ANG 1 L Add MA

Procurement of fifth generation aircraft for ANG fighter units

Date Submitted: March 18, 2019
Category: ANG
State: Massachusetts

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: David Halasi-kun

Proposal:
Support the SCAF & CSAF in the procurement of a minimum of 72 fighter aircraft per year to refresh and/or recapitalize the total force fighter enterprise.

Recommendation:

Input #: 3
Resolution #: 1
Item #: L

ANG 2 A Change ID

THE MODERNIZATION OF AIR NATIONAL GUARD A-10C AIRCRAFT

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Change Item

Additional Sponsors:

Submitter: Anthony Vincelli

Proposal:
Change item A to read, "Improved positive identification of adversaries through digital high-definition targeting pod, interface and High-Resolution Displays, and lightweight, color, night-compatible Helmet-Mounted Cueing System enhancements."

Recommendation:
This change adds a digital high-definition targeting pod and interface to improve positive identification of adversaries, and adds lightweight, color, night-compatible enhancements to the Helmet-Mounted Cueing System.

Input #: 10
Resolution #: 2
Item #: A

ANG 2 B Change GA

A-10 increased survivability through improved electronic attack, self-protection, and full-spectrum countermeasure systems (2018)

Date Submitted: June 27, 2019
Category: ANG
State: Georgia

Type Draft Resolution: Change Item

Additional Sponsors: IN

Submitter: Marshall Kennemer

Proposal:
Change item B to read, "Increased survivability through improved electronic attack, self-protection, full-spectrum countermeasure, and missile warning systems"

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG A-10 aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG A-10 Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require an MWS capable of processing ManPAD threats and automatically direct countermeasures to defeat those threats. Increased survivability without false warnings are needed to correlate threat detection and dispense countermeasures automatically. Current systems on the aircraft have significant false warnings which create a less then optimal environment for the A-10 to survive the close air support mission DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes a state of the art MWS to enable all aircraft to either survive current and future ManPAD threats FUNDING JUSTIFICATION – Replacing the aging MWS on the A-10 aircraft should be identified as critical unfunded requirements in the ANG Modernization USAF FUNDING TO DATE – A-10 MWS will be funded out of the USAF Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – A-10 MWS upgrade is applicable to all USAF, ANG and AFRC Aircraft and this standing requirement that needs to be considered

Input #: 12
Resolution #: 2
Item #: B

ANG 2 B Delete ID

THE MODERNIZATION OF AIR NATIONAL GUARD A-10C AIRCRAFT

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Delete Item

Additional Sponsors:

Submitter: Anthony Vincelli

Proposal:
Delete item B.

Recommendation:
Re-prioritizes this item from Item B in 2019 to Item E in 2020 TF Chair Note: Intent is to align with the ARC WEPTAC MDS Critical List.

Input #: 14
Resolution #: 2
Item #: E

ANG 2 B Change IN

A-10 Electronic Warfare (EW) survivability upgrades

Date Submitted: June 27, 2019
Category: ANG
State: Indiana

Type Draft Resolution: Change Item

Additional Sponsors: MS

Submitter: Ryan Harvey

Proposal:
Change item B to read, "Increased survivability through improved electronic attack, self-protection, full-spectrum countermeasure, electronic warfare (EW) survivability systems, and radio-frequency (RF) expendable decoy upgrades"

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The electronic warfare (EW) suites need upgrades to defeat RF Guided Missile Threats expendable decoys as an adjunct to the towed decoy are available STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - Whether through the program of record or separate initiatives, modernization upgrades for the EW suite require the following capabilities: proactive and directed offensive electronic attack, electronic warfare situational awareness improvements, and self-protection capabilities that include radar cross section (RCS) reduction, infrared countermeasures, and defensive jamming from an expendable RF Decoy DEPLOYMENTJUSTIFICATION- The USAF and ANG have identified and validated defensive shortfalls in the integrated EW system against radar guided missiles. This requirement is necessary in the deployed locations OCONUS FUNDING JUSTIFICATION - Accordingly, EW sustainment funding must be reinstated, and legacy obsolescence addressed with interim capabilities for ANG aircraft. USAF FUNDING TO DATE - USAF is considering this capability for the ANG. Funding will also come from NGREA (APPN0350)

Input #: 2
Resolution #: 2
Item #: B

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

RF Expendable Decoy for all ANG Aircraft

BACKGROUND:

- The ANG has just gotten approval and funding from OSD to pursue a Foreign Comparative Test (FCT) of the LEONARDO "Brite Cloud" (BC) RF Expendable decoy
- The decoy was built to protect the Tornado aircraft and has been deployed into the Royal Air Force (RAF) United Kingdom (UK)
- The decoy is built to radiate a large enough radar cross section to decoy an incoming last-minute radar guided missile targeting the aircraft
- The decoy is not a jammer it is a "bright spot" in the guidance radar's picture that would allow the targeting aircraft to take an evasive maneuver and escape the radar guidance tracking
- The FCT will be accomplished by the Air National Guard/Air Force Reserve Test Center (AATC) over the next 2-3 years
- The AATC in conjunction with Office of Secretary of Defense (OSD), RAF Minister of Defense (MoD), Secretary of the Air Force International Affairs (SAFIA) and the Air Force Reserve Command (AFRC) will be conducting the FCT for all types of aircraft (Legacy and New)
- The BC will be available, given a successful FCT, for all ANG aircraft in the future that have a chaff and flare dispenser capability

DISCUSSION:

- Standing resolutions aircraft (# 2B, 3B, 4 (new), 7(new), 9 (new), 10C, 11N, 12 (new),15 (new) 19T) are all applicable to this addition of an RF Expendable Decoy
- Any aircraft that can deploy chaff and flares as a last-minute survival mechanism to an RF radar guided missile threat could use the RF Expendable capability to mask and cause the incoming threat to miss the aircraft
- The FCT was designed to accommodate 3rd, 4th, 5th and 6th generation fighter aircraft along with airlift aircraft
- The results of the FCT will be successful and this capability will be available at the end of the FCT process and flight evaluation
- All aircraft should consider this capability as an addition to their EW and Situational Awareness resolutions

RECOMMENDATION:

Recommend NGAUS add "RF Expendable Decoy" to their Standing Resolution for all ANG aircraft (# 2B, 3B, 4 (new), 7(new), 9 (new), 10C, 11N, 12 (new),15 (new) 19T) and identify this capability to their EW survivability upgrade resolutions

ANG 2 C Change ID

THE MODERNIZATION OF AIR NATIONAL GUARD A-10C AIRCRAFT

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Change Item

Additional Sponsors:

Submitter: Anthony Vincelli

Proposal:
Changes item C to read, "Improved capability to operate and employ from austere airfields through advanced external fuel capability, enhanced weapons carriage, and specialized austere airfield maintenance kits."

Recommendation:
This is a two-part change: 1. Re-prioritizes this item from Item E in 2019 to Item C in 2020 2. Incorporates changes in the wording. For reference, 2019 recommendation follows: "Improved capability to operate and employ from austere airfields through advanced external fuel capability, on-board oxygen generation, advanced weapons carriage, and a parking brake." Intent is to align with the ARC WEPTAC MDS Critical List.

Input #: 12
Resolution #: 2
Item #: C

ANG 2 D Change ID

THE MODERNIZATION OF AIR NATIONAL GUARD A-10C AIRCRAFT

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Change Item

Additional Sponsors:

Submitter: Anthony Vincelli

Proposal:
Change item D to read, "Assured connectivity, and enhanced friendly force awareness through upgraded communications systems which function in a contested, degraded, or operationally limited environment."

Recommendation:
This is a three-part change: 1. Re-prioritizes this item from Item C in 2019 to Item D in 2020 (TF Chair Note: Intent is to align with the ARC WEPTAC MDS Critical List.) 2. Adds the words "and enhanced friendly force awareness" 3. Replaces last year's Item D, which reads as follows: "Sustained precision engagement in a degraded, deceived, or denied global positioning system environment through advanced anti-jam systems.

