



C-27J SPARTAN



 **Alenia**

AERONAUTICA

A FINMECCANICA COMPANY



The True Military Airlifter



C-27J: the best answer to current and future

Ordered by the Italian Air Force

- > *New Military Transport aircraft with State-of-the-art Technology*
- > *Extreme Operating Flexibility*
- > *High Cost Effectiveness*
- > *Interoperable & Interchangeable with Heavier Airlifters*
- > *Designed for Mission Success*





future military operators' requirements

Selected by the Hellenic Air Force

C-27J is the world's newest tactical airlifter offered by LMATTS, which combines the experience of Alenia Aeronautica and Lockheed Martin to meet current and future military transport requirements in ever-changing operational scenarios.





Extreme Operating Flexibility.....

For tactical, peace keeping
and humanitarian missions



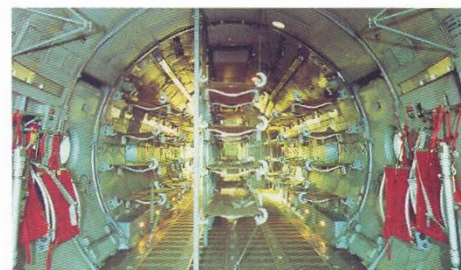
> Cargo transport

Palletised Loads, Vehicles, wheeled
equipment, up to 11.5 tonnes



> Material Airdropping

12 CDS Bundles and up to 5,000 kg
"certified" for a single shoot



> Medevac

36 casualties + 6 attendants



> Troop transport

Up to 62 troop



> Paratroop Airdropping

Up to 46 paratroop
(seats at 20", MIL-S-27174 B)

> Special Missions

Maritime and Electronic Surveillance,
Search and Rescue, Fire Fighting,
VIP Transport



High Cost Effectiveness

Easy Maintainability

- > High reliable and flexible systems
- > Maintenance through the Logistic Support Analysis (LSA) process
- > Reduced aircraft downtime
- > On-condition maintenance
- > Periodic maintenance requirements
- > Contract logistics support
- > 24-hour AOG support centre
- > Total Logistic Support

Low Operating Cost

- > Low Operating & Support Costs
- > Platform Interoperable and interchangeable with Heavier Airlifters

C-130J commonality

- > Engine & propeller
- > Avionics suite



Worldwide Support

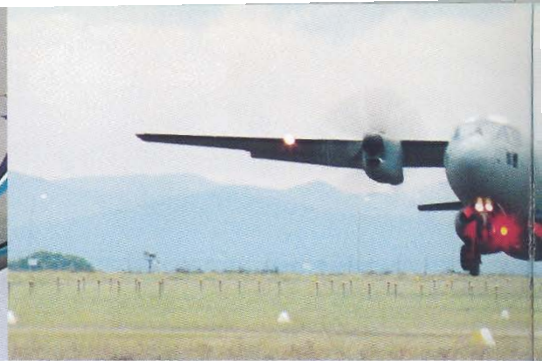
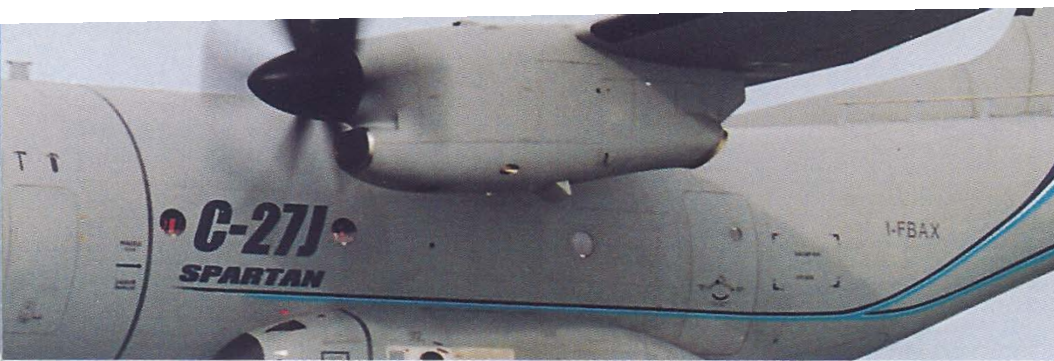
Integrated Logistic Support

