

■ ■ ■ MARSHALL

# C-130 Hercules

MRO Services & Solutions



Service | Sustainment | Engineering

[marshallgroup.com](https://marshallgroup.com)







# The Ultimate Partnership in C-130 Hercules Support

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# Introduction to Marshall

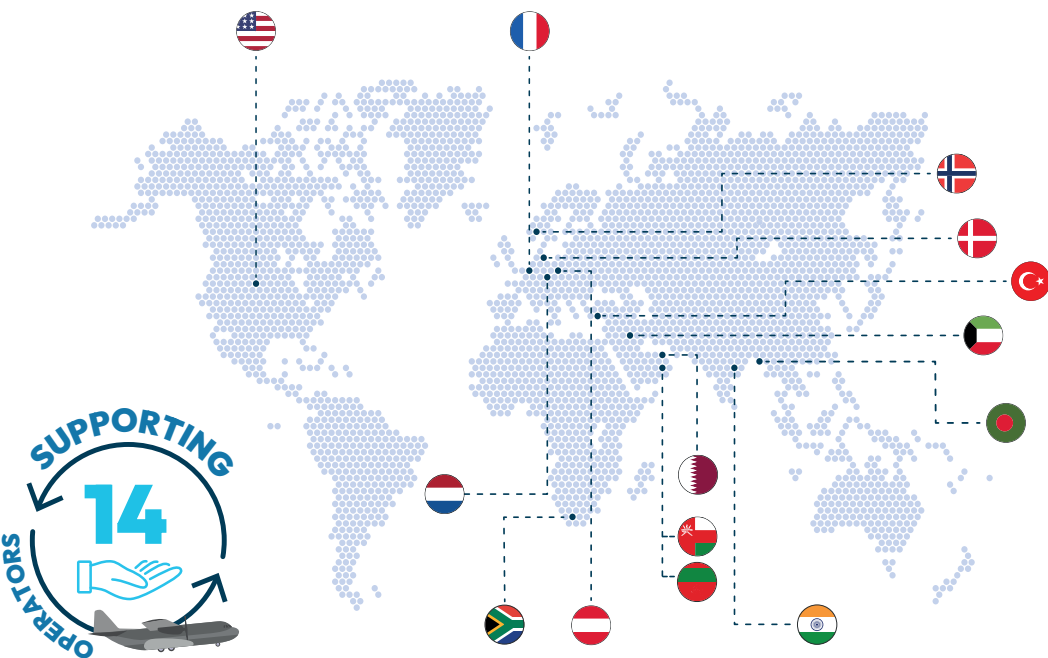
Established in 1909, Marshall is an independent British aerospace and defence company providing mission-critical support to a global customer base of governments and prime contractors.

We are regarded as an authority on maintenance, repair, modification and manufacturing for several major aircraft platforms including the Lockheed Martin C-130 and Boeing P-8, and have been trusted to deliver flagship maritime and land-based engineering programmes around the world.

With operations across the UK, Europe, North America and the Middle East, we are united behind a shared purpose of solving problems that others walk away from, coupled with an inherent instinct to do the right thing.

Our award-winning apprenticeship scheme has helped over 21,000 young people launch their careers over the past 100 years, and our property arm is committed to creating an extraordinary new urban quarter for Marshall's home city of Cambridge.

Recognised as a global leader in supporting the C-130 aircraft, Marshall holds approvals as a Lockheed Martin approved C-130J Heavy Maintenance Centre (HMC), a Lockheed Martin authorised Hercules Service Centre (HSC) for the Legacy C-130 B thru H aircraft and a Lockheed Martin approved Centre of Excellence for centre wing box replacements on C-130.



## Cambridge, UK



14 Aircraft Maintenance Bays plus 2 x Paint Bays



Supporting 14 customers globally



Located at Cambridge Airport, UK



Ground test running facility and Flight Test

## Greensboro, USA



6 Aircraft Maintenance Bays plus 7th Narrow Body Paint Bay



Hangar space; 190,000 square foot



Location at Piedmont Triad International Airport, USA



Ramp space / Apron 381,000 square foot





# C-130 Maintenance Repair and Overhaul Experience

**Marshall’s current HMC and HSC approvals and associated Technical Assistance Agreements, enable Marshall to support C-130B thru H and J aircraft maintenance requirements at its facilities. Furthermore, these approvals enable Marshall to provide technical support to customers at their home bases and to their areas of operation through highly skilled and experienced contractor working parties.**

Marshall fully understands the importance of fleet availability, capability and airworthiness, together with the associated challenges for specific military operations. Through delivering long term support contracts on the C-130 for over 59 years, Marshall has developed a unique capability to provide tailored support solutions to meet the requirements of many different military operators.

Based on this experience, Marshall has developed ‘best practices’ that are further enhanced by a continuous improvement process, leading to accurate scheduling and managing of depth maintenance inputs. At its Cambridge, UK site Marshall has 14 slots dedicated to delivering high-quality, low risk C-130 depth maintenance by 300 fully qualified and experienced C-130 aircraft personnel to support the scheduled and unscheduled maintenance, repair and overhaul requirements. All of which is underpinned by a comprehensive engineering and technical support team and an established supply chain and component repair and overhaul network.

In 2025, Marshall will be fully operational at the newly established US facility in Greensboro, NC, providing a further 6 aircraft maintenance slots plus an additional dedicated paint bay.

