

A C-27J Spartan aircraft is shown from a front-on perspective on a runway at dusk. The aircraft's four propellers are in motion, and its landing lights are illuminated. A white radar-like overlay with a central point and radiating lines is superimposed over the aircraft. The background shows a dark sky and a distant city skyline.

# C-27J SPARTAN THE UNRIVALLED MULTI-MISSION AIRLIFTER





## RUGGED, RELIABLE, PROVEN, VERSATILE

The C-27J Spartan is the most effective multi-mission airlifter available on the market today. Its capability to operate from the most rudimentary airstrips in extreme environmental conditions cannot be matched by any other twin-engine airlifter.

Thanks to its exceptional structural strength and systems redundancy, the Spartan offers unique qualities, not found in aircraft of the same class or derived from commercial turboprops: ruggedness, reliability, outstanding survivability and maneuverability.

Ordered and employed with full satisfaction by the most important Air Forces, the Spartan has already fully proven it is able to effectively accomplish any tactical transport mission, ranging from disaster relief to "last tactical mile" troops support.

The Spartan is a remarkably robust tactical airlifter with state-of-the-art technology in avionics and a powerful turboprop propulsion system, delivering extraordinary performance, extreme operational flexibility and cost effectiveness.









## ONE AIRCRAFT, MULTIPLE CAPABILITIES

Nowadays, a modern Air Force needs a highly cost-effective aircraft, capable of being quickly reconfigured to perform a high number of different missions, whilst retaining its primary role of tactical airlifter. Thanks to multiple roll-on/roll-off easily installable and transportable mission kits and systems, the C-27J can be configured to carry out tactical transport including troops, cargo, paratroops and cargo airdrop, Medevac/Casevac, VIP, Search And Rescue, ISR, Fire Support and personnel transportation.

The C-27J has a cargo bay with the largest cross section in its class (3.33 x 2.60 m), a wide rear door with opening ramp, a very strong cargo floor (4,900 kg/m max load for the entire fuselage length), large paratroop side doors, a cargo loading system designed to handle standard 463L pallets/platforms and many types of cargo loads which can be easily loaded, transported and airdropped.

The C-27J is the only aircraft in its class with the capability to adjust the cargo floor both in height and inclination, to facilitate the loading/unloading operations where no external support (cargo loader, etc...) is available.

© Aeronautica Militare - Troupe Azzurra









## HUMANITARIAN ASSISTANCE AND DISASTER RELIEF SUPPORT

The Spartan has already fully demonstrated its capability to effectively accomplish any transport mission related to disaster relief efforts, humanitarian assistance and support of Homeland Security missions, thanks to its total autonomy from ground support and ability to airlift materiel, equipment and people from/to remote and unprepared fields or areas where civil infrastructure has been damaged or destroyed, including precisely and timely airdrop of pallets and bundles with goods and life-saving supplies as needed on the ground.

The aircraft can also collect people in distress or wounded thanks to its ability to configure the cargo cabin with several standard stretchers for rapid medical evacuation (Medevac).

For fire-fighting duties, 6 "Guardian" System water/fire retardant containers can be effectively airdropped from a safe altitude (500-1,500 ft), also at night, on a single passage with no aircraft modifications.









## COMBAT PROVEN BATTLEFIELD AIRLIFTER

The ruggedness of the C-27J is confirmed by mission availability rates in excess of 85% recorded in years of operational deployments, by several Air Forces since 2006, in the austere and extreme Middle East and Central Asian environments.

The C-27J, expressly designed for intra-theatre operations, can be equipped with a full Defensive Aids Sub-Systems suite, secure communications and battlefield armor providing ballistic protection in order to operate in high threat environments, delivering cargo and people wherever they are needed.

The C-27J can directly upload large payloads, like standard 463L pallets or large vehicles such as light trucks, Humvees as they are unloaded from heavier airlifters such as the C-130 (Hercules) family or helicopters in the CH-47 (Chinook) class, delivering them straight to the frontline and austere forward operating bases, without repackaging, dismount parts or deflate tires, increasing safety and mission tempo.

The aircraft is equipped with an APU (Auxiliary Power Unit), fundamental for autonomous operations in improvised airfields and to restart the engines in flight. Aircraft loading aids can be stowed on board to allow autonomous operations in remote locations.









