



CENTER OF OUR STRENGTH

Program Executive Office Soldier



PM-Soldier Clothing and Individual Equipment Personnel Airdrop Systems Update To Parachute Industry Association

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PM-Soldier Clothing and Individual Equipment

Mission



Develop and provide superior and sustainable integrated clothing and equipment in a rapidly changing global environment for the Army's most important combat system... the Soldier!

Mission



PM-SCIE Personnel Airdrop Team develops, provides and manages innovative equipment and effective training to global airborne forces to enhance their lethality, survivability and mission success.





Agenda



- **Introduction**
- **Advanced Tactical Parachute System (ATPS)**
 - **T-11**
 - **MC-6**
- **Advanced Emergency Bailout Parachute (AEBP)**
- **Parachute Tracking System (ePTS)**
- **Modular Airborne Weapons Case (MAWC)**
- **Military Free Fall Advanced Ram Air Parachute (MFF ARAPS)**
- **Parachutists Oxygen System (POS)**
- **Parachutist Navigation System (PARANAVSYS)**



Introduction



- PM-SCIE is the total lifecycle manager for all Army personnel parachute systems
 - 2002 - Static Line systems
 - 2004 - Military Free Fall (MFF) systems
- Two Teams under PM-SCIE Personnel Airdrop Systems
 - Static Lines systems – Mr. Nolen
 - Military Free Fall - MAJ Bohlen
- Small but dynamic customer community with unique peacetime and wartime requirements
- 153,416 personnel jumps were executed in FY10 using PEO Soldier Static Line and MFF systems and equipment
- Team of 25 acquisition, engineer, administrative, training and logistics experts in four locations
- Interface with entire DoD and global airborne communities



T-11 Status



- Currently in Full Rate Production and Fielding
- Significantly lowered injuries
 - During period 2-4FY10:
 - T-10: of 42,304 jumps, 116 injuries = **2.742 injuries / 1,000 jumps**
 - T-11: of 9,667 jumps, 11 injuries = **1.137 / 1,000 jumps**
- Fielding:
 - Approximately 44% fielded
 - Ranger Regiment – complete
 - 173d ABN BDE - complete
 - 1/507th – 3,200 of 8,000 to date
 - 82nd ABN DIV - 8,500 of 14,000 to-date
 - Resume fielding and training in Feb12
 - 35,840 systems procured to-date
 - AAO: 52,000



Using the T-11 results in 44% fewer injuries than the T-10

Dr. Joseph J. Knapick, US Army Public Health Institute-

"The Advanced Tactical Parachute System (T-11): Injuries During Basic Military Parachute Training"

Aviation, Space and Environmental Medicine, Vol 82, No. 10- October 2011 and T-11



MC-6 Advanced Tactical Parachute System (ATPS)



- MC = Maneuverable Canopy
- Part of ATPS family of parachutes
- Currently in fielding
- 21,623 systems fielded to-date to over 50 DoD Units
- New Sustainment Contract in 1QFY13
 - RFI for QPL: NOV 11





Advanced Emergency Bailout Parachute (AEBP)



- 11 Sep 09: USAF Policy HQ AMC/A3V FCIF 09-10-11 directed removal of BA-18/22 by 4QFY13 from C-130 and C-17 fleets as aircraft weight reduction initiative
- Sept 11: Army adopted USN ORD for USN Thin Pack Parachute
- USN Thin Pack provides a state-of-the-art, safe alternative to BA-18 for safety personnel during jumps
- AEBP consists of container/harness assembly, vacuum sealed canopy, pilot parachute and ripcord assembly.

