Editorial

I decided to make e-Navigation the feature for this quarter because I believe that the subject is going to become one of the key issues for debate in the near future and the outcome will inevitably impact on pilotage.

From a Power Point presentation given just one year ago by Trinity House followed by adoption by the Shipping Minister, Dr. Ladyman and our DfT, the idea has gathered momentum and snowballed to such an extent that following keynotes speeches at the IALA / IASM conference in Shanghai in May a seminar dedicated to e-Navigation was held it the Paris headquarters of IALA 18th - 22nd September. As I am writing this editorial e-Navigation is forming a key part of conference being held in Seattle and the Maritime Safety Committee at the IMO are developing an e-Navigation strategy to present at the next IMO NAV session. My feature is an attempt to give an overview of the reality of the e-Navigation concept on board the average merchant ship. Although we cannot attend all the conferences and seminars, pilots are represented at IMO and EMPA pilots on the Maritime Navigation and Information Services (MarNIS) working group are well placed to provide informed comment into the debates. With Trinity House already carrying out live trials with "virtual" navigation marks this is a programme that we must follow closely. I will do my best to keep you all informed as this brave new world unfolds or unravels!

Finally, you may have noticed that my magazine website (**www.pilotmag.co.uk**) has been somewhat neglected during the last few months. This is because I am currently working on a new site which I hope to have on-line early next year.

Whilst on the subject of websites, please register your details on the new UKMPA website as per the details on page 13.

John Clandillon-Baker FNI
Tel: 01304 613020
Email: john@pilotmag.co.uk
Canterbury Gate House, Ash Road
Sandwich, Kent CT13 9HZ

World Maritime Day
Pilots at the forefront

In support of IMO's world Maritime Day initiative, IMPA, in association with the Honourable Company of Master Mariners organised a major event on board the HQS Wellington *moored on the Embankment in central London.*

Under the banner "Sea's the Future" the day was designed to highlight the role of shipping in World trade. Opened by IMO Secretary General Efthimios Mitropoulos, the event was attended by many high profile guests including the Princess Royal and the First Sea Lord. IMPA President Geoff Taylor was very much the driving force behind this initiative and the reputation of pilots will have been considerably enhanced as a result of the good attendance and excellent organisation.

In This Issue

Today

E-NAVIGATION:
Where are we and where are we going?

The term e-Navigation first appeared formally just one year ago in a presentation given by Dr. Sally Basker of the General Lighthouse Authority (GLA) and was rapidly adopted by our own DfT who introduced it to a wider audience via a keynote speech to the Royal Institute of Navigation given by Dr. Stephen Ladyman, the shipping minister.

Tomorrow?

WHY IS IT NEEDED?

To minimise navigational errors, protect people and the environment, improve security and reduce costs for shipping.

HOW WILL IT BE DELIVERED?

By using satellite positioning systems underpinned by fail safe supplementary positioning systems displayed in an intelligible and comprehensively integrated format on board ship and replicated on shore with shore based monitoring and intervention capability.

WHAT DOES IT MEAN?

This is a very good question since as the expression gains momentum there are different interpretations emerging! However, at the time of writing the definition which has been adopted by IALA is:

"the collection, integration and display of maritime information onboard and ashore by electronic means to enhance berth-to-berth navigation and related services, safety and security at sea and protection of the marine environment."

WHERE DO WE GO FROM HERE?

At a recent IALA conference on e-Navigation it was stated that the following requirements would need to be met before the concept could be implemented effectively:

- Key structural components, including Electronic Navigation Charts (ENCs), principle position systems (GPS, Galileo) and failsafe back-up systems
- Standardised electronic format for ship/shore; ship/ship; shore/ship
- Means to prioritise data
- Enhanced Electronic Chart (ENC) systems
- Common standards for bridge/shore e-navigation systems / standards.
- Security through effective protocols
- Shore support systems linked nationally and internationally similar to air traffic control.
- Close collaboration with all relevant bodies and agencies.

With a view to achieving the above, a paper has been submitted to IMO proposing that e-Navigation be added to the work programme of the Sub-Committee of Navigation (NAV).

However the IMO is still debating the implications of the concept and although it is likely that the carriage of an Electronic Chart display and Information System (ECDIS) or Electronic Navigation Chart (ENC) for all merchant vessels will become compulsory in the next few years the last meeting of the IMO Navigation sub committee (NAV 52) failed to endorse the overlay

of additional information such as ARPA plots and AIS onto the ECDIS display. This decision has reigned in some of the more enthusiastic promoters of e-Navigation who see the future concentrated on ECDIS displaying "virtual" navigation aids and reflects the opinion that too much emphasis is being placed on unproven electronic data formats at the expense of proven traditional navigation methodology. IMO secretary-general Efthimios Mitropoulos believes that the ultimate aim of a future e-navigation strategy should be *'to simplify, to the benefit of the mariner, the display of the real-time environment in which his or her ship navigates. Furthermore, the design of an all-embracing electronic system on the ship bridge should be such as not to reduce the navigator solely to the role of monitoring its function but 'to enable him or her to obtain maximum navigational support and information to facilitate and ensure appropriate and timely navigational and anti-collision decision-making, in line with good seamanship.'* These are wise words indeed and very relevant given the statistics that despite the introduction of new navigation equipment the number of collisions and groundings remain unacceptably high even on board modern ships fitted with electronic charts. Bolting on an ECDIS displaying "virtual" navigation aids is not going to miraculously reduce the ship loss statistics without standardised displays and controls and a comprehensive training regime to enable watchkeepers to effectively integrate and interact within the e-Navigation concept. As pilots we are trained to integrate into the ship's navigation regime frequently in total darkness and always within a very short time scale. This makes us ideal commentators on how appallingly inefficient the vast majority of ship's bridges are. It is therefore worth examining in more detail the environment in which we and the average watch keeper operates.

BRIDGE LAYOUT

In order for the e-Navigation concept to be implemented effectively wheelhouse design will be of paramount importance.

Picture 3: Modern bulk carrier

The glossy brochures display wonderful photographs of integrated bridges consisting of consoles containing radar and ECDIS displays and whilst these do exist on board some vessels the reality for the majority of ships is totally removed from this brochure image.

Picture 3 shows the wheelhouse of a large bulk carrier built in 2005. Any navigating officer transported from the 1960's onto this bridge would find it totally familiar! The traditional telegraph is on the port side, a helmsman's / autopilot console is in the middle and two radars are to starboard. There are two VHF sets, one on each side of the bridge front and the chart room containing the GPS and AIS displays is to the rear of the radars where is can be screened off by a traditional curtain arrangement at night. There is absolutely nothing wrong with this wheelhouse so far as navigating in the traditional manner is concerned but for e-Navigation functionality it fails miserably!

The "ideal" integrated bridge is well illustrated in picture 4 which was taken on board a brand new 5000 tonne product tanker. When seated the watchkeeper has all relevant information readily available. The radar, ECDIS, echo sounder, autopilot and VHF are all to hand, although the crew had not yet got around to making and fitting the essential coffee mug holder! From the seated position the eye line of sight is above the console thus retaining the essential concept of a visual lookout. Constructed for the N Europe trade the vessel is fitted with two fully authorised independent ECDIS and had no paper charts and docking stations on each bridge wing made berthing / unberthing efficient.

The vast majority of ships bridges fall somewhere between these two examples but many are very poor and not fit for purpose.

