



# *Maneuver Capabilities Development and Integration Directorate (MCDID)*



**Soldier Systems Branch  
Soldier Requirements Division  
Fort Moore, GA  
August 2023**





# Agenda



- Mission Statement
- Air Drop Equipment Summary
- Challenges
- Desired Capabilities
- Questions





# ***Soldier Requirements Division***

## ***MISSION STATEMENT***



Soldier Requirements Division designs the Army of 2040 and delivers the Army of 2030 by developing future requirements, integrating, and managing Soldier capabilities across all formations, focusing primarily on the lethality, mobility, and survivability of Maneuver Company/Troops, Platoons, and Squads, to provide the Army with the best trained and capable Soldiers in the world.



**SRD is responsible for the development, integration, legacy updates and management of 400+ Programs**



# SSB Portfolio Programs

## Airdrop Equipment



- Modular Airborne Weapons Case (MAWC)
- Personnel Parachute System T-11
- T-11R Single Pin Reserve Parachute
- Parachutist Flotation Device (PFD)
- Main Canopy MC-6 (Maneuverable) (MC-6)
- Advanced Emergency Bailout Parachute (AEBP)
- Parachute Emergency Release System (PERS)
- Static Line Automatic Activation Device (SLAAD)



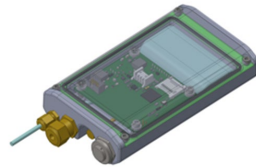
MAWC



T-11



PFD



SLAAD



MC-6



Reserve



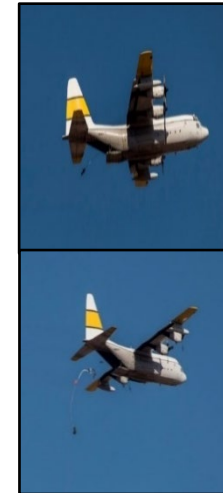
PFD Activated



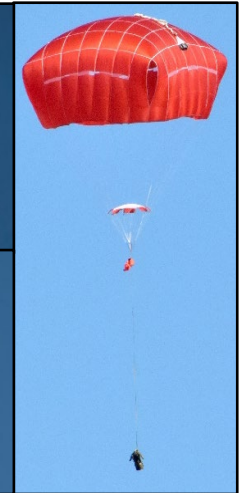
AEBP



PERS



Towed Jumper



PERS Deployed







# Airdrop Equipment Challenges



**How does the Army safely and expediently execute mass tactical airborne operations via a static line parachute system that accommodates increasing weight of jumpers and equipment without causing fatigue and maximizing personnel on aircraft?**

In 2009, the Army fielded the T-11, which improved upon the T-10 by reducing oscillation and jumper injury. Despite meeting all the requirements, the new T-11 had some unforeseen and undesirable characteristics.

## T-11 Undesirable Characteristics

- Six second opening sequence
- Prolonged in air exposure
- Large size and weight of the T-11
- Square design main canopy malfunction of Cross Corner Inversion (CCI).



# *Airdrop Equipment Desired Capabilities*



## **The T-11 replacement desired capabilities identified by the Army Airborne Board**

1. Decrease main canopy malfunctions by eliminating Cross Corner Inversion (CCI) and Corner Entanglement that are uniquely specific to the square canopy with corner vents.
  - The new parachute will further mitigate main canopy vulnerabilities in its final form factor.
2. Faster opening sequence.
  - Which affords jumpers critical time to identify a malfunction and react to it.
  - Also enables aircraft to fly at a lower altitude over the DZ.
3. Faster, safer rate of descent.
  - To mitigate exposure to enemy small arms fire during descent with increased mobility to avoid in air obstacles and ground hazards.
4. Lighter parachute system with less volume.
  - The T-11 is 7lbs heavier and 28% larger than the T-10
  - A lighter parachute will reduce jumper fatigue and enable safe existing procedures.
  - While increasing number of paratroopers that can fit on a C-130.
5. An increase in the canopy weight capacity to from 400lbs to 450lbs

### **Maintain:**

- Compatibility with all current and future static line airborne approved aircraft
- No oscillation
- Reduced jumper injury
- Compatibility with current and future weapons' cases





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# *Questions?*



Compete



Penetrate



Dis-Integrate



Exploit



Re-Compete