

PROJECT BRIEF:

TEAM 1: PATROL BOAT PROJECT BRIEF:

25 metre Coastal Patrol Craft

The team is to develop a preliminary design for a 25 metre coastal patrol craft with a maximum speed capability of 30 knots suitable for deployment within inshore and coastal waters anywhere on the Australian coastline.

Specific Requirements & Constraints

Preferred max. L_{OA} 25.00 m
Preferred max. draft 1.500 m
Service speed 25.00 knots
Maximum speed 30.00 knots
Fuel capacity 16.00 m³ (minimum)
Fresh water tank capacity 2.60 m³
Range 1200 naut. miles
Dry provision requirement 10 x 14 days
Manning Master + 8 crew
Flag of Registry Australia
Classification/Survey DNV HIGH SPEED, LIGHT CRAFT AND NAVAL SURFACE CRAFT
Construction Material Aluminium Grades 5083, 5086, (6061 extrusions)

Design Guidance

Probable power requirement 2 × 1100 kW diesel
Probable propeller diameter 850 mm

The craft is to be readily adaptable to serve any of the following roles:
Australian Customs Service coastal surveillance and interception,
Australian Immigration Services coastal surveillance and interception,
Australian (State or Federal) Police surveillance and interception.

TEAM 2: PASSENGER FERRY PROJECT BRIEF:

30M High Speed Passenger Ferry

The team is to develop a preliminary design for a 30m passenger ferry with a maximum speed capability of 35 knots and suitable of carrying 120 passengers.

Specific Requirements & Constraints

Preferred max. L_{OA} 30.00 m
Preferred max. draft 1.500 m
Service speed 32.00 knots
Maximum speed 35.00 knots
Fuel capacity based on 4 return trips
Crossing distance 30NM
Fresh water tank capacity 5 t
Passengers 120
Luggage provision 5kg
Crew 6
Flag of Registry Australia
Classification/Survey DNV and HSC Code 2000
Construction Material Aluminium Grades 5083, 5086, (6061 extrusions)

Design Guidance

Probable power requirement 2 × 1600 kW diesel
Probable propulsion - water jets

The craft is a commuter commuting between the coast and an island 4 times a day. Refuelling is daily to minimise diesel storage.