Input #: 13
Resolution #: 2
Item #: D

ANG 2 E Change ID

THE MODERNIZATION OF AIR NATIONAL GUARD A-10C AIRCRAFT

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Change Item

Additional Sponsors:

Submitter: Anthony Vincelli

Proposal:
Change item E to read, "Robust ability to operate in a degraded global positioning system environment in order to sustain the capability to find, fix, and target adversary forces, and to meet Federal Aviation Administration- Automatic Dependent Surveillance Broadcast mandate by 2020."

Recommendation:
This replaces ITEM B from 2019, which has been re-prioritized to ITEM E for 2020. TF Chair Note: Intent is to align with the ARC WEPTAC MDS Critical List.

Input #: 11
Resolution #: 2
Item #: E

ANG 2 F Add ID

A-10 Missile Warning System (MWS) upgrade

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Add Item

Additional Sponsors: IN

Submitter: Anthony Vincelli

Proposal:
New missile warning system (MWS) upgrade for the aging AAR-47 system

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG A-10 aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG A-10 Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require an MWS capable of processing ManPAD threats and automatically direct countermeasures to defeat those threats. Increased survivability without false warnings are needed to correlate threat detection and dispense countermeasures automatically. Current systems on the aircraft have significant false warnings which create a less then optimal environment for the A-10 to survive the close air support mission DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes a state of the art MWS to enable all aircraft to either survive current and future ManPAD threats FUNDING JUSTIFICATION – Replacing the aging MWS on the A-10 aircraft should be identified as critical unfunded requirements in the ANG Modernization USAF FUNDING TO DATE – A-10 MWS will be funded out of the USAF Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – A-10 MWS upgrade is applicable to all USAF, ANG and AFRC Aircraft and this standing requirement that needs to be considered

Input #: 1
Resolution #: 2
Item #: F

ANG 2 G Add ID

ALR-69A Digital Radar Warning Receiver (DRWR) USAF program of record upgrade for A-10 aircraft

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Add Item

Additional Sponsors: GA, IN

Submitter: Anthony Vincelli

Proposal:
ALR-69A DRWR continue to be funded as an ANG requirement for all A-10 aircraft CONUS and OCONUS fighter missions

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats DEPLOYMENT JUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – 69A is the Program of record for USAF, ANG and AFRC Aircraft and this is a change from previous yrs.

Input #: 2
Resolution #: 2
Item #: G

ANG 3 G Add AZ

Aerospace Ground Equipment (AGE) for maintenance use on F-15 and other legacy fighter aircraft.

Date Submitted: May 7, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Add Item

Additional Sponsors: CA

Submitter: John Vitt, CW5 (R)

Proposal:
Fully fund new mobile combined aircraft power cart and air cycle machine used for ground maintenance and servicing of legacy F-15 fighter aircraft.

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The USAF currently uses the A/M32A-60A Gas Turbine Compressor and A/M32C-10 Air Cycle Machine for ground maintenance and servicing of all legacy fighter aircraft and has been in service for 50 years. This capability requires significant modernization. Escalating Depot level refurbishment costs have skyrocketed in recent years and parts obsolescence concerns continue to impact mission capable status. STATES IMPACTED – All ANG legacy F15 fighter aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED – Equipment mission capable rates will continue to plummet eventually affecting sortie generation capability and warfighting ability. DEPLOYMENT JUSTIFICATION- New equipment utilizing modern technology will dramatically improve fuel savings, reduce mobility footprint and drive down overall maintenance costs and troubleshooting time of technicians. FUNDING JUSTIFICATION – Dramatically reduced fuel consumption, reduction in deployment airlift requirements and lower maintenance costs of new equipment will lead to significant annual operating cost savings. USAF FUNDING TO DATE – None

Input #: 11
Resolution #: 3
Item #: G

New Mobile Combined Cart White Paper

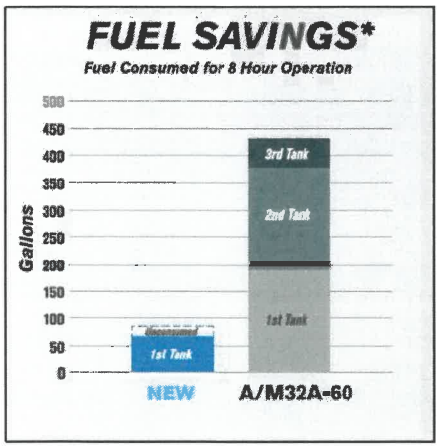
What is it?: A ground support cart capable of servicing most military fighter aircraft. In a single mobile package, it provides three ground support services including bleed air, high-pressure air conditioning, and 400 Hz power. The cart is powered by a diesel engine.

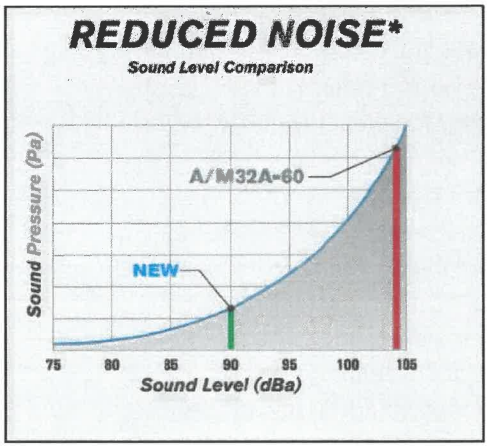
What can it do?: The following table summarizes the key characteristics and performance capabilities necessary in the cart. Bleed air or conditioned air may be operated concurrently with 400 Hz power.

Characteristic	Value
Length	122 inch
Width	70 inch
Height	67 inch (86 inch with muffler)
Weight	8,000 pounds wet
Bleed Air	50 psig, 100 lb/min, 320°F 4 inch outlet
Conditioned Air	6 psig, 100 lb/min, 40°F 8 inch outlet
AC Power Output	400 Hz, 3-phase, 115 VAC, 60 kVA
Engine	Cummins QSB6.7, Tier 3, 260 HP
Fuel	Diesel, JP-5, JP-8, Jet-A
Environment	-40°F to 125°F, 0-100%RH

How is it better?: A new cart must offer several advantages over legacy ground support carts. The three primary advantages when compared to the current A/M32A-60 include fuel savings, reduced noise, and a smaller footprint. These are summarized in the graphics below. Additional advantages include:

- Common Support Equipment for multiple airframes
- Ease of use / modern controls with plain text
- Modern diesel engine
- Refrigerant-free air-cycle cooling
- High mobility and air transportable
- Ease of maintenance / simplified troubleshooting
- Broad ambient operating conditions





ANG 3 H Add LA

ALR-69A Digital Radar Warning Receiver for F-15 aircraft

Date Submitted: June 12, 2019

Category: ANG

State: Louisiana

Type Draft Resolution: Add Item

Additional Sponsors: CA, GA

Submitter: Rob Billings

Proposal:
Ensure continued funding for ALR-69A Digital Radar Warning Receiver (DRWR) Electronic Warfare Systems upgrade for all ANG aircraft CONUS and OCONUS in support of Fighter missions in the F-15 platform.

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments (1) STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites (2) MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats (3) DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars (4) FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding (5) USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) (6) ANG REQUIREMENT – 69A is the Program of record for USAF, ANG and AFRC Aircraft and this is a change from previous yrs.

Input #: 1
Resolution #: 3
Item #: H

ANG 3 I Add LA

F-15 Electronic Warfare Protection Systems Upgrades

Date Submitted: June 12, 2019
Category: ANG
State: Louisiana

Type Draft Resolution: Add Item

Additional Sponsors: AR, CA, MS

Submitter: Rob Billings

Proposal:
Provide funding for Electronic Warfare Protection Systems Upgrade which includes an Expendable Decoy bright spot capability to increase survivability through improved electronic attack, self-protection, and full-spectrum countermeasure systems in F-15 platforms.

