INDUSTRY SCIENCE TOURISM

MARINET NEWS

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Second transatlantic record for Incat

Cat Link V, Incat Australia's latest 91 metre wave piercing catamaran, has established the fastest transatlantic crossing in a ship, despite participating in the search for a light aircraft ditched mid Atlantic. Cat Link V now enters the record books as the current holder of the famed Blue Riband of the North Atlantic. The Cat Link V broke the two world records set in June 1998 by another Incat built vessel, the 91.3 metre Catalonia, by steaming 1018.5 nautical miles in 24 hours (previous best 1015 nm); and achieving a 41.284 knot average speed over more than 2,800 nm (previous record 38.877 knots).

CAT LINK V - New Incat built Hales Trophy Winner ©Richard Bennett

Cat Link V passed the official starting line, Nantucket Light, at 06.08.42 (UTC) on Friday 17th July and crossed the finish line - Bishops Rock United Kingdom at 02.17.42 (UTC) on Monday 20th July. During the voyage Cat Link V diverted to search for a ditched single engine aircraft.

Post crossing discussions with the Hales Trustees confirmed that the distance logged during the search and rescue operation was to be added to the Nantucket Light - Bishops Rock distance. The voyage distance was easy to calculate as a careful log was kept throughout the crossing using the on-board DGPS, accurate to within 3 metres, together with independent observation and logging by other passing ships and rescue aircraft. When divided by the total elapsed time it resulted in a remarkable 41.284 knot average speed. Cat Link V's owner, Scandlines Cat-Link A/S, has since taken the vessel to Denmark where it will enter service.

Incat is a private company that is the culmination of some 25 years of direct business activity in the Ferry and Tour Boat Industry. The Incat group conducts most of its extensive shipbuilding activity from a modern facility (over 32,000m2 is under cover) located at Prince of Wales Bay in Hobart, Tasmania. The company produces two distinct types of vessels, the world record holding Wave Piercing and K Class catamarans. Both types of catamarans are tailored to suit customer and route requirements with Incat currently building its 5th generation Wave Piercer and its 2nd generation K Class catamaran. A fast freight vessel based on the wave piercing design is also now in production. On a global scale Incat has now built around 40% of the high speed car passenger ferry fleet currently in operation. Incat Australia may be contacted on tel (61 3) 6273 0677, fax (61 3) 6273 0932 and e-mail: incat@incat.com.au. Incat's web site is www.incat.com.au .

Austal Ships win Irish Ferries Contract

Western Australian shipbuilder Austal Ships has been selected by Irish Continental Group PLC to produce their Auto Express 86 vehicle-passenger catamaran. The aluminium catamaran, is to be operated by Irish Ferries, and will run between the 60 nautical mile Holyhead (North Wales) - Dublin route.

Currently, Irish Ferries operate two return crossings per day with a conventional ferry on the route. As the company's first fast ferry, it will enable the group to double their frequency of runs while almost halving the journey time. The catamaran is scheduled to enter service for the 1999 European summer. At 86.6 metres in length and a deadweight of 400 tonnes, the Auto Express 86 will accommodate 800 passengers and 200 cars with ability to carry a large number of commercial vehicles. The vessel will be powered by 4 x Caterpillar 3618 engines each generating 7200kw. It is the first of Austal's large car ferries to feature Caterpillar engines.

The Auto Express features Austal's semi-swath hull form and will be fitted with the Austal Ocean Leveller ride control system to ensure optimum passenger comfort. The vehicle deck, with nine main deck lanes and six mezzanine deck lanes will be fitted with a bow door for drive through operation. Irish Ferries selected a bow door for driver convenience and to reduce turnaround time in port. It is the third of Austal's 86 metre'Auto Express'ships to be constructed. Further information may be obtained from Mr Chris Norman, Director-Marketing on tel (61 8) 9410 1111, fax (61 8) 9410 2564 and e-mail marketing@austal-ships.com.au.

DIST business online publications

The Commonwealth Department of Industry, Science and Tourism (DIST) has published information on its Business Online and Technology Initiative. A DIST booklet entitled Getting Business Online describes these business online initiatives in detail.

