emergency Management (EM) and Fire and Emergency Services (FES) personnel respond to Chemical, Biological, Radiological, and Nuclear (CBRN) and Hazardous Material (HAZMAT) incidents. EM and FES units possess limited capability to transport CBRN response equipment to an incident. A dedicated CBRN and HAZMAT response trailer stores required equipment, provides space to conduct required medical screening for pre- and post-hazardous area entry, and provides space to conduct command and control operations of responding personnel. Additionally the dedicated response trailer has an outside area lighting capability, on-board power generation, a Heating, Ventilation, and Air Conditioning (HVAC) unit, and capability for command and control equipment integration to support 24-hour operations. Additionally, standardizing the trailer, equipment storage, and response methodology enhances training for EM and FES personnel by limiting the number of unique systems used by the responders. One trailer for each of the 62 ANG installations with CBRN and HAZMAT response teams is necessary.
- **2. Source of Need.** Lessons learned from domestic operations; 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 62 ANG installations with CBRN and HAZMAT response teams.

| Remaining Quantity Required | Unit Cost | Program Cost |
|----------------------------------|-----------|--------------|
| 62 CBRN Response Trailers (3080) | \$80,000 | \$4,960,000 |
| Total | | \$4,960,000 |

Oil and Hazardous Materials Response

RESPONDER REHABILITATION SHELTER

- **1. Background.** Chemical, Biological, Radiological, and Nuclear (CBRN) and Hazardous Materials (HAZMAT) response teams need a rehabilitation center to support responders during an incident. The responder rehabilitation shelter ensures HAZMAT response personnel meet the mandatory Department of Defense rest and work cycles. The rehabilitation shelter provides shelter, medical and physiological aid, rest and recuperation areas, and eating areas separate from victims. The shelter is portable and expandable, and provides self-contained power, lighting, and Heating, Ventilation, and Air Conditioning (HVAC) systems to support 24-hour operations. Each of the 62 CBRN and HAZMAT response teams needs two shelters.
- **2. Source of Need.** Lessons learned from domestic operations; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 62 Air National Guard (ANG) installations with CBRN and HAZMAT response teams.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--|-----------|--------------|
| 124 Responder Rehabilitation Shelters (3080) | \$60,000 | \$7,440,000 |
| Total | | \$7,440,000 |

COMMAND AND CONTROL LIAISON KIT

- 1. Background. The Command and Control (C2) liaison kit provides a Chemical, Biological, Radiological, and Nuclear (CBRN) and Hazardous Materials (HAZMAT) first responder and incident commander immediate access to communications prior to a larger mobile communications package arriving on the scene, in the event that more communications capability is required. The C2 liaison kit is an interoperable and portable C2 device that includes the following capabilities: ruggedized computer, printer, copier, scanner, cellular Internet access, satellite communications access, webcam, digital video, and an interoperability module for communication with local civil authorities. This system supports incident commanders, liaison officers, field responders, and others requiring situational awareness by enabling joint, interagency, and local coordination and universal communication. The C2 liaison kit fills a capability gap in joint, interagency, and local responders' abilities to communicate and coordinate complex tasks. The National Response Framework (NRF) necessitates all responding agencies be able to communicate with one another.
- **2. Source of Need**. Lessons learned from domestic operations; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 62 ANG installations with CBRN and HAZMAT response teams. Some C2 liaison kits have already been fielded.

| Remaining Quantity Required | Unit Cost | Program Cost |
|----------------------------------|-----------|--------------|
| 36 C2 Liaison Kits (3080) | \$35,000 | \$1,260,000 |
| Total | | \$1,260,000 |

This page intentionally left blank.

Public Safety and Security

Public Safety and Security (ESF 13) - Over 7,000 Air National Guard (ANG) Security Forces



personnel from the 54 states and territories prepare and train to provide facility and resource security; security planning and technical resource assistance; public safety and security support; and traffic and crowd control. As part of ESF 13, Security Forces units integrate with countywide public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual incidents of critical significance.

State and federal authorities may call on ANG Security Forces to respond to disasters, civil unrest, or acts of terrorism; or to assist with border security or counterdrug operations. ANG Security Forces provides increased capability in circumstances where state and local resources are inadequate or where a unique capability is required.

Security Forces units provide protection and

security resources, planning assistance, technology support, and other technical assistance to support incident operations. Security Forces units equipped with less-than-lethal weapons and explosive detection kits can assist local authorities and agencies during events like tropical storms, hurricanes, earthquakes, winter storms, blackouts, and wildland fires.