The "integrated" bridge shown in picture 5 was taken on a 1000 tonne coaster and is a prime example of a poor layout. The chair is so low that when seated the watchkeeper can only see the radar and gyro repeater and has almost no view of the sea ahead! The autopilot and VHF are not easily reached and the chart table is to the rear so the e-Navigation concept is not going to be readily incorporated on this or the vast majority of vessels without a complete re-fit of the ship's bridges and equipment.

THE EQUIPMENT

Compared to the airline and now even the road transport industries the navigational equipment to be found on the world's merchant fleet is an appalling mix of units of generally poor quality frequently designed to satisfy the creative ideals of the manufacturer with little regard for the operational prioritisation needs of the end user. This woeful state of affairs was highlighted in Dr. Ladyman's RIN speech where he stated, *"… the bridge of a typical merchant ship is awash with different generations of navigation technologies – which are not always complementary. The display equipment isn't integrated or prioritised. Value added data management is either limited or nonexistent. And what information is available, visual or otherwise, needs careful interpretation by experienced professionals. In short, mariners are asked to navigate with a variety of 'bolt-ons' to previous generations of technology."*

Starting from this level it is obvious that e-Navigation is not going to take over the world of merchant shipping for some considerable time!!

RADAR

In the 1960's the the maritime press dealt with how radar should be incorporated into the watchkeeper's duties and there was one point upon which all correspondents were agreed and that was that there should be universally standard layouts and controls. But by the time the specifications had been through the "consultation process" the only standardisation was on the basic controls and labelling. Once the sets became more sophisticated during the


Picture 4: A good integrated bridge

Picture 5: Poor integration

1970's with gyro inputs, true motion displays and Automatic Radar Plotting Aids (ARPA) any standardisation went overboard as manufacturers tried to outdo each other with additional features. The basic controls of the early models gave way to increasingly complex keyboard layouts which in turn evolved into the rollerball and button arrangement which requires every function to be accessed by the frustrating task of manipulating a cursor around the screen with many essential features hidden in sub menus resulting in a watchkeeper having to spend a considerable time learning how to undertake even quite basic operations. With crew changes frequently being done in just a few hours and the minimum manning resulting in officers being put to work on cargo and other duties the operation of key navigation equipment is often neglected and the manuals are generally too big and poorly written. I have frequently asked a watchkeeper to access a function on the radar only to be informed that he had only just joined the ship and hadn't a clue! On one model I have found the range rings hidden in a secondary sub menu and it is generally just not worth bothering to even attempt to set up a parallel index tracking line with a rollerball and button control if sanity is to be retained!

New radars fitted after July 2008 will have to be fitted with an AIS overlay facility which is already appearing on board many vessels but these regularly display a considerable discrepancy between the radar and AIS plots as shown in picture 6 (*overleaf*).

This AIS integration has even more worrying consequences in that currently there is no requirement for vessels (other than high speed craft) of less that 10,000grt to be fitted with an ARPA facility on the radar, so this means that there will be a tendency to use the AIS track for anti-collision work. There is a recommendation that only water tracking should be used for anti-
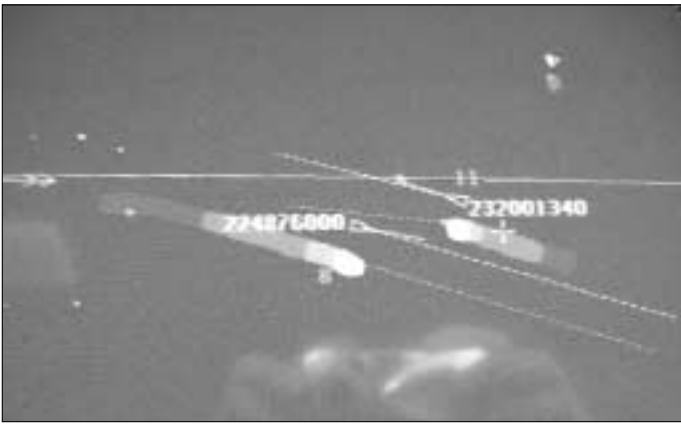
Picture 6: Radar and AIS plot discrepancy

collision work but AIS displays true Speed Over the Ground (SOG) and Course Over the Ground (COG) and AIS is not yet recognised as a collision avoidance procedure in the COLREGS. Consequently despite its imminent compulsory incorporation, many ship owners such as Maersk are instructing their Masters not to use the AIS overlay facility on the radar! To call the current situation a mess is a very polite understatement!!

ECDIS & ENC

For those unfamiliar with the terms, an ENC is basically a paper chart which has been scanned into an electronic format to be displayed on a computer and is termed a "raster" chart. Zooming in or out just magnifies or reduces the data from the chosen chart. An ECDIS is a "vector" chart format with layers so starting from a small scale only the basic outline information is displayed but zooming in reveals more features such as buoys, increased number of depth soundings, nature of bottom etc. A full ECDIS can therefore be interactive in that the navigator can program in depth parameters and if the ship is heading towards a danger then alarms will sound. It is this type of chart that can be used to replace a paper chart portfolio. Although vessels have been able to replace their charts with an authorised ECDIS system for over two years I have only piloted three vessels without paper charts which is less than 1%. The number of vessels fitted with a raster ENC is higher at around 25%.

Many observers are questioning why the uptake of electronic charts has been so slow. The answer is straightforward, it is not compulsory and in their present format many electronic charts are useless for practical navigation! A paper chart is a large document that can be opened out and the navigator can use a small scale chart for an overview of a proposed passage and easily plot a passage which can then be transferred to larger scale charts as required. This is safe and effective. The average electronic chart display is a 17 inch monitor so even plotting a short course is a challenge. A rough line can be created but then the navigator has to zoom in and scroll from screen to screen to verify that the course safely clears dangers which may not be displayed on the smaller scale chart. I have witnessed a watchkeeper totally distracted during a major part of the piloted passage whilst he attempted to plot a passage through the islands in the Baltic on an electronic chart and cursing the fact that he had no paper charts to plan on. An increasing number of companies are addressing this problem by publishing passage waypoints. This appears to be just what every navigator needs except that in the vastness of the open sea an increasing number of ships are now plotting their courses using published waypoints and the result has been an increasing number of collisions in the vicinity of these waypoints! The restricted screen size results in a raster chart displaying so many depth soundings that it is often difficult to see the charted features clearly. Zooming in on a larger scale chart will clarify the picture but then the distance shown ahead may then be less than two

miles. Even worse is that on some makes of ENC the ship transits the screen in true motion thus providing an excellent record of where the ship has been rather than where it is going!

One final major factor influencing ENC take up rates is that of after sales support. I have piloted several well equipped ships with a fine electronic chart which is out of date because the manufacturer has gone out of business. As with radars the manufacture and supply of electronic charts will inevitably end up in the hands of a few large companies and it is therefore understandable that owners will want to ensure that their chart supplier will be able to offer full support before making what is a considerable investment.

