BONANZA EXPRESS 96 metre Incat Wave Piercing Catamaran



www.BonanzaExpressFerry.com

Bichard Benne

Bonanza Express, a 96 metre wave piercing catamaran, was delivered in 1999 under a bareboat charter contract to Fred Olsen S.A. and it has remained on charter and in continuous ferry service ever since.

Bonanza Express was the 25th wave piercing catamaran car ferry and the 27th high speed vehicle ferry to be constructed by the renowned Incat Australia shipyard. This long and unparalleled lineage of vessels in service around the world provided unprecedented insights into the rigours of all weather, year round, intensive ferry operations. In addition to this, with the design and operation of **Bonanza Express** the Fred Olsen group added three very important industry benchmark dimensions that remain relevant to this day, namely:

- A clear focus on optimizing the on board passenger experience;
- · Replacing older slow conventional ferries with efficient, high speed, freight capable ferries (Bonanza Express was the first high speed vehicle ferry to operate in the Canary Islands archipelago); and
- Maximizing and diversifying the revenue base including on-board spend (bars, cafes, duty free shop etc), passenger tickets, motorbikes, cars, coaches and heavy trucks.

Bonanza Express is therefore a highly evolved and well designed ferry that can earn income from a diversified revenue base including on-board spend (bars, cafes, shops etc), passenger tickets, motorbikes, cars, coaches and trucks.

Bonanza Express is currently configured to carry 750 persons and 230 cars (or a combination of up to 330 truck lane metres and 80 cars).

Bonanza Express is one of the very few vessels in the world to be built and certified to



operate in up to 5 metres significant wave height. With its excellent manoeuvrability, station keeping and seakeeping, the latter afforded by fixed t-foils and aft trim tabs, Bonanza Express can sail when many other high speed ferries are confined to port. In operational service Bonanza Express has proven to offer very fast turnaround times (20 minutes) and extremely high levels of technical and weather reliability.

Bonanza Express minimises operating costs through a combination of low safe manning requirements, efficient medium speed diesel engines and a highly efficient hull form with minimal underwater appendages.

With historically low fuel prices during the 1990's, many designers and shipyards simply installed more power to achieve faster operating speeds, however, in contrast, the highly experienced Incat design and engineering team focused on maximizing Transport Efficiency defined as:

Transport Efficiency = (100 * deadweight * speed) / total kW (whereby speed is expressed in metres per second)

What is remarkable about Bonanza Express is that even today, some 15 years after delivery, it:

- Maintains one of the highest Transport Efficiencies of any high speed craft capable of operating in open water (implying lower annual fuel consumption); and,
- It is the 12th largest high speed vessel in the world in terms of deadweight capacity (implying it can carry large loads including many heavy trucks).





BONANZA EXPRESS

PRINCIPAL PARTICULARS

IMO Numbe	r9200225
Vessel Type	Wave Piercing Catamaran
Designation	Incat 96m
Builder	Incat
	uildAustralia
Designer	Incat
	In Service
Class	DNV +1A1 HSLC R1 Car Ferry B EO
Flag	Spain
Build Year	Feb-1999
Hull Materia	Aluminium

DIMENSIONS

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Length (m)	95.47
Beam (m)	26.60
Draught (m)	4.03
Length Waterline (m)	86.00





CAPACITIES

_	477 tonnes (330 long range + 147 operating)
Passengers	750
Crew	16
Cars	230
	330 TLM + 80 Cars

PERFORMANCE

Service Speed (kts)	38
Maximum Speed (kts)	47
Significant Wave Height (m)	5.0

PROPULSION

Engines	Ruston 20RK270 (support by MAN)
Engine Power(kW)	4 x 7080 (@1030 rpm)
Waterjet	4 x Lips LJ 150/3 D
Gearbox	4 x Reintjes VLJ 6831

OTHER EQUIPMENT

Gensets (kW).	4 x Caterpillar 3406 B (4 x 245kW)
Ride Control	MDI trim tabs & forward t-foils





GENERAL ARRANGEMENT

