

Outpost Packet Message Manager Overview Version 2.1.2

24 March 2007

Presented by: **Jim Clark N6JRC**



Why are we here?

... and, why are we talking about packet?

Purpose

- City... provides services; promotes the common good
- EMS...
 - Prepares for disasters
 - responds to minimize loss of life and property
 - speeds the recovery

Needs

- EMS...
 - needs information... what's going on out there?
 - work with recovery partners and service providers

Capabilities

- What we bring...
 - *Volunteerism!*... An interest to help out
 - Communications
 - Structure



Why are we here?

... and, why are we talking about packet?

Capabilities... communications

- Frequency agility
- Different modes... voice, data, video
- Bandwidth
- Independence from commercial services

	Simple Messages	Complex Messages
Mode	Voice	Packet
Messages	Short messages	Lists, instructions, details
Delivery	Immediate	Store & forward; mail drop
Equipment	Radio	Radio + TNC+ PC + SW + BBS
Complexity	Short learning curve	Many commands



Why are we here?

... and, why are we talking about packet?

Mapping Capabilities to Needs

- City OES... message handling with field sites, etc.
- Santa Clara County OES... EOC-to-EOC message handling
 - RIMS backup (PACRIMS)
 - City Scan / Flash Report
 - County Logistics Request Form
 - Emergency Volunteer Centers

CAPABILITIES help fulfill NEEDS, that support PURPOSE

Is Packet a capability that could address other needs?



Why are we here, really?

To dispel silly
myths about
packet radio!



Myth #1

Setting up a packet station takes lots of time and way too many cables and connectors.

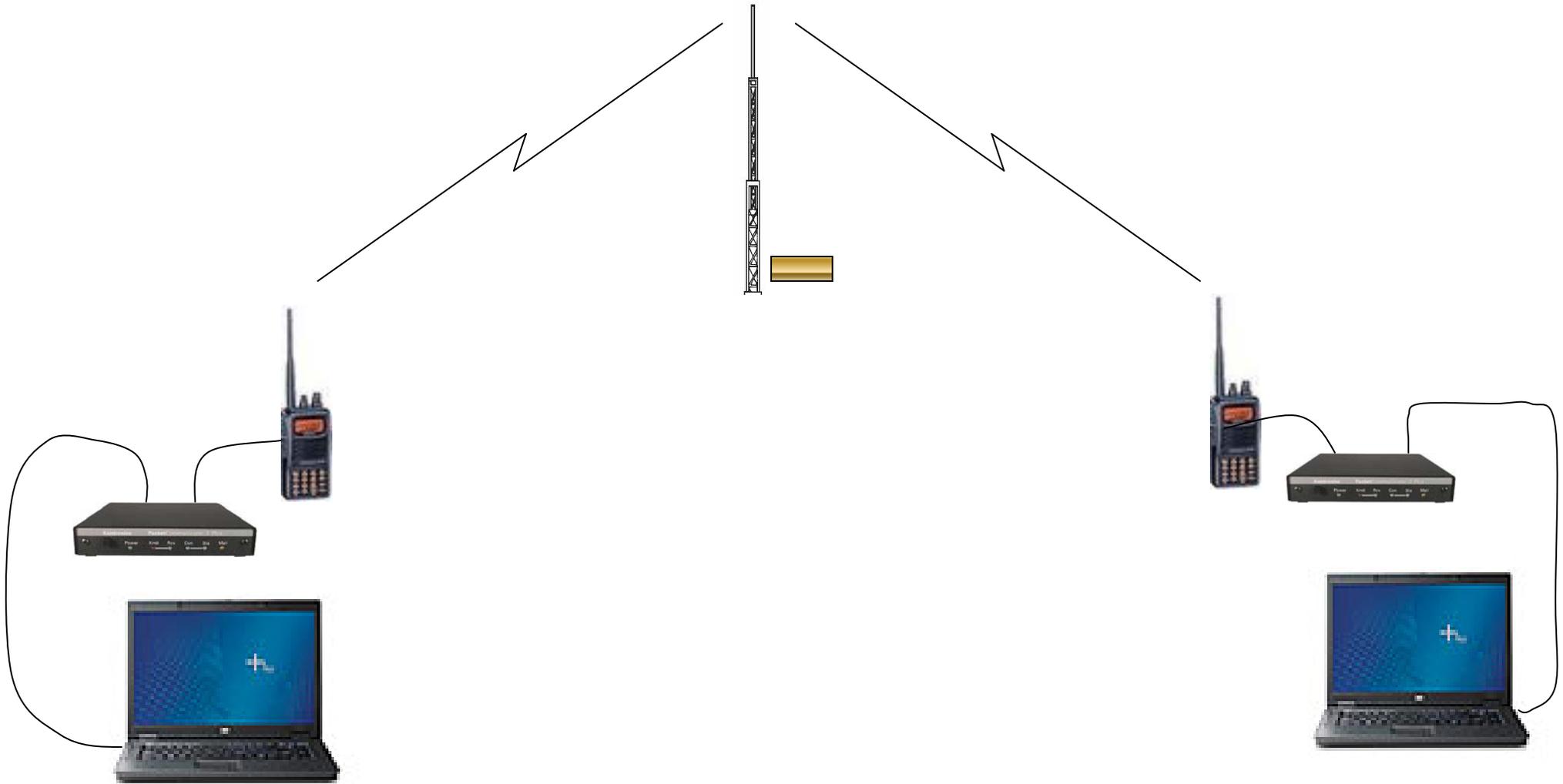


Rubbish!

