



**DLA**  
DEFENSE LOGISTICS AGENCY  
*Established 1961*



The Nation's Combat Logistics Support Agency

# 2020 Virtual Joint Advanced Planning Brief for Industry

Our program will begin  
shortly; please stand by...



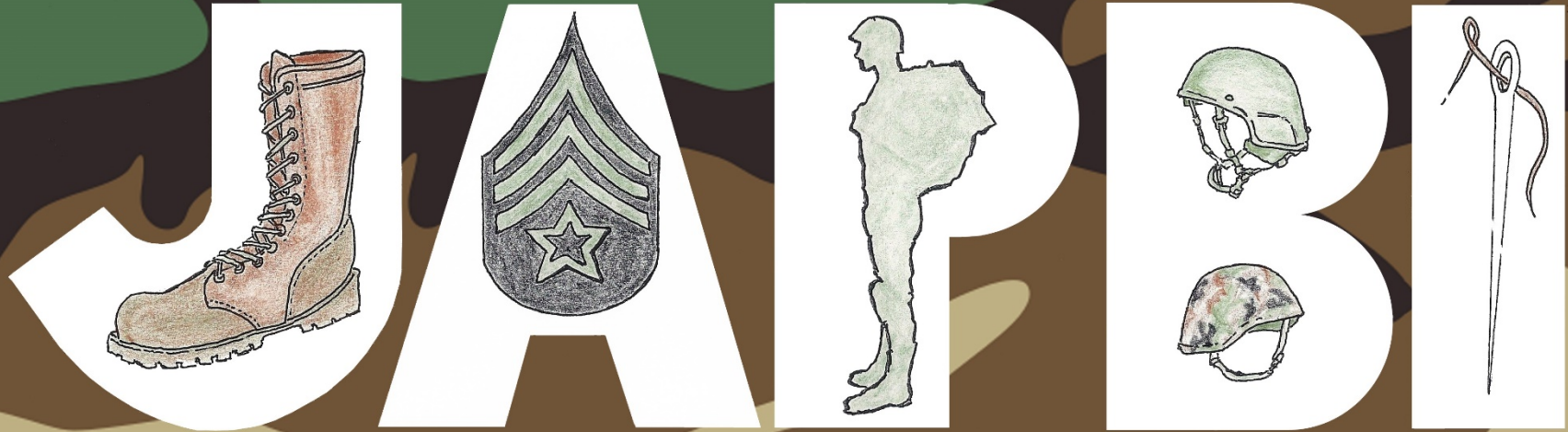
WARFIGHTER ALWAYS



# Gloves Breakout

- DLA Troop Support
  - Tanya Lockley
- Product Manager, Soldier Clothing & Individual Equipment
  - Rob Drown
- Infantry Combat Equipment (PM ICE)
  - Jen Fernald
- Air Force Uniform Office
  - Debra McLean

# Joint Advanced Planning Brief for Industry



Hosted by DLA Troop Support Clothing and Textiles

- For questions, please use the Q&A tab. Type your question ask the speaker is briefing. Questions will be read by the moderator at the end of each presentation
- You are welcome to use the chat, but please do not ask questions there as we may not see them.
- Slides are being posted within a week of the presentation at <https://www.dla.mil/TroopSupport/ClothingandTextiles/C-T-Industry/IndustryEvents/2020-JAPBI/>



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# DLA Troop Support Clothing & Textiles Gloves, Tape, Webbing, and Wet Weather Gear

Tanya Lockley, IST Chief  
November 17, 2020



WARFIGHTER ALWAYS



## TEAM MEMBERS

- Tanya Lockley, Supervisor/Contracting Officer  
[Tanya.Lockley@dla.mil](mailto:Tanya.Lockley@dla.mil)
- Clifford Lawson, Acquisition Specialist  
[Clifford.Lawson@dla.mil](mailto:Clifford.Lawson@dla.mil)
- Rafael Nazario-Vidal, Acquisition Specialist/Contracting Officer  
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- Samuel Clifton, Acquisition Specialist/Contracting Officer  
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- Dominik Dos, Acquisition Specialist  
[Dominik.Dos@dla.mil](mailto:Dominik.Dos@dla.mil)
- Kelley Mauldin, Acquisition Specialist  
[Kelley.Mauldin@dla.mil](mailto:Kelley.Mauldin@dla.mil)



