



From Snail-mail to Radio-mail

January 8, 2010

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Goals



- ▶ Clarify the differences between the **system** (Winlink) and the **software** (Airmail, Paclink, etc...)
- ▶ Understand the capabilities/limitations of radio email for emcomm and remote/mobile stations
- ▶ Encourage more people to operate RMS Packet gateway stations in their communities to provide better coverage.

Why Radio Email?

- ▶ Email messages can be sent and received even when the internet is not available or accessible locally
- ▶ Messages can be sent to ANY email address, not just to amateur radio stations
- ▶ Files, spreadsheets, photos, etc..– can be attached to a message (but will be very slow if not using latest Pactor III standard and equipment)

Email Systems



- ▶ Hotmail, Gmail, Yahoo mail are email server systems that you might be using today
- ▶ Email servers act as a kind of “post office” that accepts email to your address until you’re ready to retrieve it
- ▶ The email system for amateur radio is called **Winlink 2000** or **WL2K**

Winlink 2000



- ▶ Global radio email system since 1999
- ▶ Endorsed by ARRL and Military Affiliate Radio System (MARS)
- ▶ A system of redundant servers (CMS), connected to the internet that are strategically located around the world:
 - Halifax, Nova Scotia, Canada
 - San Diego, California, USA
 - Perth, Australia
 - Washington, DC, USA
 - Wien (Vienna), Austria

Accessing WL2K System



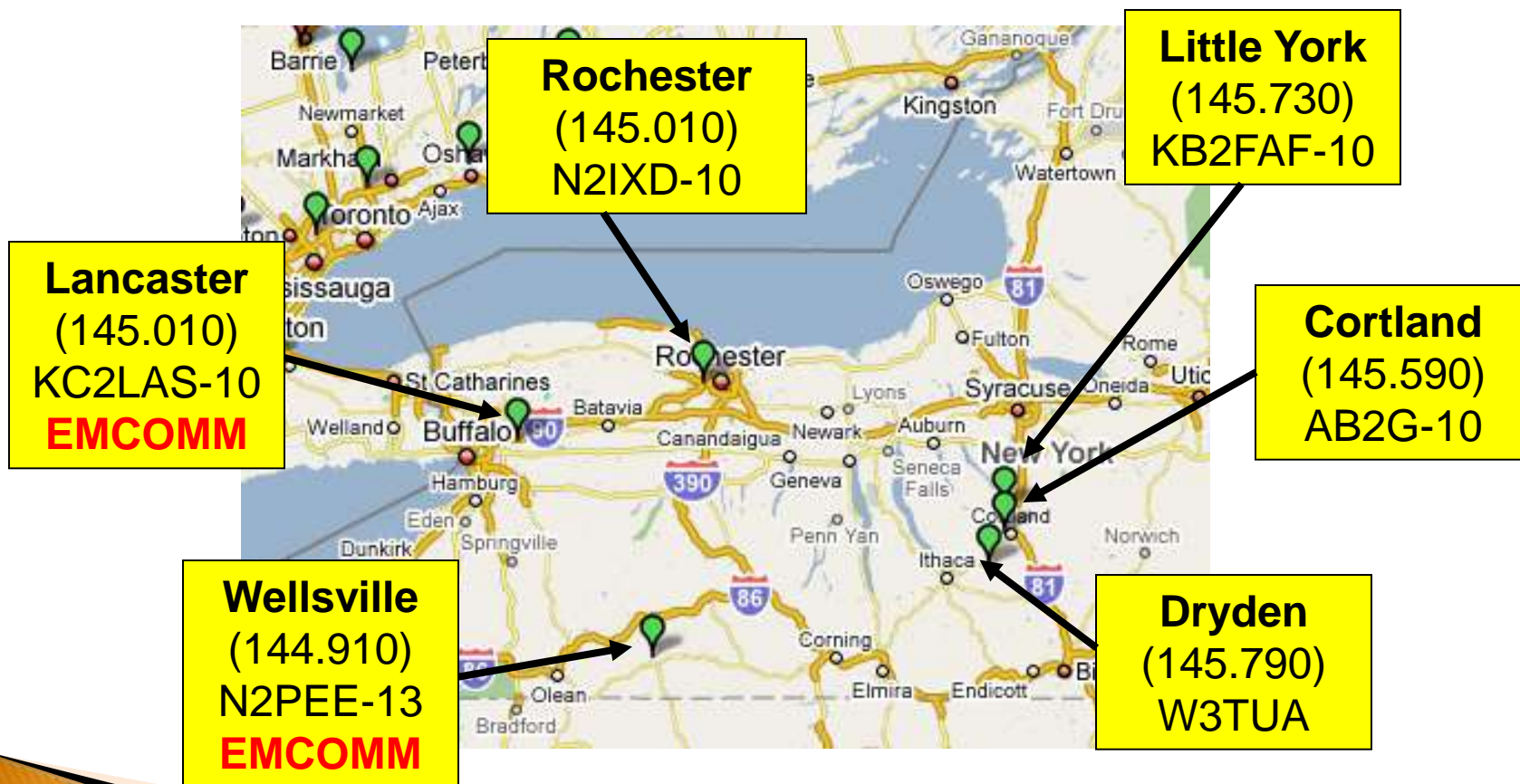
- ▶ Regional RMS Pactor Stations (HF)
- ▶ Local RMS Packet Stations and “digi-peaters” (VHF)
- ▶ Via Internet (if available)