It's much easier than looking for a needle. It takes only 3 boxes and two cables! Just take a look!



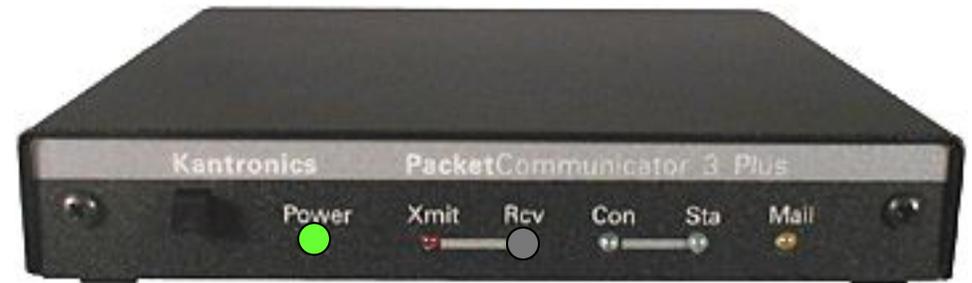
Packet – A Quick Overview



Setting the Volume

Setting the Correct Volume is easy as...

1. Turn on TNC
2. Turn on radio to lowest volume setting. Turn squelch setting to lowest setting.
3. Turn up volume until “receive” light on TNC lights up. Go just a little bit more.
4. Turn up Squelch until light goes back out.



Myth #2

Sending messages via packet is difficult and requires learning all kinds of silly commands



Nonsense!

If you can put on a set of headphones and push a button to talk, you will find this easy! Just use Outpost!



Overview

What is Outpost?

- A Windows-based packet messaging client
- Supports ARES, RACES, and other amateur radio emergency response teams and their need to pass digital traffic
- Helps automate the packet message handling environment
- Manages all message handling between you and your BBS
- Lets you read, delete, create, reply to, or forward messages back to the BBS

Outpost is a software layer that provides a nice user interface to the complex world of packet operations, TNC usage and BBS commands



Overview

Why use Outpost?

- Leverages the existing packet hardware, network, and BBS infrastructure
 - Compatible with many existing BBSs and TNC PBBSs
 - Uses your existing TNC and packet radio equipment
 - Only a packet client (end-user) change is required
- Hides the complexity of the packet operating environment
 - Similar look and feel to contemporary email programs
 - Shorter learning curve for packet operations
 - Allows users to... “focus on the message, not the medium”
- Implements most local emergency management policies for digital communications
- Still under active development based on user requests and on-going alignment with the Outpost mission.



Overview

General Outpost Features

- Message Management
 - Multiple message folders
 - Supports the three primary message types: Private, NTS, and Bulletins
 - Text Formatting in a free-form message window
 - NTS Message Maker with automated ARL message support
 - On-line report builder using report templates
 - Supports Urgent message, Delivery and Read Receipts
- Send/Receive Session Management
 - Supports Serial, AGWPE, and Telnet interfacing to a BBS
 - Automatically controls the sequence for initializing the selected interface, connecting to, and sending messages to and retrieving messages from the BBS
- Configurations and Setups
 - BBS, TNC, and Interfaces – manages a list of BBSs & Interfaces
 - Message Retrieval – choose the message types to be retrieved
 - Send/Receive automation – 3 ways for automatically initiating BBS sessions



Topics

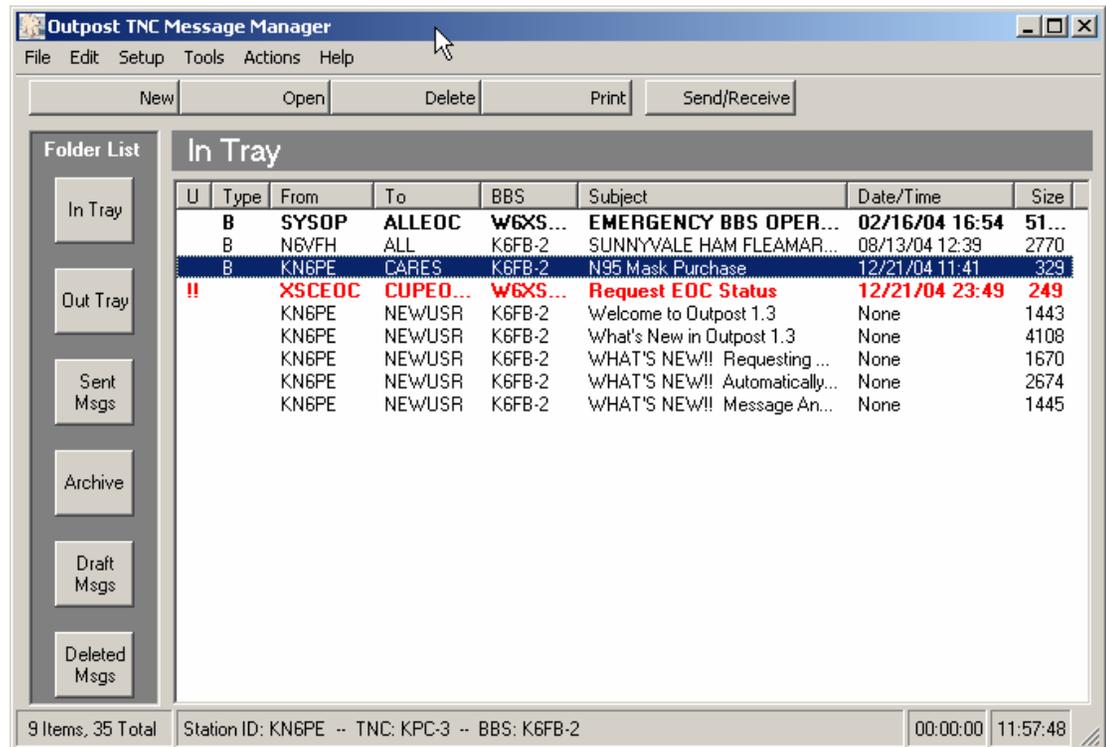
- **Features**
- **Creating Messages**
- **A Typical Session**
- **Limitations and Constraints**
- **Questions**