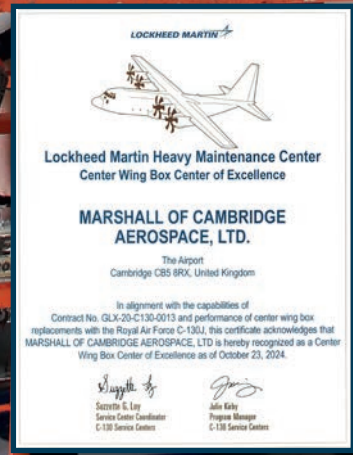
Marshall prides itself in consistently providing the highest level of service to its customers through established contract management, scheduling and delivery. With vast experience, Marshall has an in-depth understanding of potential challenges, such as common areas of rectification, diminishing sources of supply and repeatable repairs. By applying effective planning, we are able to minimise aircraft downtime and provide predictable aircraft turn-around-times, ultimately maximising fleet availability.

Marshall can carry out all types of maintenance inspection including:

- Lockheed Martin SMP checks A through to D Inspections
- US Navy Periodic Maintenance Inspections (PMI)/Major Depot Inspections (MDI)
- Programmed Depot Maintenance Inspection (PDM’s)
- Calendar based structural inspections
- Fatigue based structural health monitoring inspections

Marshall has a fully capable NDT facility that is equipped to perform a wide range of NDT methods and services to ensure the integrity and safety of materials and components without causing damage. The key methods of inspection include Ultrasonic Testing (UT), Magnetic Particle Testing (MT), Radiographic Testing (RT), Eddy Current Testing (ET) and Liquid Penetrant Testing (PT).

Marshall fully understands the importance of fleet availability, capability and airworthiness, together with the associated challenges for specific military operations.







# Spares and Ground Support Equipment

Marshall in partnership with Lockheed Martin are able to offer suitable spares packages based on the customer’s operational requirements. Flyaway kits are also available as an option. These kits provide essential spares for ‘most likely’ failures during a 30 day overseas deployment.

Throughout the service life of any aircraft, spare parts will be required to support the operation and maintenance of the aircraft. Marshall can manage the repair and overhaul of rotables through our partnerships with OEMs and OEM approved service centres. Additionally, Marshall’s vast supply network and relationships with C-130 suppliers will be available to our customers to ensure the timely delivery of spares and overhaul/repair activity.

Having conducted maintenance on the C-130 for over 59 years, Marshall has replaced almost every major structural component on the C-130B through H and J. Having the correct Ground Support Equipment (GSE) is vital to ensuring efficient maintenance activity. Over the years, Marshall has developed bespoke GSE to enable maintenance and significant structural items to be replaced in the most efficient, cost effective way. As such Marshall is well positioned to provide the necessary guidance for its customers on the GSE required to suit the level of maintenance required at their main base of operation.



# Training and Development

**Marshall’s training facility provides specialist career and technical training to support many civil and military aircraft maintenance activities and operations. With over 59 years’ experience working on the C-130, Marshall is extremely skilled and familiar with the training and education of personnel required to equip them with the necessary skills and knowledge to work proficiently on C-130B thru H and J aircraft.**

**As a UK CAA Part 147 approved training facility, we meet the highest standards of quality assurance and regulatory compliance, enabling Marshall to provide world-class technical training and to conduct examinations at the Aircraft Maintenance License level and perform Aircraft Type / Task training for both the civil and defence sectors on the Lockheed Martin C-130B thru H, J and L100/382 aircraft.**

We work closely with our customers to identify their specific training needs, ensuring all material is developed and delivered to meet their bespoke training and operational requirements. All Marshall teaching staff are professionally qualified instructors, with many years industrial and military experience in the aerospace sector. Marshall also has the flexibility to deliver training courses at customer’s facilities to further support with the development of indigenous skills and capabilities.

Combined with Lockheed Martin’s state of the art, purpose built Hercules Training Centre, Marshall, in partnership with Lockheed Martin, can provide the necessary training for ground crew, flight engineers, flight crew and other functions of the customer’s organisation, to ensure they have the necessary training, skills and regulatory qualifications to meet their operational requirements.







Recognised as a global leader in supporting the C-130 aircraft, Marshall holds approvals as a Lockheed Martin authorised Hercules Service Centre for the Legacy C-130 B thru H aircraft, a Lockheed Martin approved Centre of Excellence for centre wing box replacements on C-130 and is one of only three Lockheed Martin approved C-130J Heavy Maintenance Centres in the world. In 2024, Marshall celebrated 58 years of cooperation with Lockheed Martin on the C-130 platform.





## C-130 Manufacturing Capability

 C-130B/H/J parts manufactured by Marshall since 2004

**5000+**

**Marshall is extremely proud to be the only HSC/HMC in the world approved by Lockheed Martin for the manufacture of C-130J parts, via the Authority to Manufacture process. With approval sought from Lockheed Martin on a case-by-case basis to access the necessary technical documentation.**

Marshall has the capability to facilitate local manufacture of parts to support maintenance inputs for difficult-to-obtain and long lead-time items. This unique capability, enables Marshall to significantly de-risk emerging findings during maintenance inputs, ensuring a highly predictable and low-risk, dependable aircraft turn-around-time is consistently achieved. The facility is equipped with Computerised Numerical Control (CNC) machining centres, metal forming, welding, electrical assembly and treatment facilities.