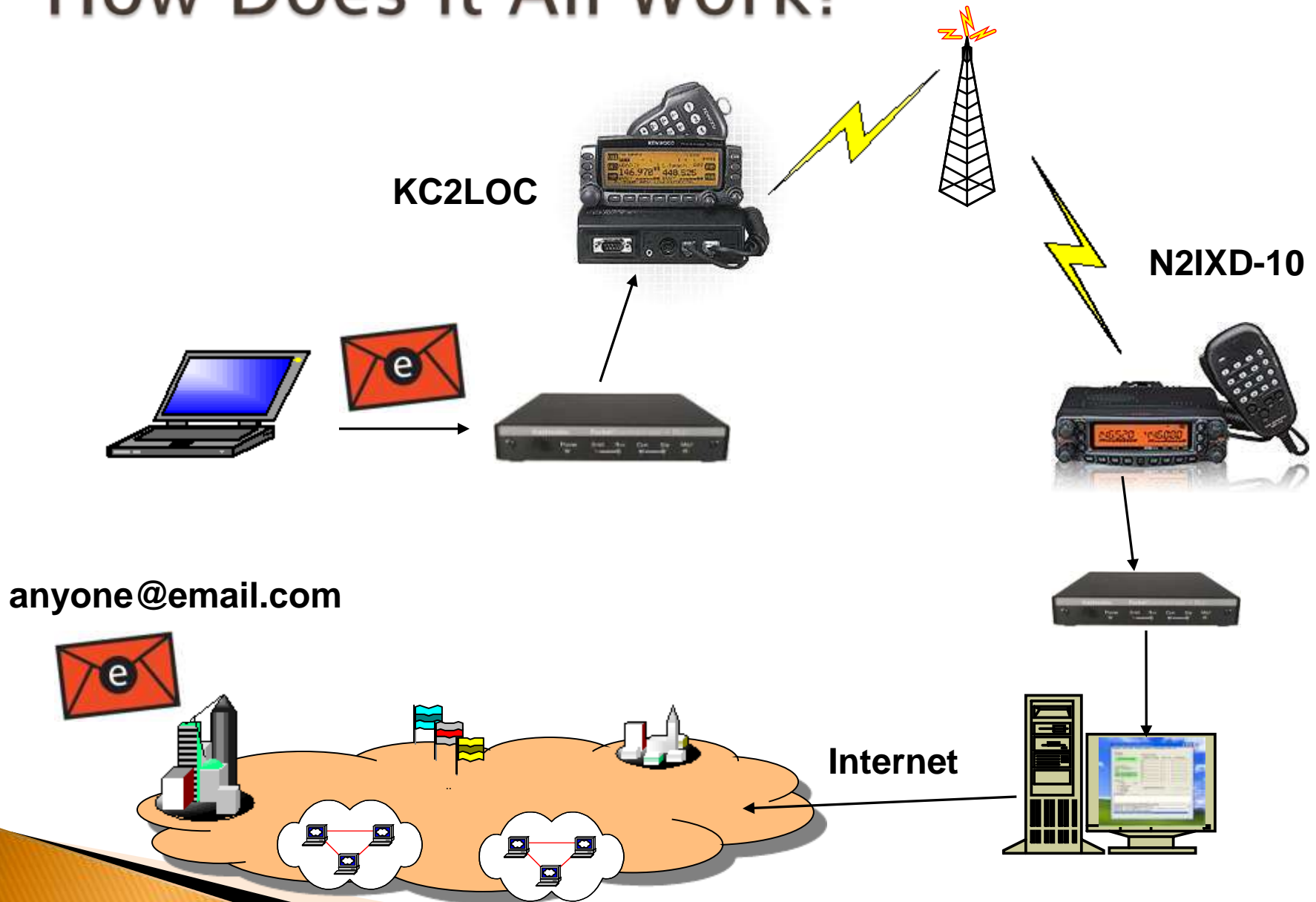
RMS Pactor Stations (HF)