# PRODUCT LINE OVERVIEW

- **GLOVES** (main product line)
  - **String Knits**  
Cold Weather Glove Inserts  
Radioactive Contaminants Glove Inserts
  - **Cut & Sew**  
Dress Gloves (Navy/MC), Summer & Cold Weather Flyer's Gloves (Navy), Crewman Vehicle Combat Gloves (Navy), Light & Heavy Duty Utility Gloves (Navy), Barbed Wire Handler's Gloves, Fuel Handler's Gloves, Welder's Gloves, Wildland Firefighter's Work Gloves, Army Combat Capacitive Gloves, Rappelling Gloves, Heat & Immersion Protective Gloves, Intermediate Cold/Wet Weather Gloves (Army), Anti-Flash Gloves, Anti-Contact Gloves, and Heat Protective Mittens
  - **Rubber Gloves**  
Disposable Gloves, Rubber Industrial Gloves, Electrical Worker's Gloves, Chemical & Oil Protective Gloves and Oil & Otto Fuel Protective Gloves



# PRODUCT LINE OVERVIEW (Cont.'d)

- **TAPE & WEBBING**

Hook Fastener Tape, Pile Fastener Tape, Textile Tape, Textile Webbing

- **WET WEATHER GEAR**

Poncho Liner/All Purpose Liner, Wet Weather Parka, Wet Weather Trousers

- **SPECIAL PURPOSE ITEMS**

Construction Apron; Welder's items: Aprons, Jackets & Sleeves; MC Martial Arts Kit items: Protective Mask & Protective Impact Gloves, various training aids; Wildland Forrest Program Items: Firefighter's Work Gloves, Chaps; Radioactive Contaminants Protective Coveralls & Hood, Chaps

- **MISCELLANEOUS ITEMS**

Needles & Thread, Leather, Straps, Yarn, Sewing Kits



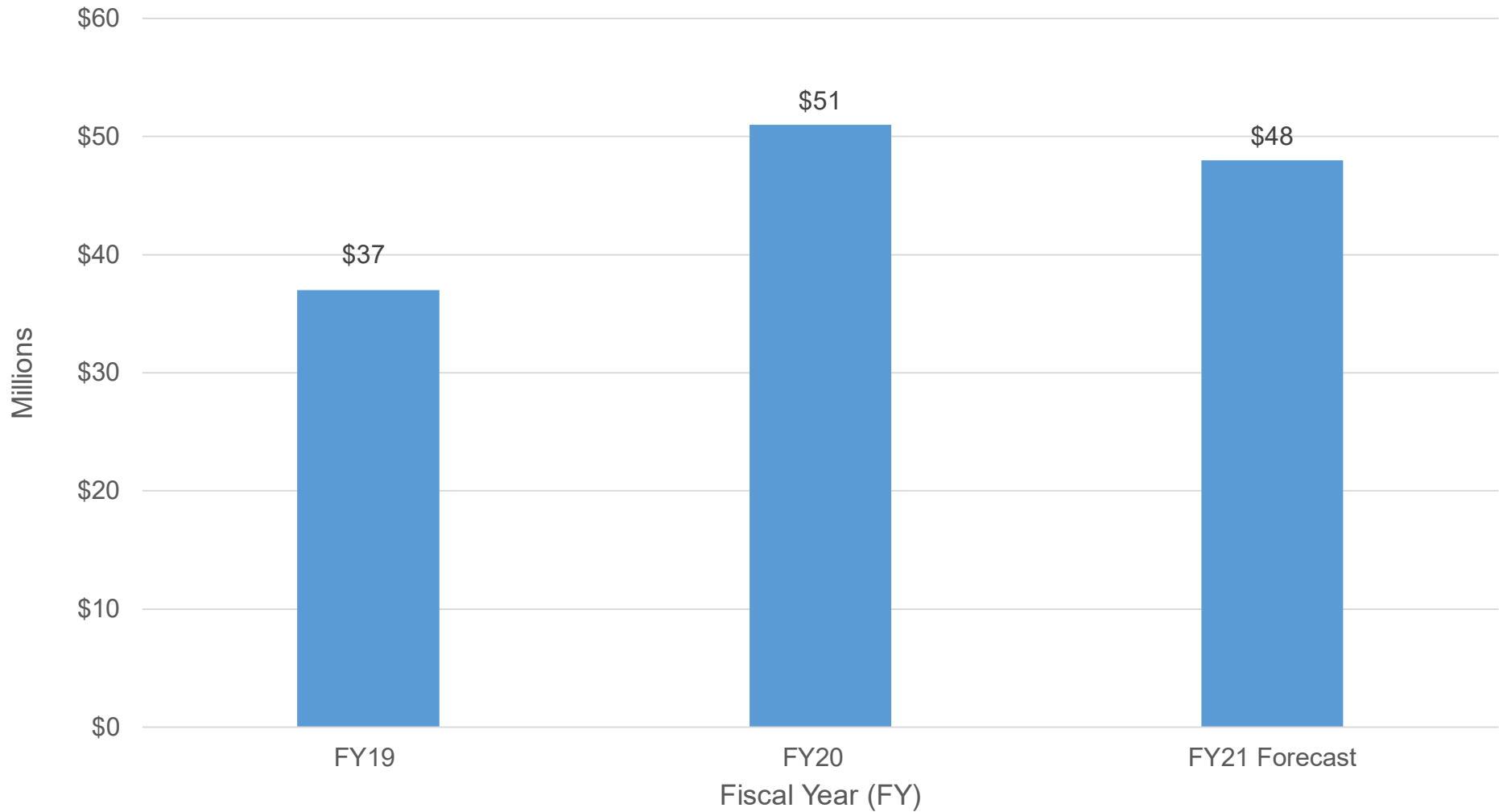
# PRODUCT LINE OVERVIEW (Cont.'d)