**Summary of manufacturing operational capabilities and limitations:**

Commodity	Operation and Limitation	
Sheet Metal	CNC Routing	5.0 x 2.5 Metres
	Cutting & Forming	4.0 Metre
	Shrinking, Stretching	Max 0.125" Thick
	Rubber Press	30.0 x 20.0 inches
Assembly	Complex electrical/mechanical assembly Bonding (Heat cured & room temperature) Large reconfigurable area and tooling for 2m+ assemblies	
Tooling	Assembly and Form Tool Manufacture, metallic/jabroc/resin	
Pipes	Flared/flareless	0.25 – 3.50 inch Dia (min bend rad 2.5D)
Machining	Turning (CNC & Manual)	10.0 Dia x 30.0 inches long
	Milling (Manual)	59.0 x 25.0 x 20.0 inches
	3-Axis CNC	40.0 x 40.0 x 20.0 inches
	5-Axis CNC	40.0 x 40.0 x 20.0 inches
	Jig Bore	30.0 x 28.0 x 20.0 inches
CAD CAM Programming	Catia V5	
Grinding	Cylindrical	6.0 Dia x 18.0 inches
	Centreless	3.0 inches Dia Max
	Surface	18.0 x 6.0 inches
	Honing	3.0 – 50.0mm Dia
	CNC Cutter Grinding	25.0mm Dia Max
Inspection	CMM	98.0 x 59.0 x 36.0
	Optical Projector	
	Planar Projector	
	Ink Jet Identification (Part Mark)	
Electrical Assembly	Cable Harness Manufacture	
	Panels & Trays	
	Electrical Testing	
	Test Rigs	
	Electrical Bond Testing	
Special Processes	Wire & sleeve printing	
	Heat Treatment	
	Solution Treatment	0.6 x 0.6 x 1.8 Metre
	Precipitation Hardening	2.26 x 2.17 x 1.73 Metres
	Surface Treatments	
	Chromic Anodise	2200 x 600 x 1050mm
	Sulphuric Anodise	2200 x 600 x 1050mm
	Chromate Conversion Coatings:	
	Alocrom	2200 x 600 x 1050mm
	Alodine	2200 x 600 x 1050mm
	Paint Spray Booths (x2)	6.0 x 5.0m
	CAD Plate (Dalic only)	





## Flight Test Capability

Marshall recognises that not all C-130 operators will have the immediate ability or resource to conduct flight test. Marshall is able to offer the services of its highly qualified and experienced C-130J flight test pilots and flight test engineers to support its customers. Along with conducting any flight tests associated with the maintenance, Marshall's pilots can deliver the aircraft to the customer's main base of operation.

Marshall pilots are approved to support and conduct all categories of flight test meeting both military (UK MoD and many foreign Air Forces) and civil (UK CAA, EASA, FAA) requirements, from experimental and developmental testing through to production and operational trials.

## World Leading Paint Facility

To complement the Maintenance, Repair and Overhaul capability, Marshall is pleased to offer a world class, in-house, full strip and repaint capability in Cambridge. This facility, together with a trusted, dedicated paint partner ensures a cost effective and high-quality paint finish. Marshall's paint facility capabilities include stripping the aircraft to bare metal or heavy sanding, resealing of all production joints, corrosion removal and treatment, composite repairs and complete aircraft repainting.

Marshall's aircraft paint facility opened in early 2015 and can accommodate Boeing 747-400, 777 and Airbus 330 sized aircraft, making it one of the largest paint facilities in Europe. As well as supporting civil customers, it is used extensively for C-130 aircraft customers.











# C-130J Capability Enhancement

Marshall is approved by the EASA, UK CAA and UK MAA to conduct design activities from concept through to verification and flight test. Marshall has developed expertise in the design, installation, commissioning and testing of avionics and structural upgrades, having a proven track record in delivering upgrades on the C-130 platform worldwide for over 40 years. Marshall is able to develop commercial-off-the-shelf systems to provide cost effective, low risk solutions. Marshall is able to offer our customers a number of modifications to enhance the safety and operational capability of their C-130J aircraft.

These modifications can be embodied during the Entry into Service process or during a later maintenance input as part of the long-term support that can be provided by Marshall.

## Satellite Communication System & Blue Force Tracker

When operating within remote and harsh conditions, clear, comprehensive two-way communication, with an accurate understanding of the aircraft's location is essential for operations staff and the aircrew. Current Beyond Line of Sight (BLOS) communication is provided by the HF Radio, however, this is subject to interference and atmospheric conditions and requires complex and costly base stations. Marshall understands the importance of having a reliable, cost effective communication system that enhances the customer's operational capability.

The Iridium Satellite Communication System (Satcom) system proposed by Marshall has an in-built Blue Force Tracker (BFT) that transmits the aircraft's GPS position over the Iridium Satcom network every 15 seconds. This system will provide the customer with world-wide communication capability for the aircrew (voice, short message system text and short burst data for email) and precise aircraft tracking information for their operations staff through the Marshall provided base station. The Satcom and BFT system proposed by Marshall will utilise some of the BLOS Satcom provisions (structural and wiring) that were retained on the aircraft following the removal of the RAF Iridium Satcom system, helping to reduce costs and the duration of the installation.

Marshall's combined Satcom and BFT system was developed to provide C-130 operators with a low risk, cost-effective communication and aircraft tracking system that satisfies the operational support requirements of the UN.

### Value and Benefits

- Provides world-wide cost-effective communication capability using the Iridium satellite network
- Provides location tracking of aircraft while operating anywhere in the world
- Low risk solution that satisfies the UNs' operation support requirements
- Increases crew confidence for operations conducted in remote environments
- Backed by Lockheed Martin and supported by more than 50 years of C-130 maintenance, repair, overhaul and modification experience



## External Fuel Tanks

The external fuel tanks provide extended operational range capability of the C-130 by approximately 1200 nautical miles (dependant on payload and flying conditions), extending the aircraft's total range to around 4,700 nautical miles. The external fuel tanks come with explosive suppressant foam installed per the aircraft's internal fuel tanks.

