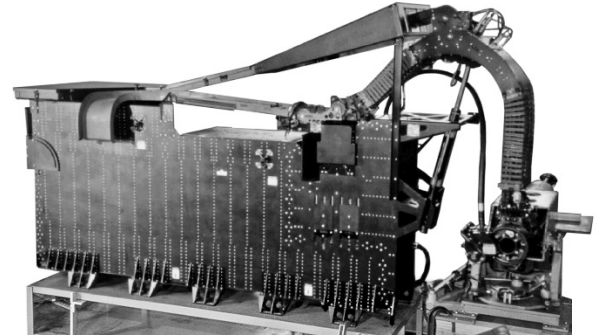


DATA SHEET

25mm Ammunition storage & handling system AC-130U Gunship



01 Description

The AC-130U Gunship 25mm Ammunition Storage and Handling System (ASHS), with a capacity of 3000 rounds represents the largest Linear Linkless feed system ever produced.

Past high rate gatling gun systems in the gunship series presented the problem of large quantities of spent cases and links to be handled by the gun crew. Under this U.S. Air Force contract through Rockwell and Delco for the AC-130U Gunship program, Meggitt Defense Systems' closed loop Linkless system feeds and restores ammunition and empty cases.

Major components of the ASHS are: The two-bay Linear Linkless Magazine, a high density storage unit which, by nature of its design, moves its 3300 lb. ammunition payload at half of the 1800 SPM gun rate. The magazine transfer unit functions as a merger for the two bays of ammunition in the magazine and delivers a single stream of rounds to the loader/downloader assembly. The loader/downloader assembly (L/DL) acts as the roundhouse of ammunition travel. The L/DL will 1) accept linked or bulk ammunition during loading operations directing them into the magazine while downloading spent cases and misfires through a dump chute, or 2) bypass the loading and downloading gates and send rounds to the conveyor assembly during firing. The conveyor assembly acts as a flexible bridge between the L/DL and the GAU-12/U gun on its trainable mount. This assembly is comprised of two sections of bi-directional flexible chuting with a spent case eject assembly in the top most center section that is supported by a spring loaded vertical equilibrator.

The spent case eject assembly, during the reverse clear operation, ejects spent cases of the last seven rounds fired. This unique assembly allows the reverse clearing system to park the gun on the empty spaces created by the ejection

02 Key features and benefits

- Linkless feed design eliminates jamming issues associated with round handling
- Retains ammunition type and location in memory
- Greater operational efficiency and lighter weight than linked system
- Stores and handles up to 3000 rounds of 25mm ammunition
- Battlefield proven very high MRBF
- Lower life-cycle costs compared to linked systems

03 Applications

- AC-130U Gunship

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
www.meggitt.com

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process instead of parking on spent cases or live rounds. This one-of-a-kind conveyor design has demonstrated that it reliably accommodates the azimuth and elevation excursions of the gun mount.

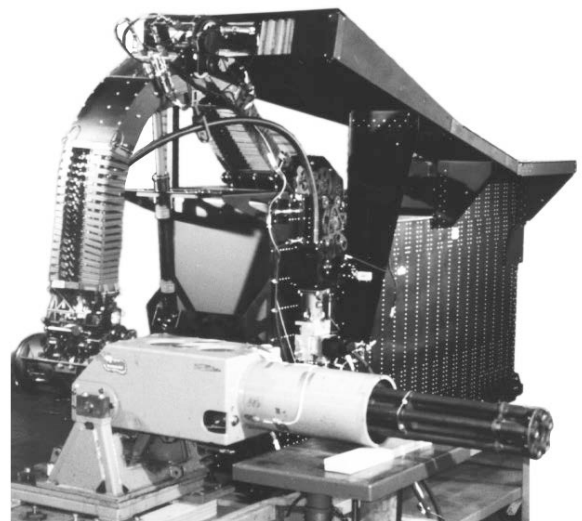
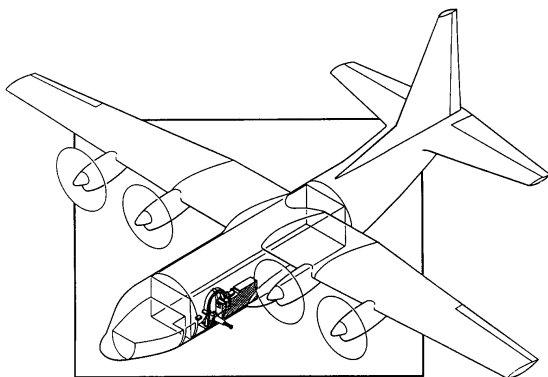
The magazine drive gearbox assembly is hydraulically powered and accepts electronic commands from a remote crew station. The unit is located adjacent to the terminal drive on the magazine. It provides power directly to the magazine and transfers power through a flexible drive shaft to the gun drive gearbox assembly at the rear of the GAU-12/U gun.

This combination of features, IE, feeding and restoring ammunition from a trainable weapon mount, the integration of a delinking loader/downloader as part of the overall system, and the inherent advantages of Linear Linkless design in the storage container, make this system truly an advancement in the state-of-the-art of ammunition handling system technology.

05 Specifications

Compatible gun	GAU-12/U gun
Round size	25mm
Round capacity	3000 rounds
Reload rate	400 SPM
Firing rate	1800 SPM
Crewmen required for loading	2
Power required:	
PSID	2500
GPM	20
Total system weight empty	1385 lbs

06 Outline details



Note: Due to continuous process improvement, specifications are subject to change without notice. TCO Review # 167