Practical Usage

At a glance, the navigator can see his vessel superimposed on the chart with all the navigation marks readily identifiable but the vast majority of the ENCs in use are not official ECDIS and therefore come with a warning that they are NOT to be used for navigation! Of course this warning is invariably ignored and an investigation into a recent grounding revealed that the Master was navigating on an out of date electronic chart that he had downloaded from the Internet. Another grounding of a prestigious cruise liner resulted from the failure of the GPS connection which caused the ENC to default to dead reckoning position mode. The GPS failure went unnoticed for two days and no checks were made by other navigation methods until the vessel came to an abrupt stop! It would seem that the presence of an ENC seems to lull the watchkeepers into a false sense of security and to overcome this torpor it would be very simple for the manufacturers to incorporate a flashing warning on the screen when the GPS signal is lost or weak that couldn't be removed until the problem had been resolved.

Earlier I mentioned the new tanker with an ECDIS in place of paper charts. With two independent units served by separate DGPS receivers, failure of both units simultaneously is unlikely and therefore in practical terms position failure will only occur if the satellite network is disabled. However ECDIS chart coverage is currently far from complete and chartless ships are therefore restricted to certain areas such as North Europe and parts of the USA. On this particular vessel the ECDIS was spot on at the commencement of the passage but later on serious anomalies were observed when the radar and AIS vectors of other vessels were overlaid on the ECDIS. Pictures 7 & 8 are very revealing in that they show how a discrepancy can introduce an element of doubt into the situational awareness.

Picture 7 is displaying the AIS and ARPA track of a vessel passing a buoy so which side of the buoy did the vessel pass? The visibility was good so I could see that the AIS track was the correct
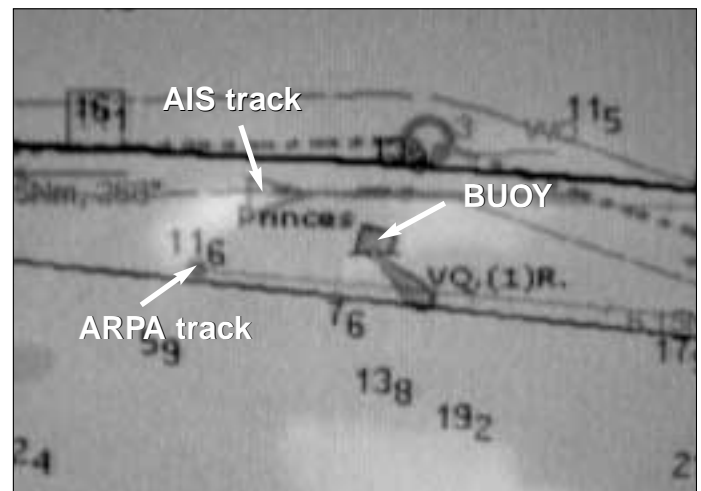
Picture 7: Where's the ship?
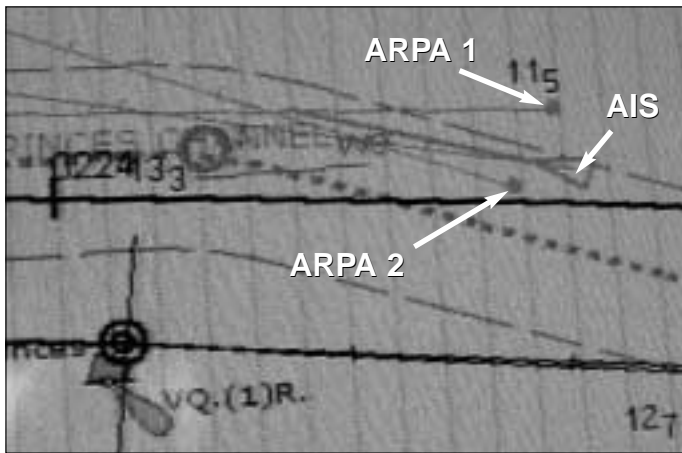
Picture 8: How many ships are there?

one but in reduced visibility there would be confusion and doubt.

Picture 8 reveals another confusing situation. Here the AIS and two radars are sending tracks onto the ECDIS, none are aligned. A check with a fixed navigation mark revealed that during the passage the radar and ECDIS correlation had become displaced by around one cable. The "tech-savvy" Russian Mate stated that he could re-align the displays but this shouldn't be necessary and the error highlights how the integration of navigation displays has not yet been perfected and could lead to an incorrect interpretation of a developing situation. Since ECDIS will be a core component of e-Navigation in my opinion such serious errors call into question the whole concept.

AIS

The compulsory carriage of AIS was pushed through at far too great a speed for the system to be properly incorporated as part of the ship's navigation equipment and consequently on the vast majority of ships it is just another box which is placed on any spare space on the bridge. Generally it is only used when the watchkeeper wants to identify another vessel so that he can call it up on VHF and negotiate a developing situation rather than rely on the COLREGS! One reason for the acceleration of AIS implementation was the USA's anti terror policy which under its Maritime Domain Awareness programme is seeking to track and monitor every vessel bound for the USA from loading port to destination. AIS is part of the development of a Long Range Identification and Tracking (LRIT) network currently being progressed through IMO into a SOLAS requirement and AIS & LRIT represent the other key element of the e-Navigation agenda. The e-navigation implementation process is now being driven by the perceived needs of shore administrations rather than an actual need by the mariner who, as usual, has been sidelined from the debate. Fortunately pilots have attended the relevant IMO sessions and have at least been able to speak with considerable authority on the issues as a result of their involvement in the Maritime Navigation and Information Services (MarNIS) project which is explained in detail on page 7.

Prior to the USA security agenda the primary promoters of AIS were the ports who saw AIS as the key to the "Holy Grail" of Vessel Traffic Service (VTS) control of shipping replacing pilots. However, although effective when functioning correctly, AIS useage has revealed many shortfalls and if, as envisaged, its role is enhanced to underpin the e-Navigation agenda then more problems can be anticipated. Many of the AIS issues have been well documented in previous issues of *The Pilot*.

VESSEL TRAFFIC SERVICES (VTS)

Proponents of VTS see shore-based operators replacing pilots on board ships by offering e-Navigation control of shipping and the

preferred terminology is now Vessel Traffic Management Systems (VTMS). For years many voices, ignorant of how shipping movements in port are handled by pilots, have questioned why shipping cannot be controlled in the same manner as aircraft are by air traffic control. The arguments put by pilots as to why ATC methodology cannot be applied to shipping have been supported by trials which always reveal that positive control of shipping by shore is non viable. AIS and the e-Navigation concept has revived the agenda but whilst it is true that modern VTS centres have far more sophisticated tracking ability, the complexities of varying ship types, speeds and tracks still prevent the VTS from being capable of positive control of shipping.

To date VTS hasn't had a great success rate in preventing collisions and groundings as dramatically revealed by the *Karen Danielson* collision with the Great Belt West Bridge *(see report on page 10)* and is also interesting to note that because VTS is currently just an aid to navigation MAIB investigations into incidents in ports operating VTS have concentrated on the actions of the vessels but not the VTS involvement. Obviously, if VTMS is to evolve to take direct control of vessel movements then the liability issues will need to be carefully examined by the VTMS authority who will also need to bear in mind that its role in any incident will be examined by investigators. The arguments for and against VTMS are many and varied and worthy of a full feature but suffice to say at this stage that no system is currently capable of reproducing the real time situational awareness and vessel control available to the pilot or Master on the bridge.

