C-130 Modernization

Air National Guard



Fiscal Year 2023 Requirements for the Air National Guard



The Issue

The Air National Guard C-130 Hercules fleet requires continued funding for modernization and recapitalization to ensure its aircraft can successfully engage in overseas contingency operations and respond to homeland emergencies well into the future.

A C-130H Hercules aircraft of the 153rd Airlift Wing, Wyoming Air National Guard, recently modernized with NP2000 eight bladed propellers.

Background

Currently, the Air National Guard operates nearly 50% of the Total Air Force C-130 tactical airlift mission, which are airlift missions within a combat zone. Most Air National Guard C-130 wings operate C-130H Hercules aircraft which are over 30 years old while some operate new C-130J Super Hercules aircraft.

Because the Air Force plans to continue utilizing the C-130 aircraft beyond 2040, it is critical to modernize the Air National Guard C-130 fleet by continuing to simultaneously upgrade some C-130H aircraft with modern technology and replacing others with new C-130J aircraft. Funding critical modernization efforts will ensure the safety, reliability and effectiveness of the Air National Guard C-130 fleet, both at home and abroad.

Thanks to Congress, funding has been included in defense appropriations each year since Fiscal Year 2017 to designate 16 total C-130J aircraft to the Air National Guard. Once these aircraft have been fielded to their units, the Air National Guard will operate 4 total C-130J Super Hercules wings.

Additionally, thanks to Congress modernization funding has been provided to ensure upgrades of older C-130H aircraft. This funding is primarily for C-130H Avionics Modernization Program (AMP) Increments 1 and 2, as well as upgrading the C-130H T-56 engine with a Series 3.5 upgrade and replacing aging C-130H propellers with the NP-2000 8-bladed propeller.

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Recommendation

Defense Appropriations



- Continue annually designating C-130J aircraft to the Air National Guard within defense appropriations legislation
- Continue funding for C-130H avionics modernization, engine upgrades, and propeller replacements within defense appropriations legislation.





Engine Upgrade and Propeller Replacement



The T-56 3.5 Series engine upgrade is projected to:

- Reduce life-cycle costs with fewer depotlevel inductions required.
- Increase time-on-wing by over 20% and the acceptable cargo load.
- Improve fuel economy in excess of 10% and rate of climb.



Additionally, replacing propellers on each C-130H with the NP-2000 is projected to:

- Provide improved thrust and readiness while reducing operations and support costs.
- Decrease maintenance time.
- Increase performance and fuel efficiency.

Continuing to provide new C-130J aircraft to the Air National Guard and funding modernization of legacy Air National Guard C-130H aircraft will ensure its C-130 fleet continues to meet its dual mission of deploying in support of overseas contingency operations and providing rapid domestic emergency response.