Features

Message management

- Familiar email-app look and feel
- Separate folders for message storage
- Clearer message identification (unread=**BOLD**, urgent=**Red**)
- Follows a formal message workflow
- Manage BBS and interface setups
- Additional settings to control how Outpost behaves



A Closer Look

Outpost Packet Message Manager

File Edit Setup Tools Actions Help

New Open Delete Print Send/Receive

Folder List

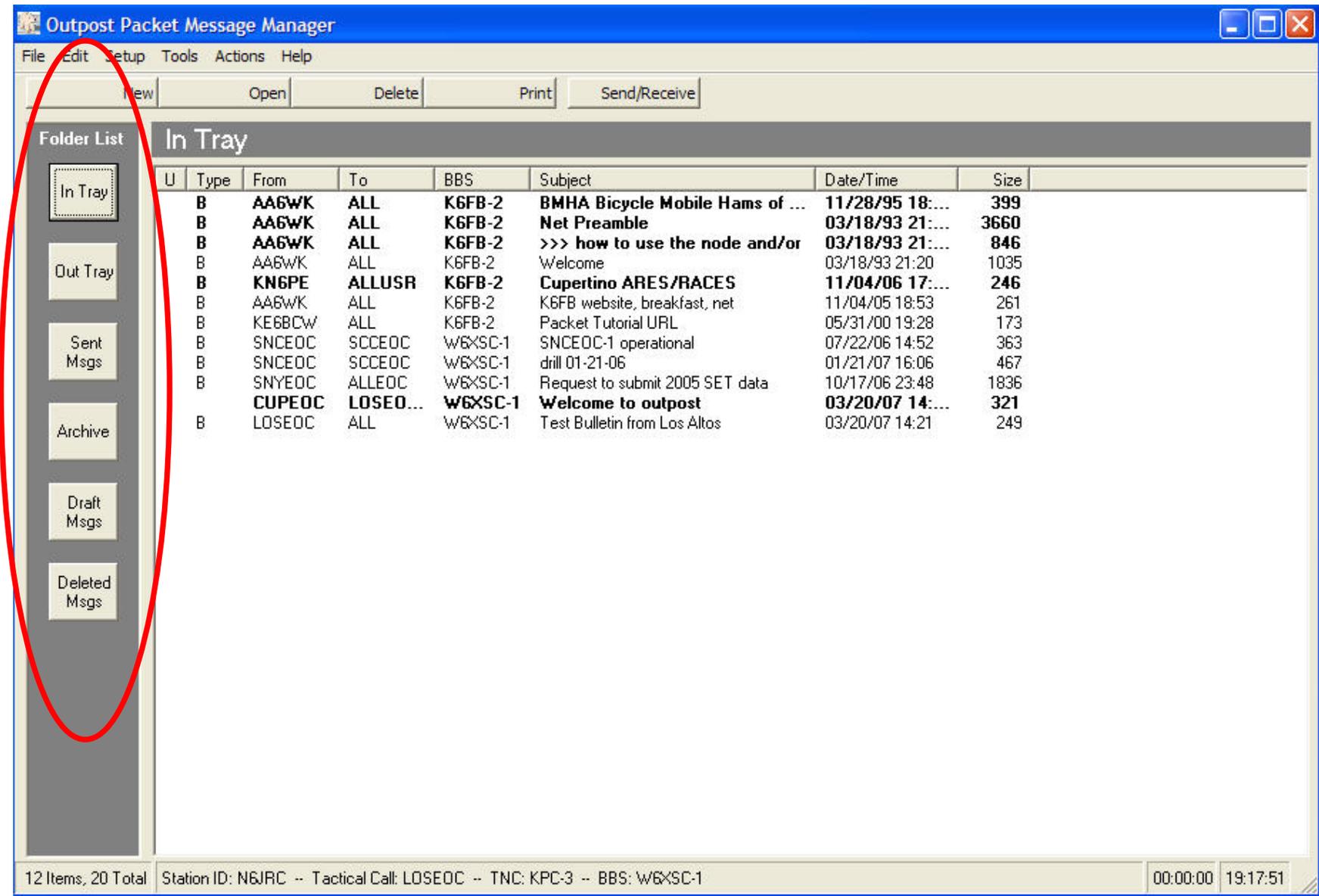
- In Tray
- Out Tray
- Sent Msgs
- Archive
- Draft Msgs
- Deleted Msgs