PORT APPROACH DOCKING SUPPORT SYSTEM (POADSS)

Pilots cannot remain detached from new technology and within Europe, as part of the MarNIS project, EMPA have been project leaders on the finely named POADSS concept which has evolved from the IPPA project. POADSS is basically a laptop with very high specification for information input and accuracy designed to be taken on board by a pilot. The first units are due to be trialled next spring and the pilot will be able to access and prioritise data and information relevant to the pilotage passage. With nearly all data available to the VTS accessible directly by the pilot I believe that the logical progression for PODSS should be towards port control becoming "silent VTS" data processing centres. This may seem a provocative pilot biased statement but in my opinion an independent analysis of what information is transmitted by VTS and how it is used by those on board would find that most of the information could be accessed / disseminated directly from source to user.

For example, in London live tide data is broadcast every half hour but often vessels call for updates between broadcasts to check on how the tide is making. The relevant tide gauges are transmitting data continuously so it would be far more efficient if the pilot were able to interrogate the gauge directly. Another example is requesting a change in berthing time. Through POADSS a pilot could interrogate the berth to find out if it is free or what time the vessel on the berth is programmed to depart and then send an ETA either to the agent or directly to the berth, boatmen and tugs etc.

These are just two examples but the vast majority of data and information handled by VTS could be accessed and transmitted directly between facilities and ships.

Obviously ports need to monitor and record the traffic in their area but I believe that a port VTS centre designed to handle and process a port's administrative function rather than seeking to become involved in the on-board navigation process would evolve into a different management and layout of VTS centres than currently exists.

CONCLUSION

A basic factor of e-Navigation is that it is administration-driven, not user-driven and the users do not particularly need or want it! In order to be fully operational and fulfil the aims of its promoters it needs:

● Worldwide ECDIS coverage.
● Worldwide GNSS coverage.
● Worldwide communication equivalent to broadband for every SOLAS vessel.

This latter communications link will require its own constellation of satellites *(opinion stated by the Comite International Radio-Maritime)* which won't be cheap.

Currently there are a series of conferences and seminars being devoted to e-Navigation and I hope to bring some feedback from these in a future issue. Meanwhile it is interesting to note that a powerful driving force behind e-Navigation is our own DfT who believe that that it should be planned and implemented in a coherent way. Unfortunately the rapid and diverse development in technology is now producing a flood of low cost equipment of variable quality, performance and utility onto the market which may actually worsen navigational safety. This factor has led most maritime experts to the conclusion that the implementation of e-Navigation is a very long way off indeed.

JCB

Y-Tronic Bluetooth AIS

As mentioned in The Pilot *(April issue) Y-Tronic have developed hardware to provide wireless communication between a ship's pilot plug and a pilot's laptop. The equipment was sent to Milford Haven for practical trials and the following is a report on the unit by Milford Haven pilot, Ed Neale.*

The hardware consists of the following:

✳ Blue tooth transmitter
✳ USB battery
✳ A cable to connect the battery to the transmitter
✳ A cable to connect the transmitter to the pilot plug
✳ 240v USB charger for the battery pack

With a weight of 350g the equipment, less the USB charger, was carried quite comfortably in my pilot coat pocket.

Setting up the cables is a little complicated, and although incorporating the battery within the transmitter would make the unit bigger it would reduce the complexity of the set up procedure. Once all items were connected the signal was received by the laptop without problems.

The battery can be charged by several means and the level of charge can be monitored at the touch of a button.

The data from the pilot plug includes own vessel's position, dimensions, heading etc. although the amount and quality of data depends on the installation on board.

Other vessels AIS data is also received.

The presentation of the data will depend on the software used. For the trial I had a demonstration version of Y-Tronic's own software. This gave a display similar to a radar with targets plotted according to their range and bearing. Triangles indicated the approximate ship's heading of the targets.

It was possible to display targets in list format, in order of distance from own ship. Again this is similar to the display option on many AIS receivers fitted to ships today. The demo version of the software would not run for more than a few minutes so it was not possible to fully assess the reliability of the data being received.

A more useful display may include an electronic chart display, with AIS targets overlaid onto the chart. This is the format we are currently using at Milford, with QASTOR software supplied by QPS. This software plots other AIS targets as ship's outlines, having received the dimensions, position and heading of targets from the AIS data stream. Unfortunately I was

unable to configure this software to run with the Y-Tronic hardware because of the QASTOR version in use at Milford.

It was disappointing to note that the Y-Tronic software could not be run on a Personal Digital Assistant (PDA) which would offer a system that could be carried in a pilot's coat pocket. Milford Haven pilots are issued with PDAs and I was able to establish a connection with the Blue tooth transmitter but was unable to make use of the data.

To sum up, the Y-Tronic system provides a robust, low cost means of providing AIS information to a pilot's laptop unit. The hardware could be simplified into one unit containing the transmitter, battery and pilot plug connector which would reduce set up times, an important factor in any equipment regularly used by pilots. Consideration of PDA based software would make the system more portable and user specific.

Ed Neale
Y-tronic: www.y-tronic.com
email: info@y-tronic.com

Maritime Navigation and Information Services - MarNIS.
www.marnis.org

MarNIS is a fairly complex project and Gareth Rees, Southampton pilot and Chairman of the T&T committee has helpfully provided the following information

MarNIS is an EU funded Project started in November 2004, executed by the European Directorate for General Transport and Energy (DGTREN), to develop Maritime Navigation and Information Services across Europe.

There are 13 EU Member States involved in the project providing 44 partners and 12 sub-partners. EMPA President, Juha Tulimaa, is a member of the Advisory Board which monitors, assesses and guides MarNIS at all stages of its development.

The main objectives are:

- Improvement of safety and the protection of the environment

- Improvement in security

- Improvement of efficiency and reliability

- Improvement of the economic aspects of sea transport

- Improvement of the legal and organizational aspects.

The project is divided into five main groups, or "clusters":

Cluster 1 looks at Maritime Information Management.
Cluster 2 deals with technology for navigation, communication and information systems.
Cluster 3 deals with Pro-active and remedial structures to improve safety and environmental protection of maritime transport operations.
Cluster 4 covers Information Services and Port Operations.
Cluster 5 examines Onboard information services.

Each Cluster is sub divided into Work Packages (WPs).

WP 4.2, under the leadership of EMPA, is working on developing the Port Approach Docking Support System (POADSS). The object of this system is to improve the safety and efficiency in ports and their approaches while improving accessibility for vessels navigating at the extreme limits of their channels and fairways. In association with POADSS is the development of a dynamic passage concept that predicts and monitors the dynamic (actual) underkeel clearance during the planned passage by using real time meteorological and hydrological information in conjunction with very accurate Real Time Kinematic (RTK) positioning. The key to these advances is the addition of a vertical position to an accuracy of 5 cms, combined with an accuracy of 2cms in the horizontal position. When this information is compared to real time tidal data and chart data, then the actual UKC is determined. i.e. squat can be measured.

Other partners in the group include the Italian company THETIS who are responsible for developing the hardware and the German company Seven C's who are developing the software.

Through a Wifi broadband connection to POADSS the Pilot will receive a presentation of the VTS/AIS Traffic image; along with other data relevant to the planned passage and ENC updates. The aim is that VTS will provide the Strategic role and Pilots the Tactical Role

EMPA are also taking part in WP4.1 which is looking at VTMS. It is anticipated that WP 4.1 & WP 4.2 will combine in the next phase in developing a full POADSS trial system in the Port of Lisbon.