### Value and Benefits

- Provides an increased range capability
- Provides a low risk solution combining existing knowledge, experience and the confidence that the modification is installed under a Lockheed Martin Service Bulletin (SB)
- Utilises the existing fuel management systems and fuel gauges fitted to the aircraft
- Role fit, external tanks are interchangeable with compatible aircraft







## Wireless Intercom

The Wireless Intercom System being offered by Marshall enhances the existing system currently installed on the C-130J aircraft by removing the use of the long lead by the Air Load Masters. The Marshall hands-free system enhances crew safety within an operational environment by removing trip and snag hazards associated with the existing long lead. It also increases optimisation and communication of the loadmaster with non-flying crew and enables freedom to move around the aircraft interior and exterior without the current restrictions. The wireless system also enables the loadmaster to communicate to multiple users at the same time on the ground and in flight.

With encrypted communication between users and a system range of up to 300 meters (line of sight), the system can be used in all mission scenarios including loading and unloading, medical evacuation, search and rescue, paratroop and dropping operations and can be used by maintenance and ground crews.



### Value and Benefits

- Provides a hands-free system that enhances crew safety within an operational environment
- Significant through life cost savings due to no requirement to replace damaged long leads
- Removes trip and snag hazards associated with the existing long lead
- Allows increased optimisation and communication of crew operations on ground and inflight with multiple users on the same intercom
- Provides encrypted communication between aircraft crew when operating away from home base

## Aeromedical Evacuation System

C-130 Operators are increasingly supporting humanitarian missions around the world, many of which are in remote and isolated locations. These missions can involve the evacuation of personnel including the medical evacuation of critical patients that require immediate medical treatment.

Marshall's Aeromedical Evacuation System (AMES) provides medium / high dependency patients with the optimum chance of survival during transportation by air. Its modular design enables multiple AMES modules to be interconnected to support multiple medium / high dependency patients being transported at any one time.

Marshall's AMES has been developed alongside medical experts and C-130 operators and is designed and built against the highest medical human factors and safety standards. Manufactured to a high medical specification with an extremely rugged construction, Marshall's AMES is designed and qualified for the C-130 and other military transport aircraft compatible with the 463L pallet system. Marshall AMES is fully configurable to customer specific operational / medical evacuation needs.



### Value and Benefits

- Palletised system enabling interchangeability across multiple military transport platforms
- Provides medium / high dependency patients with the optimum chance of survival during transportation by air
- Provides tactical and strategic medical evacuation mission capability
- No modification required to aircraft, utilises existing aircraft power supply
- Fully configurable to customer specific operational / medical evacuation needs

## Underbelly Protection

Many operators are increasingly supporting humanitarian missions or have operational commitments where the use of unpaved runways are required. Without underbelly protection, operators often experience stone damage to the belly skins or antennas during landing, causing loss of function of antennas and requiring the aircraft structure to be assessed. In some cases depressurisation of the aircraft has occurred due to the penetration of stones through the belly skin, resulting in the aircraft being grounded for repair.

Installing underbelly protection provides protection from impact damage to the underside of the aircraft including to the antennas and all but eliminates stone damage to the underside of the aircraft. Underbelly protection has been tried and tested for over 30 years on the C-130 and is currently installed on the UK RAF C-130J fleet of aircraft. However, during the strip and repaint of the aircraft, the existing belly protection will be removed.



### Value and Benefits

- Provides mission critical protection of the underside of the aircraft and lower antennas
- Increases crew confidence when operating from unpaved landing zones
- Protects the structural integrity and airworthiness of the aircraft
- Reduces the probability of puncture damage to the fuselage from stones and debris
- Provides an additional benefit of erosion and corrosion prevention







# Self-Protection Systems

With aircraft operating in hostile/combat environments, the need for a Self-Protection Systems (SPS) could not be greater. On the C-130J, the typical SPS consists of a Counter Measures Dispensing System (CMDS) and Missile Approach Warning System (MAWS). Combined they provide a total protection system that significantly enhances the safety of the crew, the aircraft and the likelihood of mission success.

- CMDS delivers aircraft survivability from InfraRed (IR) and Radio-Frequency (RF) guided missile attacks. This system is installed on many military platforms that operate within hostile/combat environments. The system uses information from integrated Electronic Warfare (EW) sensors, including MAWS to determine the correct response to defeat incoming IR guided missiles by dispensing flares or chaff as appropriate.
- MAWS is an EW system designed to protect aircraft against IR missile threats (and laser-guided/ laser-aided threats and hostile fire, depending upon version procured). Upon detection of the threat, the system will provide an audio and visual sector warning to the pilot. For IR missile threats, the system can automatically initiate countermeasures by sending a command signal to the CMDS.

Having previously installed SPS on numerous C-130 aircraft and specifically removed the CMDS and MAWS from the RAF C-130J aircraft on previous resale aircraft, Marshall is well positioned to offer a low risk solution to re-install the SPS capabilities onto other C-130J aircraft. The selected systems will be installed using Lockheed Martin SB under our HMC approval, giving our customers the confidence that the modification is backed by the OEM. The system will be positioned in previous structural locations utilising our knowledge of the existing wiring on the aircraft and tested using the Line Replaceable Units supplied as Government Furnished Equipment (GFE) by the Customer.



## Value and Benefits

- Low risk solution utilising existing knowledge of the system architecture, the installation requires an intimate understanding the C-130J aircraft
- Provides lifesaving protection of the aircrew and the aircraft
- Provides an increased probability of mission success
- Increases crew confidence for operations conducted in combat/hostile environments
- Backed by Lockheed Martin and supported by more than 50 years of C-130 maintenance, repair, overhaul and modification experience







# Sustainment

Having supported the C-130 for over 59 years, Marshall has extensive in-depth knowledge in the support and sustainment of this platform. In particular, Marshall has provided total sustainment for the RAF's fleet of C-130J aircraft since 2006. Marshall stands by ready to support all customers with the future sustainment of their C-130J aircraft to suit their specific operational needs.