International support team

- > Lockheed Martin & Alenia Aeronautica

Global network

- > Overhaul shops
- > Regional service centres
- > Affiliated service centres
- > Distributors
- > Field service representative



State of the art Technology

Advanced Cockpit and Avionics

Avionics

- > Designed to provide situation awareness and safe, efficient mission performance
- > MIL-STD-1553B digital bus architecture
- > Compatible with emerging Future Air Navigation Systems (FANS)
- > Digital Mapping Radar Northrop Grumman AN/APN-241
- > Accurate airdrop capability
- > High reliability
- > Minimum workload thanks to Flight Management System, Flight Director System, IFF Transponder, TCAS-II, GCAS
- > All weather, day and night operations
- > Growth potential
- > **C-130J commonality**

Cockpit

- > Controls and displays installed on consoles and panels within easy reach and view
- > Five colour multipurpose display units
- > All light sources NVIS and NVIG compatible
- > 16 cockpit windows provide excellent visibility
- > Ergonomic cockpit system compliant with JAR 25 requirements
- > Head Up Display (HUD)

Two men Cockpit Crew
with Minimum Workload





Powerful Engines

Excellent Hot & High Performance High Reliability



Powerplant

- > Modern and reliable Rolls Royce/Allison AE2100-D2 turboprop engines:
high power up to 4,640 SHP and low fuel consumption
- > Dowty R-391 all composite six-blade propellers
- > Full Authority Digital Electronic Control (FADEC)
- > Low noise, emissions and IR signature
- > **C-130J commonality**

APU

- > Makes the aircraft completely independent from external support
- > Mechanical power up to 150 SHP
- > Fully operable in the entire flight envelope
- > Engine starting capability up to 25,000 ft altitude