Recommendation:
F-15 aircraft that can dispense chaff and flares would be eligible and should require an RF Expendable Jammer as a launch and leave electronic decoy round that would be released from the aircraft in response to an unobserved radar guided missile threat from a pylon mounted or other internal dispenser systems and act as a "Bright Spot" in the enemy missile tracking system, allowing the aircraft to maneuver out of the path of the incoming RF missile threat and survive the attack. c. Recommendation: CRITICAL NEED FOR SUPPORT- The F-15 electronic warfare (EW) suites need upgrades to defeat RF Guided Missile Threats expendable decoys as an adjunct to the towed decoy are available (1) STATES IMPACTED - All ANG F-15 Aircraft at CONUS and OCONUS sites (2) MISSION CRITICAL NEED - Whether through the program of record or separate initiatives, modernization upgrades for the EW suite require the following capabilities: proactive and directed offensive electronic attack, electronic warfare situational awareness improvements, and self-protection capabilities that include radar cross section (RCS) reduction, infrared countermeasures, and defensive jamming from an expendable RF Decoy (3) DEPLOYMENTJUSTIFICATION- The USAF and ANG have identified and validated defensive shortfalls in the F-15C integrated EW system against radar guided missiles. This requirement is necessary in the deployed locations OCONUS (4) FUNDING JUSTIFICATION - Accordingly, EW sustainment funding must be reinstated, and legacy obsolescence addressed with interim capabilities for the 105 combat-coded ANG F-15 aircraft. (5) USAF FUNDING TO DATE - USAF is considering this capability for their F-15s as well as the ANG. Funding will also come from NGREA (APPN0350)

Input #: 3
Resolution #: 3
Item #: I

ANG 3 J Add OR

Refresh or Recapitalization of Air National Guard F-15C/D Fleet

Date Submitted: June 20, 2019
Category: ANG
State: Oregon

Type Draft Resolution: Add Item

Additional Sponsors: MA

Submitter: Adam Sitler

Proposal:
Advocate for refresh or recapitalization of the Air National Guard F-15C/D fleet.

Recommendation:
There is no refresh or recapitalization blueprint arriving soon enough to reverse the current downward readiness trend in the Nation's Air Superiority set of airframes. The F-15C/D platform is not sustainable under the current resourcing plan. Action is immediately required to preempt fleet service life safety issues and avoid crippling the air superiority capabilities of the Nation. Without action, the number of available F-15C/Ds will continue to decrease to the point of mission failure. An Air Force acquisition of 72 fighter aircraft a year will assure F-15C/D refresh/recapitalization adequately meets the Country's readiness requirements. In the short term, it is imperative that we execute a viable sustainment plan to increase aircraft availability and maximize F-15 fleet readiness. Expeditious conversion of at least two F-15C/D units to the F-35 will allow for the redistribution of F-15C/Ds from converting bases to remaining units. A balanced refresh and/or recapitalization of the aging platform to F-15EX's or F-35's will assure required mission sets are available to Combatant Commanders and new platforms will support seamless integration between the Active Component, Reserve Component, and allied Nations. The current United States Air Force F-15C/D fleet is in crisis and needs action now. Aircraft are grounded, combat capability is being lost, and this downward trend will continue without action. The F-15C/D fleet needs a refresh or recapitalization as soon as possible.

Input #: 1
Resolution #: 3
Item #: J

ANG 4 D Add OH

F-16 Electronic Warfare Protection Systems Upgrades

Date Submitted: April 4, 2019
Category: ANG
State: Ohio

Type Draft Resolution: Add Item

Additional Sponsors: AZ, AR, MN, MS

Submitter: Ryan McMaster

Proposal:
Air National Guard F-16s require an RF Expendable Jammer as a launch and leave electronic decoy for survivability.

White Paper: View White Paper

Recommendation:
Whether through the program of record or separate initiatives, modernization upgrades for the electron warfare (EW) suite require the following capabilities: proactive and directed offensive electronic attack, electronic warfare situational awareness improvements, and self-protection capabilities that include radar cross section (RCS) reduction, infrared countermeasures, and defensive jamming from an expendable RF Decoy. The USAF and ANG have identified and validated defensive shortfalls in the F-16 integrated EW system against radar guided missiles. F-16s require an RF Expendable Jammer as a launch and leave electronic decoy round that would be released from the aircraft via a pylon mounted or other internal dispenser system in response to an unobserved radar-guided missile threat. This requirement is necessary in deployed locations OCONUS. Accordingly, EW sustainment funding must be reinstated, and legacy obsolescence addressed with interim capabilities for the 333 combat-coded ANG F-16 aircraft.

Input #: 2
Resolution #: 4
Item #: D

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

RF Expendable Decoy for all ANG Aircraft

BACKGROUND:

- The ANG has just gotten approval and funding from Office Secretary of Defense (OSD) to pursue a Foreign Comparative Test (FCT) of the LEONARDO "Brite Cloud" (BC) RF Expendable decoy
- The decoy was built to protect the Tornado aircraft and has been deployed into the Royal Air Force (RAF) United Kingdom (UK)
- The decoy is built to radiate a large enough radar cross section to decoy an incoming last-minute radar guided missile targeting the aircraft
- The decoy is not a jammer it is a "bright spot" in the guidance radar's picture that would allow the targeting aircraft to take an evasive maneuver and escape the radar guidance tracking
- The FCT will be accomplished by the Air National Guard/Air Force Reserve Test Center (AATC) over the next 2-3 years
- The AATC in conjunction with Office of Secretary of Defense (OSD), RAF Minister of Defense (MoD), Secretary of the Air Force International Affairs (SAFIA) and the Air Force Reserve Command (AFRC) will be conducting the FCT for all types of aircraft (Legacy and New)
- The BC will be available, given a successful FCT, for all ANG aircraft in the future that have a chaff and flare dispenser capability

DISCUSSION:

- Standing resolutions aircraft (# 2B, 3B, 4 (new), 7(new), 9 (new), 10C, 11A, 12 (new),15 (new) and 19T) are all applicable to this addition of an RF Expendable Decoy
- Any aircraft that can deploy chaff and flares as a last-minute survival mechanism to an RF radar guided missile threat could use the RF Expendable capability to mask and cause the incoming threat to miss the aircraft
- The FCT was designed to accommodate 3rd, 4th, 5th and 6th generation fighter aircraft along with airlift aircraft
- The results of the FCT will be successful and this capability will be available at the end of the FCT process and flight evaluation
- All aircraft should consider this capability as an addition to their EW and Situational Awareness resolutions

RECOMMENDATION:

Recommend NGAUS add "RF Expendable Decoy" to their Standing Resolution for all ANG aircraft (# 2B, 3B, 4 (new), 7(new), 9 (new), 10C, 11A, 12 (new),15 (new) 19T) and identify this capability to their EW survivability upgrade resolutions

ANG 4 E Add AZ

Aerospace Ground Equipment (AGE) for maintenance use on F-16 and other legacy fighter aircraft.

Date Submitted: May 7, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Add Item

Additional Sponsors: CA

Submitter: John Vitt, CW5 (R)

Proposal:
Fully fund new mobile combined aircraft power cart and air cycle machine used for ground maintenance and servicing of legacy F-16 fighter aircraft.

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The USAF currently uses the A/M32A-60A Gas Turbine Compressor and A/M32C-10 Air Cycle Machine for ground maintenance and servicing of all legacy fighter aircraft and has been in service for 50 years. This capability requires significant modernization. Escalating Depot level refurbishment costs have skyrocketed in recent years and parts obsolescence concerns continue to impact mission capable status. STATES IMPACTED – All ANG legacy F16 fighter aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED – Equipment mission capable rates will continue to plummet eventually affecting sortie generation capability and warfighting ability. DEPLOYMENT JUSTIFICATION- New equipment utilizing modern technology will dramatically improve fuel savings, reduce mobility footprint and drive down overall maintenance costs and troubleshooting time of technicians. FUNDING JUSTIFICATION – Dramatically reduced fuel consumption, reduction in deployment airlift requirements and lower maintenance costs of new equipment will lead to significant annual operating cost savings. USAF FUNDING TO DATE – None

Input #: 10
Resolution #: 4
Item #: E

New Mobile Combined Cart White Paper

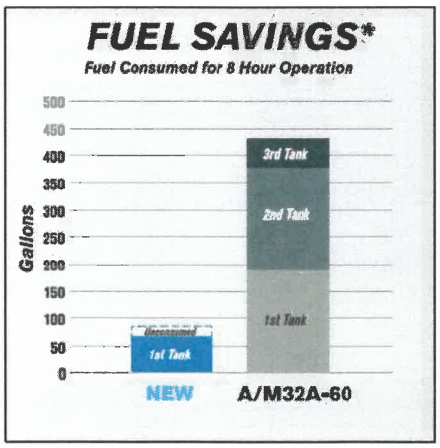
What is it?: A ground support cart capable of servicing most military fighter aircraft. In a single mobile package, it provides three ground support services including bleed air, high-pressure air conditioning, and 400 Hz power. The cart is powered by a diesel engine.

