



Islander July 2010 Technology Update

The increase in specialist “Apps” for yachts with good data communications

Part 1 – Communications - the excuse most owners need to get afloat.

“Apps” is the latest maxim to emerge from the communications industry. It has become a phenomenon since the iPhone was launched, and has now a second wind with the launch of the iPad.

For those not in the know, “Apps” stands for Applications. Applications are services in the form of software that you can run on an iPhone or a Nokia cell phone that turns the cell phone into a different tool. For example there is an App that, when run on an iTouch or iPhone turns it into a remote control for the Sonos audio system. There is another that turns it into a mini chart plotter and another that, very cleverly, displays wind speed by listening to the speed of the wind using the microphone! The marketeers for the iPad boast over 200,000 Apps are now available.

The great majority of these cell phone and tablet Apps are free and are usually small applications that need a good data connection, that turn today’s powerful smart phones into a pocket sized multi function device.

The same is happening in the specialist marine communications market and specifically in broadband. Good data communications are available for yachts almost anywhere in the world today. As a result there are some fabulous specialist Apps for the yacht market that only a few years ago could not exist. All these different Apps require different amounts of bandwidth to work.

There are a number of gateways that can be used to provide good data communications on a yacht. These are 3G with HSPA, wi-fi, Inmarsat and VSAT. Most yachts use a combination of these. They all have limitations either in the geographic area they reach or the amount of bandwidth they can provide.

A yacht will switch between the different services or use two or more gateways simultaneously to provide the data services the owner, guests and crew require to run these Apps. The type of Apps available generally fall under the following headings and are a little more complex and sophisticated than an iPhone App, but as can be seen, all iPhone Apps can also be run using these Apps.

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Welfare services for the owner, guests or crew

- Fast and reliable email, Internet and social networking services including all cell phone Apps.
- Voice services via VoIP with home country telephone numbers
- Use of own GSM cell phone anywhere in the world
- Watching home TV anywhere in the world and dedicated video
- Printing home newspapers anywhere in the world
- Home “no wait” medical support anywhere in the world

Business services for the owners, managers or guests

- VPN connection to the owner’s and / or manager’s office
- Video conferencing
- Live financial video/TV feeds
- Current financial newspaper printing available before it hits the news stands

Vessel management, safety and security services

- Automatic chart updates and navigation warnings
- Weather services and weather routing
- Passage planning
- Telemetry integration and preventative maintenance
- Communication cost control and management
- Live CCTV video from the ship to shore security office

Broadband for yachts is not new and out of the list above there are a number of Apps that are also not new and are so well used already that they are not worthy of too much space in this column other than to say they exist.

The most well used are, the first mentioned, the fast and reliable email, Internet and social networking services including all cell phone Apps. All personnel aboard are now totally dependent on these “mother of all Apps” to run a considerable number of other Apps.

A vessel cannot exist at sea today without these all being available. These Apps are one of the most important reasons why owners can use their yachts and thus desire them.

Good communications is the excuse most owners need to get afloat.

So let’s start with communication Apps. Apart from the welfare of the owner, the owner’s family, guests and crew, good communications also enable an owner or charter guest to keep in contact with his business and to never miss that important business call, wherever the yacht may be in the world. What is almost as important as “never missing that important business call” is keeping the family happy when they are in captivity onboard by giving them access to all their social networking sites.

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So the Apps that can be used if the yacht has good broadband, that are not basic Internet and email are as follows:

- **VoIP. Voice over IP.** This is a dedicated version of Skype and it uses less bandwidth and has a guarantee of voice quality. A voice call off the yacht using VSAT bandwidth costs nothing. The part of the call from where the call lands ashore or breaks out is then paid for. So if the break out is in the USA and you are calling the USA the call cost from the yacht in the Med is the cost of a local call in the USA. The VoIP line can also be given a country telephone number so, for example, if the owner is Russian, then all calls from Russia to the Russian number on the yacht will be at Russian national call rates. A yacht can assume a number of different phone lines and they could all be with numbers from different countries.
- **Use of own GSM cell phone on board.** This is an App that turns the yacht into a floating GSM cell. The connection from the yacht to the shore GSM system is made via the broadband data pipe and typically will use the dedicated VSAT bandwidth. In practical terms this means that the personal cell phone of anyone on board will ring with an incoming call as it does when ashore. Thus the “never miss that important business call” or “never miss the call from family” is a reality as no-one needs to know where you are. The very latest version of this is called **eCell@Sea** and is designed to be used onboard any yacht anywhere in the world. Numerous people can use their cell phones simultaneously using this App.
- **VPN. Virtual Private Networks** can be used to provide a connection between PCs onboard with a network ashore. So, for example, the PC on the owner’s desk onboard can become a PC on his office network in New York thus allowing him to be able to work from the yacht anywhere in the world.
- **VC. Video conferencing.** When the important business call has been received, a video conference can be set up with the parties involved in the business deal from the yacht. No-one needs to know the yacht is anchored off a coral-atoll in the Pacific, as it will work just as well from there as it would from his office in Zurich.

In the next issue we will move onto “**Home from Home**” and “**Safe and Secure**”. Home from Home will explain the Apps that deliver home newspapers, TV and medical services to the yachts anywhere in the world. Safe and Secure will explain the current Apps to enable safe navigation, chart updates, navigation warnings, passage planning, weather services and routing plus preventative maintenance and security Apps.

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