

Islander July 2007 Technology Update

What can you use a VSAT for? You are paying for it monthly so why not use it?

A VSAT provides the equivalent of a land based ADSL line to a vessel at sea or even to a fixed dish for use in remote locations, such as in deserts, jungle or safari game parks.

The VSAT data line can be used for many applications on the yacht, just as an ADSL line is used in the office or at home. Also, just as an ADSL line the VSAT monthly running cost is usually a fixed figure for an unlimited amount of data transmissions. Thus, when you have signed up for a contract and you are paying for it you may as well make use of it for everything and anything you can think of.

So what are the applications? The most obvious is for Internet and email access. With a distributed mail system and your own domain, virus and spam control, via E3's Hosting service, you can have an email address for everyone on board and configurable guest email accounts for guests, if they don't have their own web mail service. E3 also provide web mail as part of their Hosting service for access off the yacht.

The next most obvious application is using the data line for making voice calls using Voice over Internet Protocol (VoIP) technology. A voice call is converted into data and converted back, as anyone who has used Skype has experienced. Some VSAT services, such as MTN, have dedicated voice lines built in as part of the service, at no extra charge per month. You have to pay extra for voice lines with other VSAT service providers. For the voice quality to be good you need a part of the data bandwidth to be dedicated to the voice line, otherwise when someone is starting a download or surfing the net it will use a portion of the data pipe and the result will sound like a strangled cat. The service provider will provide what is known as a breakout from their VSAT system somewhere in the world. The breakout is where it connects to the land based telephone network in a selected country. Thus if the yacht's regular guests are from the USA, then a US breakout would be sensible, as then the VSAT can be used to make calls to the USA for the cost of a local US call, from anywhere in the world. As the call to the US from the yacht is already being paid for within the monthly VSAT fee you may as well make the most of it to save on your regular telephone bills.

What comes next? Downloads? Use your VSAT to download newspapers or music for your iPod. The newspaper in your hand has been downloaded over VSAT and printed on a Yacht Print Station printer. Thus if you have a VSAT you can download

and print your local daily newspaper to read with breakfast wherever you are in the world and before it appears on your news stand at home. A newspaper download file is huge. On an Inmarsat terminal it would cost \$120 plus to download an average paper. On VSAT, as you're paying for the monthly fee for unlimited data you may as well make the most of it and use. The same reasoning applies music downloads.

The next application would be to use the VSAT to keep in touch with the office via a Virtual Private Network (VPN) linking the yacht and your office desk PC or by simply using something like the Microsoft Small Business Server for Remote Workplace access, so you can operate the PC on your desk from the yacht. This is the excuse that a lot of business people need to be able to get afloat and to use their yachts more.

How about using the VSAT data tunnel to keep the crew, the kids and the adults all happy by allowing their cell phones to work through it even though the yacht is at sea? This is GSM at sea. The yacht can be configured as a floating GSM cell. Thus everyone on board can use their cell or GSM phones for voice and text messaging – reference the kids and crew. The link to the shore GSM network is provided by the VSAT. This is rather like the Voice over IP mentioned above but you can make and receive calls on your own mobile phone onboard the yacht when outside the land based cell phone networks with all the benefits of having your own mobile phone with your own contacts directory and messages.

Finally, you can now also use the VSAT to watch TV. This technology is new and we are very excited about it. Imagine being able to watch that sports event at home in Australia when you are on your in the Med.

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