U	Type	From	To	BBS	Subject	Date/Time	Size
B	AA6WK	ALL	K6FB-2	BMHA Bicycle Mobile Hams of ...	11/28/95 18:...	399	
B	AA6WK	ALL	K6FB-2	Net Preamble	03/18/93 21:...	3660	
B	AA6WK	ALL	K6FB-2	>>> how to use the node and/or	03/18/93 21:...	846	
B	AA6WK	ALL	K6FB-2	Welcome	03/18/93 21:20	1035	
B	KN6PE	ALLUSR	K6FB-2	Cupertino ARES/RACES	11/04/06 17:...	246	
B	AA6WK	ALL	K6FB-2	K6FB website, breakfast, net	11/04/05 18:53	261	
B	KE6BCW	ALL	K6FB-2	Packet Tutorial URL	05/31/00 19:28	173	
B	SNCEOC	SCCEOC	W6XSC-1	SNCEOC-1 operational	07/22/06 14:52	363	
B	SNCEOC	SCCEOC	W6XSC-1	drill 01-21-06	01/21/07 16:06	467	
B	SNYEOC	ALLEOC	W6XSC-1	Request to submit 2005 SET data	10/17/06 23:48	1836	
B	CUPEOC	LOSEO...	W6XSC-1	Welcome to outpost	03/20/07 14:...	321	
B	LOSEOC	ALL	W6XSC-1	Test Bulletin from Los Altos	03/20/07 14:21	249	

12 Items, 20 Total Station ID: N6JRC -- Tactical Call: LOSEOC -- TNC: KPC-3 -- BBS: W6XSC-1 00:00:00 19:17:51



A Closer Look



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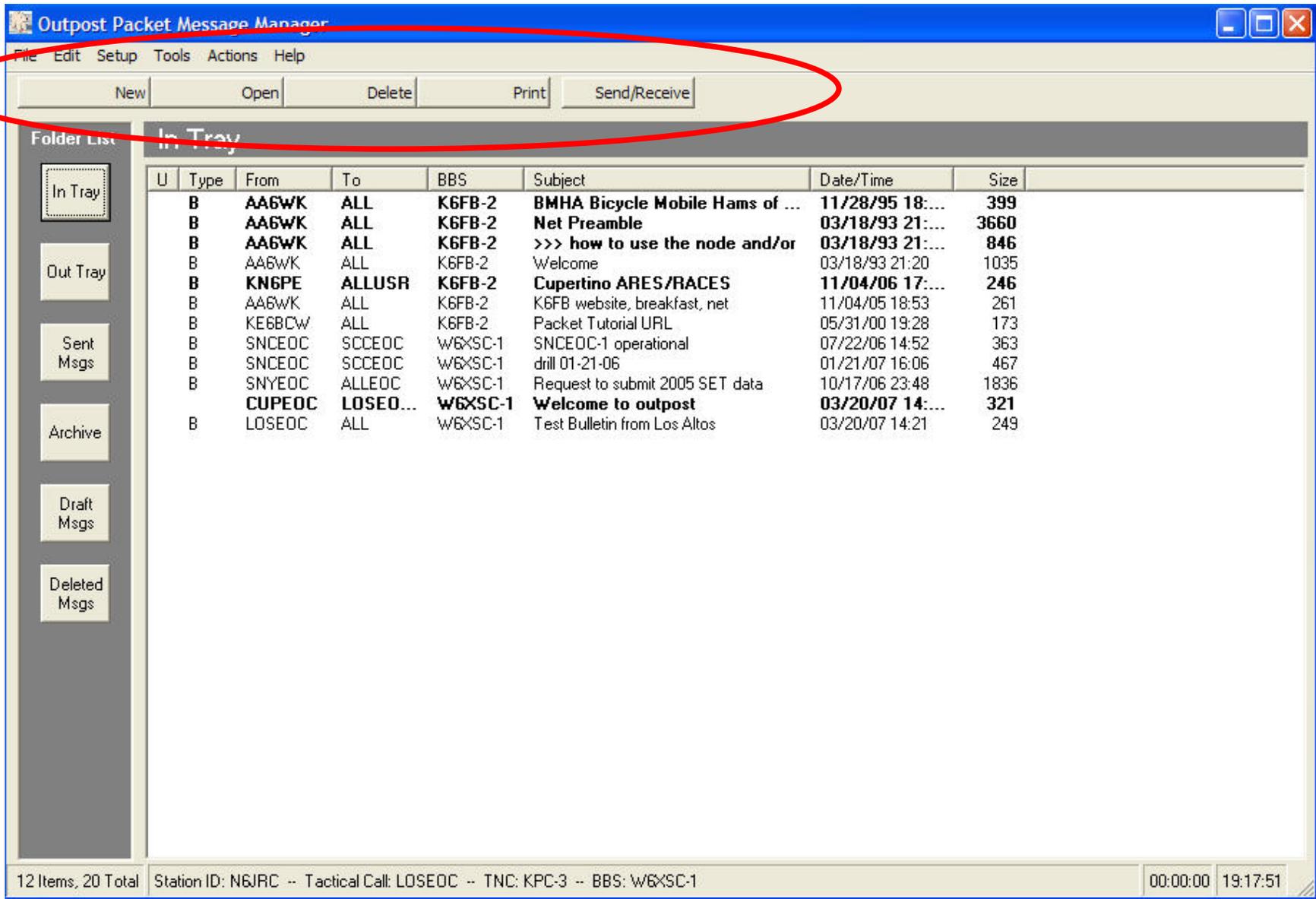
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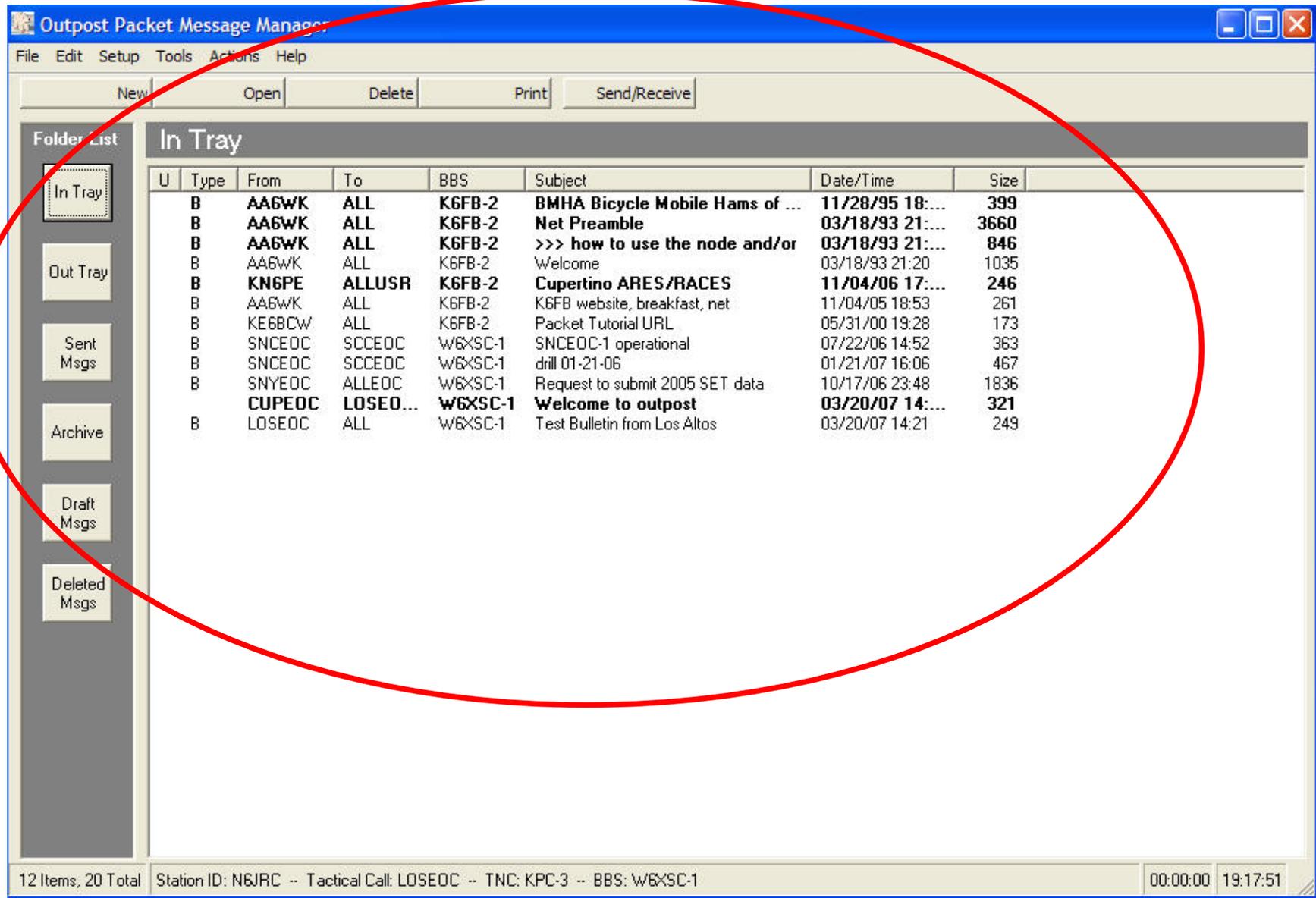
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Features