- Performance Specs:

Total Jumper Weight:	300 lb max
System Weight:	17.0 lbs
System Thickness:	3.0 in
System Life:	14 yrs
System Repack Cycle:	5.5 yrs

- Milestones:

MAY 12 – Contract Award
OCT12 – FUE
SEP 13 – IOC
DEC 13 – FOC



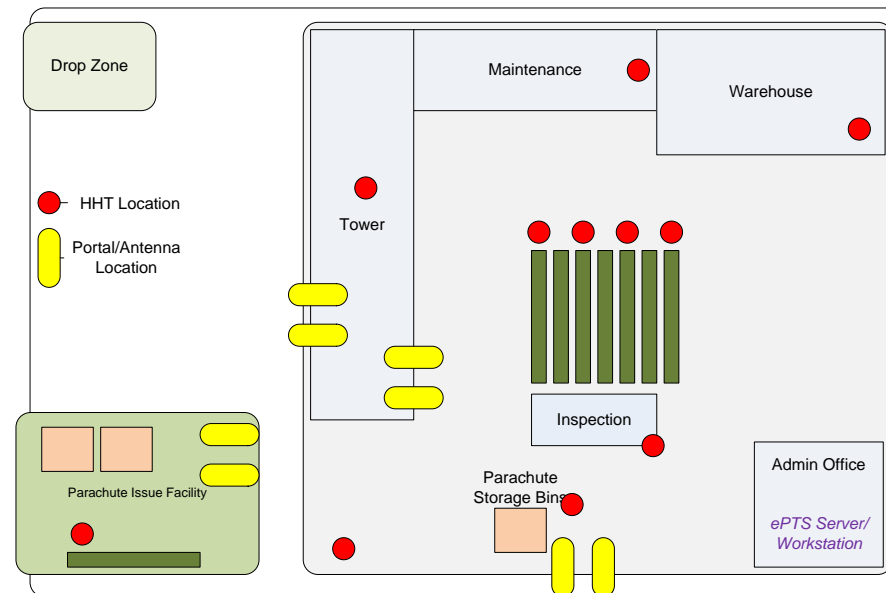
Passive Radio Frequency Identification Enhanced Parachute Tracking System (pRFID-ePTS)



- pRFID-ePTS tracks personnel parachutes through their life cycle from being placed into service, through packing, transportation to the issue/storage facility, and return to the pack facility
- Automated system improves parachute re-pack, management, use monitoring, accountability, clearing of hand receipts and accident investigation
- Current effort will install a turnkey system at the 82nd ABN DIV Parachute Pack Facility
- Capable of supporting both training and deployment operations for units deploying to OIF, OEF, or other theaters of operation
- Lacks validated requirement to sustain effort or to expand Army-Wide

■ Milestones

- AUG 11 Contract Award
- FEB 12 HW/SW Integration
- FEB 12 Development of Test Plans
- MAY 12 Install HW/SW; Validation Test; IKPT
- JUN 12 Field Testing; Turn over by 29 JUN 12



Modular Airborne Weapons Case (MAWC)



- XVIII ABN Corps identified capability gap jumping modern weapon systems w/ M-1950 weapons case
 - Provide paratroopers an advanced tactical weapons carrier for use during airborne operations
 - Padded, durable, light weight and adjustable allowing greater flexibility and decreased weapon systems damage
 - Small and large versions
- Submitted and approved as SEP effort
 - CPD in worldwide staffing DEC 11 (ECD 1QFY13)
- RFP Released 20 JAN 12
 - Responses due 19 FEB 12
 - Proposal Evaluation and Down Select MAR 12
 - Contract Award APR 12
 - Operational Testing JUL 12
 - User Evaluations AUG-SEP 12