Other DIST reports reinforcing the message about electronic commerce and encouraging the uptake of online technologies include NEWS - Networked Enterprises Web Strategy (a project to get smaller enterprises online); Stats. Electronic Commerce in Australia (a statistical report on electronic commerce activity in Australia) and PECC - The Way Forward (a review of the outcomes of the Pharmaceutical Electronic and Communication project by Price Waterhouse). Electronic copies of all the above mentioned online publications are available at website www.dist.gov.au/infoind/html/pubs.html. Hard copies may also be obtained by contacting Mr Graydon Smith on tel: (02) 6213 7166.

INSIDE

Marine tourism study

The Federal Government is developing an Oceans Policy for Australia in consultation with other Government agencies, the States and Territories, industries and the public. From the early days of DIST's involvement with this Policy, it became apparent that the Marine Tourism sector was an important user of the oceans. At the same time, it became clear that little is known about the extent or impact of marine tourism, apart from in some exceptional areas, such as the Great Barrier Reef Marine Park. The Bureau of Tourism Research (BTR) was asked to update some figures contained in a 1989 report Oceans of Wealth. BTR concluded that Coastal and Marine Tourism is a significant proportion of Tourism in Australia, comprising approximately 50% of International visits and 42% of Domestic visits (unpublished results).

To continue to rectify the lack of data and information about this sector of the tourism industry, DIST commissioned a report on the economic impact of coastal and marine tourism. This article summarises some of the major findings of that report. The report was completed by a consultant engaged by the Department with funding provided under the DIST Shipbuilding and Marine Industies Program.

From the outset there was a difficulty in defining Coastal and Marine Tourism, as it is constrained by the available data sources. However, it was decided to base an investigation on data that could be obtained from 44 geographical regions that comprise the Coastal areas around Australia. Only non-business visitors to these areas are included in the definition as it is assumed that these visitors will interact with the Coastal and/or Marine environment.

Using the relevant data that was available, and conducting a survey of firms potentially involved in coastal and marine tourism, the investigation made a number of assumptions to estimate that expenditure on Coastal and Marine Tourism was around $22,892 million in 1995-96. This figure represents 2.9% of all Australian expenditure on goods and services.

In industries associated with the Coastal and Marine Tourism sector, every $1 million of this expenditure directly represents:

- $332,000 in wages and salaries;
- 11 full time positions; and
- $610,000 of gross domestic product.

In addition, for the industries directly supplying goods and services to the Coastal and Marine Tourism sector, purchases are required from other industries. For every $1 million of Coastal and Marine Tourism expenditure, subsequent rounds of purchasing or flow-on effects represent:

- $572,000 in further purchases of goods and services;
- $139,000 in additional wages and salaries;
- an additional 4.5 full-time jobs; and
- $303,000 in additional gross domestic product.

When both the direct expenditure and flow on effects are combined the contribution to the Australian economy are substantial. For 1995-96, the $22,892 million expenditure on Coastal and Marine Tourism represents:

- a total expenditure on goods and services of $35,984 million, representing 4.6% of the Australian total;
- $10,558 million in wages and salaries, or 5.2% of all Australian wages and salaries;
- full time jobs numbering 363,461, 5% of the Australian full-time equivalent workforce; and
- $20,904 million of gross domestic product, or 4.7% of Australia's gross domestic product.

The investigation also looked at the popularity of coastal destinations and using data from the Domestic Tourism Monitor (DTM) and the International Visitor Survey (IVS) identified the top 5 visitor destinations in terms of market share for 1995-96. Not surprisingly, those areas with the greatest visitation are more urbanised and accessible.

Great Keppel Island - Australia has unsurpassed marine tourism attractions

The Olympic Effect report

Olympic visitors may generate $6.1 billion in tourism export earnings between 1997 and 2004, according to a study commissioned by the Tourism Forecasting Council (TFC). The report entitled the Olympic Effect forecasts the likely extent of the tourism spin-off from Sydney's hosting of the Games. Benefits extend beyond New South Wales. The report costs $95 (plus $5 postage/handling). Contact Ms Caroline Darcy on tel (02) 6213 6967, fax 6213 6983 and via e-mail: bureau.tourism.research@dist.gov.au.

Coastal and Marine Tourism Visitation, 1995-96

Region	Total Visits (Number)	Share (%)	Rank
Gold Coast	3,207,138	9.29	1
Great Ocean Road	2,569,591	7.44	2
Hunter	2,393,211	6.93	3
Illawarra	2,196,281	6.36	4
Sunshine Coast	2,137,485	6.19	5

However, the report found that the situation was slightly different for visitor nights. The main point of interest is the change in the rankings indicating that average lengths of stay vary for different Coastal regions. For example, the average length of stay is longer for the Sunshine Coast than for the Hunter.

