

WIRELESS COMMUNICATIONS & SNAIL MAIL

(Keeping In Contact With Home and/or Business While Cruising)

Introduction:

While on our America's Great Loop cruise during the Summers of 2002, 2003 and the Spring of 2004 we traveled through 18 states and 2 Canadian provinces. At that time, the state of the art method of communicating was with a tri-mode cell phone. Email was accomplished using the cell phone as a modem hooked up to our laptop computer using Quick Link Mobile (Macintosh) or Quick to Link (PC's). When we did not have a digital Data signal, we had to rely on buying telephone time from marinas, and other places (see other options for Email and Internet).

Obviously there have been a lot of technological improvements over the past four years, so we will attempt to cover not only how we communicated, but will also explore many of the newer methods and options that are available now.

Cell Phone options:

- (1) **PDA (personal digital assistant), Smart Phone, OR a Tri-Mode Cell Phone** - VERIZON or Cingular-ATT -- must be a Tri-Mode phone for Digital DATA use. Note: You will be able to make a voice call with either an Analog or a Digital Signal, but having a Digital Signal does not always mean that you have a Digital DATA Signal.(14 Kbps.). All new cell phones are Tri-Mode with GPS (global positioning system for 911 calls).
 - a. Verizon - Get the North America's Choice service, for use in Canada and more coverage. Do NOT get America's Choice or a Regional plan.

Before deciding on a Plan, check for the non-coverage areas which are far more important than the plans cost rate. Also check to ensure that the Plan includes DIGITAL DATA Service.
 - b. Verizon - If going into Canada, add Canada Non-Roaming to your plan (included in North America's Choice). Also available from AT&T and possibly other service providers.
 - c. Check your Internet Service Provider to see if 800 service is available. Check about toll free service from Canada and other countries.
 - d. Bahamas - Not unless you have a BATELCO phone (rentals). Cingular International works on some islands, i.e. Grand Bahamas and Abaco.
 - e. Europe - No, but apparently not too far into the future. You may be able to get service while there.

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- f. Cell Phone Booster. PowerMax DA4000MR dual band amplifier boosts power from .6 watts to 3.0 watts (up to 50 miles). Wireless - with no connection to cell phone. FCC-approved. (Verizon, AT&T, Sprint, T-Mobile). From: Digital Antenna at \$499. <www.digitalantenna.com>.

(2) Satellite Telephones (need a clear view of the sky or auxiliary antenna).

- a. Qualcomm 600 Satellite & Cell Phone combination (two phones in one)
 - 1. Satellite Phone side (need GLOBALSTAR service account and number).
 - 2. Cell Phone side (need a Cell Phone service account and number).
- b. Motorola Iridium Satellite Phone
 - 1. Satellite Phone Only (need IRIDIUM service account and number).

On Line From Anywhere -- Well Almost

There are several options to send and receive Email and/or go on the Internet:

Quick Link Mobile by Smith Micro, Inc. <www.smithmicro.com>

Quick Link Mobile provides quick and easy wireless connectivity for Macintosh Laptop Computers with OS-X operating system. It will automatically determine whether to link to a Wi-Fi, WWAN or a PDA Cell Phone

(1) Cell Phone OR Tri-Mode Cell Phone. PDA and a Laptop Computer.

- PDA's are personal data assistants which are compact devices which have a data base for calendar and appointments, phone and internet.
- a. A Digital DATA Signal is required and there are black holes where you will have a Digital Signal and can make a Digital Cell Phone call, but NO DATA allowing you to do Email or Internet dial up. There are other areas in the country where you will only have an Analog signal.
 - b. Need QuickLink Mobile (Mac) or Quick 2 Net (PC) by Smith Micro, Inc.
 - c. Check with current ISP if they have Authentication capability with password and allow RELAYING from Verizon to their outgoing mail.
 - 1. If NOT - Keep existing ISP and Email provider for INCOMING mail
 - 2. Get VERIZON account for OUTGOING MAIL.
 - d. Slow - Only 14.5 Kbps.

- (2) **WWAN is an acronym for Wireless Wide Area Network.** It is a competing system to Wi-Fi.

WWAN is the preferred system for long range boaters doing the America's Great Loop Cruise or others who need to be able to send and receive Email and use the Internet while not in major market areas. The system also has good NationalAccess coverage in Canadian waters.

VERIZON® BROADBAND ACCESS / NATIONAL ACCESS

There is good news for long range cruising boaters doing the America's Great Loop Cruise with regard to Email and Internet Access. The news is the Verizon® Broadband Access / National Access PC Cards which not only work on the IBM PC format, but now also on Macintosh® G4 PowerBook laptop computers with Mac OS 10.3 or higher operating system.

The high speed WWAN system consists of the VZAccess Manager software program with a Verizon wireless BroadbandAccess / NationalAccess Kyocera® PC wireless data card (three versions available). The Software with the PC card inserted into a laptop computer takes the place of a land line modem or the use of a cell phone as a wireless modem.