Message viewing

- Supports viewing, printing, deleting or saving a message to a local file
- Reply and Forward message formatting

How?

1. Highlight Message
2. Press "Open"

The screenshot displays the 'Outpost TNC Message Manager' interface. The main window shows a list of messages in the 'In Tray' folder. The 'Open' button in the toolbar is circled, and an arrow points to the selected message in the list. A secondary window titled 'N95 Mask Purchase - Packet Message' is open, showing the details of the selected message.

U	Type	From	To	BBS	Subject	Date/Time	Size
B	SYNOPSIS	ALLEOC	W6XS...	EMERGENCY BBS OPER...	02/16/04 16:54	51...	
B	NEWS	ALL	K6FB-2	SUNNYVALE HAM FLEAMAR...	08/13/04 12:39	2770	
B	KN6PE	CARES	K6FB-2	N95 Mask Purchase	12/21/04 11:41	329	
!!	XSCEDC	CUPED...	W6XS...	Request EOC Status	12/21/04 23:49	249	
	KN6PE	NEWUSR	K6FB-2	Welcome to Outpost 1.3	None	1443	

N95 Mask Purchase - Packet Message

File Edit Actions Help

Print Reply Forward Delete Close Expire

Bulletin Message

Bbs: K6FB-2 Sent: 12/21/04 11:41

From: KN6PE

To: CARES

Subject: N95 Mask Purchase

MSG#43 12/21/04 11:41 FROM KN6PE TO CARES
SUBJECT: N95 Mask Purchase
PATH: K6FB

All Packet-enabled CARES members,

Those CARES members interested in purchasing N95 masks as described by Marsha, please let me know. We will be doing a bulk purchase at a cost of \$1 per mask for CARES members.