Coastal and Marine Tourism Visit Nights, 1995-96

Region	Visit Nights ('000s)	Share (%)	Rank
Gold Coast	14,878	11.51	1
Sunshine Coast	9,462	7.32	2
Far North	9,046	7.00	3
Illawarra	7,914	6.12	4
Hunter	7,555	5.84	5

With such an exercise as this, there are always data gaps especially as one reduces the size of the areas to be investigated. Good data was found at the national level and the estimates of the direct and indirect economic impacts can be considered robust. With the exception of Census data, data sourced at the regional level is generally less accurate and prone to larger standard errors. The major data difficulties encountered during the study were with the different time periods of the DTM and IVS and the lack of expenditure data for Domestic tourists. The new National Visitor Survey conducted by the consultants A.C. Nielsen and managed by the BTR began in January this year. This survey is anticipated to provide improved data at the regional level.

The report has provided a broad picture of the economic impact of coastal and marine tourism. It is hoped that further work could be done in the near future to gain a clearer picture of the diverse activities which comprise marine tourism. This work might include identifying industry issues, such as possible impediments to the growth of this important sector of the tourism industry.

For further information about the report contact Mr Alan Henderson, DIST on tel (02) 6213 7043 or fax (02) 6213 7097.

Tenix's Philippines coast guard vessels contract

A US$38.5 million contract for the construction in Australia of two search and rescue vessels for the Philippines Coast Guard has come into operation following an initial payment through the Australian Export Finance Insurance Corporation (EFIC). The 56 metre ships are being built by Tenix Shipbuilding WA, based at Henderson near Perth in Western Australia. The development followed contract signature in Manilla in December 1997. The two vessels will play a pivotal role in saving lives, cargo and vessels.

The contract is for the construction and delivery of the vessels and crew training, with the first ship scheduled for delivery in June 2000 and the second in December 2000. The project is being funded through AusAid (the Australian overseas aid agency), which provided 35 per cent of the contract price in aid grants, and EFIC, which provided mixed credit funding. Further information may be obtained from Ms Kath Templeton, Tenix Defence Systems on tel (61 3) 9244 4333 or fax (61 3) 9244 4347.

NQEA's Polynesian ferry deliveries

Shipbuilder, NQEA Australia Pty Ltd has delivered two of its 'River Runner' low wash catamaran ferries to Bora Bora Navettes in French Polynesia. The two RR150 model ferries will be used to transport passengers between the island of Bora Bora and the airport which is located on the edge of the lagoon.

NQEA's low wash catamaran ferries

According to NQEA, "Bora Bora Navettes came to NQEA seeking a reliable low wash high speed ferry which emphasised the spectacular visual appeal of the area. The standard River Runner 150 was offered and modified to accommodate an upper viewing deck and larger windows. The vessel package was further enhanced by the addition of an NQEA designed and built baggage handling system, berthing pontoon and gangways, fully integrated and positioned on site to suit the River Runners."

Each vessel is capable of carrying up to 115 passengers plus their baggage. The main cabin and wheelhouse are airconditioned. The propulsion system consists of two Caterpillar 3196 diesels, driving conventional propellers via Twin Disc gear boxes. A 32 kW Lugger generator set provides power for the airconditioning and AC electric services. During trials the vessels satisfied all the speed and wash contract conditions, achieving a speed of 25 knots with more than 11 tonnes of deadweight aboard.

The 'River Runner' standard series of low wash vessels vary in size from 75 up to 250 passengers with loaded speeds in the range 25 - 35 knots. These ferries are suitable for operation in sheltered environmentally sensitive areas. They represent a very economical, low impact alternative to existing forms of land and water transportation.

For further details contact Mr Paul Harrison, Business Development Manager, NQEA Australia Pty Ltd on tel (61 70) 4052 7222, fax (61 7) 4035 2520 or e-mail: nqea_cns@nqea.com.au. NQEA's web site is www.nqea.com.au.

