

## **White Paper: Enhancing C-130 Fuel Transfer Capabilities for Agile Combat Employment and Domestic Response**

**SUBJECT:** National Guard Association of Texas - State Resolution to Address Man-Portable Fuel On-loading/Off-loading Requirements

**ISSUE:** The current resolution concerning C-130 refueling/defueling capabilities needs to be revised to reflect the critical need for a man-portable system capable of on-loading and off-loading 18,000 pounds of fuel within 60 minutes, utilizing only aircraft power, in austere environments.

**POINT OF CONTACT:** Resolution Committee, NGAT

**PROPOSAL:** Modify NGAUS C-130 Resolution #9J to emphasize the requirement for a man-portable system capable of on-loading/off-loading 18,000 lbs of fuel in 60 minutes from C-130 aircraft, utilizing only aircraft power.

**BACKGROUND INFORMATION:** The Air National Guard (ANG) C-130 fleet is tasked with critical Special Fuel Operations (SFO) and Agile Combat Employment (ACE) missions, which frequently require fuel transfer in austere locations where traditional ground power infrastructure is unavailable. <sup>1</sup>Current refueling/defueling procedures, reliant on ground-based fuel trucks, are inadequate for these time-sensitive operations. The ANG must be able to rapidly on-load and off-load fuel from C-130 aircraft into collapsible tanks, trucks, or bladders at a rate of 18,000 pounds within 60 minutes, using only aircraft power. This capability is essential for both combat operations, where rapid fuel transfer is crucial for maintaining operational tempo, and domestic response, where infrastructure failures following natural or man-made disasters necessitate independent fuel transfer capabilities. The current resolution, focused primarily on defueling, does not adequately address this critical need for rapid, man-portable on-loading/off-loading systems.

**DISCUSSION:** The ANG C-130 wings require a self-sufficient, man-portable fuel transfer system to support SFO/ACE missions in both CONUS and OCONUS locations. This system must enable rapid fuel transfer in environments lacking ground power, including forward operating bases and disaster relief zones. The ability to quickly transfer fuel is vital for extending the reach of aviation and ground transportation assets, particularly during the critical first 72 hours following a disaster or during combat operations. The current reliance on ground-based fuel trucks creates vulnerabilities and delays, hindering the ANG's ability to execute its missions effectively. The USAF and ANG both have identified this capability as a mission-critical need.

**RECOMMENDATION:** The National Guard Association of the United States (NGAUS) should modify the existing C-130 Refueling/Defueling Capability resolution (Resolution #9J) to advocate for the procurement and implementation of a man-portable system capable of on-loading and off-loading 18,000 pounds of fuel within 60 minutes from C-130 aircraft, utilizing only aircraft power. This system must be compatible with all C-130 variants and deployable to all ANG C-130 locations, both CONUS and OCONUS.

**CRITICAL NEED FOR SUPPORT:** The ANG requires a man-portable system capable of rapid fuel transfer to maintain operational readiness and effectiveness in both combat and domestic response scenarios. This system must be compatible with all C-130 aircraft and capable of utilizing only aircraft power.

**STATES IMPACTED:** All states with ANG C-130 and HC-130 aircraft, both CONUS and OCONUS.

**MISSION CRITICAL NEED:** This man-portable system will enable the ANG C-130 fleet to extend the reach of aviation and ground transportation assets in austere environments, particularly during the critical first 72 hours following a disaster or during combat operations.

**DEPLOYMENT JUSTIFICATION:** The ANG's SFO mission requires the ability to rapidly transfer fuel in locations lacking ground power infrastructure. This capability is essential for both homeland defense and combat operations.

**FUNDING JUSTIFICATION:** Funding for this equipment is a candidate for the National Guard and Reserve Equipment Account (NGREA) Appropriation 0350.

**ANG REQUIREMENT:** Deployable, man-portable systems capable of on-loading and off-loading 18,000 pounds of fuel within 60 minutes, utilizing only aircraft power, are required for C-130 aircraft at all ANG locations, both CONUS and OCONUS, to support the ACE mission.