regards,
Jim KN6PE



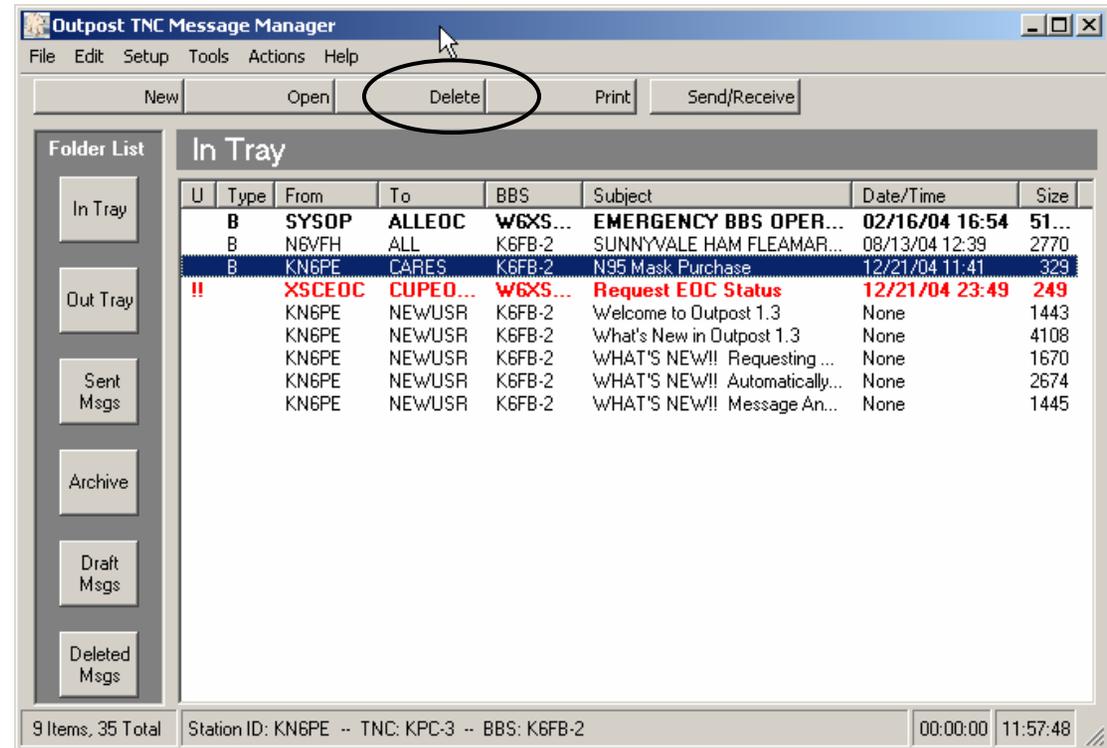
Features

Deleting Messages

- Moves message to the Deleted Messages folder (just like a trash can)

How?

1. Highlight Message
2. Press "Delete"



Features

•Creating Messages

- Direct Entry
- Cut-and-paste from other apps
- Import Text from a file



Workflow – How it Gets Done

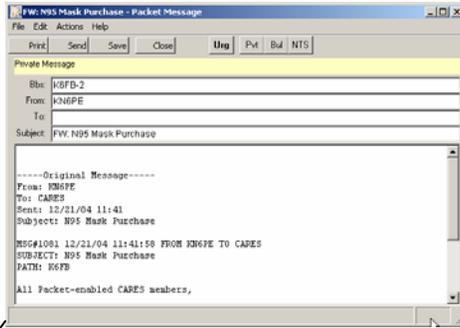
1. Press “New” to create a new message
2. Compose the message.
3. Press “Send” – message is moved to Out Tray
4. Press “Send/Receive” to transmit/receive msgs
 1. Sent messages are moved from Out Tray to Sent Msgs folder
 2. New messages are displayed in bold in In Tray
5. Read and handle new messages
6. Delete messages as needed
 1. Deleted messages moved to Deleted Messages folder



