

## **C-17 Logistic Seat Pallet Optimizes Passenger and Cargo Hauling Capability**

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In July 2006 the Plans and Programs Special Projects Office at Wright-Patterson AFB, OH began searching for a comfortable auxiliary seating arrangement for small team deployments on the C-17 Globemaster III. The primary objective was to develop a 1-pallet-position seat pallet for the Logistic Rail System. This would maximize load configuration flexibility by enabling side-by-side passenger and cargo loading in the dual Logistic Rail Systems. A secondary objective was to enhance passenger comfort on long flights. Working with Air Force Material Command (AFMC), AAR Mobility Systems (AAR), developed, tested, and certified the new seat pallet in nine months.

The new 88-inch-wide Logistic Seat System allows Loadmasters to load up to seven seat pallets (84 passengers) down one side of the aircraft logistic rails leaving 11 pallets positions to include the ramp open for cargo and/or rolling stock. This is a 56 percent overall increase in passenger carrying capacity compared to using the 54 sidewall seats and 11 ADS pallet positions.



The Logistic Seat Pallet has six sets of removable airline style “economy class” double seats, in three rows of four. Exceptional passenger comfort is provided by the 36-inch seat pitch, which allows the seats to recline and provides plenty of leg room. Each set of double seats can be easily removed to further increase load configuration options. The pallet occupies a standard 88-inch x 108-inch footprint and has full perimeter 463L type detent rails to lock into the cargo restraint system. Its 463L base loads exactly the same way as standard cargo pallets enabling rapid aircraft reconfiguration in less than 15 minutes.

AFMC is working with AAR to implement two significant improvements before the new seat pallet goes into full production later this summer. First, the team is evaluating a new, more robust fabric that is resistant to stains and spills, and that lasts approximately four times as long as standard passenger seat fabric. Retired Loadmaster Jim Bomberger, AAR’s Director of Sales, stated, *“These new fabrics will be on display at the up coming Airlift Rodeo at McChord AFB. We’d like to get the operators’ feedback on these materials before we move forward.”* Another planned improvement is to use pivoting armrests in place of stationary armrests. The pivoting armrests stow neatly between seat-backs, improving access to the seats and giving troops more room to stow gear.



The new logistic seat pallet gives the Air Force an alternative configuration to existing 10- and 15-passenger centerline seat pallets, expanding the C-17's already impressive operational capability. The 88-inch-wide Logistic Seat System is also suitable for use on C-27J Spartan and CASA C-295 aircraft, in 6- or 9-passenger variants to provide a longitudinal aisle for egress. This will enhance configuration options and mission planning scenarios for the upcoming Army/Air Force "Joint Cargo Aircraft".

More information about AAR's products and services may be found at [www.aarmobilitysystems.com](http://www.aarmobilitysystems.com).