## Centre Wing Box Replacement

The life of an aircraft is predominantly limited by the combination of the hours flown and the severity of the operational loads applied to the aircraft structure during service. These continuous operational loads applied to the aircraft structure will fatigue the structural components, ultimately resulting in failure. With the Centre Wing Box (CWB) attracting the highest operational loads, the CWB is a fatigue lifed item that will require replacement at some point to ensure the continued airworthiness of the aircraft.

The Enhanced Service Life (ESL) CWB extends the fatigue life of the aircraft, with an unlikely future replacement of the CWB required. The ESL CWB is the latest CWB produced by Lockheed Martin with significant structural enhancements, giving an increased fatigue life of approximately 2 to 3 times the original C-130J CWB fatigue life. As part of the CWB replacement, Marshall will replace the existing riveted (permanently installed) centre wing-to-fuselage fairings with removable fairings to facilitate the ease of future inspections of critical structure. The plumbing (along with the auxiliary fuel tank cells) and wiring within the CWB will also be replaced. Furthermore, Marshall will thoroughly inspect the

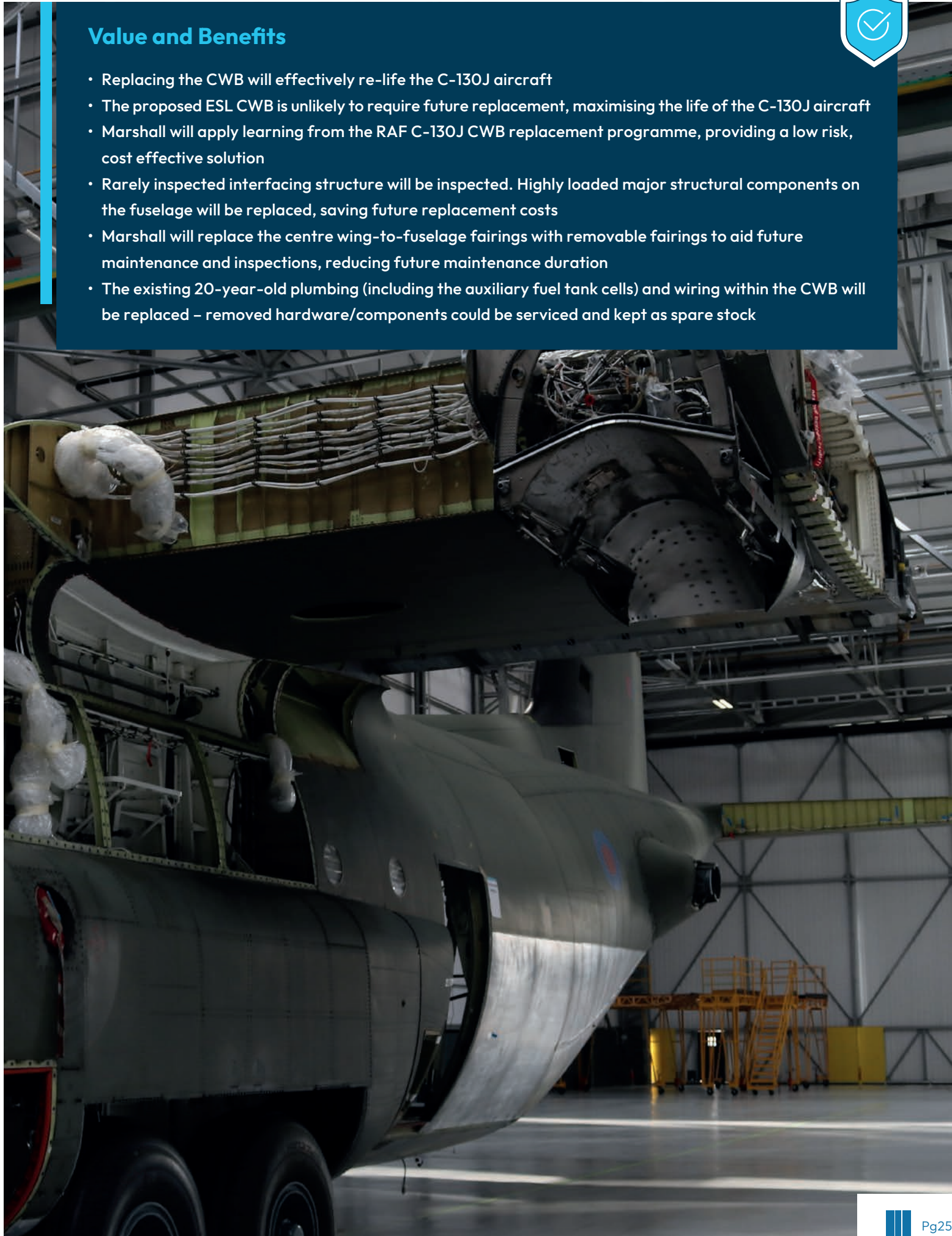
interfacing structure with the fuselage and will replace major attaching highly loaded structural components recommended by the OEM, effectively re-living the C-130J aircraft. This will ensure the prolonged airworthiness and through-life structural sustainment of the customer's C-130J aircraft.

Marshall is the only MRO outside of the United States and the first Lockheed Martin approved HMC to have replaced the CWB on a C-130J aircraft. Marshall bespoke facility has the infrastructure and tooling ready to carry out this complex structural replacement programme. To date, Marshall has replaced the CWB on more than 70 Legacy C-130 aircraft and more recently eight RAF C-130J. This provides our customers with a low risk, cost effective solution that will minimise aircraft downtime while maximising fleet availability.