Concept case



Legacy M-1950 case

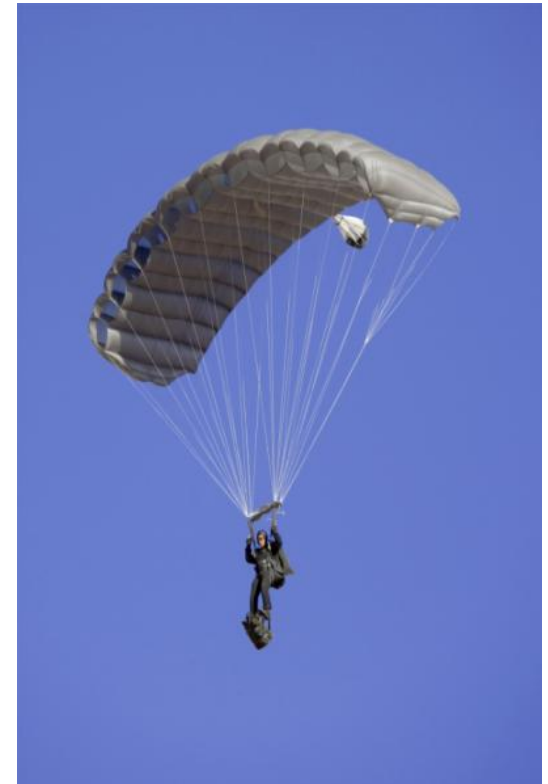


Military Free Fall Advanced Ram Air Parachute (MFF ARAPS)



- Material Development Decision: MAR 11
- MSB: MAR 11
- Request For Proposal: MAR 11
- Design Validation Testing: JUN-JUL 11
- Contract Award: SEP 11

- Requirements:
 - Provide increased jumper exit weight up to 450Lbs
 - Capable of Military Free Fall and Static Line deployment >30,000 ft
 - Reduced opening shock at exit altitude
 - Electronic Automatic Activation Device (EAAD) compatible
 - Increased stand-off capability





MFF ARAPS STATUS



- Developmental Testing on going (began JAN 12)
 - Mannequin drops and live jumps in both Static Line and MFF configurations
 - A total of 229 jumps scheduled

- Operational Testing scheduled to start 1QFY13
 - Prove system reliability and determine system suitability and effectiveness for operations
 - A total of 460 jumps scheduled

- MSC: scheduled for 2QFY14

- AAO: 2,378 systems



Parachutist Oxygen System



- Parachutist Oxygen Mask (POM)
 - Currently in production and fielding
 - Approx 73% of Masks fielded to date
 - Each Unit is fielded one test stand
 - Fielding should be complete by May 12
- Next step: Address 35,000-ft capability
 - Testing new high pressure bottles
 - O2 consumption study to determine if current system can provide sufficient oxygen when conducting HAHO Operations
 - Looking into new concepts for wearable O2 supply vessels as well as O2 generation and re-breather technologies





Parachutist Navigation System (PARANAVSYS)



- PARANAVSYS is a Military Freefall (MFF) navigation system capable of providing continuous access to mission critical information throughout HALO/HAHO operations
- System will function regardless of visibility or physical constraints providing mission planning capability and GPS guided navigation
 - Reliable & Easy to Use; Accurate to within 100 ft; SAASM and Net-Centric/Net-Ready Compliant
 - Includes Jumpmaster (JM) screen to identify release point (RP) from inside aircraft, and Navigation screen to direct parachutist to drop zone (DZ) once under canopy
 - Planned interoperability with JPADS/Mission Planner
 - Additional planned features include jumper and cargo asset deconfliction, ability to follow and/or redirect cargo to alternate DZs
 - Software & User Interface are the key elements; system should be platform independent
- Program continues to experience delays due to CPD staffing and approval process

Parachutist Navigation System (PARANAVSYS)



Predicted altitude when you reach funnel centerline

Glide ratio

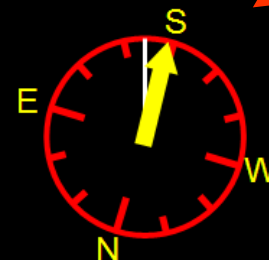
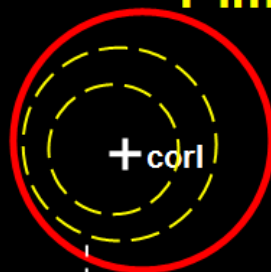
Time to target