Gareth Rees Chairman T&T committee.
Please note new contact details on p.13

BOOK REVIEW

SEA OF GLORY: Nathaniel Philbrick

I haven't actually finished reading this book but having been engrossed by the contents so far I felt that it would be a worthy title to include as a recommendation for a pilot's Christmas list!

The book is a detailed account of the US Exploring Expedition undertaken between 1838-1842. The primary role of this expedition was to survey the Pacific from Antarctica to the NW coast of the USA in order to provide more accurate charts for the US whaling fleets.
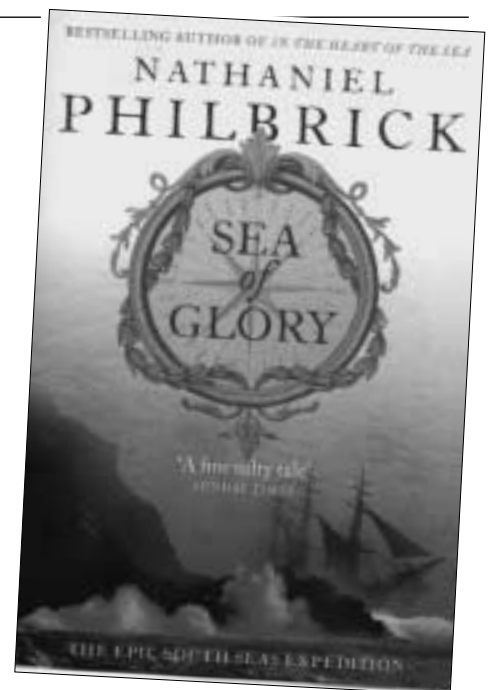
The secondary role was as a scientific voyage of discovery. Politically this voyage was not high on the priorities of the US government and consequently it was led by a relatively junior Lieutenant Charles Wilkes. Although totally dedicated to the expedition Wilkes was a controversial choice and a total egoist who rapidly fell out with most of the other officers. However, of particular interest to pilots is that of the six ships chosen for the expedition two were New York pilot schooners. The *Sea Gull* was the ex-New Jersey and the *Flying Fish* was the ex-Independence. Both around 100 tons dwt, and 75ft long these craft were specifically chosen for their manoeuvrability which made them ideal for survey work close inshore.

The *Sea Gull* was lost with all hands early in 1839 in an unknown location off Chile following the first expedition to the Antarctic as the flotilla sailed north to Valparaiso. The *Flying Fish* however survived to complete the expedition. Despite being totally unsuitable for navigating in ice, damaged and leaking, *Flying Fish* actually achieved the distinction of sailing the furthest south during the first voyage to the Antarctic reaching within one degree of the latitude reached by Captain Cook. The account of this is worth the price of the book alone!

Also of note to pilots is that Wilke's ship *Vincennes* and thus the expedition were saved by the skill of the British pilot, Edmund Fauxall departing Pago-Pago in October 1840.

Nathaniel Philbrick brings to life the characters and events and for those of you unfamiliar with this author I can also recommend "In the Heart of the Sea", the story of the whaleship *Essex*.

JCB

Sea of Glory. ISBN 0-00-712116-4.
Harper Collins Paperback (RRP £8.99)
or hardback (RRP £20)

PENSION NEWS

The Secretariat

Those of you who ring the Secretariat may notice that there has been a change to the staffing levels. As part of an ongoing reduction in costs the Trustees decided to make the part-time position of Secretarial/Administrative Assistant redundant. This has resulted in Vicki Apps leaving the Secretariat and taking up a life of leisure with more time to spend enjoying her numerous hobbies.

This leaves Richard and me to carry on with the day to day running of the Fund and the reduction in staff should not affect the standard of service you have been receiving.

Trustees

There have been changes in the Trustee Board, as well, with Stewart Lee (Forth pilot) resigning from the Board and retiring from pilotage. Tony Anderton (Bristol pilot) has stepped up as a full Trustee with Alastair Gibson (Forth pilot) becoming a new Alternate Trustee.

On the Port side David Holmes has retired as an Alternate and Graeme Clark, Aberdeen, taking his place as an Alternate Trustee.

Investment Strategy

The Trustees are continuing to implement their investment strategy with the last £10m tranche disinvested from the equities portfolio and transferred to Quellos at the end of October. This completed the second phase of the strategy and the Trustees will be discussing the third phase at their November quarterly meeting.

Pensioners Deceased

May 2006 - July 2006

GS Black	*Belfast*
GA Connolly	*London-Thames*
TJ Garrett	*Humber*
TH Knaggs	*Hartlepool*
JA Starr	*London-West*
ME Warren	*Manchester*
JG Webber	*Liverpool*
JR Whale	*Tyne*

Summary of Funding Statement

In accordance with current legislation and Government dictates the Summary of Funding Statement was sent out to all P.N.P.F. members on 20 September 2006. I am pleased to report that the mass hysteria expected by some pension pundits did not occur among P.N.P.F. members. It appears most members realised that the Statement represented a snapshot of pensions at a particular date and that shortfalls should continue to reduce over time. Although I will admit that there were a few telephone calls seeking clarification on one or two points.

Benefit changes

Flexible Retirement

From 1 January 2007 the Trustees have agreed that flexible retirement will be allowed in the PNPF. This means you cold continue to work as a pilot while receiving your pension from the PNPF. There are three caveats attached to this option which are:

- You must be over age 50 (age 55 from 2010)
- Once your PNPF pension has been put into payment you will not be allowed to continue to contribute to the PNPF or accrue any future pensionable service. Your entitlement to death in service and ill health benefits will also cease.
- You must have the consent of your Competent Harbour Authority.

The Association's Payment Proposal

The Trustees have been in consultation with the Association of Participating Bodies in the PNPF (the "Association") regarding the Fund's level of funding. This culminated in the Association putting forward a voluntary payment proposal to the Trustees. The proposal has the support of the majority, but not all, of the CHAs with employed and self-employed active pilots, is voluntary and is not legally binding on either the Trustees or the CHAs.

Following actuarial and legal advice the Trustees agreed to accept the Association's proposal, which is retrospective from 1 January 2006 and payable over a 5 year time period.

News in General

DISCLOSURE REGULATIONS

The Department for Work and Pensions (DWP) announced that the draft regulations which were due to come into force in October have been dropped. The new regulations would have introduced annual benefit statements for defined benefit (DB) schemes (the PNPF already provides these) and the concept of information disclosure within a "reasonable time".

AGE DISCRIMINATION

New laws covering age discrimination are to be postponed for two months and will now come into effect on 1 December 2006. The Government says it intends to use the delay to change the Regulations so as to clarify what is permitted and what is not. The postponement will give Trustees longer to prepare for the changes.

AGE REGULATIONS

Judicial review proceedings have been commenced by Heyday, on behalf of Age Concern, to challenge the Government's introduction of a national default age of 65.

CONTRIBUTIONS UP, MEMBERSHIP DOWN

A recent survey by the Government Actuary's Department (GAD) reveals that employer pension contributions rates in the private sector are increasing while the number of members of schemes is falling.

PENSIONS EXPERIMENT

A recent experiment challenged 26 households, aged between 30 and 50, to live off the equivalent disposable income today's pensioners received if they relied on the state pension. All but one household, overspent their state pension allowance by 158 per cent. The majority spending their weekly entitlement within three days.