## UNRIVALLED ABILITIES

The glass cockpit includes 5 Color Multipurpose Display Units, a dual redundant Flight Management System, two Digital Autopilot-Flight Director Systems with Auto-throttle capabilities, radar for tactical transport missions and a comprehensive communications suite. These features, coupled with many large cockpit windows, full NVIS/NVG compatibility and optional Head-Up Displays availability, minimize pilot workload while increasing situational awareness in day, night and adverse weather conditions.

The Spartan has an unrivalled ability, and it is qualified, to perform short take-offs and landings (STOL) on snowy, sandy and unprepared airfields.

Compared with other military transport aircraft in its class, the C-27J has the best descent and climb rate (4,000 and 2,500 ft/min) and can also perform 3 g tactical maneuvers, minimizing its approach phase and reaching a safe altitude more quickly in high threat scenarios.

The Spartan is qualified for extreme temperature conditions and it is capable to carry its load in very hot and high conditions as already demonstrated in the Andes.





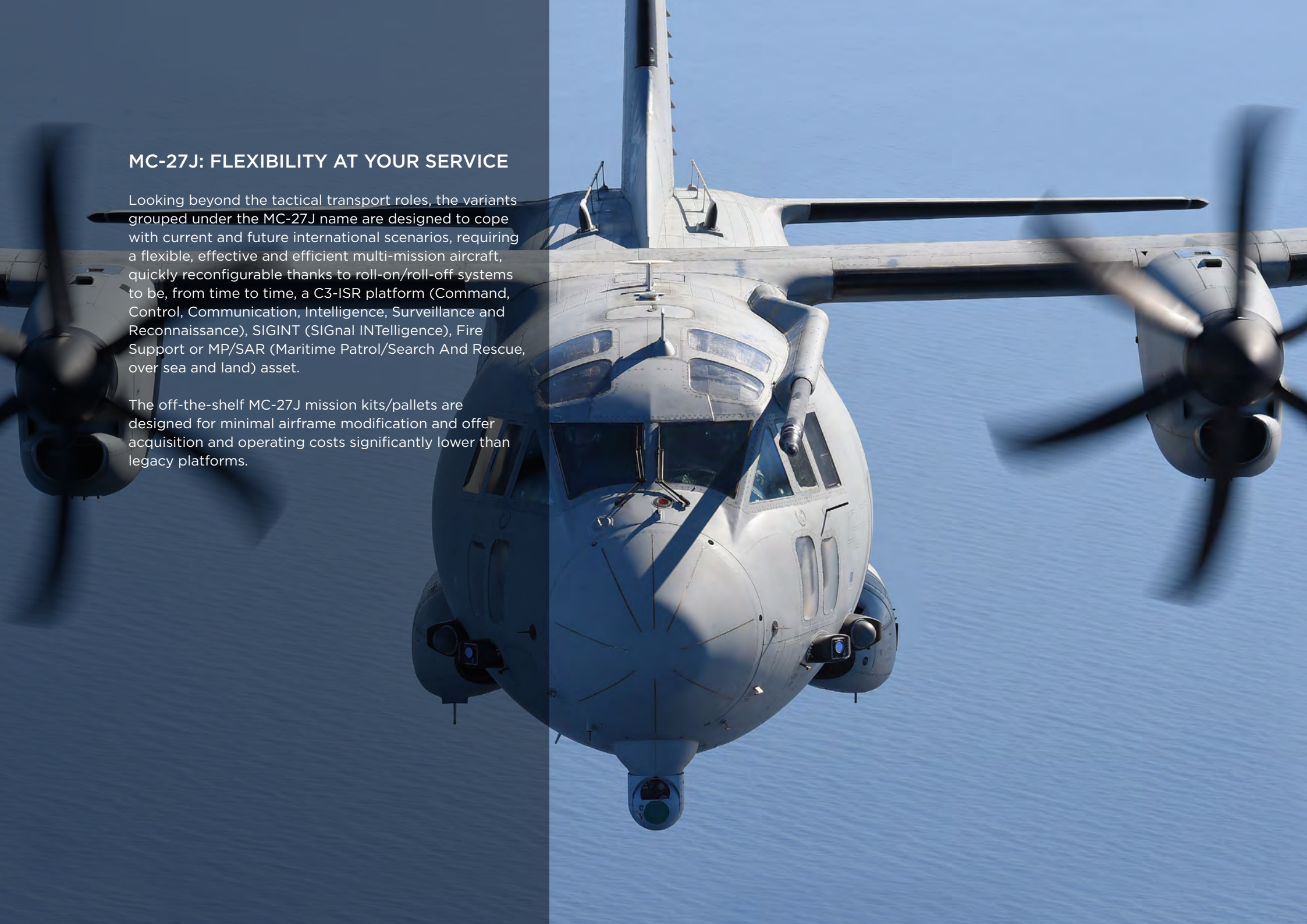




## MC-27J: FLEXIBILITY AT YOUR SERVICE

Looking beyond the tactical transport roles, the variants grouped under the MC-27J name are designed to cope with current and future international scenarios, requiring a flexible, effective and efficient multi-mission aircraft, quickly reconfigurable thanks to roll-on/roll-off systems to be, from time to time, a C3-ISR platform (Command, Control, Communication, Intelligence, Surveillance and Reconnaissance), SIGINT (SIGnal INTelligence), Fire Support or MP/SAR (Maritime Patrol/Search And Rescue, over sea and land) asset.

The off-the-shelf MC-27J mission kits/pallets are designed for minimal airframe modification and offer acquisition and operating costs significantly lower than legacy platforms.









**USCG:** *"This aircraft meets our mission needs for endurance, speed and efficiency. Coast Guard pilots were easily able to shift from flying the C-130Js the service also flies thanks to the commonalities between the two aircraft".*

Lt. Cmdr. Ryan Allen, U.S. Coast Guard's C4ISR platform manager, July 14, 2016 – Defense News website







