

# HUMPHREE

Trim and stabilisation systems

REFERENCE DOCUMENT



## V2V Empress – High Speed Ferry

**Humphree Interceptors:** 4x HAE1000, 75mm blade deployment

**Humphree Fins:** 2x SU552-0.5m<sup>2</sup> Pitch Fins

**Humphree Control systems:** Active Ride Control (HSC5)

**Propulsion:** 2x Caterpillar 3516B @2800hp & 2x Hamilton Jet HM811

### Data:

- Top speed: 31 knots
- LOA: 38.5 m
- Displacement: 201,000 kg

### Results:

- At hump speed the vessel saved 5.0% fuel and gained 0.7 knots
- At cruising speed the vessel saved around 2.1% fuel with a speed increase of around 0.5 knots
- For the vessels intended operation this will save the operator over 39,100L per year (based on 300 operation days per year)
- Predicted motion dampening of up to 39% roll and 33% pitch