ESF 13 - Public Safety and Security 2014 Domestic Capability Priorities Conference

Critical Capabilities List

- Less-than-Lethal Kits
- Security Forces Vehicles
- Incident Response Command and Control Kit
- Emergency Vehicle Response Suite
- Ultralight All-Terrain Utility Equipment

Essential Capabilities List

- Multiple Purpose Trailer
- Elevated Portable Security Platform
- Mobile Entry Control Point
- Mobile Surveillance Detection
- Extraction and Casualty Care Kit

Desired Capabilities List

- Light Medium Tactical Vehicle
- Individual Mobile Checkpoint
- Personal Flotation Device
- Fire Retardant Textiles
- Site Preparation Equipment

LESS-THAN-LETHAL KITS

- 1. Background. Security Forces (SF) provide civil disturbance response and force protection. A Less-than-Lethal (LTL) equipment set provides an immediate deployment capability for a standard SF 13-person squad for situations when a forcible but non-lethal option might be needed, such as for crowd control or civil unrest, border security, and counterdrug operations. These kits include helmets, pads, gloves, shields, batons, portable power, area lighting, and safety equipment (i.e., reflective vests, cones, signage, etc.). LTL kits provide additional capability in any domestic scenario including enhanced security and traffic control. Additionally, the LTL kit allows for the rapid deployment of equipment, provides secure storage of weapons, and provides working space for command and control personnel.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2006, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, and Washington State mudslide in 2014; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All 92 ANG SF squadrons.

| Remaining Quantity Required | Unit Cost | Program Cost |
|----------------------------------|-----------|--------------|
| 146 Less-than-Lethal Kits (3080) | \$57,200 | \$8,351,200 |
| Total | | \$8,351,200 |

SECURITY FORCES VEHICLES

- 1. Background. Security Forces (SF) provide civil disturbance response and force protection. SF are assigned vehicles based upon federal mission requirements not upon off-base domestic emergencies. These vehicles are issued from the wing's vehicle fleet, based upon SF-unique security and law enforcement requirements. Fleet vehicles are programmed for replacement after 20 years or if they have met or exceeded the economic one-time repair limit in accordance with Air Force Instruction 24-302 and Technical Order 36-1-191. SF vehicles typically experience higher levels of wear and tear by 24/7 operational use in law enforcement resulting in an increased need for modernization. SF require more robust vehicles than those available in the vehicle fleet to execute both the federal and domestic missions. Additionally, SF vehicles provide capability beyond the transportation requirements of moving personnel and equipment; they provide a mobile mission platform that enables SF personnel to conduct their daily operations, and provide an initial on-scene command and control capability during an incident. SF vehicles also provide a staging capability for checkpoints, road closures, traffic control points, civil disturbance operations, town patrols, and serve as a blocking force and barricade protection if required.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, Washington State mudslide in 2014, 2014 Domestic Capability Priorities Conference.
- **3.** Units Impacted. All 92 ANG SF squadrons. A unit's mission design and status as a standalone or co-located unit determines distribution of vehicles.

| Remaining Quantity Required | Unit Cost | Program Cost |
|--------------------------------|-----------|--------------|
| 92 Crew Cab Trucks, 4X4 (3080) | \$55,000 | \$5,060,000 |
| Total | | \$5,060,000 |

INCIDENT RESPONSE COMMAND AND CONTROL KIT

- 1. Background. The Security Forces response team that arrives at an incident requires standardized Incident Command System (ICS) equipment to integrate into the on-scene incident command structure. Needed equipment includes ICS kits, ICS vests, Common Operating Picture (COP) ruggedized tablets, and area illumination lights. A mobile command and control kit with video capability provides shared situational awareness at the tactical level through a COP to the incident commander, Joint Operations Centers (JOC), and local, state, and federal emergency operations centers in real-time, enabling efficient planning, effective prioritization of resources, and resource accountability.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, Washington State mudslide in 2014; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 92 ANG Security Forces squadrons.

| Remaining Quantity Required | Unit Cost | Program Cost |
|------------------------------------|-----------|--------------|
| 92 Command and Control Kits (3080) | \$6,400 | \$588,800 |
| Total | | \$588,800 |

EMERGENCY VEHICLE RESPONSE SUITE

- **1. Background.** Security Forces provide civil disturbance response and force protection. When Security Forces have to surge to full capability, it requires more vehicles than are routinely assigned to Security Forces units. Security Forces units acquire these vehicles through their wing's vehicle fleet management office. Those vehicles need temporary modifications with equipment such as emergency lighting, high visibility markings, tactical equipment racks and mounts, and a portable public address system for mass notification. This equipment is easily removed from the vehicle once the mission has been completed.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, Washington State mudslide in 2014; 2014 Domestic Capability Priorities Conference.
- 3. Units Impacted. All 92 ANG Security Forces squadrons.

| Remaining Quantity Required | Unit Cost | Program Cost |
|-----------------------------------|------------------|--------------|
| 92 Emergency Response Kits (3080) | \$74,300 | \$6,835,600 |
| Total | | \$6,835,600 |

ULTRALIGHT ALL-TERRAIN UTILITY EQUIPMENT

- **1. Background.** During many domestic scenarios, Security Forces deliver forces and equipment into environments where standard vehicles are not be able to operate. Lightweight all-terrain vehicles provide mobility with a smaller footprint, easy operation, and safer operation within crowds. This is especially useful for missions such as riot control, natural disasters, border security, civil unrest, inaugurations, and counterdrug operations.
- **2. Source of Need.** Lessons learned from Hurricane KATRINA in 2005, Superstorm SANDY in 2012, Boston Marathon bombing in 2013, Washington State mudslide in 2014; 2014 Domestic Capability Priorities Conference.
- **3. Units Impacted.** All 92 ANG Security Forces squadrons.

| Remaining Quantity Required | Unit Cost | Program Cost |
|---|------------------|--------------|
| 184 Ultralight All-Terrain Equipment (3080) | \$18,000 | \$3,312,000 |
| Total | | \$3,312,000 |