

Hamilton Jet Model HJ391
Application Review

Portuguese Customs Fleet Powered by Hamilton HJ391 Jets



When the marine branch of the Portuguese Customs Service up-graded its patrol fleet with a 12 new 16-metre vessels, twin Hamilton Model HJ391 Waterjets were chosen as the best propulsion option. Designed to combat the increase in smuggling from North Africa, the new boats have been designed with many sea-keeping and safety features.

The vessels' deep-V hull design with low chine was the work of Tony Castro Designs of Southampton, England, and was tested at the UK's Defence Equipment & Research Agency. This hull form works well with waterjet propulsion, providing a cushioned ride in waves and positive steering response. The low chine adds buoyancy at the bow and increases the internal volume of the hull for crew accommodation.

The composite structure of

the hull and superstructure provides a low radar signature, as well as being bulletproof. Heavy-duty fendering protects the hull during boarding operations, while a ramp-launched rigid inflatable tender is stored on the aft deck. The vessels' outside steering position, above and behind the wheelhouse, gives an excellent view during all phases of tender launch and recovery, and during close-quarters manoeuvring.

The waterjets provide outstanding control and

▶ Brief Specifications

SERVICE:
Customs Patrol Craft

LENGTH:
16.40 metres [LOA]

BEAM:
4.10 metres

DRAUGHT:
0.85 metres

CONSTRUCTION:
GRP-Kevlar/PVC sandwich

FUEL/RANGE:
3,750 litres,
400 nautical miles

SPEED:
45 knots [max]
40 knots [operational]

WATERJETS:
Twin Hamilton Model HJ391 Jets

ENGINES:
Twin MTU diesel
Model 12V 183 TE93, each
885kW (1150hp) @ 2400rpm

DESIGNER:
Tony Castro Design,
Southampton, UK

BUILDER:
Conafi SA, Villa Real de San
Antonio, Portugal

OWNER/OPERATOR:
Lanchas Brigad Fiscal
(Portuguese Customs)

Hamilton Jet DISTRIBUTOR:
Electro Central Vulcanizadora,
Lisbon, Portugal

manoeuvrability at all boat speeds, along with shallow draft capability – all crucial features for successful patrol and intercept operations.

Conafi SA is building the vessels, with all 12 expected to be in operation early in 2002. Portugal has now joined many European countries, including Spain, France, Italy, Greece and Egypt, in choosing Hamilton Waterjet propulsion for its new Customs and Coast Guard vessels.