Marshall will work closely with the end user to understand the remaining CWB life of their aircraft. Marshall, in conjunction with Lockheed Martin can help the customer determine the best time to replace the CWB if required. The CWB can be replaced as part of the Entry into Service process.

### Value and Benefits

- Replacing the CWB will effectively re-life the C-130J aircraft
- The proposed ESL CWB is unlikely to require future replacement, maximising the life of the C-130J aircraft
- Marshall will apply learning from the RAF C-130J CWB replacement programme, providing a low risk, cost effective solution
- Rarely inspected interfacing structure will be inspected. Highly loaded major structural components on the fuselage will be replaced, saving future replacement costs
- Marshall will replace the centre wing-to-fuselage fairings with removable fairings to aid future maintenance and inspections, reducing future maintenance duration
- The existing 20-year-old plumbing (including the auxiliary fuel tank cells) and wiring within the CWB will be replaced – removed hardware/components could be serviced and kept as spare stock



Marshall is the only Maintenance, Repair and Overhaul organisation outside of the USA capable of replacing the Centre Wing Box (CWB) on both legacy C-130 and C-130J, providing valuable aircraft life extension.







# Structural Modernisation

**Marshall holds an in-depth understanding of the C-130 structure and has replaced almost every major structural component on the C-130 without Original Equipment Manufacturer (Lockheed Martin) involvement.**

To enable this, Marshall has developed bespoke jacking and trestling instructions and developed equipment to enable significant structural items to be refurbished and replaced. For this reason, Marshall occupies a leading position in the non-standard repair and replacement market. Keeping aircraft airworthy and structurally sound can often extend beyond routine maintenance and sometimes calls for repair or complete refurbishment of major components. Marshall offers the full spectrum of engineering capability


to extend aircraft life and ensure crew safety.

The structural life of an aircraft is predominantly limited by the combination of the hours flown and the severity of the operational loads applied to the aircraft structure during service. With the Centre Wing Box attracting the highest level of operational loads, the Centre Wing Box is a fatigue-life item that will require replacement to ensure the continued airworthiness of the aircraft.

Marshall has a bespoke facility with the infrastructure and tooling to carry out this complex structural upgrade programme. This important modification supports the through-life structural sustainment of the C-130 aircraft for many years to come.


**Marshall major structural repairs, replacements, refurbishment programmes, include:**

- Flight deck window doubler repairs and replacements
- Engine truss mount repair and replacement (including force-mate bushing installation)
- Inner and outer wing attachment (rainbow) fitting replacements
- MLG beams, fuselage beam caps and belly skin replacements
- Sloping longeron (FS737-FS1041), upper BL61 and BL20 longeron repairs and replacements
- Centre wing drag angles, chine angle and chine cap repair and replacement



80+ Centre Wing Box replacements on the Royal Air Force C-130

**80+**



Marshall has recently completed the 8<sup>th</sup> of 14 Centre Wing Box replacements for the Royal Air Force C-130J aircraft

**8<sup>TH</sup>**

Marshall truly boasts a complete C-130 Centre of Excellence under one roof, ensuring the customer receives a world class service experience from start to completion.





# Engineering and Technical Capability

Marshall has decades of experience in developing non-standard structural repairs on the C-130B thru H and J aircraft, having completed over 15,000 repairs. This vast experience enables Marshall to design and substantiate non-standard repairs without the need for reach back to Lockheed Martin on the C-130B thru H aircraft and where not required by the customer, on the C-130J aircraft. All repairs are designed to maintain the airworthiness and structural integrity of the aircraft with all repairs designed with fatigue in mind.

Marshall has a dedicated Repairs Group which supports aircraft during maintenance at its facilities and at customer locations when required. The Repairs Group has extensive knowledge of the Lockheed Martin drawings and document set supplied for the C-130 aircraft. This enables the Repairs Group engineers to resolve any structural issues during maintenance or at the customer’s facility as quickly as possible.

As well as having an established engineering capability, Marshall has a dedicated Technical Support Group that provides technical support during in-service operation and maintenance. To help minimise the impact of any unforeseen technical issues that may arise during maintenance, Marshall’s Technical Support Group can provide general technical support and advice as well as performing fault analysis and investigation work relating to problems discovered during aircraft maintenance.