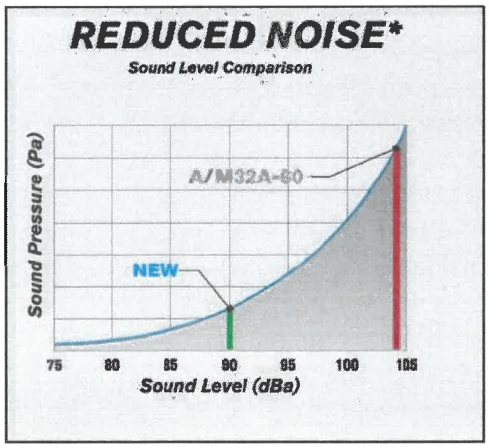
What can it do?: The following table summarizes the key characteristics and performance capabilities necessary in the cart. Bleed air or conditioned air may be operated concurrently with 400 Hz power.

Characteristic	Value
Length	122 inch
Width	70 inch
Height	67 inch (86 inch with muffler)
Weight	8,000 pounds wet
Bleed Air	50 psig, 100 lb/min, 320°F 4 inch outlet
Conditioned Air	6 psig, 100 lb/min, 40°F 8 inch outlet
AC Power Output	400 Hz, 3-phase, 115 VAC, 60 kVA
Engine	Cummins QSB6.7, Tier 3, 260 HP
Fuel	Diesel, JP-5, JP-8, Jet-A
Environment	-40°F to 125°F, 0-100%RH

How is it better?: A new cart must offer several advantages over legacy ground support carts. The three primary advantages when compared to the current A/M32A-60 include fuel savings, reduced noise, and a smaller footprint. These are summarized in the graphics below. Additional advantages include:

- Common Support Equipment for multiple airframes
- Ease of use / modern controls with plain text
- Modern diesel engine
- Refrigerant-free air-cycle cooling
- High mobility and air transportable
- Ease of maintenance / simplified troubleshooting
- Broad ambient operating conditions





ANG 4 F Add AZ

Digital Radar Warning Receiver (DRWR) ALR-69A as a program of record upgrade for F-16

Date Submitted: April 27, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Add Item

Additional Sponsors: MN, MS, OH

Submitter: John Vitt, CW5 (R)

Proposal:
Add the Digital Radar Warning Receiver (DRWR) ALR-69A as the program of record for F-16 aircraft and support the continuation of funding for F-16 aircraft CONUS and OCONUS

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – 69A is the program of record for USAF, ANG and AFRC Aircraft and this is a change from previous years.

Input #: 3
Resolution #: 4
Item #: F

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

ALR-69A, Digital Radar Warning Receiver

BACKGROUND:

The ALR-69A was selected in a full and open competition in the United States Air Force (USAF) in 2018 as the Digital Radar Warning Receiver (DRWR) program of record for all aircraft.

DISCUSSION:

- Standing resolutions for Electronic Warfare (EW) for the A-10, C-130, F-15, F-16, KC-135, KC-46 and C-17 state that the EW upgrades should include DRWRs or 69A
    - The standing resolutions are not consistent or missing this system
- Inconsistency can cause confusion in the Congress of the United States when approval of funding in the National Guard and Reserve Equipment Account (NGREA) (Appropriation 0350) Bill each year
    - The Congressional Authorizers of the NGREA account suggest ways to spend the NGREA funding they appropriate each year
    - Confusion caused by the inconsistency in the programs that the Air National Guard (ANG) want to be considered, leads the Congress to think the ANG is not clear and will not identify funding for the specific program the ANG identifies
- Not funding specific programs, the ANG causes delay in critical modernized technology being delivered and installed in the ANG aircraft

RECOMMENDATION:

Correct the inconsistency in the Air Standing Resolutions and add the term "69A Digital Radar Warning Receiver (DRWR)" as the designation applicable to all aircraft (A-10, C-130, F-15, F-16, KC-135, KC-46, MQ-9 and C-17) to replace the designation "DRWR" or "Digital Radar Warning Receiver".

ANG 5 J Add HI

Compact PAO Cooling System Servicing Cart for F-22

Date Submitted: January 29, 2019
Category: ANG
State: Hawaii

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Dominador Molina

Proposal:
Smaller PAO (Polyalphaolefin) cooling system servicing cart to troubleshoot and maintain the F-22.

Recommendation:
A smaller PAO will save space and aircraft fuel. Having a more compact servicing cart is crucial for Agile Combat Employment (ACE) for F-22. Current PAO (Polyalphaolefin) cooling system is too large and heavy, limiting valuable space in the transport aircraft. Maintenance personnel are forced to remove other vital equipment, parts and other resources for one PAO cart. The PAO cart takes as much as four (4) pallet positions in the C-17 and will not fit into a KC-135. Current PAO cart: Model # CCU-1314-CUP Part # 1077663 Equipment Type: Ground Cooling Cart Length: 150 inches (12.5 ft) Width: 86 inches (7.1 ft) Height: 91 inches (7.6 ft) Weight: 10,500 pounds (fully serviced)

Input #: 1
Resolution #: 5
Item #: J

ANG 5 K Add HI

F-22 Externally-Mounted Antenna for GPS/ADS-B

Date Submitted: February 7, 2019
Category: ANG
State: Hawaii

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Kevin Horton

Proposal:
F-22 externally-mounted Antenna capable of delivering a live commercial and military satellite signals into the cockpit to meet January 1, 2020 FAA automatic dependent surveillance-broadcast (ADS-B) capability requirement.

Recommendation:
GPS: Global Positioning System ADS-B: Automatic Dependent Surveillance-Broadcast

Input #: 3
Resolution #: 5
Item #: K

ANG 5 L Add HI

F-22 Common Datalink (5th Generation to 4th, 5th, & 6th Generation Capability)

Date Submitted: February 7, 2019
Category: ANG
State: Hawaii

Type Draft Resolution: Add Item

Additional Sponsors: AL

Submitter: Kevin Horton

Proposal:
Secure, low-probability of detection Datalink network capability that smartly integrates with Link-16 and has the ability to effectively operate in hostile jamming environments while preserving the low observable characteristics of the F-22 and allowing effective data share between F-22, F-35, 4th Generation, and 6th Generation fighter aircraft.

Recommendation:
Gen-Generation (i.e. 4th Generation non-Stealth platform, 5th Gen F-22/F-35, 6th Gen PCA) A/C-Aircraft

Input #: 2
Resolution #: 5
Item #: L

ANG 7 F Change FL

Air National Guard Standing Resolution #7 and CV-22 procurement and fielding to the Air National Guard.

Date Submitted: July 26, 2019
Category: ANG
State: Florida

Type Draft Resolution: Change Item

Additional Sponsors:

Submitter: Ryan Hagemeier

Proposal:
Change item F to read, "Funding to procure and field, concurrent and balanced to the Active Component, the CV-22 to the Air National Guard for mobility missions to include Search and Rescue, Homeland Defense and Disaster Response Operations, Consequence Management, High Polar, and Special Operations."

Recommendation:
While the language in Standing Air National Guard Resolution #7 addresses the need for the procurement and fielding of the CV-22 in the Air National Guard, it is limited in its scope, restricting the air frame for the purposes of Search and Rescue (SAR) mission. In addition, Line F indicates a requirement for the Department of Defense and National Guard Bureau to develop a budget requirement for Headquarters Air Force to develop an accession strategy for the fielding of the CV-22 to the Air National Guard, but it fails to be specific in regards to a CONCURRENT and BALANCED strategy with the active component. RECOMMEND: Change item F to read, "Funding to procure and field, concurrent and balanced to the Active Component, the CV-22 to the Air National Guard for mobility missions to include Search and Rescue, Homeland Defense and Disaster Response Operations, Consequence Management, High Polar, and Special Operations."