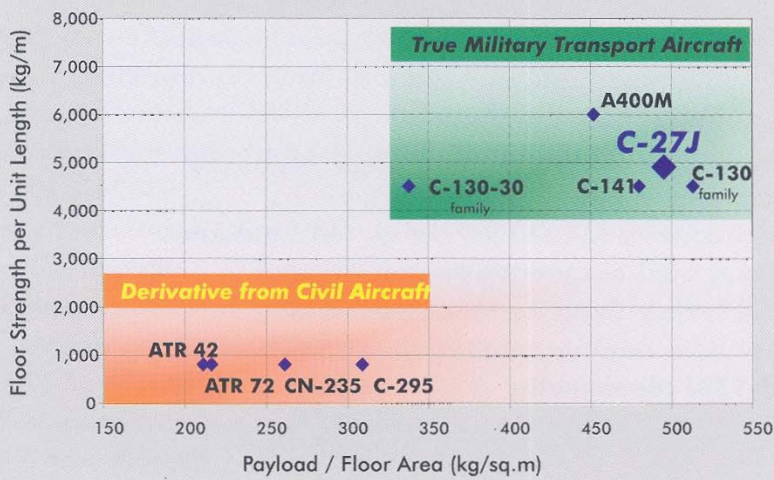




True Military Platform

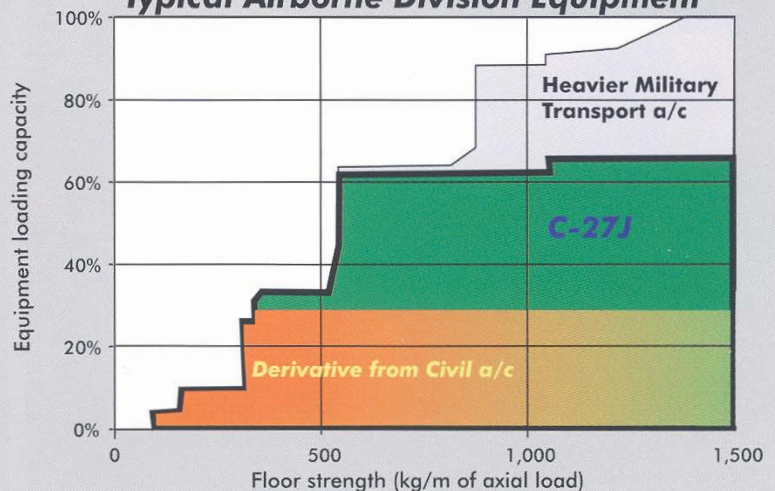
Interoperable & Interchangeable

The C-27J is a True Military Airlifter



> Any type of large and dense military loads can be transferred from heavier airlifter and transported or airdropped in remote areas under hostile conditions

The C-27J deploys up to 70% of the Typical Airborne Division Equipment

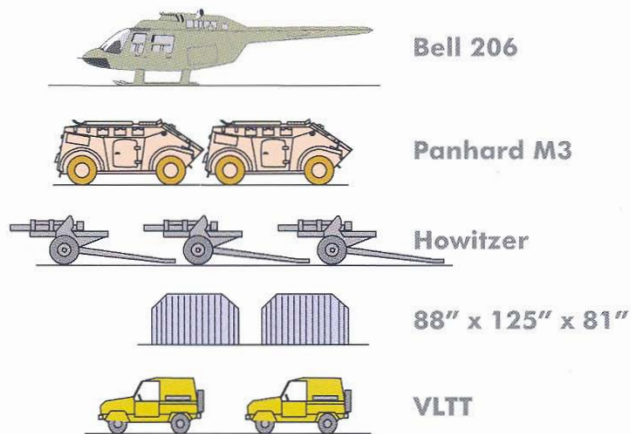
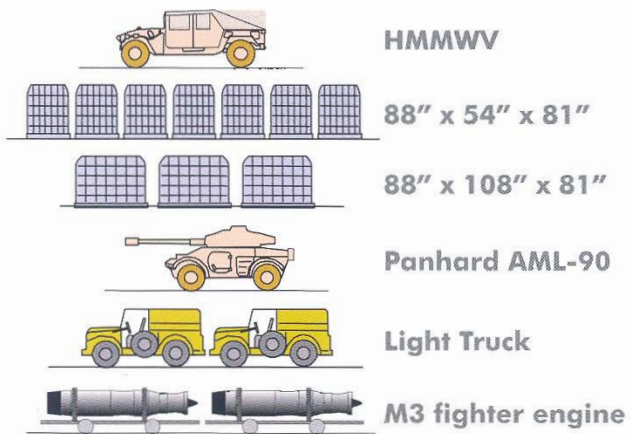


> The C-27J is the ideal complement of the most popular larger military transport aircraft: C-130, C-160, I176, C-141, A400M, An70