Electric boats - an international update

With increasing environmental concern over the protection of inland lakes and waterways, battery-electric boating offers a hitherto untapped market for the Australian marine industry. Initially more expensive to purchase, these silent motorboats can cost 40% less to refuel and are easier to maintain. Whilst battery energy (b/e) has recently been improved, it is still tied to lunchtime or overnight re-charging; the elegant incorporation of photovoltaic (p/v) panels into deck and roof design, can give unlimited cruising. In Australia Frank Wheeler, whose p/v catamaran Sun Pirate II holds the official world p/v boat distance record (3330 km/2049 miles along the Hawkesbury River) is understood to be planning a 17,000 km circumnavigation of Australia's coastline.

The breakdown of the thirty known electric boat (e-boat) building yards around the world is as follows: nine (USA), six each (UK and France), three (Netherlands), two each (Germany and Austria) and one each (Canada, Switzerland, Italy). Thirty years ago, there were only two boatyards. Boats produced range from 2m theme park dinghies, to runabouts, dayboats, 9-metre live-aboard cruisers to passenger waterbuses. A "Casebook" of b/e and p/v waterbuses has just been produced by the European Community. It gives detailed specifications of 58 vessels (between 8 and 200 passenger capacity) in reliable operation around the world.

In terms of motorisation, twelve brands of electric outboard engine are being manufactured worldwide with a power range of 200watt up to 8kW. Inboard engines can take kW power up into the 60 kW range. Because of their energy/power limitations, the underwater hulls of battery-electric boats are of carefully designed shallow draught.

Electric boats are starting to voyage offshore. In July 1998, American Marshall Duffield averaged 9.7 knots in his 62ft b/e Duffy Voyager during a World record-setting 55-mile Pacific offshore voyage from California's Newport Beach to Catalina Island and return. Since the early 1970's, Duffy Electric Boats are sold internationally through a network of boat dealers across the United States, Europe and Asia with more than 3,500 boats in operation worldwide.

In terms of projects, Dr Robert Dane's Sydney-based Solar Sailor Company has internationally patented a hybrid boat which pivots its p/v panels for both electric energy and as sails. Such a boat could cruise offshore for unlimited periods. Following successful trials of 7-knot prototype Marjorie K, detailed plans are being drawn up for a 35m, 300-passenger catamaran for Sydney Harbour's Millennium celebrations.

In terms of the sports potential, solar-electric boat racing during this summer of '98 took place in Australia, Germany, Italy, Japan and the USA. Despite ingenious entries by 18 American university teams, 8 Australian schools, four German colleges and a Japanese technology institute, the p/v speed record for

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Inquiries: Inquiries regarding Marinet News to Richard Hogg Engineering and Marine Industries Section Department of Industry, Science and Tourism, Canberra on Fax. (61 2) 6213 7614 (Email:**rhogg@dist.gov.au**)
View Marinet News on the Internet at www.ozemail.com.au/~marinedb/

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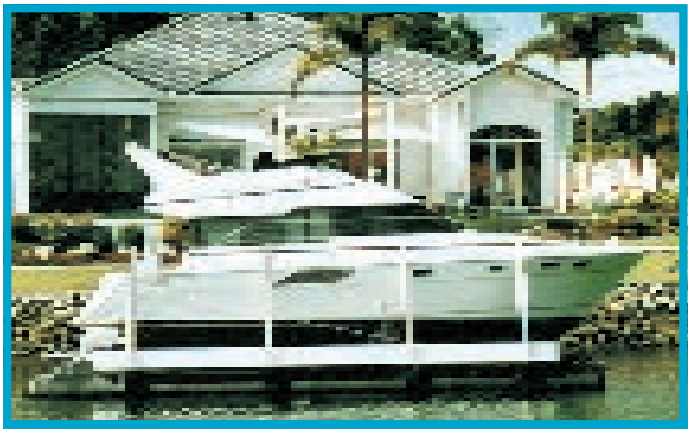
the 300-metre sprint remains at 26mph/41.9 km/h established two years ago by the University of Michigan entry Vee-N-Verse II. To-date an electric boat has not been clocked at 100 mph. The current two-way Kilo average of 70.597 mph, is still held by the USA after three years.

Any Australian marine company concerned with battery-electric boats is asked to contact Mr Kevin Desmond , International Electric Boat, 54 route de Latresne, 33-360 Carignan, Bordeaux, France. (e-mail: desmond.writer@wanadoo.fr.) Mr Desmond is establishing an international bulletin on electric boats entitled "The International Electric Boat", a publication that may offer international exposure for Australian electric boat innovators and developers.