Input #: 3
Resolution #: 7
Item #: F

ANG 7 K Change LA

Tactical Air Control Party (TACP) communication upgrade to the AN/PRC-161 Battlefield Awareness Tactical System–Dismounted (BATS-D) hand held multi network Link 16 radio

Date Submitted: June 12, 2019
Category: ANG
State: Louisiana

Type Draft Resolution: Change Item

Additional Sponsors: GA, ID, IN, MS, NY, NC, WA

Submitter: Rob Billings

Proposal:
Change item K to read, "Ensure the TACP AN/PRC-161 hand held Link 16 Radio continues to be funded in the ANG to ensure interoperability with already fielded DoD Link 16 platforms."

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The ANG TACP's and deployed field locations require comprehensive and networked battle space awareness. (1) STATES IMPACTED - All TACP Deployed locations CONUS and OCONUS (2) MISSION CRITICAL NEED - Link 16 capability provides increased situational awareness and a DACAS capability in support of secure communications in both CONUS and OCONUS operational situations. The low probability of intercept and low probability of detection AN/PRC-161capability provides ANG TACP JTAC users a certified Digitally Aided Close Air Support (DACAS) system to conduct operations in contested environments. (3) DEPLOYMENTJUSTIFICATION- ANG TACP JTAC personnel lack the ability to conduct DACAS operations via Link 16 with currently fielded DoD platforms. Future conflicts will include a wide band of data link communication systems to and from Ground to Air assets. Training of air and ground assets require a communication system that includes a Link 16 data link capability to pass significant data to and from air and ground assets. (4) FUNDING JUSTIFICATION - Funding from the National Guard and Reserve Equipment Account (Appn 0350) (5) USAF FUNDING TO DATE – ANG is procuring the BATS-D radio capability now but are short systems for all location (6) ANG REQUIREMENT – BATS-D is part of a critical requirement for TACP communications with assets in both training and deployment missions

Input #: 2
Resolution #: 7
Item #: K

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

Battlefield Awareness and Targeting System- Dismounted (BATS-D) AN/PRC-161 Tactical Radio

BACKGROUND:

- The AN/PRC-161 handheld radio has been procured by the Air National Guard (ANG) Tactical Air Control Parties (TACP) missions
    - Provides several frequencies to include Link-16, Airman Network, Soldier Network and Civilian network
    - It is part of the Battlefield Airman kit that is being fielded throughout the ANG
    - It is the program of record for the TACP mission
- The ANG continues to need funding for this capability and this resolution will be an update to the current Standing Resolution 7k
- This resolution would an addition to Standing Air Resolution #32, 33, and 39

DISCUSSION:

- The ANG TACP's and deployed field locations require comprehensive and networked battle space awareness.
- The States impacted would include the following: IL, IN, KS, LA, MS, NV, NC, OH, OK, PA, TX, WA, WI
- Multiple networks to include the Link 16 capability provide increased situational awareness and a capability in support of secure communications in both CONUS and OCONUS operational situations.
- The low probability of intercept and low probability of detection AN/PRC-161capability provides ANG TACP JTAC users a certified Digitally Aided Close Air Support (DACAS) system to conduct operations in contested environments.
- The ANG TACP JTAC personnel lack the ability to conduct DACAS operations via Link 16 with currently fielded DoD platforms.
- Future conflicts will include a wide band of data link communication systems to and from Ground to Air assets.
- Training of air and ground assets require a communication system that includes a Link 16 data link capability to pass significant data to and from air and ground assets.
- Funding from the National Guard and Reserve Equipment Account (Appn 0350) would be used to procure this capability for all TACP's
- The ANG is procuring the BATS-D radio capability now but are short systems for all location
- The BATS-D is part of a critical requirement for TACP communications with assets in both training and deployment missions
-

RECOMMENDATION:

Recommend NGAUS support an addition to Standing Resolution #26 to include the Battlefield Awareness and Targeting System- Dismounted (BATS-D) AN/PRC-161 Tactical Radio for all TACPs in the ANG states.

ANG 9 K Add NC

ALR-69A Digital Radar Warning Receiver (DRWR) USAF program of record upgrade for C-17

Date Submitted: June 20, 2019

Category: ANG

State: North Carolina

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Larry Coleman

Proposal:
ALR-69A DRWR continue to be funded as an ANG requirement for ALL aircraft CONUS and OCONUS C17 missions

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG C17 at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – 69A is the Program of record for USAF, ANG and AFRC Aircraft and this is a change from previous yrs.

Input #: 1
Resolution #: 9
Item #: K

ANG 10 C Change MN

ALR-69A Digital Radar Warning Receiver (DRWR) for C-130 aircraft

Date Submitted: June 16, 2019
Category: ANG
State: Minnesota

Type Draft Resolution: Change Item

Additional Sponsors: AR, KY, WY

Submitter: Lyle Rock

Proposal:
Change item C to read, "Continued funding for ALR-69A Digital Radar Warning Receiver (DRWR) as an ANG requirement for all CONUS and OCONUS missions."

Recommendation:
CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – 69A is the Program of record for USAF, ANG and AFRC Aircraft and this is a change from previous yrs.

Input #: 2
Resolution #: 10
Item #: C

ANG 10 D Change MN

C-130 APN-241 Radar Upgrade via Value Engineering Change Proposal (VECP)

Date Submitted: June 16, 2019
Category: ANG
State: Minnesota

Type Draft Resolution: Change Item

Additional Sponsors: AR, GA, KY, MS, WY

Submitter: Lyle Rock

Proposal:
Change item D to read, "APN-241 radar upgrade via Value Engineering Change Proposal (VECP) as an addition to current C-130 modernization requirements."

Recommendation:
CRITICAL NEED FOR SUPPORT- The ANG C-130H/J fleet have several shortfalls in their ability to accurately deliver airdrop loads in combat in both Instrument and Visual Meteorological Conditions (IMC/VMC). STATES IMPACTED - All ANG C-130 Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - The U.S. Army's objective for airdrop accuracy is 50 meters circular error average, but traditional methods only provide 300-meter accuracy. Current Precision Airdrop (PAD) methods require multiple passes over the drop zone (increasing exposure to threat) for atmospheric calculations before dropping loads. This proposed VECP will improve the radar to perform with all this capability and reduce the cost of repair and sustainment significantly DEPLOYMENTJUSTIFICATION - Targeting pods with light detection and ranging provide the necessary capabilities during VMC operations. 1Meter High Resolution Radar Imagery upgrades coupled with targeting pods and off-board cueing provide a highly accurate all-weather single-pass airdrop capability that can be used to support domestic and contingency operations FUNDING JUSTIFICATION - Funding out of the Active Duty C-130 Systems Program Office Operations and Maintenance funds because it is an upgrade to the current radar installed on the aircraft

Input #: 4
Resolution #: 10
Item #: D

ANG 10 J Add MN

C-130 Refueling/Defueling Capability

Date Submitted: June 16, 2019
Category: ANG
State: Minnesota

Type Draft Resolution: Add Item

Additional Sponsors: GA, IN, WY

Submitter: Lyle Rock

Proposal:
Add a C-130 refuel/defuel capability to locations CONUS and OCONUS.