Debbie Marten
Debbie@pnpf.co.uk

Retirements

May 2006 to July 2006

JD Brown	Forth	*Jun*
L Fant	Wisbech	*Feb*
GE Guy	King's Lynn	*Jul*
DH Jackson	Manchester	*Jun*
R Payn	King's Lynn	*Apr*
MJ Sterland	Bristol	*Jun*
DFS Williams	Peterhead	*Apr*

REMEMBER

It is in your interest,
if involved in any accident or injury,
however trivial it may seem at the time, to inform:

Circle Insurances Services
WITHIN 30 DAYS

WORLD MARITIME DAY EVENT:
## 28th September 2006

As headlined on the front page, IMPA, driven by recently retired Tees pilot Geoff Taylor's enthusiasm, arranged and co-hosted the "Sea's The Future" event on board HQS *Wellington* in support of the IMO's World Maritime Day initiative. IMO Secretary General Efthimios Mitropoulos made an opening speech and in addition to the Princess Royal and the First Sea Lord, the event was very well attended by key representatives from all sectors of the Maritime Industry. My own employers, the Port of London Authority had provided moorings and safe gangway access from the *Wellington* to a barge moored alongside which held a walk-through container exhibition detailing the essential role that shipping plays in 95% of World trade. Those of you who know Geoff will be fully aware of how strong an ambassador he is for pilots both in the UK and worldwide and over the last few years he has established an excellent relationship with other representatives at IMO sessions, even some who have traditionally held a rather low opinion of pilots! During the day on board the *Wellington* pilots'

L to R: Geoff Taylor; Efthimios Mitropoulos, Secretary General of the IMO; First Sea Lord and Chief of the Naval Staff, Admiral Sir Jonathon Band; Deputy Master of the Honourable Company of Master Mariners, Captain Keith Hart

representatives from several different countries mingled freely with the wide range of shipping representatives present and IMPA had arranged for a film crew to record the occasion. Such events, which enable representatives to converse outside the "positions" required at formal venues, are invaluable in breaking down old traditional barriers. One of the key reasons behind the IMO establishing the annual World Maritime Day is to try to change the on-going negative image of ships and shipping prevalent in the general populations. It is an uphill struggle because good shipping news is not interesting news. However, programmes such as BBC's "Coast" have revealed that the general public are interested in and care about the sea and that interest can be expanded by encouraging the general media to report positive news stories about ships and shipping. Pilots are fully aware of their essential role in ensuring that the highest risk elements of a ships passage are undertaken as safely as possible and events such as World Maritime Day serve to highlight that safety role amongst the desk bound representatives of the shipping world as well as the general public. Well done Geoff.

JCB
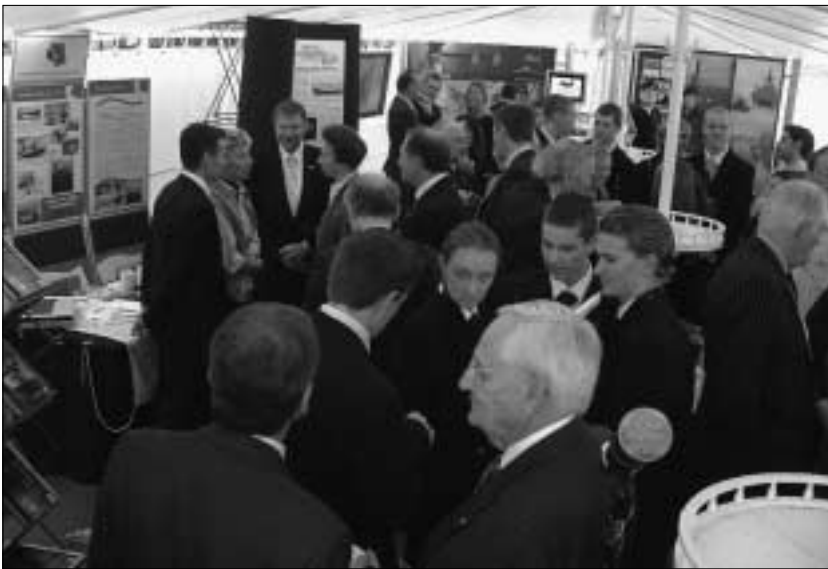
Lively conversation on the main deck

Le Havre pilot: Catherine Cornu

UKMPA Chairman Joe Wilson is interviewed for the IMPA film

The Princess royal cuts the commemorative cake.

Karen Danielson

In the April 2005 Pilot *I included a report into the fatal collision of the* Karen Danielson *with the Great Belt Bridge. The initial accounts into the disaster questioned why the Danish Belt VTS, which had been installed specifically to monitor traffic in the vicinity of the bridge, had failed to prevent the collision. The full report has now been released and the following account contains the main findings. In my opinion there is a bit of whitewash over the finding that the VTS could probably not have prevented this disaster since the investigators have seemingly revealed that no operators were monitoring shipping on the relevant display for over 30 minutes. If it is considered unlikely that the operator could have prevented the collision even if he had been keenly monitoring the ship it does rather beg the question why bother with having the VTS and expensively manning it since it is seemingly not fit for purpose?*

One common factor amongst all the VTS centres that I have visited is that VTS operators are allocated many administrative duties which inevitably distract the VTS operator from monitoring the displays. If the procedural changes introduced in the Danish Belt centre following the collision were implemented as general VTS policy the increase in manpower required to separately cover the administrative functions could have a significant impact on cost effectiveness of VTS. The following is edited from the official report.

The *Karen Danielson* was a general cargo ship of 3120 grt, built in 1985 and which collided with the Great Belt West Bridge shortly after leaving the port of Svendborg in Denmark.

1715 The pilot left the ship when it was off Thurø.

1815 The chief officer came to the bridge and shortly after the master left to eat and left the chief officer alone on the bridge.

1820 The course was altered to 005°. The speed was 11.5 knots. It was twilight and the weather was clear.

At approximately **1857** hours the ship was due to alter to an easterly course to pass north of Langeland However, the ship continued on a course of 005°.

1907 *Karen Danielson* collided with the western section of the Great Belt Bridge and the wheelhouse was torn off.

1912 hours the ship transmitted a Mayday distress signal, and only then did the VTS Centre realise that something was wrong. The master was severely injured in the collision and another crewmember was injured during the rescue. Following salvage of the vessel the chief officer was found dead in the wreckage of the wheelhouse. At the post-mortem examination, the result of the alcohol test proved positive

Karen Danielson was equipped with AIS and the ship's movements from departure from Svendborg and until it collided with the bridge were registered by the Royal Danish Administration of Navigation and Hydrography

VTS Great Belt

When the decision was taken to build the fixed link across the Great Belt it was also decided to establish a Vessel Traffic Service (VTS) system for safeguarding the link.

The Admiral Danish Fleet (SOK) is the operational manager of the VTS-system and the operation is based upon an agreement between SOK and A/S Sund & Bælt Holding, which has economic responsibility.

Extract from VTS Great Belt Procedure:
The task of VTS Great Belt is to supervise the Great Belt traffic to protect the bridges spanning the Great Belt and to alarm in time to stop rail and road traffic in case of a risk of collision with the bridges.

According to the watch schedule the team leader should have taken over from operator 2 at the operator's desk at 1800 hours. Around that time he was however occupied by a telephone conversation and he also needed to finalize some administrative work and did not take over from operator 2 until approximately 1830 hours when operator 2 informed him about the vessels, which were within the VTS area. The team leader was well aware of the fact that *Karen Danielson* was too large to pass under the bridge.