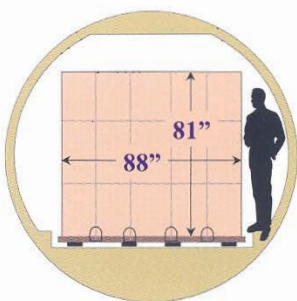


le with Heavier Military Airlifters

Directly from heavier airlifters to C-27J



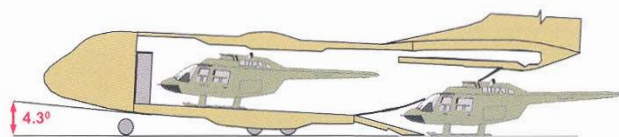
Easy Cargo Bay Access



Palletised Loads



Vehicles and wheeled artillery



Special Loads

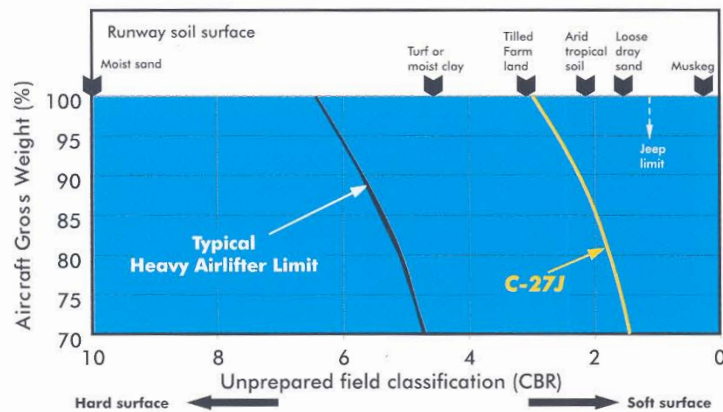
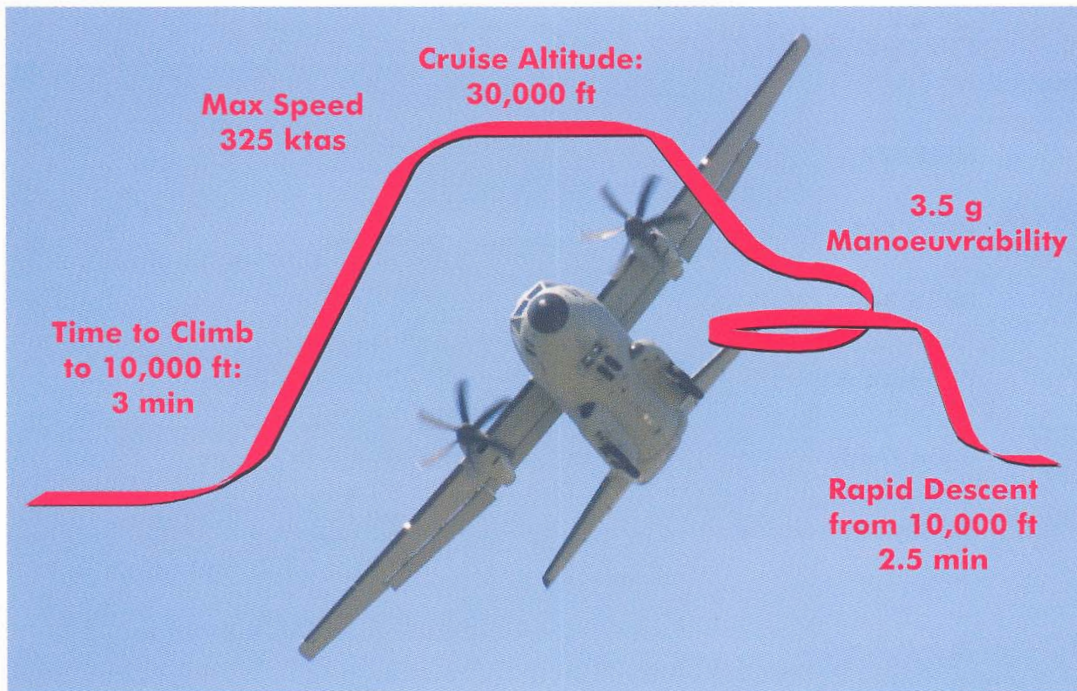
The wide cargo compartment provides:

- > easy walk around access to the cargo by the loadmaster to enhance safety in all missions
- > easy drive-in/drive-out of a large variety of military vehicles without modifications



