The Soldier

Product Manager
Soldier Clothing and Individual Equipment
(PM SCIE)

PIA Government Systems Committee Brief

21 FEB 20

Takis Blanas
Team Leader
PM SCIE Personnel Airdrop Systems Team

LTC Jonathan E. Allen
PdM SCIE

Mr. Jeff Myhre
DPdM SCIE
Provide an update of PM SCIE Personnel Airdrop Programs to the PIA
• Replace T-11 and MC-6 systems going out of service life
• T-11: PM-SCIE rebuy multi-year contract awarded July 2019
• MC-6: PM-SCIE rebuy multi-year contract award projected for 3QFY20
  ▪ RFP released 14 Feb with responses due back 16 March
• T-11R and T-11 harness common components for both systems
T-11R Single Pin (T-11R-SP) Pack Tray Modification Effort

- New pack tray design developed as long-term solution to prevent T-11R Inadvertent Activation
- Modification consists of new pack tray, ripcord handle, and extractor
- The T-11R-SP design:
  - Maintains current packing procedures up to closing flaps
  - No ballooning or release of handle for wind speeds up to 290±5 kts
  - Accommodates T-11R Automatic Activation Device
  - Incorporates 1-pin closure
  - Ripcord handle assembly allows for visual check of pin and lanyard for JMPI
  - T-11R extractor chute modification addresses premature extractor release for 400 LB TRW No Main malfunction
- Developmental Testing (DT): 3QFY20
  - Testing for high-speed and low-speed scenarios across weight range
- Operational Testing (OT): 4QFY20
- Contract award for replacement Pack Trays and Extractors anticipated 1QFY21
- Implementation through ECP for both the T-11 and MC-6 TDP
• Update the 250-ft tower J-1 parachute drawings and specifications
  ▪ Canopy geometry will be maintained from J-1
    ➢ Use currently available textile/hardware specifications and block canopy construction
  ▪ Comparable ROD to J-1 in order to keep POI the same
• High canopy oscillations experienced during initial mannequin testing
• Additional venting and suspension line length modifications made to address oscillation
• Projected mannequin and live testing complete 4QFY20
• Projected contract award for the procurement of 25 J-3s for 1/507th in 1QFY21
Parachutist Flotation Device (PFD)

- Develop a one size fits all buoyancy device to support the full range of parachute operations.
- RFP is currently in review with the Natick Contracting Office, with expected release of March 2020.
- Source Selection Evaluation Board (SSEB) to establish competitive range.
- Design Validation (DV) for initial down select – 4QFY20
  - Buoyancy evaluation by activation
  - Inflation times
  - Deployment System
  - Basic integration to existing parachute systems and equipment
- DT/OT will follow DV – 1QFY21
  - Test against all performance requirements outlined in the RFP
  - Buoyancy, water entry evaluations, integration and anthropologic evaluations
  - Intentional slick water jumps
  - Jump evaluation both T-11 and RA-1 in an unintentional water jump scenario
- Production Contract Award 2QFY21
- First Unit Equipped (FUE) projected 3QFY21
- Initial Operational Capability (IOC) projected 3QFY22
High performance ram air parachute system used to infiltrate small teams into denied areas using High Altitude Low Opening (HALO) and stand-off techniques for both SOF and conventional forces.

RA-1 system includes:
- Main Canopy Assembly
- Reserve Canopy Assembly
- Harness Assembly
- Military Free Fall and DBSL Deployment assemblies

Enables the parachutist to safely carry an increased combat load and operate at higher altitudes.

Currently in production and fielding/New Equipment Training (NET)
RA-1 Above 25K Effort

- RA-1 system can only deploy up to 25,000 feet Mean Sea Level (MSL) at current threshold weights
- The Above 25,000 feet (A25K) effort shall support deployments for both the main and reserve canopies above 25,000 ft. MSL
- Provide a safe and reliable system for use during high-altitude standoff personnel parachute operations

**REQUIREMENTS:**
- Compatible with and easily integrated into the existing RA-1 parachute system
- Must be deployable from altitudes of up to 35,000ft MSL at increased airspeed at an exit weight of 360 lbs. (T) an exit weight of 450 lbs. (O)
- Shall be deployable from all aircraft currently used during MFF and DBSL operations. (T=O)
- Shall provide a lift to drag ratio of 3 to 1 and greater with zero user interface
RA-1 Above 25K Effort

- REQUIREMENTS (cont.):
  - Altitude loss shall not limit the system’s use in standard MFF and DBSL profiles below 25,000ft MSL (T=O)
  - Should provide capability for jumper input to modulate glide down to 2 to 1 lift to drag ratio (T) to modulate glide down to 1 to 1 lift to drag ratio (O)
  - Shall be deployable in Bottom of Container and Over the Shoulder ripcord grip configurations (T) in Bottom of Container and Over the Shoulder ripcord grip configurations as well as Double Bag Static Line configurations (O)

- RFI published on 07 Jan 2020 and open through 28 Feb 2020
  - Search beta.sam.gov/opp for A25K
  - Seeking information on designs that are at Technology Readiness Level 6 or higher
  - Responses should include information on ram air main and reserve parachutes which are compatible
  - including supporting information (product performance information, test reports, photos, etc.) indicating the level of technical maturity of the system
Enhanced Electronic Automatic Activation Device (EEAAD)

- Next-generation automatic activation device to replace currently fielded EAAD
- Enhanced capability for flight data recording and unit-level download & analysis
- Configuration control for hardware and software

Current Status
- RFP released 21 MAR 2019
- Source selection ongoing
  - Phase I: proposal review for technical, management, past performance, cost/price, small business participation completed
  - Phase II: DV test for fire & no-fire scenarios and user feedback on rigging/operation/data download; completed SEP 2019

Upcoming Events
- MAR 2020: Complete Source Selection and award base contract to one vendor
- MAY/JUN 2020: Start of DT
- 2QFY21: Start OT
QUESTIONS?
POCs

Philip Yandall CPT, IN
Assistant Product Manager Personnel Airdrop
philip.g.yandall.mil@mail.mil
O: (703) 805-8528
C: (703) 906-8287

Takis Blanas
Team Leader Personnel Airdrop Systems Team
panagiotis.blanas.civ@mail.mil
O: (508) 206-3281
C: (508) 314-3283