Takis Blanas
Team Leader
PM SCIE Personnel Airdrop Systems Team

Product Manager
Soldier Clothing and Individual Equipment

The Soldier
Our Strength and Purpose

Product Manager Clothing and Individual Equipment (PdM SCIE)

Program Update to the PIA
2 MAR 18
Program Executive Office (PEO) – Soldier
PEO - BG Potts

Program Manager
Soldier Protection and Individual Equipment
(PM SPIE)
PM – COL Thomas

Product Manager
Soldier Clothing and Individual Equipment
(PdM SCIE)
PdM – LTC Allen

PERSONNEL AIRDROP TEAM
Airdrop APM – CPT McNally

Personnel Airdrop Systems Team
(matrixed to PdM SCIE)
NSRDEC - Aerial Delivery Directorate
Team Leader – Takis Blanas

Ft. Belvoir, VA

Natick, MA
Advanced Tactical Parachute System (ATPS): T-11 & MC-6

- **T-11: Static Line, Non-Maneuverable Troop Parachute**
  - 16.5 year Age Life per TB 43-0002-43 (4.5yr Shelf Life + 12yr Service Life)
  - First Unit Equipped: 2009
  - Re-buy to replace systems going out of service life: 2018

- **MC-6: Static Line, Maneuverable Troop Parachute**
  - 16.5 year Age Life per TB 43-0002-43 (4.5yr Shelf Life + 12yr Service Life)
  - First Unit Equipped: 2006
  - Re-buy to replace systems going out of service life: 2019

- T-11R and T-11 harness common components for both systems
• The T-11 CVRBS effort was initiated in response to the XVIII Airborne Corps’ T-11 Modernization Memorandum, dated May 2015.

• A 6-in webbing sawn on to radial seam adjacent to the corner vent

• The CVRBS controls corner vent panels during deployment, eliminating irregular canopy inflation

• Incorporate ECP into future T-11 production contracts
T-11R Single Pin (T-11R-SP)

• New pack tray design developed as long-term solution to T-11R Inadvertent Activation

• System showed no ballooning or release of handle up to test setup limit of 290±5 kts

• The T-11R-SP design:
  ▪ Maintains current packing procedures up to closing flaps
  ▪ Accommodates AAD
  ▪ Incorporates 1-pin closure

• Ripcord handle assembly allows for visual check of pin and lanyard for JMPI
IMPROVED TACTICAL FLOATATION SUPPORT SYSTEM (ITFSS)

- Legacy systems, B-7, LPU-10 and Tactical Flotation Support System, do not meet all of the Army’s requirements for intended and or unintended parachutist water entry

- The ITFSS will support airborne operations over water or during airdrops when water obstacles are near or on the intended drop zone

- Key requirements for the Airborne community are:
  - Ability to properly rig the device to a fully combat equipped jumper for both Static Line Mass Tactical and Military High Altitude Parachutists
  - Ability to easily identify and manually activate the inflation triggers
  - Once inflated the parachutist needs to release parachute gear and retain floatation device
  - Ability to maintain the parachutist’s buoyancy and head out of water for a fully equipped combat jumper at 400lbs (T11) and 450lbs (RA1) for one hour (T) and 550lbs for two hours (O)
  - Size must be equal to or smaller than the current TFSS
The RA-1 is a high performance ram air parachute system used to infiltrate small teams into denied areas using High Altitude Low Opening (HALO) and stand-off techniques.

The enhanced canopy performance allows for increased stand-off, thus decreasing aircraft vulnerability.

The RA-1 enables the parachutist to safely carry an increased combat load (up to 450 lbs. rigged weight) and operate at higher altitudes – 25,000 Mean Sea Level (MSL)

- Future efforts include certification to 30,000 MSL and a high glide main

Has two methods of deployment: Military Free Fall (MFF) or Double Bag Static Line (DBSL)

- Bottom of the Container (BOC) deployment capability in the process of implementation

Currently in production and fielding/New Equipment Training (NET)
• The RA-1 RRH replacement effort was initiated in response to a USASOC request to replace current metal ripcord handle
  ▪ The shape and location of the current RA-1 RRH could present a snag hazard; jumpers inadvertently can attach their combat equipment to the handle
• A new RRH assembly was developed and successfully tested
  ▪ Vertical Wind Tunnel Testing/User Assessment completed
  ▪ Material Strength equal or higher than legacy stainless steel handle in all environmental conditions
• Design widely accepted by the Free Fall Community
• Implementation throughout the fleet
• Initiate Fielding: 3FY18
In response to request by USASOC to remove all metal ripcord grips on the RA-1

Inclusion of a BOC in military parachute systems will assist to mitigate issues with pilot chute hesitation

- Hand-deployed pilot chutes are in wide use in civilian skydiving and DoD non-standard parachute systems

Completed User Evaluation Jan 17 conducting over 170 jumps with no issues

Safety Confirmation received 1Q18

Fielding and NET Start: 3Q18

Implementation will include “train the trainer” Rigger NET and “train the force” jumper transition course
Enhanced Electronic Automatic Activation Device (EEAAD)

• Provide identical reserve activation performance/reliability with current EAAD
• Provide users and maintainers a parachute “Black Box” technology
  ▪ Additional data collection capability: G-load, orientation, altitude, change in speed, terminal velocity, deployment altitudes
• Life cycle greater than 12 years with reduced maintenance requirements
• Configuration management of hardware/software
• Internal analysis of flight data in malfunction/incident investigations in addition to AAD manufacturer’s analysis
• Unit-level access to flight data for providing training feedback
• Flight data access for RA-1 fleet allows for analysis of performance over service life
• Program Start anticipated 2Q18
• New RA-1 Parachute has increased Parachutist’s requirements for oxygen (O2) during extended High Altitude and stand-off missions
• Oxygen consumption studies confirmed existing O2 bailout bottles used by Military Freefall (MFF) Parachutists cannot provide the parachutist with sufficient oxygen to support these operations
• An enhanced capacity oxygen delivery system is required that will support extended duration missions
• PODS will consist of five (5) components
  • Individual Oxygen Source (IOS)
  • Transfer Pump
  • Pre-Breather
  • Parachutist Oxygen Mask (POM)
  • System Test Device
• Program start anticipated FY19
Military Altimeters (MA-1)

- Currently fielded altimeters are non-standard, have operational issues or are no longer being supported by manufacturers
- Need exists for single ruggedized MFF altimeter with improved accuracy, data logging and ease of use
- Bench testing and User evaluations show that both analog and digital commercial alternatives have potential to meet User requirements
- Requirements documents under development
- Program start anticipated FY19
POC

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