

Hamilton Jet Model HJ391
Application Review

Twin 391 Jets Power PCC-HSV Patrol Craft for NAVSEA



▶ Brief Specifications

CLASSIFICATION:
PCC-HSV (Patrol Craft
Coastal-High Speed Variant)

SERVICE:
Patrol Craft

LENGTH:
15.70 metres [51' 5" LOA]

BEAM:
3.80 metres [12' 6"]

CONSTRUCTION:
Aluminium

SPEED:
48.6 knots

WATERJETS:
Twin Hamilton Model HJ391

ENGINES:
Twin MTU diesels,
Model 12V 183 TE92, each
845kW (1150hp) @ 2400rpm

DESIGNER/BUILDER:
Peterson Builders Inc,
Sturgeon Bay, WI, USA

Hamilton Jet DISTRIBUTOR:
Palmer Johnson Marine,
Windsor, WI, USA

Key Hamilton Jet Features for Military & Patrol Applications

Inboard Hydraulics

Ahead/astern and steering hydraulic are located inboard, with no lines vulnerable to outside damage.

Maintenance

Design enables most routine maintenance procedures to be undertaken without the need to slip the vessel.

Maximum Acceleration

The jet design, with mixed flow style pump and integral intake/transition duct, provides high cavitation resistance, allowing full power input at low boat speeds to ensure maximum acceleration performance.

Manoeuvrability

As the ahead/astern and steering functions are independent, thrust vectoring alone will provide precise control, regardless of boat speed or direction. This allows 360° thrusting for rotating "on-the-spot", moving sideways or holding station.

Reverse Thrust

The split duct astern deflector directs the reverse jetstream away from the intake to avoid recycling, providing up to 55% of ahead thrust in reverse. This provides a powerful reversing capability for backing off beaches or emergency "braking".