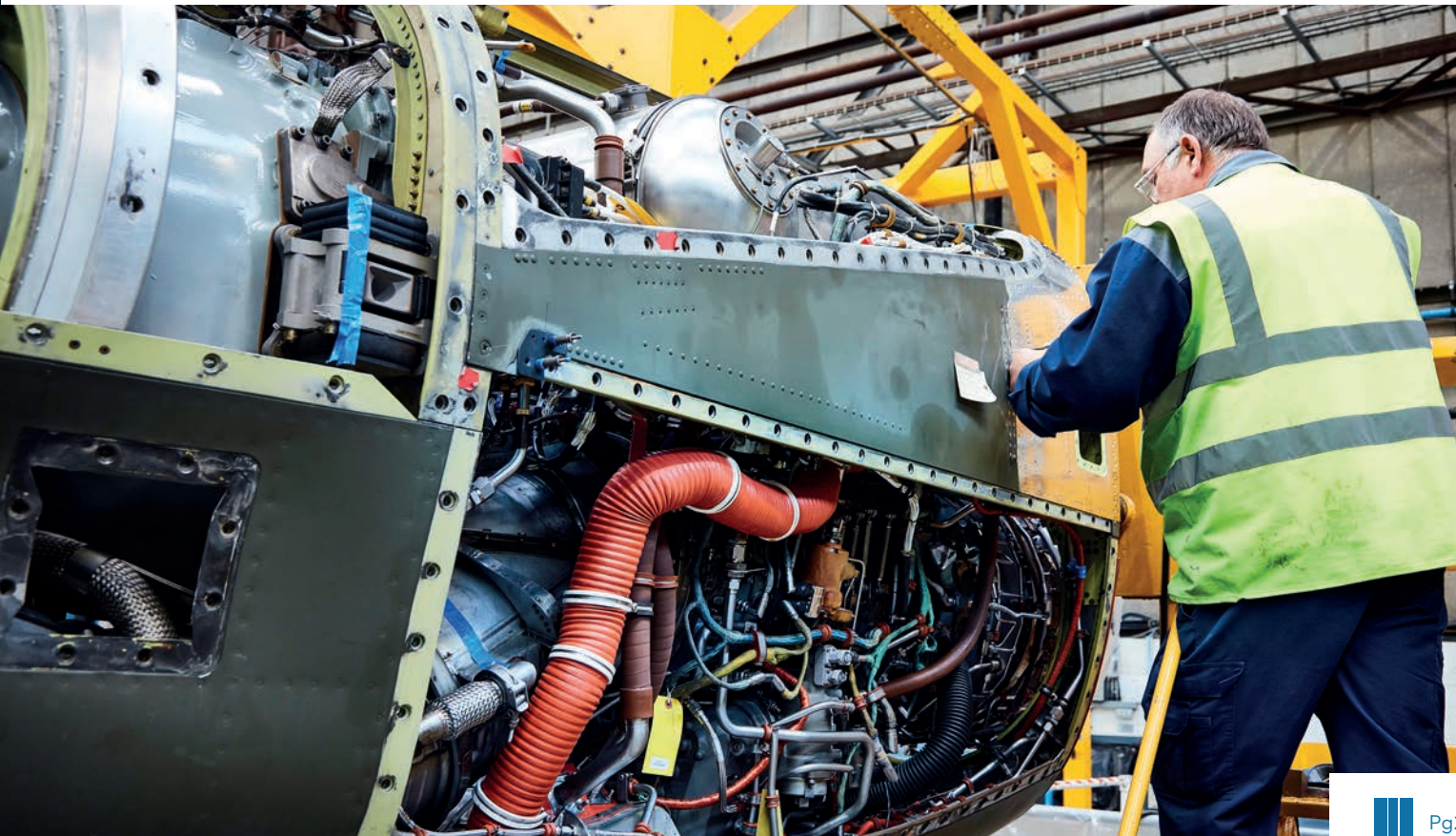
The Technical Support Group can also support structural integrity and fatigue management, provide ageing aircraft studies, conduct repair assessment programmes, conduct structural damage assessments and provide airworthiness advice, provide corrosion control advice, provide obsolescence and reliability management, as well as identifying suitable alternative parts. Through Marshall’s Technical Support Group the following services can be offered to customers to support the sustainment and airworthiness of their C-130J aircraft:

- **Continued airworthiness management**
- **24hr technical support hotline**
- **Cost benefit analysis**
- **Reliability centred maintenance**
- **Spares optimisation**
- **Technical publication management**
- **Repair solutions**
- **Obsolescence management**
- **Fleet management**

Marshall supports many of its C-130 customers with engineering and technical support, providing long-term sustainment of their aircraft.

## Engine and Propeller Support

Utilising our long term relationships with OEMs and OEM approved service centres, Marshall can effectively manage all levels of scheduled and unscheduled maintenance on engines and propellers both in Cambridge during maintenance and at our customers base of operation.










# Quality, Safety and Security


## Quality

   Key to providing a low-risk, reliable service is reassurance that all operations are reinforced and managed by a robust quality management system accredited by AFNOR AS9100/AS9110, along with a dedicated in-house Quality Assurance team. Quality policies and processes ensure the design, production and maintenance of products (hardware, software or documents) and all services are delivered to meet the contractual requirements to a predetermined quality standard.

The Marshall quality system documentation and methodologies are fully compliant with the following standards:

■ AFAQ	ISO 9001 : 2015	2008/32550.17
■ AFAQ	AS9110:C / SJAC 9110:B / prEN9110:2018	2013/57102.9
■ AFAQ	AS9100:D / JISQ 9100:2016 / EN 9100:2016	2008/32551.17
■ Boeing International Corporation	D1-4426 Manufacturing Process	Process Code No. BE10047515
■ Boeing International Corporation	D6-82479 Develop/Manufacture	
■ Civil Aviation Authority (CAA)	Aerodrome Certificate	UK - EGSC-001
■ Civil Aviation Authority (CAA)	CAA 21G Production Organisation Approval Certificate	UK.21G.2078
■ Civil Aviation Authority (CAA)	CAA 21J Design Organisation Approval	UK.21J.0181
■ Civil Aviation Authority (CAA)	CAA 145 Maintenance Organisation	UK.145.0003
■ Lockheed Martin	Hercules Service Centre	Contract GLX-20-C130-0012
■ Lockheed Martin	Heavy Maintenance Centre	Contract GLX-20-C130-0013
■ Lockheed Martin	Lockheed Martin Special Processes	QCS-001
■ Lockheed Martin	Supplier Engagement and End Item Acceptance	D&B Number 218083210
■ Military Aviation Authority	DAOS	UK.MAA.DAOS.153
■ Military Aviation Authority	MRP Part 145 MAOS	145.1001
■ Military Aviation Authority	Contractor Flying Approved Organization Scheme (CFAOS)	UK.MAA.CFAOS.0011
■ MoD (DE&S)	Design Organization for the RAF C-130J Aircraft	DES AS C130J PT/04/07/07
■ MoD (DE&S)	Letter of privileges to be invoked as the Type Airworthiness Authority (TAA) for the C-130J Aircraft	DES AS C130J PT/04/07/07

## Safety and Security

 Marshall takes the safety and security of customer’s assets and personnel extremely seriously. As a UK Civil Aviation Authority approved international airport, Marshall surpasses the standards set by this authority. Site access is strictly controlled ensuring only authorised personnel have access to Marshall’s facilities. Each customer will have accesses to the Customer Service Centre, the main site and only the specific hangar where their aircraft maintenance will be conducted. Access to other areas of the site and other hangars will be prohibited unless escorted by the Customer Service Manager.