**Australia:** *"The relatively small Spartan is capable of accessing 1,900 airfields in Australia, and 400 in the region - more than double the amount now accessible by the larger Hercules. The C-27J will strengthen the Australia Defence Force's airlift capability by increasing our ability to move troops, equipment and supplies. The aircraft will complement the capabilities of the C-130J Hercules and C-17A Globemaster and will be able to carry medium-sized loads and access smaller runways that are not suited to other aircraft. This will allow Air Force to support humanitarian missions as well as battlefield airlift in remote locations and unprepared airstrips common in Australia's region. The government's decision to acquire the Spartan will give the Royal Australian Air Force the best tactical air mobility capability that we could acquire"*

Air Marshal Geoff Brown, Chief of Royal Australian Air Force, June 30, 2015 - RAAF website



**Italy:** *"In theatre we need to minimize exposure to a possible threat during the take-off. To do this we exploit the extreme maneuverability of the airplane: a pilot of C-27J sees the aircraft as a 30-tons fighter! This allows us to enter and exit the drop zone in a very short time."*  
*"On semi-prepared runways we exploit the characteristics of the landing gear, the engines, brakes and avionics, this enables us to plan approaches from any directions for maximum surprise and land in very limited space. The excellent positioning of the engine nacelles makes the airplane very resistant to damage from external objects, allowing us to operate on very dirty runways."*

A pilot of 98° Gruppo, 46a Brigata Aerea, Aeronautica Militare Italiana  
November 2010, AIR International Magazine







*Peru: "It's a powerful and robust plane. It can take off from a short runway and can climb rapidly to the maximum cruise ceiling of 30,000 ft and while carrying heavy payload. C-27J is perfect for operation in mountainous regions of Peru" .*

Col. Alejandro Caceda, Peruvian Air Force  
December 2015 - Vanguard Canada website



*The robust airframe and upgradable avionics are complemented by a tailored and effective Integrated Logistic Support (ILS), through the 24H Leonardo Aircraft AOG (Aircraft On the Ground) center and optional logistic support package.*





## C-27J SPARTAN CHARACTERISTICS

### WEIGHTS

MTOW (logistic - 2.25 g)	71,650 lb (32,500 kg)
MTOW (normal - 2.5 g)	71,650 lb (32,500 kg)
Maximum Landing Weight (6 ft/s)	71,650 lb (32,500 kg)
Normal Landing Weight (10 ft/s)	66,139 lb (30,000 kg)
Max Payload (logistic - 2.25 g)	25,574 lb (11,600 kg)
Fuel Capacity	3,255 US Gal (12,320 l)