Typical Download Speed for the Broadband Access (WWAN) speed is 400-700Kbps with maximum download speed of 2Mbps. In areas where Verizon Broadband Access coverage is not available, the system automatically drops the user down to the Verizon National Access program (called backward compatible). National Access coverage has typical download speeds of 60-80 kbps and a maximum speed of 144Kbps. By comparison, typical Land Line Dial Up speeds are 56Kbps and DSL at 768Kbps, 1.5 Mbps, or 3.0 Mbps depending on plan purchased. Use of a Cell Phone as the modem with Quick to Link (PC's) or Quick Link Mobile (Macs) has a speed of only 14.2Kbps.

PC users may need to increase their memory and operating systems. Macintosh users may also need to increase their lap top memory and/or update their OS X operating system to meet the Macintosh compatible Kyocera® KPC 650 requirements (in January 2006 the Mac OS X Tiger, version 10.4.3).

To check on the local availability of Broadband Access / National Access, log onto the <www.verizonwireless.com> website. There is a section where you can type in a zip code to find out what coverage is available in that area. The site also lists availability in Canadian provinces, which is quite extensive but is largely National Access versus Broadband Access.

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Depending on your ISP, you may also need a Verizon ISP (Internet Service Provider) account for outgoing Email if you wish to continue to use your existing ISP for incoming Email. This is because some ISP's do not have authentication and can not accept relaying. Essentially, one can get Broadband Access in most major market areas (171 nation wide) and National Access anywhere you can make a digital cell phone call.

The cost (January 2006) for the Verizon wireless Kyocera PC card was \$180 with at monthly charge about \$60 for Unlimited Access Time - based on having a two year contract for a Verizon cell phone.

- (3) **Wi Fi PC card and a Laptop Computer** (also PC Air Cards which use GPRS -- general packet radio service).

Wi-Fi is an acronym for Wireless Fidelity, a method of making a computer connection using radio waves instead of plugging in. This is a quickly emerging technology. Wi Fi access is becoming available in Airports, Hotels, Marinas, etc. around the country.

- a. The initial set up cost for Wi-Fi is about \$50.00 and approximately \$45 to \$50 per month plus pay per day rates for transients.
 - b. Good coverage in most Major Metropolitan areas.
 - c. Advantage: Fast speed - up to 54 Mbps in some cases.
 - d. Disadvantage: Poor or no coverage in non metropolitan areas
 - e. Wi Fi Seekers (small key chain devices) are available to detect Wi Fi wireless hot spots for about \$30.00. If in doubt, it may be worth a small investment to make sure that the area(s) you will be visiting has Wi Fi service.
- (4) **The use of a Smart Phone such as the Treo 600 manufactured by palm one.** The Treo 600 is a little larger than a cell phone, but has cell phone, Email - send and receive, Internet capabilities and camera. It has its own miniature keyboard and an auxiliary portable keyboard is also available.
- a. \$400 initial cost
 - b. \$40 to \$50.00 per month

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- (5) The use of a BlackBerry cell phone to access a computer located in home or office.** Call 1-800-TMOBILE or log onto the following web site: <www.tmobile.com/products/default.asp?class=pda>, or other companies to make sure you can connect to a BlackBerry.

NOTE: BlackBerry phones require a PocketMac For BlackBerry and a Keystone USP SERIAL ADAPTER (US-19H)S) to connect to a Macintosh.

- a. \$400 to \$450 initial cost PLUS \$30.00 for a PocketMac with adapter.
- b. \$40 to \$50.00 per month

(6) Other Options for Email and Internet:

- a. Libraries, Book Stores, Coffee Shops and Cruise Ships generally have computers for logging onto the Internet. Make sure you know how to access your Email from another computer.
- b. Office Supply Stores, Computer Stores, Cell Phone Stores and FAX locations will usually allow you to use their FAX line to send and receive Email (a nominal fee of 50 cents a minute is the going rate).

Mail Options:

(1) Someone to open and sort important mail from junk mail.

- a. Relative, Neighbor or Friend.
 - 1. Note: Anticipate mail and how to identify Important mail. What to look for during your time away from office and/or home.
- b. Mail forwarding Firm (MAIL BOXES) for First Class mail.
- c. Pay regular bills by Direct Payment or paying on line. If using paying on line option, make sure that you do not wait until the last day - pay several days ahead of time, so you do not find yourself in a non Data service area.
 - 1. Take business checkbook with you to either send checks home or pay bills forwarded to you.

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(2) Mail Delivery Providers:

- a. Express Mail (overnight) or Priority Mail (2 days) don't bet on it! Express Mail and Priority Mail are only delivered as such in the USA.
 1. Take envelopes and stamps with you. Drop off at any Post Office, Hotel, etc.
- b. FEDERAL EXPRESS Account - particularly if in Canada
 1. Confirm mailing - delivery address which may be different than a business address.
 2. Also good to be able to send things back home or to office. Take envelopes and boxes with you. Drop off bins at most U.S. Post Offices.

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