- **NUMBER OF ITEMS:** Approximately 331 items
- **SALES (@ Standard)**
  - FY19: \$38M
  - FY20: \$43M
- **NUMBER OF EMPLOYEES:** Five (5) Acquisition Specialists including two (2) Contracting Officers (Simplified Acquisition Threshold). Lead Contracting Officer vacancy, to be filled.
- **CRITICAL ACQUISITIONS:** Nuclear Program Support items and Critical Safety Items: Rubber Industrial Gloves, Otto Fuel Gloves, Electrical Worker's Gloves, Barbed Wire Handler's Gloves, and various Parachute items; Ceremonial Items: Dress Glove (Black & White); Wildland Forrest Program Items: Firefighter's Work Gloves and Chaps; Light Duty Utility Gloves for Afghan Security Forces
- **COMMAND INTEREST:** Nuclear Program Support; Wildland Forrest Program; Parachute Critical Safety Items





# MATERIAL OBLIGATIONS





# OPEN PROCUREMENTS

1. Electrical Worker's Gloves PGC 01850, 01851, 01852
  - Unrestricted
  - TAD December 2020



# UPCOMING OPPORTUNITIES

- Textile Tape - Small Business Set-Aside  
Anticipated Solicitation Date: NOV 2020  
POC: Dominik Dos
- Heat Protective Mittens - Small Business Set-Aside  
Anticipated Solicitation Date: NOV 2020  
POC: Clifford Lawson
- Summer Flyer's Gloves - Mandatory Portion  
Anticipated Solicitation Date: NOV 2020  
POC: Samuel Clifton
- Heavy Duty Firefighter Gloves, Small Business Set-Aside  
Anticipated Solicitation Date: DEC 2020  
POC: Rafael Nazario-Vidal
- Oil & Otto Fuel Protective Gloves, Unrestricted  
Anticipated Solicitation Date: DEC 2020  
POC: Rafael Nazario-Vidal



## UPCOMING OPPORTUNITIES (Cont.'d)

- Chemical Protective Gloves - Small Business Set-Aside  
Anticipated Solicitation Date: DEC 2020  
POC: Kelley Mauldin
- Intermediate/Cold Wet Weather Gloves  
Small Business Set-Aside  
Anticipated Solicitation Date: JAN 2021  
POC: Kelley Mauldin
- Summer Flyer's & Combat Vehicle Crewman Gloves  
Small Business Set-Aside  
Anticipated Solicitation Date: FEB 2021  
POC: Samuel Clifton
- Textile Webbing - Small Business Set-Aside  
Anticipated Solicitation Date: FEB 2021  
POC: Rafael Nazario-Vidal
- Barbed Wire Handler's Gloves - Unrestricted  
Anticipated Solicitation Date: July 2021  
POC: Clifford Lawson