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The ANG requires a system capable of off-loading fuel from mobility aircraft into collapsible tanks for multi-point aircraft/vehicle refueling operations. This single-point defueling system must be compatible with C-130, E-8B, HC-130, KC-135, KC-46A and C-17 aircraft. STATES IMPACTED - All ANG C-130 CONUS and OCONUS sites MISSION CRITICAL NEED - This system can extend the reach of aviation and ground transportation assets into isolated areas experiencing critical infrastructure failure during the first 72 hours following a natural or man-made disaster. DEPLOYMENTJUSTIFICATION- The ANG has identified and validated shortfalls in the ability to offload fuel from aircraft in both CONUS and OCONUS locations due to lack of enough fuel trucks at the location. FUNDING JUSTIFICATION – The funding for this equipment is a candidate for National Guard and Reserve Equipment Account (NGREA) Appropriation 0350 ANG REQUIREMENT - Deployable aviation refueling point systems are required for C-130 to add a refuel/defuel capability to locations CONUS and OCONUS

Input #: 6
Resolution #: 10
Item #: J

WHITE PAPER EXPLANATION FOR RESOLUTION

for

C-130, E-8B, HC-130, KC-135, KC-46A and C-17 Refueling/Defueling Capability

- INTRODUCTION
  - The ANG requires a system capable of off-loading fuel from mobility aircraft into collapsible tanks for multi-point aircraft/vehicle refueling operations.
  - This system can also provide refueling directly from mobility aircraft to other aircraft or ground systems.
  - This single-point defueling system must be compatible with C-130, E-8B, HC-130, KC-135, KC-46A and C-17 aircraft.
  - This system can extend the reach of aviation and ground transportation assets into isolated areas experiencing critical infrastructure failure during the first 72 hours following a natural or man-made disaster.
  - Deployable aviation refueling point systems are required for each of the C-130, E-8B, HC-130, KC-135, KC-46A and C-17 wings
- DISCUSSION
  - The ANG has several uses for a system capable of off-loading fuel from Mobility Aircraft into collapsible or stationary tanks for several reasons
    - Refueling vehicles in a deployed location
    - Defueling aircraft for maintenance requiring empty tanks
    - Transfer of fuel to other manned or unmanned aircraft
  - Currently the location has to have a fuel truck to defuel aircraft and this causes potential problems with timed critical situations
    - Not enough trucks at the location
    - Austere locations for fuel trucks to be operating in disaster relief locations
    - Dangerous time critical offloading requirements in combat locations
    - Must be cargo certified to be able to be transported to locations
    - Can be stationary at a location
    - Be able to download fuel at a minimum rate of 120 gallons per minute
    - Must be able to be adaptable to multiple aircraft single point refueling points
- RECOMMENDATION
  - NGAUS establish a resolution for C-130, E-8B, HC-130, KC-135, KC-46A and C-17 Refueling/Defueling Capability to add a refuel/defuel capability to locations CONUS and OCONUS

ANG 10 K Add GA

C-130 Electronic Warfare (EW) survivability upgrades

Date Submitted: June 27, 2019
Category: ANG
State: Georgia

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Marshall Kennemer

Proposal:
Radio-frequency (RF) expendable decoy electronic warfare (EW) survivability upgrades

Recommendation:
CRITICAL NEED FOR SUPPORT- Electronic warfare (EW) suites need upgrades to defeat RF Guided Missile Threats expendable decoys as an adjunct to the towed decoy are available. STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - Whether through the program of record or separate initiatives, modernization upgrades for the EW suite require the following capabilities: proactive and directed offensive electronic attack, electronic warfare situational awareness improvements, and self-protection capabilities that include radar cross section (RCS) reduction, infrared countermeasures, and defensive jamming from an expendable RF Decoy DEPLOYMENTJUSTIFICATION- The USAF and ANG have identified and validated defensive shortfalls in integrated EW systems against radar-guided missiles. This requirement is necessary in the deployed locations OCONUS FUNDING JUSTIFICATION - Accordingly, EW sustainment funding must be reinstated, and legacy obsolescence addressed with interim capabilities for ANG aircraft. USAF FUNDING TO DATE - USAF is considering this capability for their aircraft as well as the ANG. Funding will also come from NGREA (APPN0350)

Input #: 14
Resolution #: 10
Item #: K

ANG 11 N Change AZ

Digital Radar Warning Receiver (DRWR) ALR-69A as a program of record upgrade for KC-135

Date Submitted: April 27, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Change Item

Additional Sponsors: CA, ME, MS, OH

Submitter: John Vitt, CW5 (R)

Proposal:
Change item N "Fund and Procure Digital Radar Warning Receiver" to read "Fully Fund and Procure 69A Digital Radar Warning Receiver (DRWR)" the Program of Record

White Paper: View White Paper

Recommendation:
Change item N "Fund and Procure Digital Radar Warning Receiver" to read "Fully Fund and Procure 69A Digital Radar Warning Receiver (DRWR)" CRITICAL NEED FOR SUPPORT- All these aircraft suite requires considerable modernization to keep pace with surface-to-air threat technology advancements and proliferation. Modernized EW suite subsystems, architecture, and countermeasures will allow ANG aircraft to conduct full spectrum combat operations in the vast majority of today's contested environments STATES IMPACTED - All ANG Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - To survive, ANG aircraft require a Geo-locating radar warning receiver capable of processing signals in a dense RF environment and automatically direct countermeasures to defeat those threats. Increased situational awareness is needed to correlate on board and off-board threat detection, terrain masking, and optimized dynamic rerouting capabilities to minimize exposure to threats DEPLOYMENTJUSTIFICATION- A robust integrated electronic attack suite that includes the ALR-69A DRWR will enable all aircraft to either survive current and future radars FUNDING JUSTIFICATION - Incorporating features such as a 69A DRWR capability in all these aircraft are identified as unfunded requirements in the ANG Modernization books and have been identified to the USAF for funding USAF FUNDING TO DATE – USAF and ANG will fund 69A DRWRs for their Combat and Mobility aircraft in the Program Objective Memorandum and the National Guard and Reserve Equipment Account (Appn 0350) ANG REQUIREMENT – 69A is the program of record for USAF, ANG and AFRC Aircraft and this is a change from previous years.

Input #: 5
Resolution #: 11
Item #: N

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

ALR-69A, Digital Radar Warning Receiver

BACKGROUND:

The ALR-69A was selected in a full and open competition in the United States Air Force (USAF) in 2018 as the Digital Radar Warning Receiver (DRWR) program of record for all aircraft.

DISCUSSION:

- Standing resolutions for Electronic Warfare (EW) for the A-10, C-130, F-15, F-16, KC-135, KC-46 and C-17 state that the EW upgrades should include DRWRs or 69A
    - The standing resolutions are not consistent or missing this system
- Inconsistency can cause confusion in the Congress of the United States when approval of funding in the National Guard and Reserve Equipment Account (NGREA) (Appropriation 0350) Bill each year
    - The Congressional Authorizers of the NGREA account suggest ways to spend the NGREA funding they appropriate each year
    - Confusion caused by the inconsistency in the programs that the Air National Guard (ANG) want to be considered, leads the Congress to think the ANG is not clear and will not identify funding for the specific program the ANG identifies
- Not funding specific programs, the ANG causes delay in critical modernized technology being delivered and installed in the ANG aircraft

RECOMMENDATION:

Correct the inconsistency in the Air Standing Resolutions and add the term “69A Digital Radar Warning Receiver (DRWR)” as the designation applicable to all aircraft (A-10, C-130, F-15, F-16, KC-135, KC-46, MQ-9 and C-17) to replace the designation “DRWR” or “Digital Radar Warning Receiver”.

ANG 11 Q Add AZ

KC-135 Portable Refueling/Defueling Capability

Date Submitted: April 27, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Add Item

Additional Sponsors: WI

Submitter: John Vitt, CW5 (R)

Proposal:
Portable refueling/defueling capability for offloading fuel from the aircraft for both refueling of other aircraft and ground vehicles and for defueling for maintenance.

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT- The ANG requires a portable system capable of off-loading fuel from mobility aircraft into collapsible tanks for multi-point aircraft/vehicle refueling operations. This system can also provide refueling directly from mobility aircraft. This single-point defueling system must be compatible with C-17, C-130H/J, and KC-135 aircraft. STATES IMPACTED - All ANG C-130, KC-135 and C-17 Aircraft at CONUS and OCONUS sites MISSION CRITICAL NEED - This system can extend the reach of aviation and ground transportation assets into isolated areas experiencing critical infrastructure failure during the first 72 hours following a natural or man-made disaster. DEPLOYMENT JUSTIFICATION- The ANG has identified and validated shortfalls in the ability to offload fuel from aircraft in both CONUS and OCONUS locations due to lack of enough fuel trucks at the location. FUNDING JUSTIFICATION – The funding for this equipment is a candidate for National Guard and Reserve Equipment Account (NGREA) Appropriation 0350 ANG REQUIREMENT - Deployable aviation refueling point systems are requested for each of the KC-135 Wings.