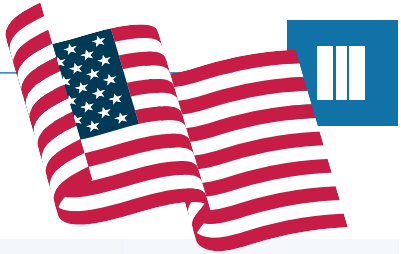
**In my role as liaison for the RNoAF I can without a single doubt in my mind say that our dialogue with Marshall Aerospace has improved extremely the last couple of years. Previously there was a void in which where we did not know where to reach out in regards to information and coordination not directly relating to current inputs. This void has been eliminated, and I feel confident that every time we reach out to you the case will be handled professionally. Information flow has never been better in regards to current inputs either, and your aid in both the pre input planning process, weekly meetings and current affairs is being noticed.**

*Royal Norwegian Air Force*

**Team performance was excellent. They tried hard to deliver the aircraft on time. The team leader made an excellent job. He guided the team very well achieved reasonable additional work. He presents Marshall very well to the customer!**

*Austrian Air Force*





# Global Leader in C-130 Maintenance and Fleet Support

## Marshall's history in aerospace and relationship with the U.S. goes back to the middle of the 20th century.

During World War II we modified and repaired over 5,000 aircraft as part of the U.K. government's Civilian Repair Organisation, including the Douglas Dakota, de Havilland Mosquito, Hawker Typhoon, Armstrong-Whitworth Whitley, and Boeing B-17 Flying Fortress. We also trained over 20,000 aircrew, including pilots, observers and flying instructors. Our training scheme was adopted by the Royal Air Force in 1941, and continues in use to this day.

In the late 1950s we were trusted to service Lockheed Martin's Super Constellation aircraft and a decade later we played an integral role in the development of Concorde, designing and developing its iconic drooping nose – used so effectively to facilitate transatlantic travel.

We are also proud of our 30 year relationship with Boeing, which has seen us manufacture auxiliary fuel tanks for its 747 and 777 aircraft and over 1200 tanks for the military P-8 platform for export around the world. Marshall has also carried

out many modifications on 777 and 747 aircraft for different operators.

We have maintained extraordinarily close cooperation and partnership with Lockheed Martin on its much-loved C-130 Hercules platform since first being appointed as the U.K.'s technical center for the Royal Air Force fleet in 1966. Since then we have been honored to be trusted to maintain C-130 fleets for numerous other nations, including Canada, where our Abbotsford, British Columbia based colleagues continue to support the Royal Canadian Air Force.

Other long-term customers include the Swedish and Royal Netherlands Air Forces who have been partnered with us for 45 and 25 years respectively, during which time we have performed major avionics and structural modernization programs, delivering increased capability and fleet sustainment. In addition, we support the majority of C-130J operators in the Middle East. No wonder then that between them our teams have notched up an incredible three million man hours working on the C-130 platform alone.



## USMC Demonstrated Performance

Maintenance Event	Aircraft Quantity
	Running Contract Total
PMI	14
O-Level	7
MDI	27
ISR	2
Total Induction	50



**Total Fleet Size 2023**  
100+ A/C







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**Marshall’s performance on this first aircraft gives me the confidence that we will be able to continue to meet the U.S. military’s needs for C-130 maintenance and positively impact readiness and sustainment goals within the Naval Aviation Enterprise.**  
*Commanding Officer Fleet Readiness Center Western Pacific, LtCol Kevin M. Ryan, USMC*  
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## Customer Service

Marshall seeks to uphold four values that are at the core of all activities we undertake for customers and are fundamental to Marshall’s success.



### Customers

Putting our customers above all else



### Integrity

Upholding the highest standards of integrity and fairness



### People

Recognising that people are the heart of our success



### Innovation

Maintaining competitive edge through innovation and creativity

Marshall strives to provide the highest level of service possible and is extremely proud of the excellent reputation it has on the market for the quality of service we provide. After significant growth in Marshall’s international C-130 market share in recent years, Marshall looks forward to welcoming new C-130 operators to its facilities. To support this growth, in 2018 we created a dedicated Customer Service Team to assist and guide customers with their day-to-day tasks and ensure consistently high-levels of customer service are maintained at all times.

The Marshall Customer Service Team, which operates 24 hours a day, ensures all customer needs are accommodated for and any queries swiftly resolved.

As a Lockheed Martin approved Heavy Maintenance Centre and Hercules Service Centre, it is our duty to uphold the values and quality of service entrusted to us by the Original Equipment Manufacturer. Below we have included testimonials from customers relating to the quality of service provided by Marshall:

## USMC CPARS 2024 Overall Rating

	Previous 2023 Rating	New 2024 Rating
Quality	Very Good	Very Good
Schedule	Exceptional	Exceptional
Cost Control	Satisfactory	Satisfactory
Management	Very Good	Very Good
Regulatory	Satisfactory	Satisfactory
Engineering	Very Good	Exceptional
Safety	Satisfactory	Satisfactory
Supply	Very Good	Exceptional





 MARSHALL

For a full set of capabilities please contact the  
Marshall Sales team or take a look at our website.