**Project Manager Soldier Survivability**

**PRECISION  
Is the Standard**

*Every Ounce Matters, Every Bullet Counts*

**Product Manager  
Soldier Clothing and Individual Equipment  
Joint Advanced Planning Brief to Industry  
*Gloves/Handwear Session***

17 November 2020

Rob Drown  
Product Engineer, PM SCIE  
robert.e.drown.civ@mail.mil



# Army Combat Glove – Capacitive Gauntlet (Type III)



## Where We Are:

- Warfighters require a gauntleted glove to provide operational protection against heat and flame
  - Currently this need is met with the Summer Flyers Glove (SFG) and Combat Vehicle Crewman (CVC) Glove
    - These gloves do not provide the level of durability and capacitive capabilities necessary for Warfighters to execute their duties
- The Army Combat Glove (ACG) Type III shares the same form factor with the Type I and II, being touch capacitive
- The ACG Type III (Capacitive, Gauntlet) underwent both Army and Air Force evaluation
  - Both Services evaluation proved a need and desire for the Type III ACG among Air Crew and Combat Vehicle Crew personnel

## Where We Are Going:

- The Type III ACG will be introduced as an alternative to the SFG and CVC for Warfighters that require a durable, gauntleted and touch capacitive glove
- Changes to the fingertip design have been made for improved screen interfacing
- PM SCIE will submit Technical Data Package to DLA for sustainment





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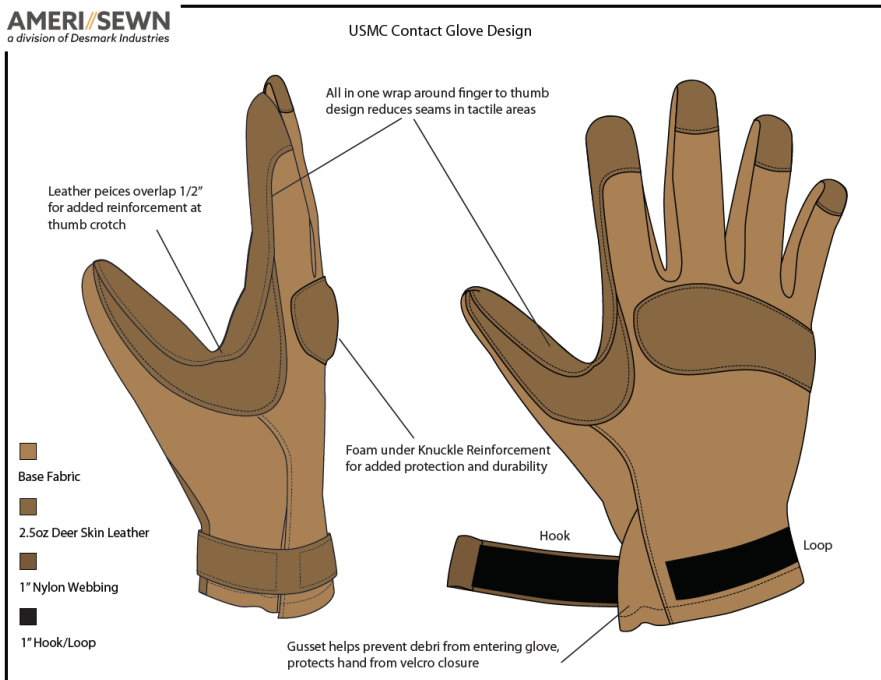
*Program Manager  
for  
Infantry Combat Equipment (PM ICE)*

**USMC HANDWEAR  
JAPBI 17 Nov 20**





AMERI/SEWN  
a division of Desmark Industries



## Background:

- FY19 contact glove winter LUE included 3 COTS gloves.
- Issued to Marines participating in CW training at MWTC and in Norway.
- User feedback collected via surveys and focus groups in FY19 used to develop a government owned design for FY21 LUE.

