

FINCANTIERI
The sea ahead



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Aircraft Carrier
Cavour Class

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Aircraft Carrier

Cavour Class



_ overview

_ main characteristics



— The ship has highly flexible operational capabilities, which enable her to carry out the functions of an aircraft carrier, as well as transport wheeled and tracked vehicles. The vessel is equipped with a flight deck designed for operating with helicopters and V/STOL aircraft. There is also a hangar/garage of 2,500m². The ship's conventional non-nuclear plant propulsion system is the most powerful (88 MW) built to date, and her controllable pitch propellers are at the cutting edge of naval technology.

— La nave ha delle capacità operative molto flessibili che consentono le operazioni tipiche di una portaerei nonché del trasporto di autoveicoli e cingolati. È dotata di un ponte di volo per operazioni con elicotteri ed aerei V/STOL e un hangar/garage di 2.500 mq. Il sistema propulsivo è il più potente impianto non nucleare finora costruito (88 MW) ed è dotato di eliche a passo variabile progettate e costruite da Fincantieri.

Length overall.....	244.00 m
Length between perpendiculars.....	215.60 m
Moulded breadth.....	39.00 m
Full load displacement.....	28 100 t
Flight deck.....	232.60 x 34.50 m
Hangar.....	134.20 x 21 m
H.T. Steel hull and Superstructures	
Stability and buoyancy according to Italian Navy std.	
NBC Protection	
Shock Protection of vital equipment	
Low Underwater Radiated Noise Signature Control	
Aviation facilities for fixed-wing aircraft AV-8B Harrier and JSF and helicopters EH101, AB212, NH 90, SH3D	
AVIO/GE LM2500 Gas Turbines (COGAG)	
Max Continuous Power.....	4 x 22 MW
Fincantieri Feathering CP propellers.....	2
Max sustained speed (85 % MCR).....	> 29 kn
Range at 16 kn.....	7 000 nm

AUXILIARY SYSTEMS

6 Generating sets Wärtsilä CW 12V200	6 Reverse osmosis desalinators (70 t/day each)
2 200 kW each	2 Couples of active-fin stabilizers
2 Shaft generators 2200 kW each	Bow and stern thrusters
Primary power 660V - 50Hz through passive distribution ring	Stern and side ramps
2 Rudders	2 Aircraft lifts (forward and stb. aft)
HVAC in all living and operational spaces	4 Landing crafts (LCVP)

CREW

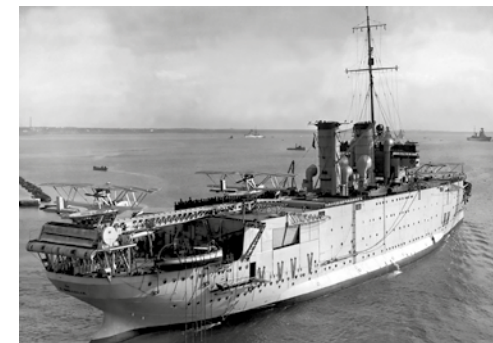
Flag Officers and VIP's.....	5	Aircrew.....	211
Ship's Complement.....	486	Troops.....	360 + 90
Amphibious Command Task Force.....	140	Total.....	1 202 + 90

_ combat system

1 2D Surveillance Radar	2 Radars for Aero Mobile Control
1 3D Multifunctional Radar	1 Command Management System including SATCOM and Tactical Data Links
1 3D Long Range Surveillance Radar	1 Integrated Int/Ext Communication System
2 Navigation Radars	2 Main Calibre Guns - 76 mm SR
1 Mine Avoidance Sonar	3 Secondary Calibre Guns - 25 mm
1 EW System (RESM/CESM, RECM)	1 Sylver SAM Vertical Launching System (2 x 2 x 8)
1 Anti Torpedo Defence System (SLAT)	1 Decoy Launching System (2 Launchers)
2 Radar/E0 Fire Control System	1 Tactical Air Navigation System (TACAN)
2 IFF Systems	
1 IR Surveillance System	
1 Underwater Telephone	

the past
il passato

Seaplane Carrier



— "Giuseppe Miraglia"



— "Aquila"



— "Garibaldi"

Before the 20th century only Leonardo da Vinci might have conceived an aircraft carrier, but he did not. The first Italian aircraft carrier was the "Giuseppe Miraglia": a seaplane carrier. She was laid as a merchant ship in 1921, converted during construction and completed in 1927. The "Miraglia" carried 20 seaplanes to be launched either via launching pad or from the sea surface. The first "real" aircraft carrier should have been the "Aquila", a conversion of the ocean liner "Roma". However, the conversion had still not been completed by the end of the Second World War. The "Aquila" was designed to carry 51 airplanes and was to be fitted with two elevators and two launching pads. In 1985, the aircraft carrier "Giuseppe Garibaldi" was commissioned by the Italian Navy. She can operate helicopters and V/STOL airplanes and is fitted with one elevator connecting the hangar to the flight deck. The "Cavour", delivered in 2008, is the flagship of the Italian Navy and was designed to operate helicopters, aircraft AV-8B Harrier and JSFs (Joint Strike Fighters).

Prima del 20° secolo solamente Leonardo da Vinci avrebbe potuto ideare una portaerei, ma non lo fece. La prima portaerei italiana fu la "Giuseppe Miraglia": impostata nel 1921 come nave mercantile e successivamente convertita e completata nel 1927. La "Miraglia" era in grado di trasportare 20 aeromobili, i quali potevano essere lanciati sia da una rampa di lancio sia dalla superficie marina. La prima vera portaerei avrebbe dovuto essere "L'Aquila", una trasformazione del transatlantico "Roma", ma il lavoro fu interrotto dalla seconda guerra mondiale. "L'Aquila" era stata progettata per trasportare 51 aeromobili e dotata di 2 ascensori e altrettante rampe di lancio. Nel 1985 la Marina Italiana ha commissionato la portaerei "Giuseppe Garibaldi", unità in grado di operare con elicotteri ed aerei V/STOL e dotata di un'ascensore che collega l'hangar al ponte di volo. La portaerei "Cavour", consegnata nel 2008, è la ammiraglia della Marina Militare italiana, in grado di operare con elicotteri, aerei AV-8B Harrier e i JSF (Joint Strike Fighters).