RMS Packet Stations (VHF)



How Does it All Work?



Getting Started

- ▶ Equipment
 - Radio
 - Cables
 - TNC
 - Computer
- ▶ Software
 - Airmail or Packlink



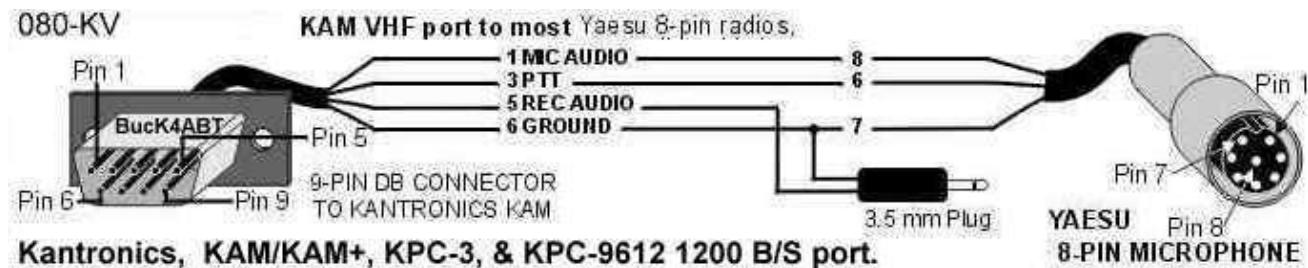
Radio

- ▶ VHF, HF or both
- ▶ Radios with data ports work best
- ▶ HT's will work too!



Cables

- ▶ Purchased
 - BuxComm
- ▶ Homebrew
 - http://66.49.139.252/radio/TNC_%20Diag.htm
- ▶ Same as used for Packet radio



TNC

- ▶ VHF, HF or Dual-mode
- ▶ Kantronics
 - KPC-3 Plus
 - All Mode
- ▶ Timewave
 - PK-232
- ▶ SCS PTC-II
 - Only Pactor III modem on the market today
 - Very expensive



www.rigpix.com

Computer

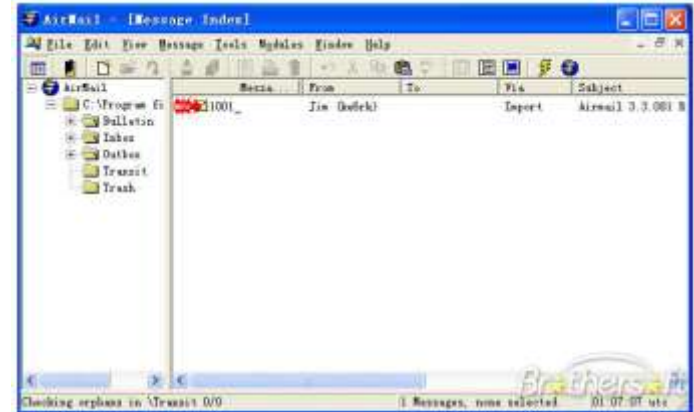
- ▶ Window 95 or newer OS (for Airmail)
- ▶ Internet connection (optional)
- ▶ Serial port
 - Or use USB to serial
- ▶ Newer “netbooks” are compact, powerful and have good battery life



Client Software



- ▶ Software is free!
- ▶ Two popular options
 - Airmail
 - Paclink
- ▶ Download from
 - www.winlink.org/ClientSoftware