After been relieved operator 2 went down to the cellar conduct some tests on new VHF equipment.

Between approximately 1840 and 1900 operator 2 called the Team Leader in the operations room three times from the cellar to test the new VHF.

At around 1900 hours the team leader was also occupied by printing out the pilot lists from the Great Belt Pilots and checking them against the VTS database.This was the normal watch routine. Operator 1 was then in the nearby pantry dishwashing.

At about 1909 hours the team leader heard a "Mayday" call. He did not quite understand what was said because the voice calling was exited. The exited voice continued calling "Mayday" and the team leader now understood that the ship was *Karen Danielson*.

The team leader therefore looked at the radar monitor and he could not see the echo of *Karen Danielson*. He then heard that the person calling said that the vessel was locked under the bridge and he then activated the alarms to the bridge traffic watch, the police and the railway remote control centre.

Alarm – Danger of collision

According to the procedure VTS must immediately inform the police, the railway remote control centre in Roskilde and A/S Great Belt traffic watch when VTS estimate, that the navigation of a vessel towards the West Bridge can create a situation of risk to the West Bridge. If it is estimated that within 10 minutes a vessel will collide with the bridge, VTS activate "alarm". If VTS estimate that there is a risk that a vessel within 10 to 30 minutes will collide with the bridge, VTS activate "collision warning".

On 3 March at 1917 hours A/S Great Belt received a phone call from VTS Great Belt.

This was followed immediately after by a phone call from the police in Slagelse. At that time the alarm had not been received. The alarm sounded at 19.17.44 – "collision warning" and "alarm" at the same time. At 1919 hours the police closed the barriers onto the Great Belt West Bridge.

Alarm function on the VTS system

There are several automatic alarm functions in the VTS system. e.g. it is possible to insert a zone on each side of the bridge. Echos from vessels within the zone will activate the alarm. The automatic alarm function has not been used for the last 8 years.

According to the Admiral Danish Fleet the reason for not using the alarm function is that if used it had to be linked to the 10 minutes warning alarm and that the zone thus would be so great that the alarm would be activated constantly due to ships which were not a risk to the bridge.

The team leader on duty at the operator's desk at the time of the collision, has told the investigators that he had concerns in relation to his work and thinks this, the administrative work with pilot lists and the radio check have been essential contributory factors to his failing concentration and the fact that he did not notice that the echo of *Karen Danielson* continued on an unchanged course towards the bridge.

The team leader is also of the opinion that the colours on the radar screen are not suitable. The head of VTS Great Belt has told the investigators, that it is possible to use screen adjustments decided by the user. He also advised that the screen adjust-

ments have been discussed at meetings at the VTS Centre. Because it is fast and easy to adjust the screen, they had agreed that each operator should choose the adjustments he or she preferred.

Analyses

The chief officer, who was killed in the collision, did not initiate a turn to the east at waypoint 107, in accordance with the passage plan despite the fact that the GPS Navigator had been sounding on the bridge from the time the ship passed waypoint 107 at 1857 hours and until the collision at 1907 hours. The available evidence therefore suggests that the chief officer had fallen asleep, some time after the alternation of course which he made at 1820 hours to 005°.

VTS Great Belt

The VTS Great Belt procedures did not include rules on the watch team's internal organisation.

The watch had been organised according to regular practise. In the period prior to the collision, only a few ships were in the VTS area. It was not until 10 minutes prior to the collision that something out of the ordinary happened.

The fact that the surveillance of the VTS area had been left with only one operator contributed greatly to *Karen Danielson*'s steady course going unobserved and it also prevented the VTS-centre from trying to contact *Karen Danielson* and warn that the vessel was standing into danger.

According to the Admiral Danish Fleet, the internal watch procedure has been changed to the effect that there are now always two operators in the immediate vicinity with the operator's desk. One of them is primarily responsible for communication and the other one is primarily responsible for watching the radar screens.

Plotting

At no time was the VTS-centre in doubt as to the identity of *Karen Danielson*. The pilot' report had been received, there were no other echoes on the screen that could be confused with that of *Karen Danielson*, and the AIS information was also available. Therefore, the VTS-centre did not request *Karen Danielson* to report in at a given point within the radar coverage and the centre did not call the ship after the ship had appeared on the radar screen. Irrespective of the fact that the VTS-centre had no doubt about *Karen Danielson*'s identity on the radar screen, the investigators were of the opinion that, that by omitting to request the ship to report and by omitting to call the ship, the centre cut off themselves from direct contact with *Karen Danielson*'s master or the officer on watch and hereby the positive effect such

contact could have had to get the attention of the person on watch.

The investigators were of the opinion that the lack of proximity alarms prevented the inattentive operator on duty from being warned about the danger of collision with the bridge.

The possibility for the VTS-centre to prevent the collision

In order to prevent the collision, the VTS-centre should have followed *Karen Danielson* on the radar and realised that the ship was not turning as expected.

If the VTS-centre had followed *Karen Danielson* on the radar, the centre would only have had reason to assume that something was wrong approximately 9-Ω minutes before the collision occurred because the ship did not turn east. The VTS-centre could have called *Karen Danielson* on the VHF or sent out the guard vessel from Slipshavn.

The chief officer on *Karen Danielson* was alone on the bridge. It is not possible to determine whether he would have heard a call on the VHF. He did not hear the "line alarm" from the GPS navigation

which sounded for about 10 minutes.

It would have taken approximately 10 minutes from the VTS-centre's alarm for the guard vessel to get close to *Karen Danielson*. This would have been too late in this case. Even if the VTS operator had realised that *Karen Danielson* was not turning east, it is doubtful whether it would have made any difference to the collision.

The Admiral Danish Fleet has stated that they have established the following special procedures for ships that are navigating from Svendborg into the VTS area:

■ Svendborg Port informs VTS Great Belt by fax when a ship departs
■ The VTS-centre calls the ships 5-10 minutes before they reach the turning point and asks them to confirm their intention to alter course.

The full report can be downloaded from: **http://soefart.inforce.dk/graphics/Synkro-library/DMA/UK_PDF/CasualtyReports/200 5%20uk/finalreportKARENDANIELSEN_%5 B1%5D.pdf**
I will also be placing it on my website once I have upgraded it.   JCB

Footnote: The hours culture applicable to seafarers!

Although no new crew members were involved in the incident the investigators noted a disturbing factor around how crew changes are now undertaken in total contravention of the Working Time Directive which results in ships' personnel joining the vessel in an already extremely fatigued state. The report notes:

The 2nd officer together with four other new crew members joined the vessel around 1000 hours on 3 March 2005 after travelling by mini-bus from Split in Croatia to Svendborg, in Denmark. This was a direct drive of 26 hours, they were accompanied by two drivers and a crew manager from the manning agency. Upon arrival at the ship they went through their respective handovers and the departing crew members left to return to Croatia with the same mini-bus shortly after 1400 hours on 3 March. The joining crew went straight on duty upon arrival at the vessel.

Due to the busy work schedule planned for the 3rd March, all on board, both existing and newly joined crew worked throughout the day on the 3 March 2005.

I understand that this appalling disregard of the "Human Element" is apparently now common practice as a means of saving the cost of hotel bills and air fares.

