

BMEA Annual Conference 2009

Conference sponsored by  **victron energy**
BLUE POWER



The Conference was opened by Paul Holland as BMEA Chairman, thanking our headline sponsor Victron Energy bv for their support. Paul also referred to our close relationship with NMEA, welcoming the president, David Hayden, Technical Director Steve Spitzer and his assistant Technical Director, Dave Morschhauser. Paul emphasised the continuing and increasing importance of training and the changes to the BMET certification, following a meeting with NMEA at METS last November. We would be hearing about NMEA as a whole as well as seeing a demonstration of NMEA 2000 during the afternoon.

Ian Lockyer of Icom UK Ltd promoting the benefits of BMEA membership.

Ian Lockyer as the BMEA Webmaster quoted 1400 unique visitors per month to the BMEA website, 80% of which were UK based. Most popular were the information about BMEA with its news and press releases, marine electronics and the members' directory. He asked that our member send him any items of news, PR and pictures. Multimedia and the use of video, Powerpoint presentations etc could be included. Also the new on-line BMEA Direct is currently sent to 500 addresses. Finally two of the annual awards are voted for on-line and within the site.

Ian was followed by Johannes Boonstra of Victron Energy bv who presented his view of 'Smart Energy Solutions'. He gave a brief resume of the company's history, their field of activities that had started with inverters. Today, he stated the need for a fast service turnaround and in addition the need to reduce pollution, fuel saving and installation costs. He went on to talk about the different sources of power and the modern ways of optimising them. He then detailed some of their product range such as the 'Quattro'. He concluded with very detailed information about their testing facilities and the need for smaller and better storage systems.

Tim Gallego of Poundbury Wealth Management described the company and its strong long term partner/client relationships. He discussed the actions of fund managers and the reduction of investment risks by spreading them out. He gave his outlook for 2009 and what had been referred to as 'Quantitative Easing' - a fancy title for printing money with the Government taking out a massive mortgage on the Country. He stated that the long term investment in property continues to be sound. Finally, Tim showed GDP projections, explaining the significance and projected rise probably including the FTSE.





At short notice, Russell Morrison from EADS, Astrium, Portsmouth gave an update on GPS, Galileo and e-navigation. He referred to the GPS L2 frequency (currently dataless) which should include data transmission by the end of this year, and explained that Galileo, although seen in the most part as a competitive system, can be viewed as complementary to GPS. He detailed the constellation, 30 satellites in 3 orbits at a height of 23,600 km with a 56° inclination. In 2005, GIOVE-A and in 2008 GIOVE-B (both validation) satellites were placed in orbit. It is expected that Galileo will be fully operational by 2013, then having 30 satellites. Its use would be free of charge. EADS has a major involvement in both Galileo and EGNOS that had begun in the 1990s. He went on to say that GLONASS was being replenished to have 19 satellites with 17 currently operational. In 2010, GLONASS-K would be in use to provide better interference and multi-path resistance of GLONASS signals. The Chinese also had their own system known as COMPASS with potentially 10 satellites by the end of the current year and an accuracy around 10 metres for the 'free to use' service. It will become global with 35 satellites in 20 km orbits. QZSS (Quasi Zenith Satellite system) will have 3 satellites providing regional time transfer and enhancement to GPS.

From the augmentation point of view, GPS is vulnerable to interference and can be jammed deliberately or by other sources. A 'system of systems' is one solution with GNSS providing coverage almost ubiquitously but with local augmentations in areas where reception is poor. E-Loran was also a solution to provide navigation when satellite systems were jammed or otherwise inoperative. Russell finished by taking questions from the floor.

Ken Wittamore from Triskel Marine Ltd presented the Hymar Project on behalf of ICOMIA. The project's objective is to open up the hybrid drive market for small craft so that anyone can contribute, a project of 36 months duration. He was referring to diesel-electric drives with the aim to reduce both emissions and noise. He believes that it is possible to make a significant reduction in fuel consumption. Ken provided figures for the overall efficiency of normal diesel engine propelled craft which is extremely low. Energy storage is one of the key issues. Lithium and super-capacitors are the current technologies with the capacitors being able to discharge energy very quickly. The supply voltage is 144 V DC and currently there are no standards for such voltages, yet to be developed. He quoted Nigel Calder's boat used for test purposes. This year, they are collecting data on the various efficiencies of diesel engines; next year will be the turn of pure electric drives.