Input #: 6
Resolution #: 11
Item #: Q

WHITE PAPER FOR PORTABLE REFUELING/DEFUELING CAPABILITY

C-130, KC-135, C-17 Refueling/Defueling Capability

- INTRODUCTION
  - The ANG requires a system capable of off-loading fuel from mobility aircraft into collapsible tanks for multi-point aircraft/vehicle refueling operations.
  - This system can also provide refueling directly from mobility aircraft.
  - This single-point defueling system must be compatible with C-17, C-130H/J, and KC-135 aircraft.
  - This system can extend the reach of aviation and ground transportation assets into isolated areas experiencing critical infrastructure failure during the first 72 hours following a natural or man-made disaster.
  - Deployable aviation refueling point systems are required for each of the 44 C-17, C-130H/J, and KC-135 wings
- DISCUSSION
  - The ANG has several uses for a system capable of off-loading fuel from Mobility Aircraft into collapsible or stationary tanks for several reasons
    - Refueling vehicles in a deployed location
    - Defueling aircraft for maintenance requiring empty tanks
    - Transfer of fuel to other manned or unmanned aircraft
  - Currently the location has to have a fuel truck to defuel aircraft and this causes potential problems with timed critical situations
    - Not enough trucks at the location
    - Austere environments for fuel trucks to be operating in disaster relief locations
    - Dangerous time critical offloading requirements in combat locations
- RECOMMENDATION
  - Establish a requirement for a refuel/defuel capability in each state to solve the refueling/defueling problem by considering commercial-off-the-shelf solutions
    - Must be cargo certified to be able to be transported to locations
    - Can be stationary at a location
    - Be able to download fuel at a minimum rate of 120 gallons per minute
    - Must be able to be adaptable to multiple aircraft single point refueling points

ANG 12 E Add GA

Fielding of Advanced Air Battle Management System (ABMS) and Sustainment of the E-8C (JSTARS) fleet

Date Submitted: June 27, 2019
Category: ANG
State: Georgia

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Marshall Kennemer

Proposal:
Ensure Air National Guard fully integrated with the Advanced Air Battle Management System (ABMS) fielding process and provide for continued sustainment and modernization of the E-8C until ABMS is brought on line in accordance with Fiscal Year 2019 National Defense Authorization Act (NDAA) language and the National Defense Strategy (NDS).

Recommendation:
NGAUS supports the Air Force's plan to base the Advanced Battle Management System (ABMS) at Robins Air Force Base, Georgia (RAFB GA). This will require activation of an Air National Guard (ANG) transition strategy team in order identify and develop the initial ANG cadre for ABMS and also assist in determining the ABMS Total Force Wing(s) Structure. In conjunction with the RAFB GA ABMS conversion effort, the Georgia ANG and it's Total Force Partners, require a fully funded sustainment of the E-8C until a draw down in line with NDAA FY19 language and the NDS.

Input #: 15
Resolution #: 12
Item #: E

ANG 16 A Delete MA

Distributed Common Ground System

Date Submitted: March 6, 2019
Category: ANG
State: Massachusetts

Type Draft Resolution: Delete Item

Additional Sponsors:

Submitter: Matt Ferringer

Proposal:
Delete item A.

Recommendation:
Due to additional funding by Air Combat Command and National Guard Bureau, Air National Guard Distributed Common Ground Station units are in the process of upgrading all legacy systems to the new open architecture system that will provide lasting capability for units for the foreseeable future and keep units in parity with their active duty counterparts. National Guard Bureau J2 has provided funding to equip applicable sites with equipment to process data at the unclassified level to provide analytical support to decision makers at the local, state, and federal as required.

Input #: 5
Resolution #: 16
Item #: A

ANG 16 B Delete MA

Distributed Common Ground System

Date Submitted: March 6, 2019
Category: ANG
State: Massachusetts

Type Draft Resolution: Delete Item

Additional Sponsors:

Submitter: Matt Ferringer

Proposal:
Delete item B.

Recommendation:
Due to additional funding by Air Combat Command and National Guard Bureau, Air National Guard Distributed Common Ground Station units are in the process of upgrading all legacy systems to the new open architecture system that will provide lasting capability for units for the foreseeable future and keep units in parity with their active duty counterparts. National Guard Bureau J2 has provided funding to equip applicable sites with equipment to process data at the unclassified level to provide analytical support to decision makers at the local, state, and federal as required.

Input #: 6
Resolution #: 16
Item #: B

ANG 25 O Add NY

Support of Space Operations

Date Submitted: June 25, 2019
Category: ANG
State: New York

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Jason Zeliph

Proposal:
Propose creation of an ANG Offensive Space Control (OSC) capability within the New York Air National Guard to support expanding Combatant Commanders' (COCOM) and Joint Task Force Space Command (JFSCC) space control requirements.

Recommendation:
-Air Force Space Command's (AFSPC) vision to create six ANG space control units with 18 Unit Type Codes (UTC) capable of deploying anywhere in the world to conduct space superiority operations. Three OSC units exist and the creation of a fourth is underway. -To meet the increased demand for OSC assets, the 107 Attack Wing proposes an initiative to create a Space Control Squadron within the New York Air National Guard (NYANG). -Establish a new OSC Squadron made up of space control experts. -Leverage existing Intelligence, Surveillance, and Reconnaissance (ISR) Space expertise within the state to support the initial stand-p of this new capability.

Input #: 1
Resolution #: 25
Item #: O

ANG 25 P Add NY

Support to Space Operations

Date Submitted: June 25, 2019
Category: ANG
State: New York

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Jason Zeliph

Proposal:
Propose creation of an Air National Guard (ANG) space operational intelligence capability to support expanding United States (US) Space Operations, by establishment of an ANG Space Control Group at the 107th Attack Wing.

Recommendation:
-Operational intelligence for Space is a known capability gap and the 2018 National Space Strategy calls for US forces to improve space intelligence capabilities. -Space is a significantly different warfighting domain and requires a specific knowledge set and proficiency for operational intelligence. -New York Air National Guard (NYANG) has resident knowledge requisite to build a capability that could provide operational intelligence support to Air Force/DoD Space Control and National Security Space missions. -The recommended ANG Space Group includes a new Space Intelligence Squadron and the 222d Command and Control Squadron leveraging existing NYANG space acumen to support Air Force Space Operations.

Input #: 2
Resolution #: 25
Item #: P

ANG 25 Q Add MI

RELATING TO AIR AND SPACE OPERATIONS CENTER (AOC)

Date Submitted: June 28, 2019

Category: ANG

State: Michigan

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Mark Hurley

Proposal:
Ensure battlespace awareness in a near peer environments and enhanced efficiency at Air Reserve Component Air Operations Centers and ensure readiness of the Air National Guard with Air and Space Operations Center training upgrades

Recommendation:
Maintain common Weapon System versions between Air Force and Air Reserve Component to include a stand-alone capability for Block 20 in the event of network disruptions or degradation and allow for continuity of training and distributed operations. These upgrades will be included in Air Combat Command's plan for all Air and Space Operations Centers, and will be aligned with the Active Duty counterpart's timeframe for installation. Increase Joint Worldwide Intelligence Communications System connectivity to access higher classification level intelligence and data. Fund a full time Configuration Manager as defined at Air Force Instruction 13-1-Air Operations Center Volume 3. Fund Mission Appropriate Bandwidth that allows substantial amounts of data and communications between Active Duty and Air Reserve Component units. Enhance the Cross Domain Network Display capability to display multiple classifications of networks on a single display and extended desktop and a Trusted Gateway System for data transfer between different classifications of networks. Provide Weapon System Mission Defense Team associated manpower and the toolkits necessary for enhanced Air and Space Operations Center cyber defense/mission assurance capabilities. Provide a Secure Voice capability that includes a High Frequency radio. Fund a full-time Information System Security Manager and/or Information System Security Officer for each Air Operations Group to support the Information Assurance requirements for both Air Force Joint Worldwide Intelligence Communications System and the Air and Space Operations Center Weapon System. Installing a Dual-Use Coalition - Collateral Network with a Collaborative Operational-Level training capability. Providing Distributed Mission Operations training equipment at Distributed Training Operations Centers. Installing a Joint Interface Control Officer Extended Trainer in order to meet Air Combat Command-mandated Interface Control Team Training Task Lists in garrison. Funding an Operational-Level Data Link Training Tool.