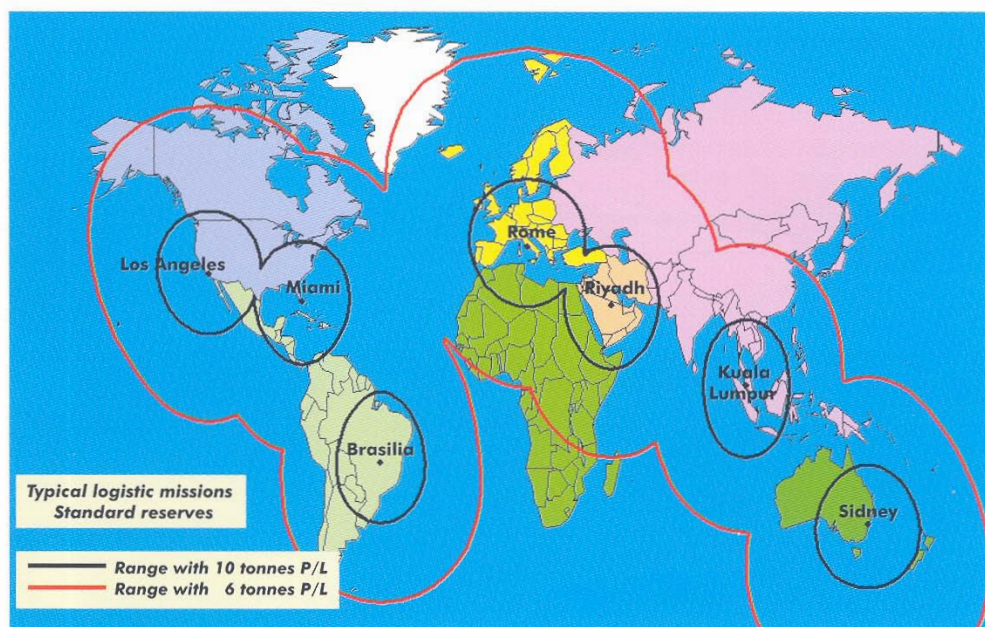
Designed for Mission Success

Outstanding threat avoidance capabilities

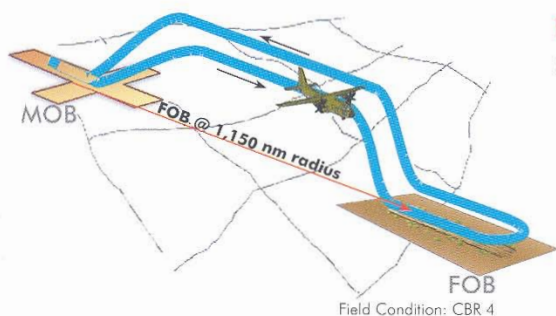




Perfect for logistic operations

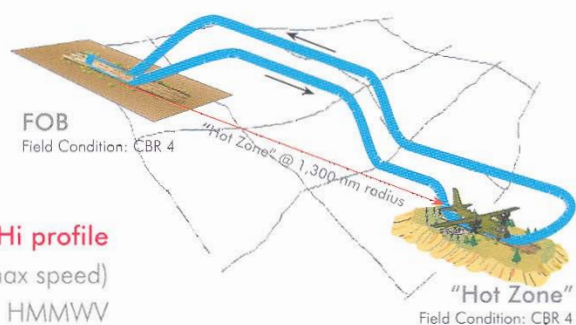


Unbeatable for tactical operations



Force sustainment

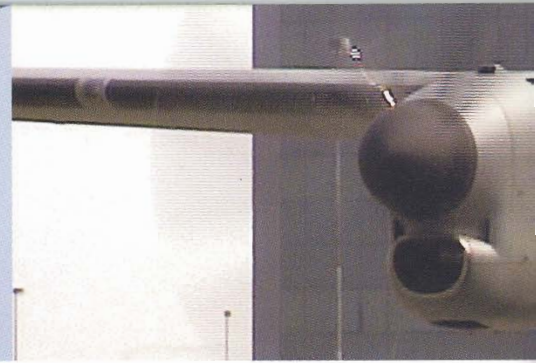
Payload: 6,000 kg (material, personnel)



"Hot zone" Commando insertion - Hi/Lo/Lo/Hi profile

(100 nm penetration @ max speed)

Commando: 6+1 full equipped soldiers + 1 HMMWV



Designed for Mission Success

Autonomous Ground Operation Capability

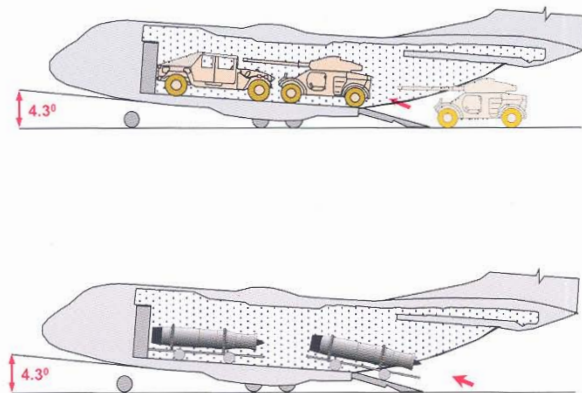
Variable height

Straight - in/out (M-101; 105 mm Howitzer)