### CONFIGURATIONS AND LOADS

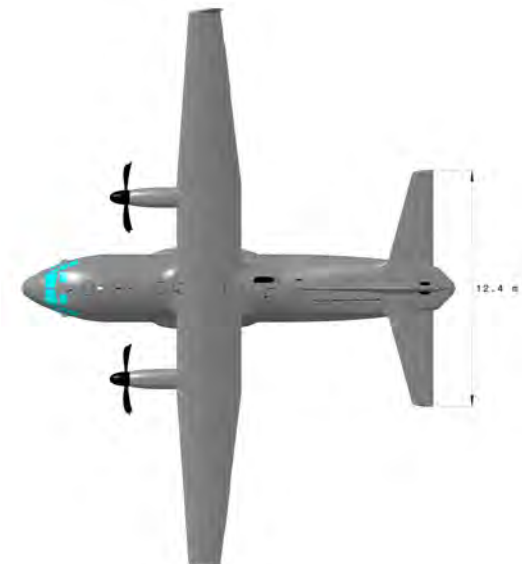
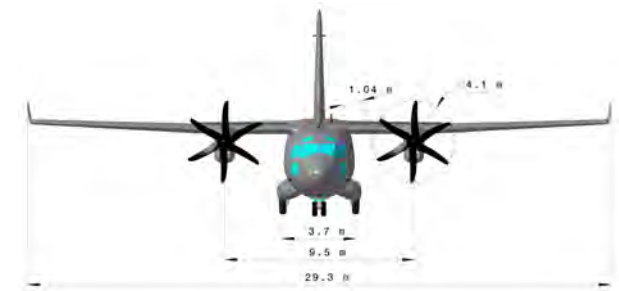
Troops Transport	46 troops, up to 60 troops in high density configuration
Paratroops Transport	34 fully equipped paratroopers, up to 46 if lightly equipped
Cargo Transport	bulk loads, wheeled and tracked vehicles, aircraft engines, light helicopters, etc...
	3 HCU-6E (5,000 kg max single load) 463L pallets + 1 HCU-12E on the ramp
	6 HCU-12E (2,500 kg max single load) 463L pallets (1 on the ramp)
	up to 9,000 kg with 2 platforms (6,000 kg max single load)
	up to 6 A22 CDS Bundles (908 kg each)
	up to 5,000 kg with 1 or 2 platforms (5,000 kg max single load) by LAPES
	up to 6,000 kg by combat off-load with 3 HCU-6E 463L pallets
	up to 36 standard stretchers + 6 medical attendants
	6 VIP plus 18 escort passengers plus a service module
	up to 6 "Guardian" System containers
	(6,000 l of water/fire retardant)

### POWERPLANT

Engines	2 Rolls-Royce AE 2100-D2A
	3,458 kW / 4,637 shp each
Propellers	2 Dowty R-391 six-blade

### PERFORMANCE

Take-Off Ground Run (MTOW normal, ISA, S.L.)	2,230 ft (680 m)
Landing Ground Roll (NLW, ISA, S.L.)	1,246 ft (380 m)
Top Cruising Speed	325 KTAS (602 km/h)
Max Service Ceiling	30,000 ft (9,144 m)
Cruise Altitude (95% MTOW)	27,000 ft (8,229 m)
Range with 10,000 lb (4,536 kg) of Payload @ MTOW normal, ISA	2,760 nm (5,112 km)
Ferry Range	3,160 nm (5,852 km)







Leonardo - Società per azioni  
Registered Head Office:  
Piazza Monte Grappa, 4 - 00195 Rome - Italy  
Tel. +39 06 324731 - Fax +39 06 3208621  
Leonardo Aircraft  
Head Office:  
Strada del Malanghero - 10072 Caselle Torinese (TO) - Italy  
Tel. +39 011 9960080

© Leonardo - Società per azioni

This document contains information that is proprietary to Leonardo - Società per azioni and is supplied on the express condition that it may not be reproduced in whole or in part, or used for manufacture, or used for any purpose other than for which it is supplied.

[leonardocompany.com](http://leonardocompany.com)

O. Stefanov