## Contact Glove FY21 LUE Descriptions

- Two contact glove variants:
  - Cold Weather (CW): will be constructed using hardface fleece with leather palms. Touch capacitive.
  - Temperate Weather (TW): similar design but utilizes lighter FR fabrics; will test 2 different fabric variants, both with leather palms. Touch capacitive.

## Schedule

- 1<sup>st</sup> & 2<sup>nd</sup> QFY21:
  - Lab testing.
  - Limited User Evaluations – Norway & Mountain Warfare Training Center (MWTC), Bridgeport, CA.
- 3QFY21:
  - Analyze results to determine updates to material/design; whether temperate and cold weather versions are needed.
- 4QFY21:
  - Final design review and approval.
  - Begin development of technical data package (TDP) for submission to DLA-TS.
- FY22:
  - Planned transition to DLA-TS.



▪ **Intermediate Cold Weather Glove (ICWG)**

- Government owned – sustainable
- Increased insulation
- Longer cuff
- Increased leather at knuckles, 1<sup>st</sup> finger, and thumb crotch (patch) for increased durability
- Adjustable wrist strap back of wrist
- Nose wipe

▪ **Extreme Cold Weather (ECW) Mitten Systems**

- Government owned design – sustainable
- Both ECW & TF Shells developed
- TF Liner developed for better dexterity; used with both shells
- Nose wipe
- Replace legacy mittens through attrition

▪ Development of government owned patterns for ICWG, ECW Mitten System and TF Mitten System began in 2<sup>nd</sup>QtrFY19.

- Lab testing (material & end item) completed 2QFY20.
- LUE completed 2QFY20 in Norway & the Mountain Warfare Training Center (MWTC).
  - 500 pairs of each item purchased for LUE.
- Data analysis / final report complete June 2020.
- Pattern modifications (fit and design) based off of LUE results underway, followed by final prototypes.
  - Will validate final designs winter FY21 – 50 pairs of each.
- End item and material specifications to run concurrently with finalization of patterns.
- Following final design review, finalize technical data package (TDP).
- Transition of TDP to DLA-TS scheduled for 2QFY21.



**MARINE CORPS SYSTEMS COMMAND**

**Equipping our MARINES**

***Questions??***



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Edge*



# **JAPBI Glove Session USAF PEO ACS Human Systems Division**

**17 Nov 20**

**Debra McLean  
Program Manager/WNU  
Debra.a.mclean4.civ@mail.mil  
508-206-3072**



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## **AGENDA**

**Current Requirement Gaps**

**New Requirements**

**New Requirements Pending**

**Touch Screen Gloves**



# Current Glove Gaps Cold Weather Aviation System

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- **PACAF Cold Weather Aviation System CWAS Gloves**

- **Key Perf Parameters (KPPs):**

Environmental Protection Reduce Bulk, Manage Moisture, Flame

Protection

- Threshold (T) protect to -20F /2hrs;
  - Objective (O): **protect down to -49F, 6 hrs;**
  - 450 knots equivalent air speed (KEAS) / 3 sec (at altitude)
  - Wind chills 55 mph (at ramp)
  - Require high level of dexterity and flexibility during flight operations as well as post ejection
- Current warmest Safe To Fly approved gloves
    - **total glove clo values were 1.49**



# Current Glove Gaps Cold Weather Aviation System

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- **CW Flyer Gloves/ Safe To Fly Approved**

- 2 products of 7 tested for clo values and prediction modeled:
  - can protect from frostbite (cold injury) for **26 hrs at -20F**, exceed (T) threshold
- **None meet 6 hr duration time** for Objective: Temp (-49F) at 0.4 m/s wind speed
  - fell short of requirement by 3 hrs maximum endurance time
- **None meet HUMAN FACTORS** (Dexterity/Tactility) required for all aviation tasks

**GAP:** Need gloves with clo value 1.49 but with much less bulk (thickness) to improve tactility/ dexterity in fingers !