Alt@WL: -4170 ft(AGL)
toDIP: 10 km

(L/D)eff = .0
T impact = .0 sec

Direction to target

Distance to target



Target & Status

Actual ground speed

GPS and battery status



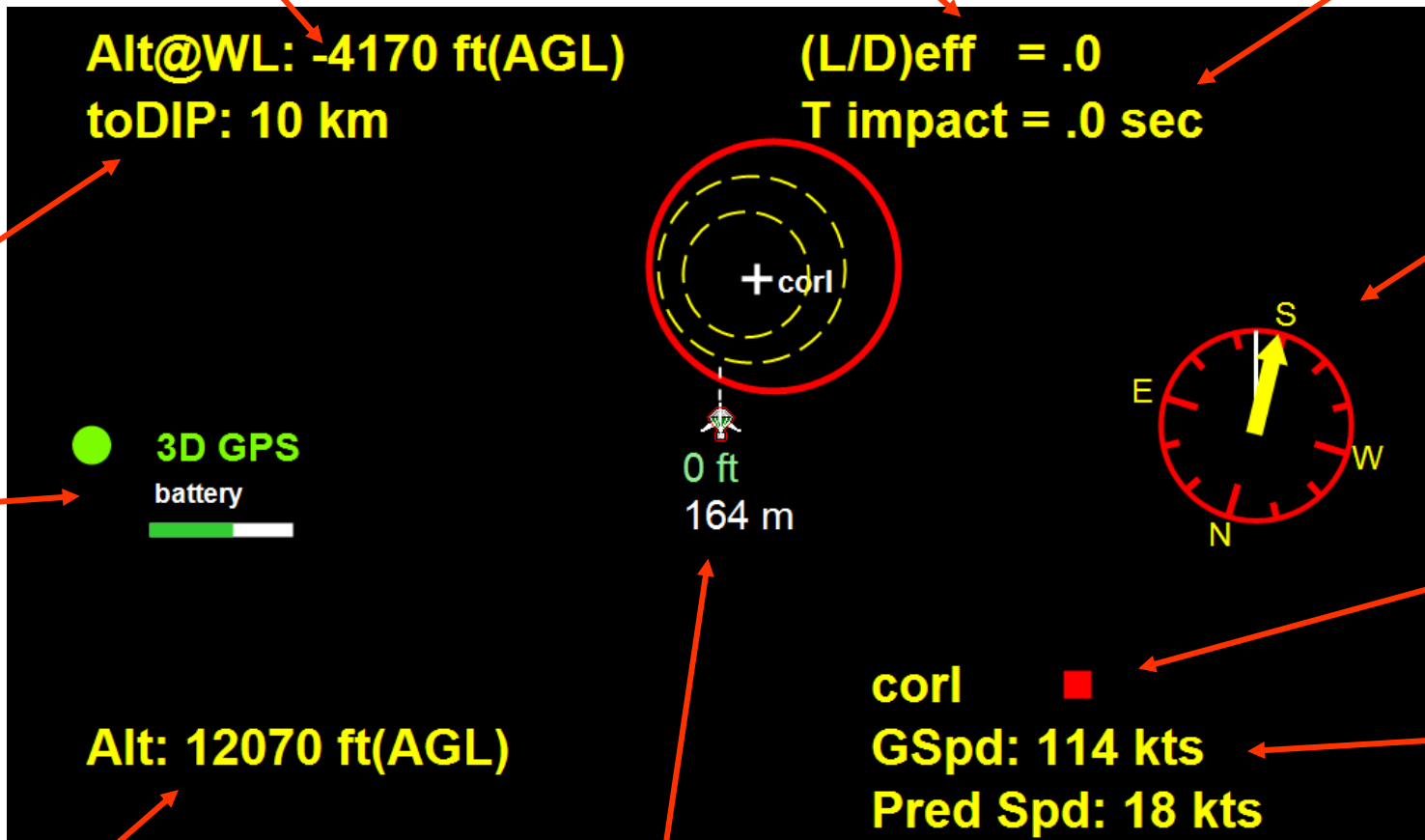
0 ft
164 m

corl
GSpd: 114 kts
Pred Spd: 18 kts

Predicted speed (wind & canopy)

Current altitude

Navigation and Deconfliction Information





Questions?



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