Variable attitude

Drive in/out - Vehicle no dismantled - Engine with standard trolley



C-27J features the unique capability to continuously adjust cargo floor height and attitude ensuring easy loading and unloading of **Large Volume High Density Payloads** without ground support equipment and easy drive in/out of **Vehicles** allowing their immediate operability



High Mission Accomplishment Rate

Systems Redundancy and Structural Strength

- > Double hydraulic circuit
- > Electrical redundant power (3 generators, 3 alternators, 3 TRU)
- > Oxygen available for crew and passengers
- > APU operable on ground and in-flight
- > Three engine restart possibility
- > 3-spar wing

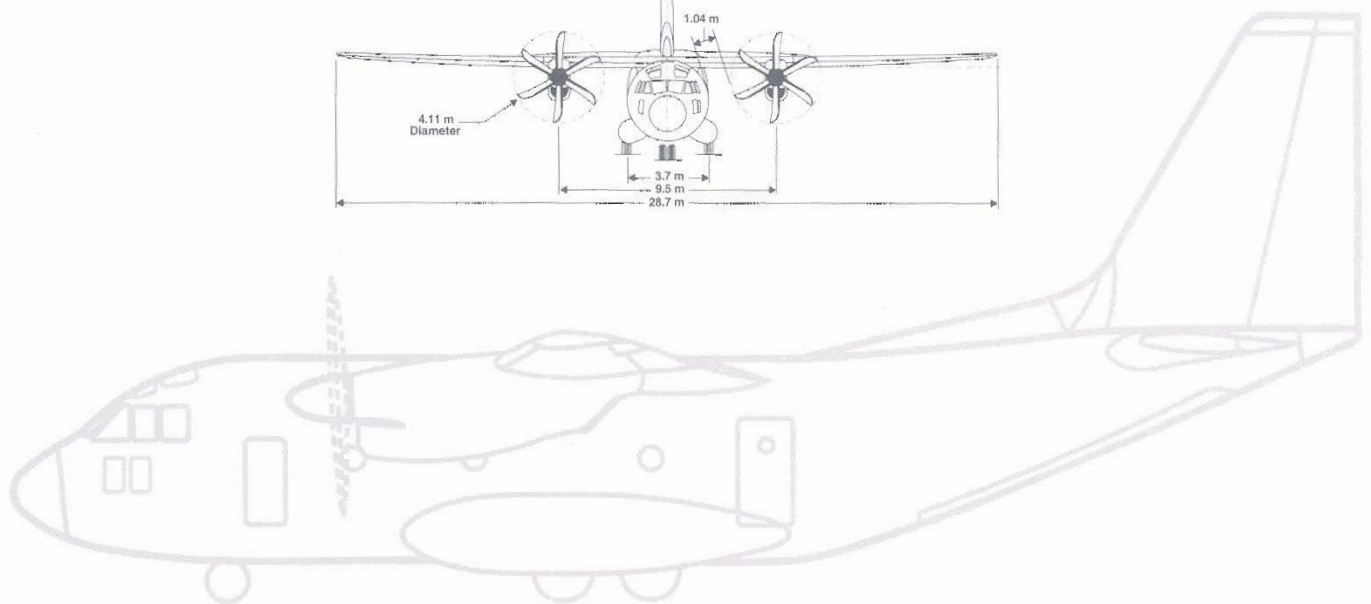
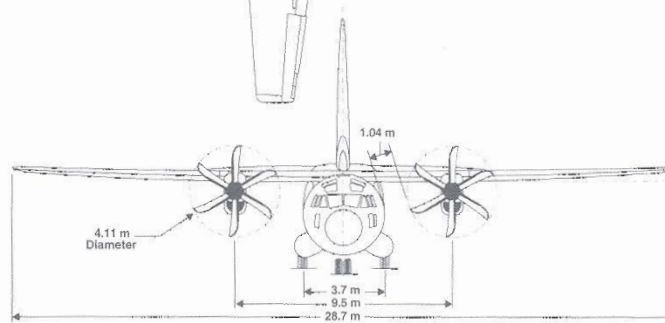
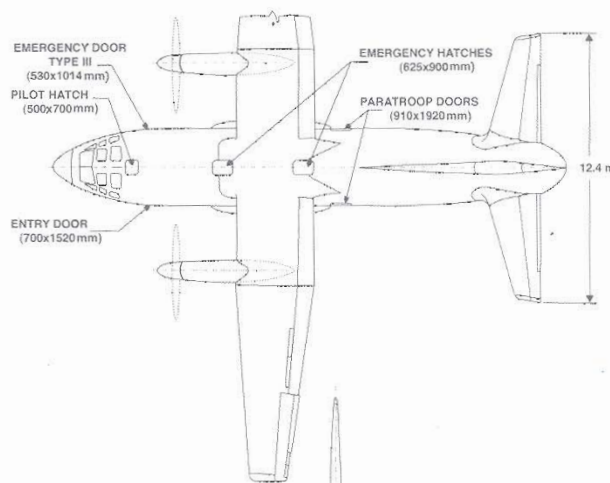
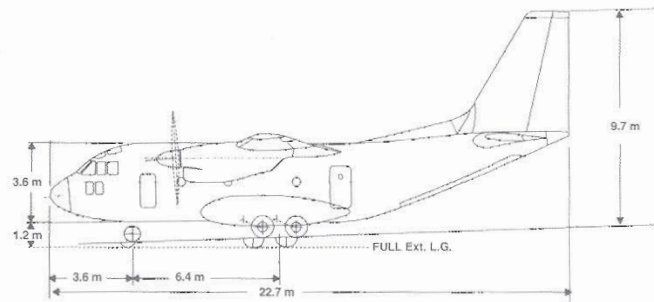


