

Location: Canada/USA

Service: Lobster Fishing

Waterjet Model: HJ292



NAME:

Bella-V

SERVICE:

Lobster Fishing Boat

LENGTH:

11.00 metres (36.1 ft)

BEAM:

3.65 metres (12 ft)

DRAUGHT:

0.46 metres (1.51 ft)

CONSTRUCTION:

GRP

SPEED:

29 knots

WATERJETS:

Single HamiltonJet Model HJ292

ENGINES:

Single Cummins diesel engine

Model QSC8.3

360kW (490hp) @ 2600rpm

GEARBOX:

Twin Disc – 1:1 ratio

DESIGNER:

McGowan Marine Design Inc,

Annapolis Royal, NS, Canada

BUILDER:

LeBlanc Brothers Boatbuilders

Wedgeport, NS, Canada

HamiltonJet DISTRIBUTOR:

Jastram Technologies,

Dartmouth, NS, Canada

Jet-Powered Lobster Boat Meets Its Targets Second Time Around

Different propulsion systems require different hull characteristics - as Nova Scotia boat builder LeBlanc Brothers found out when building its first waterjet powered lobster fishing boat, "Bella-V." After learning from its mistakes on the first hull, LeBlanc produced a new hull which meets all requirements of its Massachusetts-based owner.

Correct waterjet selection is based largely on vessel weight, in conjunction with the main hull shape parameters. Any good recommendation of waterjet size also takes into account the likelihood of operating in slightly overweight conditions. But when an 11m boat is built almost 3 tonnes heavier than predicted it is never going to perform as planned.

That was the story of the first Bella-V, which was built like a displacement-speed prop boat with a stepped chine, excessive underwater appendages and extra strong, extra heavy, GRP construction. The result was a meagre 17 knots.

The owner had specified waterjet propulsion, as he wanted a boat with high speed and minimal draught for fishing lobsters out of the tidal Nauset Inlet. A single Hamilton HJ292 waterjet and 360kW Cummins engine were specified

to achieve 30 knots lightship and give a static draught of 46cm. However, this setup was unsuitable for the significant weight gained during construction and less than ideal hull design of the boat.

The only feasible solution was to build a whole new boat, with greater attention given to light weight construction and a modified design to give a hard chine and reduced appendage drag. The result is a boat that performs exactly as desired – reaching 29.5 knots on trials and crossing the Nauset Inlet in about 30cm of water.



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