ALL AMERICAN MARINE INCORPORATED

83' Aialik Voyager
150 passengers

TEKNICRAFT MAKES A DIFFERENCE

Teknicraft catamarans by All American Marine feature durable and lightweight aluminum construction, a unique and patented hull shape, and offer enhanced performance with an integrated hydrofoil system. The result is a vessel with high fuel efficiency, low wake wash energy, excellent seakeeping, and an extremely smooth ride.

The Teknicraft hydrofoil system provides a lifting effect for the hull and displaces nearly one-third of the vessel's weight, while at speed. The lifting effect reduces drag and resistance, which in turn requires less engine power and lower fuel consumption to maintain a given speed. The *Aialik Voyager* has demonstrated extreme fuel economy and burns approximately the same gallons per nautical mile from 17 knots up to 27 knots.

TECHNOLOGY THAT PAYS FOR ITSELF

The fuel effeciency of Teknicraft catamarans like the *Aialik Voyager* can save an estimated $359,520.00 in fuel costs each year, based upon 1600 annual operating hours at cruise speed and in comparison to a conventional composite monohull. It is possible to offset the annual mortgage costs entirely with the fuel cost savings realized each year. If that's not enough, extra speed without the penalty of increased fuel consumption can make extra trips or extended trips possible and creates the potential for even more revenue.

VESSEL	83' Teknicraft Catamaran	90' Composite Monohull
PASSENGERS	150	150
ENGINE RPM	1800	1800
ENGINE POWER	49.5%	80%
SPEED	22 knots	22 knots
FUEL CONSUMPTION	75.1 gallons/hour	150 gallons/hour
HOURS AT 22 KNOTS	1600 hours/year	1600 hours/year
FUEL COST	$3/gallon	$3/gallon
ANNUAL FUEL CONSUMPTION	120,160 gallons	240,000 gallons
ANNUAL FUEL COST	$360,480	$720,000
ANNUAL FUEL SAVINGS	$359,520	$0
MONTHLY FUEL SAVINGS	$29,960	$0

83' TEKNICRAFT CATAMARAN

Sea Trial Analysis

RPM	Average Speed (knots)	Average Gallons/Hour	Gallons/Nautical Mile	Endurance (hours)	Range (nautical miles)
600	6.85	3.8	0.55	474	3245
700	7.75	5.8	0.75	310	2405
800	8.65	9.7	1.12	186	1605
900	10.1	13.6	1.35	132	1337
1000	10.5	18.1	1.72	99	1044
1100	11.45	21.7	1.90	83	950
1200	12.2	28.4	2.33	63	773
1300	13.25	36.5	2.75	49	653
1400	14.3	43.5	3.04	41	592
1500	15.75	51.7	3.28	35	548
1600	17.5	60.5	3.46	30	521
1700	20.1	67.9	3.38	27	533
1800	22.05	75.1	3.41	24	528
1900	23.9	83.7	3.50	22	514
1950	25.35	90.9	3.59	20	502
2000	25.9	95.7	3.69	19	487
2050	26.95	101.1	3.75	18	480
2100	27.55	106.3	3.86	17	467
2200	28.75	119.2	4.15	15	434
2300	29.9	138	4.62	13	390
2335	30.1	143	4.75	13	379

Performance Comparison