Input #: 4
Resolution #: 25
Item #: Q

ANG 27 D Add ID

Air National Guard (ANG) develop or assist in the Missile Field, Continuation of Operations and Continuation of Government mission for the MH-139 (UH-1N replacement selection by the USAF in 2018)

Date Submitted: June 19, 2019
Category: ANG
State: Idaho

Type Draft Resolution: Add Item

Additional Sponsors: CA, IN

Submitter: Anthony Vincelli

Proposal:
ANG take over of all/part of the USAF COOP, COG, Homeland Security and Missile field mission as recommended by the National Commission on the Structure of the Air Force as a "Pilot Program" per the report

Recommendation:
CRITICAL NEED- The USAF has selected the MW-139 to replace the UH-1N helicopters. The Air Force classified the need to replace the UH-1N as "urgent and compelling" to Congress. It is fully funded in the FY16 Fiscal Year Defense Plan (FYPD). The program is underway and has been authorized at $1+B. STATES IMPACTED - ND, MD, WY, CO, MO, CA, NV and other states as the Homeland Security Mission (HSM) requirement is developed MISSION CRITICAL NEED – Given this award to the MW-139 Helicopter there is now an opportunity for the ANG to develop flying missions for states without flying missions. Also, the states with significant distance to cover in HSM requirements need to consider this AF program to fund the new MW-139 for their states as a solution to the HSM requirement. Today, COTS helicopters regularly fly in small fleets at very low-cost points. MISSION JUSTIFICATION- The ANG could save the USAF life cycle costs, deliver capability on an accelerated timeline, and takeover all or part of an enduring homeland/domestic flying mission by using this USAF awarded COTS helicopter and the Pilot Program recommendation from the USAF Commission on the Guard recommendation. OPPORTUNITY - This is an opportunity for the Air National Guard and the States to become actively involved in the HSM using this USAF Award to the MW-139 Helicopter as avenue to transition into a flying mission and adjunct to the Active Force. The Air Force intends to move rapidly and will prioritize speed over perfection. The ANG could step in with a well thought out solution, and get all or a part of this program, if they are willing to bring the full weight of their political and military might to bear.

Input #: 4
Resolution #: 27
Item #: D

ANG 29 D Add AZ

Add the move out/jump off (MOJO) system for communication with airborne and ground assets

Date Submitted: April 27, 2019
Category: ANG
State: Arizona

Type Draft Resolution: Add Item

Additional Sponsors: AR, GA, IN, MN, MS, NY, TN, WA

Submitter: John Vitt, CW5 (R)

Proposal:
Fund the move out/jump off (MOJO) system to provide ANG personnel both Situational Awareness and the ability to train at CONUS and OCONUS locations.

White Paper: View White Paper

Recommendation:
CRITICAL NEED FOR SUPPORT - The ANG Ranges and deployed field locations require comprehensive and networked battle space awareness and the ability to bridge disparate waveforms, e.g., SADL to Link 16 STATES IMPACTED - All ANG Ranges and Deployed locations at CONUS and OCONUS MISSION CRITICAL NEED - Simultaneous three-channel line of sight, and/or satellite communications provide increased situational awareness to coordinate and bridge communications over multiple communication bands in CONUS and OCONUS for both training and operational situations DEPLOYMENT JUSTIFICATION - Future conflicts will include a wide band of data link communication systems to and from Ground and Air assets. Training of air and ground assets require a multi-band communication system that includes a Link 16 and UHF/VHF capability to pass significant data to and from air and ground assets. The move out/jump off (MOJO) system provides three-channel line-of-sight and/or satellite communications with already fielded capabilities on other Department of Defense (DoD) assets. Using the Small Tactical Terminal (STT), the MOJO system provides line of sight and beyond line of sight Link 16 as well as UHF/VHF waveforms to include SINCGARS, ANW and P25 and the ability to bridge disparate waveforms FUNDING JUSTIFICATION - Funding from the National Guard and Reserve Equipment Account (Appn 0350) USAF FUNDING TO DATE - ANG is using this MOJO Link 16 capability now but are short systems for all locations ANG REQUIREMENT - Communication over multiple bands to include Link 16 Radios as part of the ANG overall communication plan for training and deployment locations

Input #: 7
Resolution #: 29
Item #: D

INFORMATION PAPER FOR SUBMITTED RESOLUTION

ON

Move Out/Jump Off (MOJO) system for communication with airborne and ground assets

BACKGROUND:

- The MOJO system provides three-channel line-of-sight and/or satellite communications with already fielded capabilities on other Department of Defense (DoD) assets.
- Using the Small Tactical Terminal (STT), the MOJO provides line of sight and beyond line of sight Link 16 as well as UHF/VHF waveforms to include SINCGARS, ANW and P25 and the ability to bridge disparate waveforms

DISCUSSION:

- Standing Resolution #29 relating to the modernization of the Combat Readiness Training Center (CRTC) and Tactical Range Enterprise (TRE) infrastructure to support training deployments of 4th and 5th generation does not include this capability
- CRTC's and Tactical Ranges need this data link capability to train aircrew on the use of many networks and waveforms prior to deploying to OCONUS Operations
- MOJO gives aircrews the ability to test and refine their ability to communicate under combat operations with several different radios and waveforms
- This CRTC and TRE capability provides the training necessary to ensure survivability and success of combat missions in deployed locations

RECOMMENDATION:

Recommend NGAUS add MOJO to the Standing Resolution #29 as a necessary capability for the Combat Readiness Training Center (CRTC) and the Tactical Range Enterprise (TRE) sites.

ANG 29 E Add IN

Rugged Low-Energy, High-Performance Shelter Lighting (Replacement)

Date Submitted: June 27, 2019
Category: ANG
State: Indiana

Type Draft Resolution: Add Item

Additional Sponsors:

Submitter: Ryan Harvey

Proposal:
Provide a requirement and funding for the replacement of damaged, inefficient and insufficient shelter lighting with rugged, shock/vibration resistant lighting that draws 60% less energy than standard lighting, has a 50,000 hour life expectancy and can be rolled up with a tent at breakdown

Recommendation:
Through advances in lighting technology, the next generation of shelter lighting (currently available) is virtually indestructible, with a higher illumination, lower power consumption and a lower operating temperature than traditional military light sets that are heavier, run hotter, draw more power and do not provide sufficient lighting required for every mission. This light weight, new lighting technology can be controlled individually or at a set level in red or blue blackout mode. They are easily installed and can be left as installed in a tent when it is taken down and stored. Recommendation: Request for NGAUS to support a requirement and funding (NGREA) for states to have the ability to replace outdated, underperforming and energy inefficient shelter lighting with this new lighting technology.

Input #: 11
Resolution #: 29
Item #: D

ANG 30 New Resolution GA

RELATING TO AIR CONTROL SQUADRON'S COMMAND AND CONTROL NEW PLATFORM CONVERSION

Date Submitted: June 27, 2019
Category: ANG
State: Georgia

Type Draft Resolution: New Resolution

Additional Sponsors:

Submitter: Marshall Kennemer

Proposal:
To ensure readiness of the Air National Guard, the National Guard Association of the United States supports:

Recommendation:
A. Fund construction of in-garrison bed down facilities for the new tactical command and control system B. Provide Air Control Squadrons (ACS) with modern state-of-the-art facilities containing sufficient intrusion detection systems (IDS) to meet DoD mission requirements in the area of Command and Control (C2)

Input #: 10
Resolution #: 30
Item #: New