Self Protection

- > Radar warning receiver
- > Missile approach warning system
- > Laser warning receiver
- > Countermeasures dispensing system (chaff & flare)
- > Directed infrared countermeasures
- > Electronic countermeasures stowed decoy



Main characteristics





Weights

Max Take Off Weight	(kg)	31,800	(lb)	70,105
Max Landing Weight	(kg)	30,000	(lb)	66,140
Max Payload	(kg)	11,500	(lb)	25,355
Fuel Capacity	(l)	12,300	(US Gal)	3,250
Optional Fuel Tank	(l)	1,550	(US Gal)	410

Configurations and Loads

Troops Transport	up to 62
Paratroops Transport	up to 46
Cargo Transport/Material Air-Dropping	up to 11,5 tonnes 3 HCU-6E (108"x88") + 1 HCU-12E (54"x88") 7 HCU-12E (54"x88") 12 A22 CDS Bundles Wheeled and tracked vehicles, spare engines, etc.
Medevac	36 Stretchers + 6 Medical Attendants

Powerplant

Engine	Rolls Royce/Allison AE2100-D2 Power 4640 SHP
Propeller	Dowty R-391 six-blade Diameter 4.11 m

Performance

Take Off Ground Run (MTOW, ISA, S.L.)	(m)	550
One Engine Ceiling @ ISA, 95% MTOW	(ft)	14,500
Max Service Ceiling	(ft)	30,000
Max Cruise Speed	(KTAS)	325
Landing Ground Roll (MLW, ISA, S.L.)	(m)	350
Range:		
> with 10,000 kg of payload	(nm)	1,100
> with 6,000 kg of payload	(nm)	2,400
> Ferry	(nm)	3,200



Alenia Aeronautica S.p.A.
Via Giulio V. Bona, 85
00156 Roma
Phone + 39 06 417231
Fax + 39 06 4114439
www.aleniaerospazio.com

A FINMECCANICA COMPANY