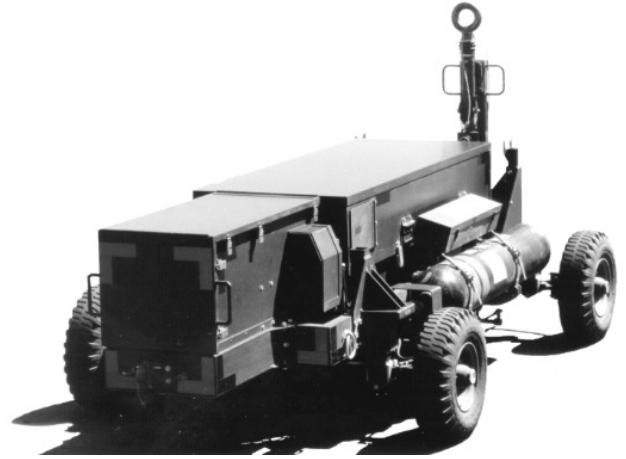


DATA SHEET

# Linkless ammunition loading system

## US Air Force



### 01 Description

The US Air Force 20mm Linkless Ammunition Loading System (LALS) follows fielding of the US Navy's highly successful version of the same system. The USAF LALS takes maximum advantage of joint service interoperability and cooperation. As a result of the high degree of component commonality in concert with prior completion of the Navy's demanding environmental and operational testing, the USAF LALS was developed and qualified in a matter of months rather than years. Having received a highly enthusiastic response from the field, the USAF LALS test report described its operation as "flawless."

A truly multi-service program, initial procurement of both Air Force and Navy LALS units was accomplished by the Naval Air Weapons Center in Lakehurst, New Jersey, thus ensuring an extremely cost-effective procurement. The USAF LALS is also unique in that it utilizes the existing Universal Ammunition Loading System (UALS) trailer and pneumatic drive system components. Unlike the aging UALS, however, the USAF LALS provides a built-in stacking capability which supports more rapid transport, stowage and air deployment.

Using a crew of two, the USAF LALS can typically service F-15, F-16 or F-22 aircraft in less than five minutes, simultaneously uploading rounds in the aircraft gun system while downloading and recovering empty cases and unfired rounds. Improving upon its UALS predecessor, the USAF LALS is capable of servicing not only the above mentioned Air Force aircraft, but the Navy's F-14 and F/A-18 aircraft as well. Thus, for the first time, a true "cross-decking" capability is available between the two services and our NATO allies.

### 02 Key features and benefits

- Compatible with F-15, F-16, F/A-18 and F-22 systems
- Compatible with standard ½ in. sq. drive power tools
- Stores and handles up to 3000 rounds of 25mm ammunition
- MRBF 200,000 rounds
- Stacks two (2) high for air transport and storage

### 03 Applications

- F-15, F-16, F/A-18 and F-22

### 04 Contact

Meggitt Defense Systems  
9801 Muirlands Blvd  
Irvine, CA 92618, USA  
Tel: +1 (949) 465 7700  
Fax: +1 (949) 465 9560

[www.meggittdefense.com](http://www.meggittdefense.com)  
[www.meggitt.com](http://www.meggitt.com)

DATA SHEET

## Linkless ammunition loading system, US Air Force

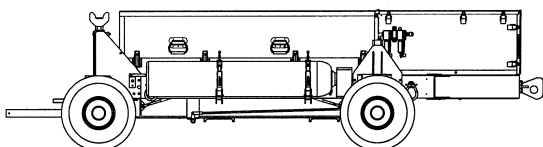
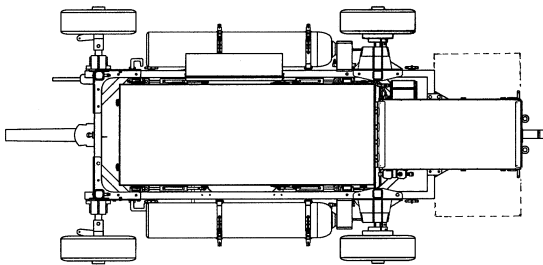
Servicing of the USAF LALS with a complete complement of 2100 rounds can be accomplished with a new compact replenisher developed by Meggitt Defense Systems, or an existing USAF Replenisher, in less than 30 minutes using a crew of two. In operation, the efficiency of the USAF LALS is equally impressive. The system can be driven pneumatically or operated manually using a standard 1/2-inch square drive tool. The storage container assembly stores rounds in a serpentine fashion across three bays, using Meggitt Defense System's innovative and highly reliable Linear Linkless chain ladder system to provide 100% round control at all times.

The 3 bay Linear Linkless ammunition feed path in the storage container supplies rounds to the transfer unit assembly, which then accelerates and merges the rounds into a single stream of ammunition. The ammunition, in turn, feeds into the flexible conveyor assembly. The conveyor assembly transports the rounds to the Universal Aircraft Interface Unit (UAIU) which attaches directly to the aircraft gun system. Safe, easy to operate and maintain, the LALS is a cost-effective, highly reliable system for use in the services now and into the 21st century.

### 05 Specifications

Capacity	2100 rounds
Aircraft loading rate	830 spm maximum
Aircraft loading operations	accomplished by two (2) crewmen
Replenishment rate	100 spm nominal
Replenishment operations	accomplished by three (3) crewmen
Pneumatic or manual power	
Total system empty weight	2375 lbs.
MRBF system reliability	Greater than 200,000
Stacks two (2) high for air transport and storage	

### 06 Outline details



Note: Due to continuous process improvement, specifications are subject to change without notice. TCO Review # 170