# New Requirements AF Global Strike Command

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## AFGSC Gloves: Heating Required – Solutions Needed

- **Key Perf Parameters (KPPs):**

- Environmental Protection **-65F** (-54C) ambient / and **with windchill -140F** (-96.5C)
- Provide Heat/Flame Protection, and No Melt No Drip
- **Not degrade tactility and dexterity** required to flight mission tasks and emergency egress
- Enable Commercial Mobile Device **touch screen** operated by touching (objectively, without causing
- any delay, or contact error, or miscommunication, compared to bare hand)
- **Not become stiff or crack** under cold environment that interferes with its use, wear life, durability,
- required protection, and/or dexterity performances
- Fit 5<sup>th</sup> to 95<sup>th</sup> percentile population of each based on sizing systems for both men/women's sizing
- Worn with Cold Weather Aviation System flight clothing equipment and layering



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RFI





# New Requirements AF Global Strike Command

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## AFGSC Gloves

## Heating Required



### ○ Key Perf Parameters (KPPs):

**Power:** Electronically Powered or Portable Battery system or combination (no Aircraft modifications)

- If electronically battery powered, battery will weigh **no more than 15lb max** and Manportable, or
- Able to be aircraft secured to an 8G minimum IAW aircraft Flight Manual
- Manportable battery should be **conforming to individual**, not limit mobility, range of motion
- Manportable batteries should **be user changeable to eliminate need for connection cables** to battery source
- **Active control for increase/decrease heat**, located near the power source to facilitate ease of op /adjust
- Withstand extreme environment conditions induced by aircraft ops, ground transport, storage, rough handle
- Not cause injury, toxicity, or irritation to using personnel (Objective: any encounter with fire will not render the system unusable or unsafe)
- Not cause interference with aircraft systems; system **may require EMI shielding**



# New Requirement AF Global Strike Command

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## AFGSC Gloves

## Heating Required – Solutions Needed

### ○ Key Perf Parameters (KPPs):

- **Not cause ancillary problem** on aircraft platforms or mission operation, nor aircraft mod
- **Not cause snag hazard** or injury when exposed to moisture, rain, sweat, or submerged
- **COLOR:** (O) **match current OCP pattern for outer** components. (O) Underlayers match current undergarment colors worn with A2CU and CWU-27P flight suit (T) Subdued color underlayers (tan brown, gray, black) not used as a possible outer garment layer.
- Outerlayers not interfere with camouflage **detection avoidance**, or cause material reflectance, or significantly increase Near IR signature, or visual detection
- **Not shrink** after laundering or accommodated for shrinkage in the final design
- **90% probability of function** in intended environment without fail for first 3 yrs of service





# New Requirements Pending Air Ntl Guard Polar Tactical Airlift

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- **ANG Polar Tactical Airlift Extreme Cold Clothing System**

- Includes Headwear, Torso, Extremities, and non-fog Eyewear
- And Handwear and Footwear requirements
- **Difficult solutions needed**

- **V1) Maintainers**
- **V2) Aviators**

- **Key Perf Parameters (KPPs):**

- **Environmental Protection**

- Provide environmental protection in temp ranges of 40°F to -60°F or below *maintain body temperatures and remain relatively comfortable in cold, extreme cold, environments*

- **Safe for Aircrew Duties and Survival Operations**

- Provide sufficient protection from hazards associated with aircrew duties and survival activities



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for RFI Soon!



# New Requirements Pending Air Natl Guard Polar Tactical Airlift

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## ANG Polar Tactical Airlift Handwear– Solutions Needed

### Key Salient Attributes (KSA):

#### KSA Hand Protection

- Environmental protection of exposed skin from extreme cold (-60F) and wind exposure.
- Moisture wicking, water repellent, and thermal insulation
- **Five fingered glove** for dexterity
- Ability to operate touchscreen devices
- Resistant to aircraft petroleum, oil, and lubricants (POLs)
- Provide palm and finger material to prevent premature wear
- Sufficient grip
- **High static risk**





# New Requirements Pending Air National Guard Polar Tactical Airlift

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- **ANG Polar Tactical Airlift Handwear– Solutions Needed**

- **Key Salient Attributes (KSA):**

- **KSA Extreme Hand Protection**

- environmental protection **down to -60F and wind**
- Adequate moisture wicking and thermal insulation to prevent frostbite
- Gauntlet style **mitten for highest level thermal retention** when fine dexterity not essential
- Removable liners to facilitate greater dexterity for short-term exposure while performing survival tasks and quickly doff outer layer and still be protected from contact frostbite.
- **High static risk:** *Personnel maintaining aircraft in cold, dry environments, on snow and ice surfaces without adequate static grounding capability are exposed to higher-than-normal risk of explosion and fire. External protection layers require flame resistant/flame retardant characteristics.*