How it Gets Done

1. Click... **New**

2. Type msg...

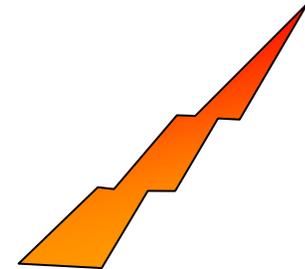


3. Click... **Send**

Message stored in Out Tray

4. Click... **Send/Receive**

Message moved to Sent Msgs



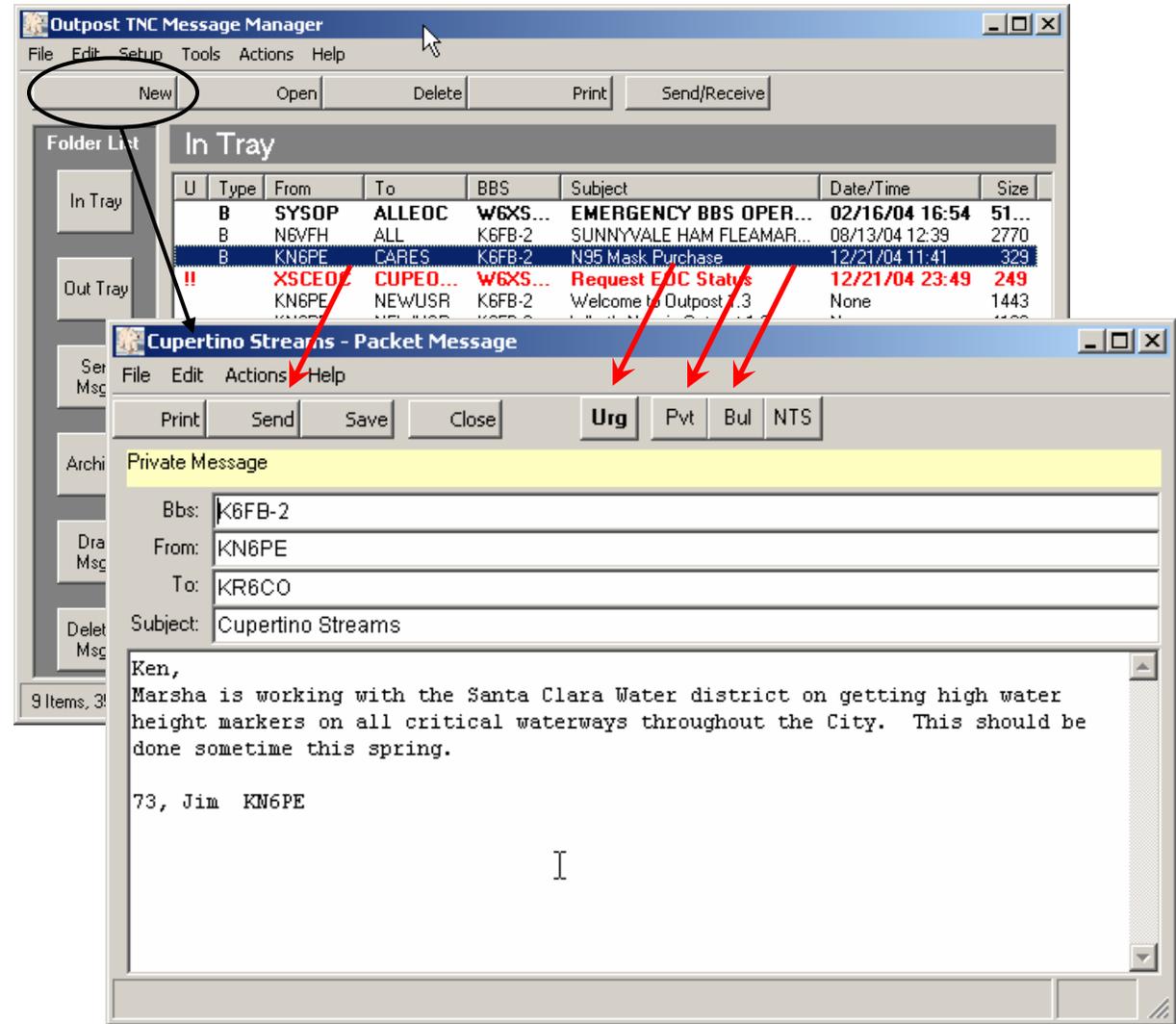
Features

Message creation

- Supports Private, Bulletin, and NTS message types
- Message formatting before sending
- Set messages to **Urgent**
- Request delivery or read receipts

How?

1. Press "New"
2. Type Message
3. Press "Send"



Creating Messages

Direct entry

- Allows cursor placement within the text field
- Supports TAB characters (cntl-tab) thereby reducing character count
- Allows text files to be directly imported into the message form

New Packet Message

File Edit Actions Help

Print Send Save Close Urg Pvt Bul NTS

Private Message; Delivery Receipt Requested

Bbs: W6XSC-1

From: CUPEOC

To: XSCEOC

Subject: Status of Cupertino EOC

The following operating positions are staffing at the EOC:

Director Emergency Services	Dave Knapp	777-1234
Planning/Intel Section	Bob Knight	777-2345
Logistics Section	Ken Smith	777-3456
Operations Section	Bill Wright	777-4567
Finance Section	Trudy Collins	777-5678

All phone numbers are in the 408 area code.

Jim O KN6PE



Creating Messages

Cut-and-Paste from other apps

- From Excel, highlight the fields to be copied, then paste into an Outpost message.
- At the receiving station, highlight and copy the message, then paste back into Excel.
- Tabs are preserved so the message can be pasted back into another spreadsheet.

The image shows a Microsoft Excel spreadsheet titled 'Shelter Requirements.xls' with a table of material requirements. A 'New Packet Message' dialog box is open, showing the same data pasted into a message format.

Item Num	Description	On Hand	Units	Qty needed	Req Date	Req Time
1	cots	30	ea	25	18-Mar	18:00
2	blankets	45	ea	15	18-Mar	18:00
3	water, 12 oz bottles	200	bottles	100	19-Mar	12:00
4	First Aid kits	3	kits	12	ASAP	
5	Toilet paper	50	rolls	250	19-Mar	12:00
6	tooth brushes	10	ea	50	ASAP	

The 'New Packet Message' dialog box shows the following fields:

- Bbs: W6XSC-1
- From: CUPEOC
- To: XSCEOC
- Subject: Shelter Material Requirements

The message body contains the following text:

