CVR(T) Rear Door Hinge

Solving the long lead time issues for parts no longer in production.

Value Summary

Small batch manufacturing of obsolete parts is costly and time-consuming. Military supply chains take 5 days for part supply. On-site production of the same part in less than a day restores capability faster.

Production Method	Production Time	Cost
Manufactured Spares	6-8 weeks	$1577.34
SPEE3D CSAM AL 6061	18.5 hours	$321.39

Source for estimated cost for spares: https://www.thexmod.com
Source for estimated CSAM cost: SPEE3D cost estimator

Background
Door and hatch hinges are vital to maintaining the integrity of the vehicles armor and protecting the crew and maintaining the survivability of the platform.

The Challenge
The unavailability of simple parts such as door hinges render platforms unfit for operational use, this may cause the vehicle to be scrapped or stripped for parts for other platforms. Thus, reducing the overall fighting effectiveness of armoured formations.

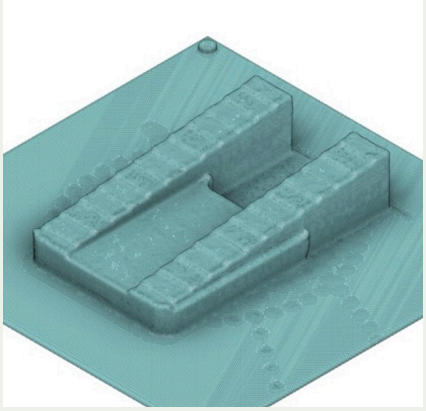
The Solution
SPEE3D's CSAM (Cold Spray Additive Manufacturing) technology can 3D print metal replacement parts from design to deployment in less than 20 hours or 1 day.

The Value
Keeping equipment running is essential in critical enviorments for any industry. Whether it's a tank on a battlefield, a piece of mining equipment in a remote area, or a valve on an oil rig in the ocean, without the correct spare parts equipment can sit idle and unable to be used. Often the cost of the replacement parts is not the issue, it's the time it takes to receive them. With CSAM technology customers can reduce the wait time for critical spare parts from weeks to less than a day.

Design to deployment in 18.5 hours

Print: 3.6 hours

Aluminum 6061, 1.9kgs of material



Cook: 11.5 hours

Heat treated in a standard air furnace

Cut: 3 hours

Critical surfaces machined on CNC

About The Equipment

The Combat Vehicle Reconnaissance (Tracked) (CVR(T)) is a family of armored fighting vehicles (AFVs) developed in the 1960s and were in service with the British Army and are still in service with others forces throughout the world. They are small, highly mobile, air-transportable armored vehicles, originally designed to replace the Alvis Saladin armored car.

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