An uplifting experience for boats

A unique Australian product making life easier for boat owners is the Atlas Hydrolift, a uniquely designed and constructed boat lift which its makers advise removes the need for continuous anti fouling and servicing of fouled propellers, shafts, rudders and hulls. The Hydrolift utilises a simple principle of displacement of water by air in lifting vessels from 2 tonne upwards and only requires standard electricity supply to operate. Atlas Marine International Pty Ltd, trading as Superior Jetty Constructions, developed the first Hydrolift nine years ago and considers there is a huge market for the product both in Australia and overseas. The company already have distributors throughout Australia, New Zealand, Philippines and India.

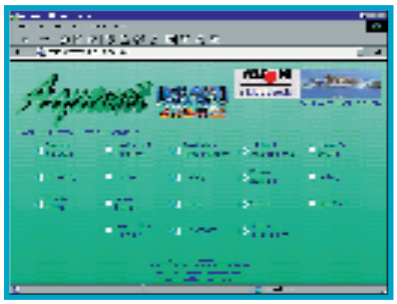
The Hydrolift can be designed and constructed for a variety of motor cruisers with its fibreglass reinforced plastic flotation modules, hot dipped galvanised fittings and specially engineered hull support pads ensuring longevity and low maintenance. The controls are water and corrosion proof and set into an aluminium control box. The Hydrolift can be located within marina berths and alongside jetties and pontoons. Further details may be obtained from Mr Steve Middleton, Atlas Marine International Pty Ltd on tel (61 7) 5597 1933 and fax (61 7) 5597 0476.



The Atlas Marine International Hydrolift

Aquanet - an Australian marine website worth seeing (http:www.aqua.net.au)

(by Mr Stuart Grey, Aquanet)



The Aquanet is an internet directory of marine companies, organisations and professionals. Launched at the Sydney Boat Show 1996 the directory now has 2000 organisations listed. These organisations are cross referenced in 200 categories to produce 5500 listings. The directory is a source of Marine Industry contact information for the general public. It also increases the effective internet exposure of the listed organisations. For a portion of the industry, the Aquanet is their first and, as yet, only internet exposure.

The number of visitors to the Aquanet has been growing steadily. Last month the site averaged 2750 directory listing hits per day with somewhere in the order of one million hits since inception. Half of these hits have come from overseas. The most popular category groups are Products & Suppliers, Power Boating, Australian Manufacturers, Sailing, Marine Services and Chartering.

The majority of directory listings are Australian and this was our initial intention but the international nature of the internet has seen an increasing number of overseas companies adding themselves to the directory. Adding a listing has been made easy by providing an on-line form on the home page. All the basic listings are free with highlighted listings available for a small fee. Companies are welcome to submit a listing and to use other facilities on the Aquanet home page.

Part of our activity involves answering inquiries from the general public. Mostly these concern products and services. Where possible we endeavour to answer them by referring to the directory or otherwise by gathering the information in-house or from the internet. A Message Board provided on the site allows people to post notices and make public requests for information. The directory listings can be scanned for particular words and phrases by using the Search facility.

In addition to the Directory, Aquanet provides general internet services including; domain and website hosting; website production; dial-up accounts; software development; and graphic design. We have developed several databases for managing website data including one to manage the last three pre-Olympic regattas. We recognise that the internet is quickly becoming an integral part of normal business operations. The Aquanet will continue to keep up the pace and remain a useful on-line service for the Marine Industry. Contact Mr Stuart Grey on e-mail: webmaster@aqua.net.au for further information.

Good ideas can provide good business

The small Brisbane based company, Hi Tek Manifolds, is actively turning a good idea into good business. The company has addressed the often costly problem for "boaties" of cast exhaust manifold replacement and designed and developed a stainless steel marine water cooled manifold for boats. According to the company the response from boat owners has been "overwhelming".

Hi Tek Manifolds have advised that their own testing over two years has indicated the product achieves substantially better fuel economy, more power and more torque. Less maintenance is also required. The product has application to cabin cruisers, speed boats and "virtually any vessel with an inboard motor". Other advantages are that the new design is light-weight and has a longer life than conventional cast iron exhaust manifolds.

While currently a small operation with a limited production run, the new manifold is believed to offer a solid basis for future growth. The company considers the product has international market potential which will be explored. Additional information may be obtained from Mr Allen Will, Hi Tek Manifolds on tel/fax (07) 3284 8858.