OBITUARIES

John Oates

John Oates, retired Trinity House Cinque Ports & Port of London pilot died on the 12th August 2006 at the age of 77. John went to sea with the Ellerman Lines in 1947 and then joined the Cunard Line where he served until entering the Cinque Ports Pilotage in 1962. Married to Francis, they had three children Susan, Michael and Charlotte, tragically losing Susan in 2005 at the age of 48 to emphysema and Charlotte's partner Callum 2 years ago, but leaving granddaughter Poppy to delight everyone.

John's hobby was sport, he didn't play soccer or rugby (few pilots do!) but he played everything else. The Cinque Ports Pilots Cricket Team was at its best during John's enthusiastic captaincy in the 1960's. He will be remembered for his efforts to persuade cricketing pilots to leave their beds after some 2 hours sleep to make up the eleven for a match as well as his borrowing cricketers he knew from other clubs, once even enlisting a drunken GP who managed to fall on his wicket 2nd ball! Not to mention the Pilot's wives who had to report for duty to make the tea!

Even in later years, despite suffering from a gammy knee, John played squash, badminton, cricket for several local clubs and of course golf. A long term member of the Royal Cinque Ports Golf Club, he was honoured at his funeral by the large turn out from follow members and by the Reception for him held afterwards at the clubhouse.

John will be sadly missed by Fran, son Michael, daughter Charlotte and their offspring, by his retired pilot colleagues and his golf club associates.

John Godden,
Cinque Ports & London pilot (Retired)

Michael E. Warren
1926 -2006

The chapel of rest was full to overflowing as family, friends, neighbours and colleagues of "Mick" gathered to say their goodbyes. In a service that was a celebration of his life we were constantly alternating between sadness and laughter. Mick was one of a dwindling number of men who were at sea during World War 2 having joined the Merchant Navy in his early teens and now we can only imagine what life must have been like enduring the wartime convoys. In 1948 Mick joined the Manchester pilot service and became a first

class pilot in 1956. Those of us who worked with him remember a good pilot and a good shipmate, a pleasure to have known.

He will be sorely missed by his wife Pat, his children Paddy, Jane and John along with his grandchildren. Outside the family he is remembered with affection by all who knew him.

John W Jarvis,
Manchester pilot (Retired)

Joseph Gray Webber
1924 -2006

There will still be a number of seafarers outside of Liverpool who will remember Joe Webber and be saddened to learn of his death.

A Liverpool pilot first and foremost. Born and bred in Liverpool but with strong links to Northern Island. His father was a Commodore master with Coast Lines and presumably influenced Joe's attraction to seafaring; and towards pilotage. After serving with wartime convoys during his 'Seatime', he was always convinced that early deafness was as a result of cleaning ship's hold when Escorts were dropping their depth charges close by. There followed his pilot apprenticeship years before before becoming licenced in 1948. A year later he married Dee, as she was always known, who became his anchor in life's journey. A period of ill-health befell him which threatened his career.

Back in harness he progessed to become a First Class pilot and later a Shell Appropriated pilot. Work and, especially, play took on a new meaning. He lived life to the full – looked over the edge – pulled back, and never wavered from this resolve over the next thirty years. His new found purpose in life led him to actively assist those whose lives were blighted with the difficulties he had overcome.

Within the Service he became involved with pilots's politics, local and national. For many years he served the office of Senior Pilot's Representative with great distinction. He was ever directed to promote the interests of Liverpool pilots. His forthright expressions of opinion would have had today's politically correct brigade in a permanent state of shock; branding those whose actions damaged the reputation of the Service as "scallywags". Joe had a remarkable gift of being able, in most cases, to admonish without any rancour. In all his dealings with shipowners or Port Authority his honesty and integrity

were his strong points from which he built beneficial associations for Liverpool Pilots. These characteristics were recognised at every level and still some eighteen years after retirement, many still enquire as to his wellbeing.

Over the past few years fighting the onset of declining health his lifetime partner became his guardian angel. His desire for good order never wavered; ever immaculately dressed, excellent company and a kindly host.

Obviously remembered with affection from many sources. None more so than his family. To whom sincere condolences are offered to Dee, son Christopher, Pirji and grandson Joshua.

Neville Owen,
Liverpool pilot Retired

Michael Field

On August 9th 2006 Michael Field, retired Trinity House Cinque Ports and Port of London Authority pilot, died aged 74 after coping brilliantly for many years with chronic emphysema. After attending Purley County School Mike transferred to the Worcester Nautical College in 1947, following in the footsteps of his elder brother Kester, and joined the New Zealand Shipping Company in 1949. Rising to the rank of Chief Officer he entered the Trinity House Cinque Ports Pilot Service in April 1966.

Brother Kester, already a pilot, asked if I could "look after" Mike when he started

OF PILOTS PAST

During the summer of 2006 we decided to visit Ireland. Arriving in Dublin we headed north into Northern Ireland. From Warren Point we followed the coast to the Antrim Coast Road to be greeted with wall to wall sunshine, blue seas and probably the most beautiful coastal scenery we have ever seen. After 5 days in the north we crossed into Donegal, visited Malin Head the best known weather forecast area, and headed south, stopping for lunch at Rosses Point to the west of Sligo. On our way we had visited the church, grave and sculptured tribute to WB Yeats the great Irish writer. At Rosses Point a friendly Irishman reminded us that many thousands of Irish people had left Sligo by sailing ship, mainly for America, during the "potato famine of 1842. Walking out to the Point itself we found a plaque explaining that WB Yeats and his brother Jonathan, the artist, had spent their childhood here "playing around the Pilot House".

Sure enough the Pilot House still stood, deserted now, with the pilot's look-out window commanding a view directly out to sea where at the entrance to the Bay a sand bar practically closes down Sligo Bay at low water. The Sligo pilots apparently brought hundreds of sailing vessels in and out of the port, with no tugs in Atlantic coast conditions, bringing in turn hope for a better life to thousands of starving and dispossessed Irish. As I stood in the old building, thinking how important the Sligo pilots were to their fellow countrymen 160 years ago, I felt proud that I had belonged to the same profession all these years later.

John Godden, Cinque Ports & London Pilot (Retired) and Past Editor The Pilot

Marine Pilots' Golfing Society

The Marine Pilots' Golfing Society has held two meetings in 2006. A spring meeting was held at the The Bryn Morfydd hotel and golf club attended by eight pilots from Bristol, Milford Haven and Manchester.

Winners were:

G Hill (Bristol) and **G Hutchinson** (Manchester)

The main meeting was held at the Mytton Fold hotel and golf complex Blackburn Lanes. Twenty six pilots attending from seven ports, Milford Haven, Bristol, Manchester, Tees, Humber, Forth, and Sullom Voe.

Sponsorship for the above was received from The Milford Haven Port Authority and Svitzer Marine Milford Haven.

Next year there will be a spring meeting in April and our annual event in September both at the Bells hotel and golf complex Gloucester.

For further details contact Peter Ryder:

Tel: 01646 600711 • email: pilotlight10@hotmail.com

Mytton Fold Trophy Winners
(l to r): P Upton, M Cramond, M Wilkinson and G Hill

Hawkstone Cup - P Upton (Tees)
Wilmslow Cup - P Upton (Tees) & M Cramond (Forth)
Jim Purvis Memorial Cup - G Hill alias Jesse James (Bristol)
Manchester Salver - M Wilkinson (Humber)