He then showed various graphs to illustrate fuel consumption versus boat speed, propeller efficiencies etc. The maximum diesel engine efficiency was around 45% based on dynamometer testing but the total efficiency at low speeds was only 4%. If the engine is not loaded correctly, its efficiency is proved to be terrible.

The current conclusion is that engines must be loaded to maximise their efficiency.



David Hayden, President of NMEA then spoke of the relationship that has developed with BMEA. He thanked BMEA for inviting them to the Conference and stated that there is a shortage of ex-college student engineers into the marine industry. NMEA has close to 600 members with over 300 delegates at this year's convention. He also referred to their on-line Buyers' Guide as well as their emphasis on safety in all that they do. NMEA has now been accredited by ANSI as a 'standards-developing' organisation and this will give them a huge bonus. They also have a 'master dealers Association'. Like us, they insist on at least one CMET certificated engineer on each such dealer's staff. They recognise the importance of dealers' education and technical proficiency, a high level of customer service that must meet NMEA standards. He then talked about IMEA (International Marine Electronics Association) as a separate entity with a mission to support

NMEA in the future development of standards. BMEA and NMEA now have a partnership agreement that will result in specific benefits to BMEA and its members. He was very pleased with the BMEA/BMF affiliation and finished with a Q/A session that included a question concerned with the lack of manufacturers interest in qualifications.

Finally Dave Spitzer, NMEA Technical Director gave an overview of the NMEA 2000 interface. Then, following the BMEA two AGMs, Dave Morshhauser from NMEA gave a hands-on demonstration and answered questions about this interface - a 'mini-Connect Fest'.



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In the evening, the Annual Dinner took place and at the coffee stage there were the three awards. Firstly the annual award to the 'Dealer of the Year' as voted on the BMEA website. This method of voting has now been in use for a couple of years and has proved most successful, thanks to Ian Lockyer who organised it. The voting is open both to the trade and public and is for the BMEA dealer that is considered to offer the best service and advice for the boat owner. This year, it was won by Landau UK Ltd. In Benjamin Metcalfe's absence, it was taken by Jonathan Bagge of that company. The picture shows Jonathan (left) receiving the trophy from Dick Stanger of Garmin Europe Ltd who sponsored the award.

The 'Product of the Year', also voted for on-line on the BMEA website, was won by Actisense for their new NGW-1 NMEA 2000 to NMEA 0183 Gateway. This was also highly recommended by Steve Spitzer, the Technical Director of NMEA as amongst the best.

This award is sponsored by Boating Business and shown here to the right is Kate Didymus of Boating Business with Phil Whitehurst of Active Research Ltd.



Runners-up and commendations were made to Icom UK Ltd for their handheld VHF, the IC-M71 and Raymarine for their C Series Multi-function displays.

Below left are shown Kate Didymus with Ian Lockyer left representing Icom UK Ltd and on the right, Derek Gilbert of Raymarine plc.



Finally, a new award sponsored by Raymarine plc is the 'Newly Certificated Technician of the Year'. Shown right is Roger Upham of Roger Upham Marine Electronics Ltd with extreme right, Derek Gilbert who presented the award.



While Roger has been in the industry for many years, he is one of those who has seen the benefit of sitting the BMET (British Marine Electronics Technician) exam. BMEA has taken the initiative in generating over the last few years, exams and requirements for minimum and relevant practical experience in both this and pure electrical certifications, thus helping to ensure good workmanship of installations and in turn minimising the warranty work that can be a pain to both boat owners, the equipment suppliers and manufacturers.

Recently and to fill a need, the BMET certification has changed to represent pure electrical installation work (British Marine Electrical Technician) with the electronic installations being catered for by the NMEA based MEI (Marine Electronics Installer) and to a higher level, the NMEA CMET certification (Certified Marine Electronics Technician) with minor changes to better suite the European requirements.