# New Requirements Pending Air National Guard Polar Tactical Airlift

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- **ANG Polar Tactical Airlift Handwear– Solutions Needed**
- **Other Key Salient Attributes (KSA)**
  - Tailorable and scalable system components
  - Safe To Fly approval requires v2 provide Heat/Flame Protection, and No Melt No Drip
  - Durability for at least 180 days of field use without replacement or repair (T) threshold; more than 180 days of field use without replacement or repair (O) objective
  - Moisture Vapor Transmission Rate (MVTR) for laminated shell fabrics shall be greater than 4,200 grams/meter 2/24 hours (T) and greater than 6,000 grams/meter 2/24 hours (O)
  - Size and Adjustability (fit 98% of female and male population); quick donning and doffing
  - Closures must not become Foreign Object Debris potential (safety mishap)



# APPROVED SAFE TO FLY LIST TOUCH SCREEN FLYER GLOVES

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- **Summer Flyer Gloves (Touch Screen Type)**
  - AF tested and approved COTS until supply system could fill sustainment need
  - DLA touch screen flyer gloves production uses PD prepared by Navy and AF
  - Issues have been brought to attn. by Aviation units of ineffective Touch Screen Gloves; Further research determined these were not bought from DLA
- **Color – Caution message to AF Aviators: Tan color touch screen leather is unreliable!**
  - Do not buy tan- color commercial touch screen flyer gloves
  - Only AF STF approved colors/styles (khaki/coyote brown, or green)
  - Contact our office if having issues with touch screen gloves bought by unit (send label)
- **New Color Rqmt:** Cold Weather Flyer Gloves (Touch Screen Type) – for AFGSC and ANG PTA
  - Camouflage pattern outer shell is desired for these special mission requirements



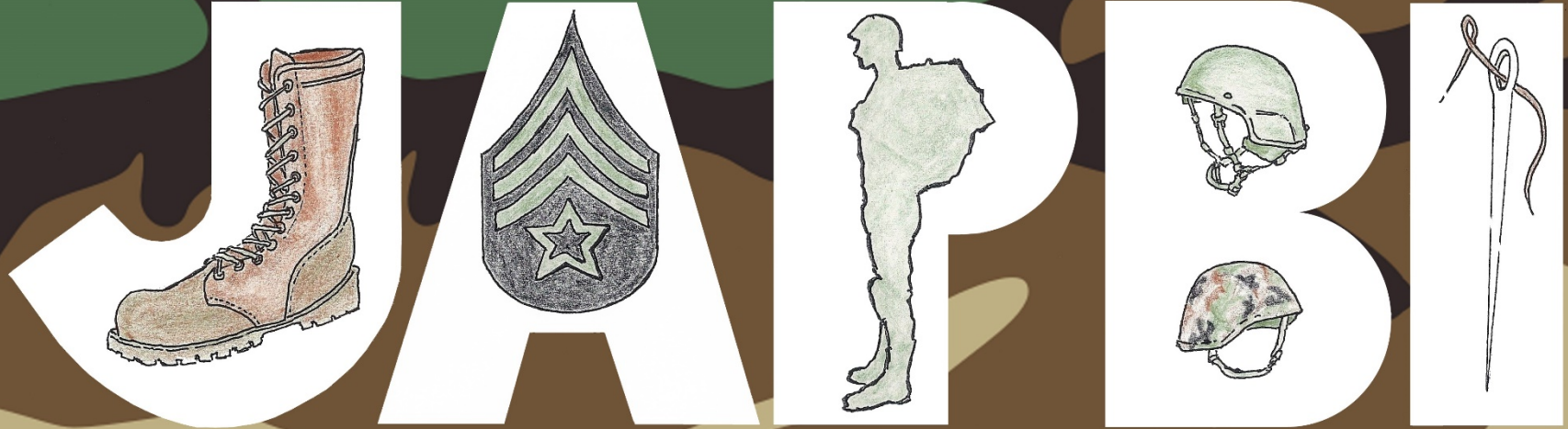
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## Questions?





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- THANK YOU FOR ATTENDING!
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