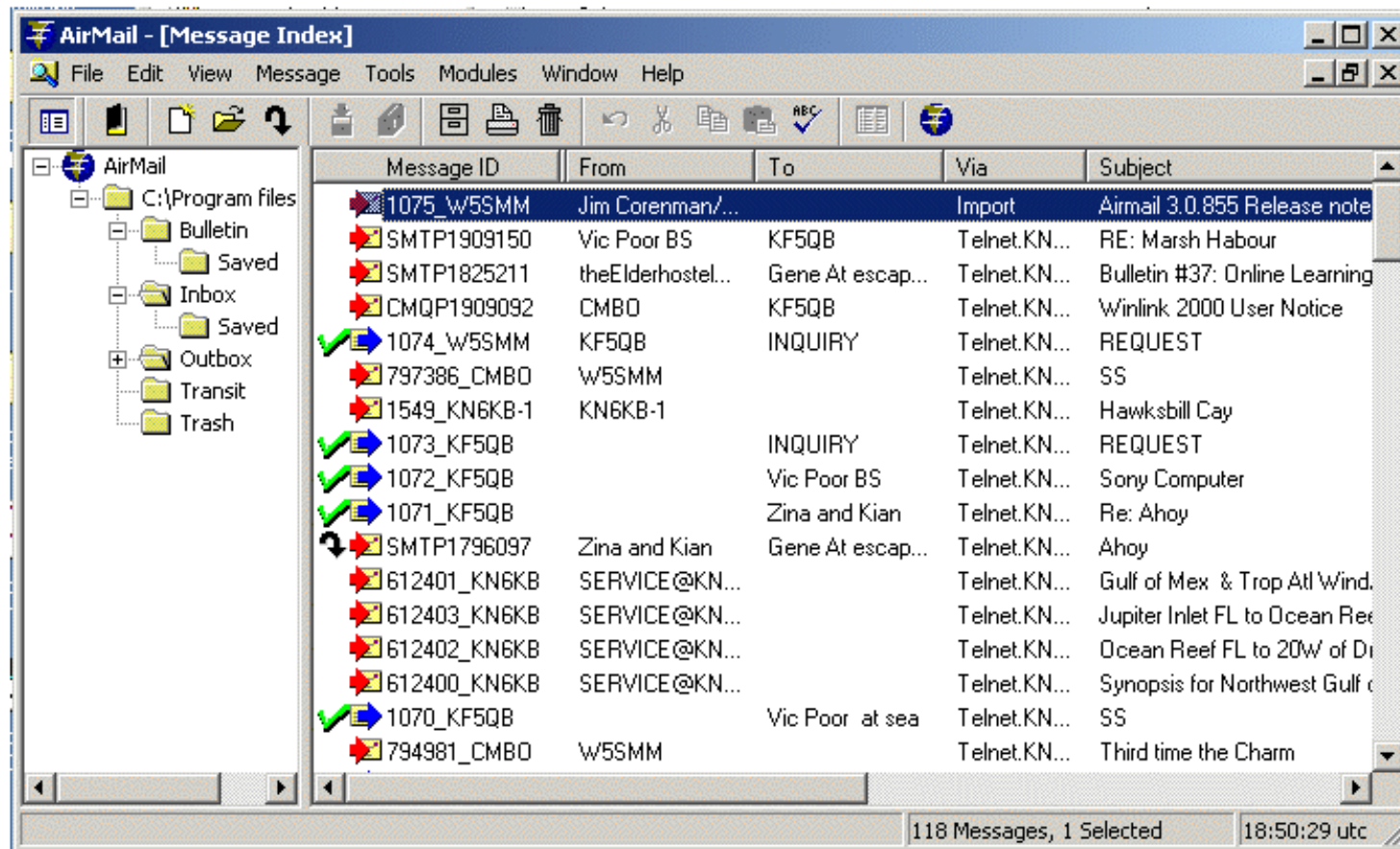
Airmail



- ▶ Oldest and most widely used program for sending and receiving messages using the WL2K system
- ▶ Will run on Microsoft Windows 95 or higher
- ▶ Easy to use and install



Airmail Screen



Main Airmail Screen

Paclink



- ▶ Interfaces with most popular e-mail client programs, like Microsoft Outlook Express and Mozilla Thunderbird
- ▶ Easy to install and use



Getting Started



- ▶ No radio or TNC needed!
- ▶ WL2K for “Dummies”
 - By Bud Thompson, N0IA www.winlink.org/node/23
- ▶ Go to www.winlink.org
 - Download Airmail
 - Setup the Telnet (internet connect) Module
 - WL2K system “registration” is automatic
- ▶ Yahoo user groups
 - <http://groups.yahoo.com/group/airmail2000>

It's Demo Time!



- ▶ Anyone in the room have a mobile device with email capability?
- ▶ Lets move some traffic!