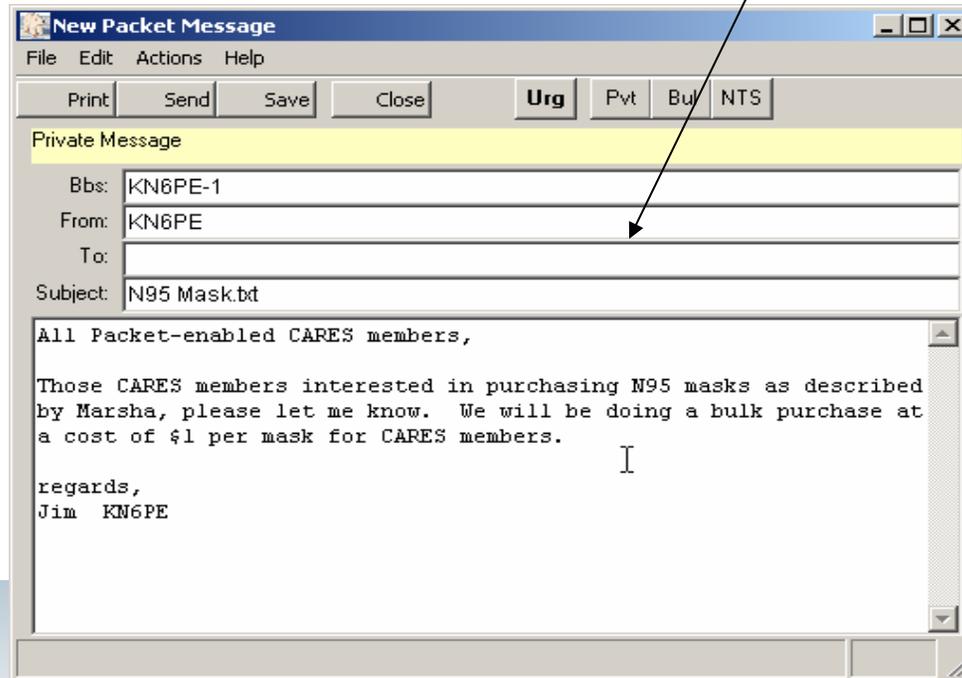
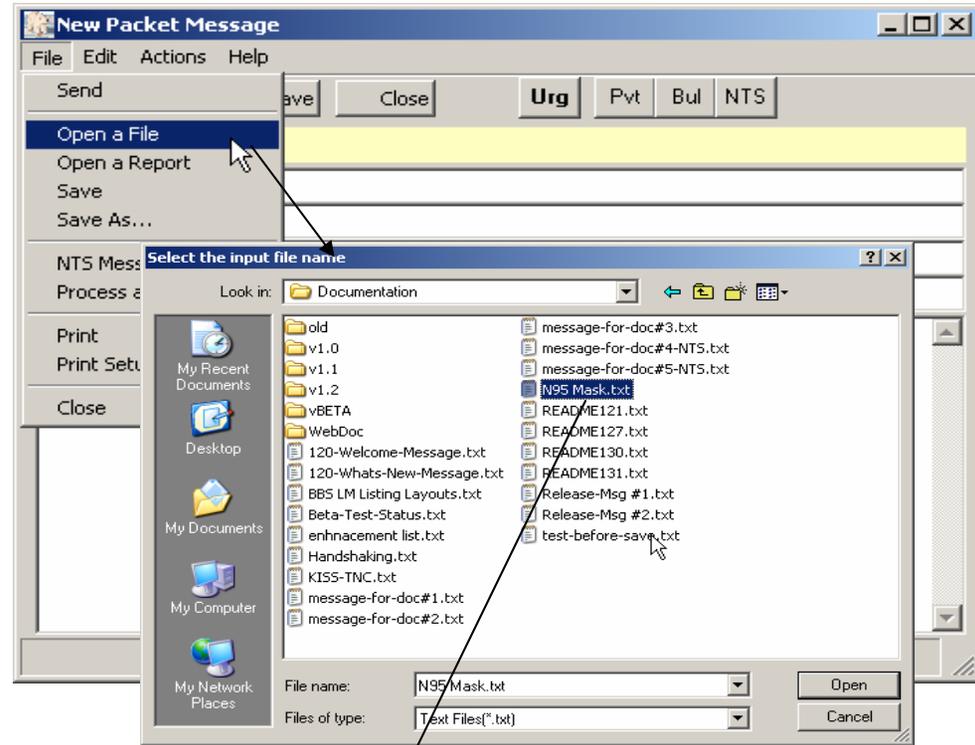
```
Please send the following material to out shelter:
Item Number   Description   On Hand Units   Qty needed   Req Date
Req Time
1      cots      30      ea      25      18-Mar      18:00
2      blankets  45      ea      15      18-Mar      18:00
3      water, 12 oz bottles  200      bottles  100      19-Mar      12:00
4      First Aid kits  3      kits      12      ASAP
5      Toilet paper  50      rolls    250      19-Mar      12:00
6      tooth brushes  10      ea      50      ASAP
7      tooth paste   5      ea      55      ASAP
8      note pads    0      ea      25      19-Mar      18:00
9      pencils 0      ea      25      19-Mar      18:00
10     MRE      10      300      18-Mar      18:00
```



Creating Messages

Import text from a file

- Open a new message
- File > Open a file
- Select the text file, press OK
- Fill in the Destination and Subject.
- Press Send when done.



PacFORMS

What Are They?

Browser-based versions of

- City Scan/Flash Report
- Logistics Request Form
- RIMS Form (called PacRIMS)
- DOC9 form (for hospital support)

Requires Javascript to be enabled in the browser

Read and follow the **red instructions**



"CITY SCAN" - FLASH REPORT

JavaScript Version for Packet Transmission

Note: This Form has been adapted from the paper form to prepare an ASCII text file for transmission via Amateur Radio Packet.

Form adapted by Phil Henderson, KF6ZSQ, Mountain View, CA AEC.

Ver. 2.1, 12-08-06

(This form is best used with Microsoft Internet Explorer)

< Items in RED are required >

1a.) Los Altos

1b.) If Other is selected, Enter Entity Name:

Date/Time of Contact: 2.) Date: 03/21/2007 3.) Time (HrMin - 24 Hour Time): 1940
Contact Person: 4.) Name: Bob Lacey 5.) Title: Chief of Police
Method of Contact: 6.) Phone #: 800-555-1212 7.) Radio Frequency: 145.57

8.) HAS THE CITY BEEN IMPACTED? (check one) YES NO

9.) HAS A LOCAL EMERGENCY BEEN DECLARED? (check one) YES NO

When? 10.) Date: 3/24/2007 11.) Time (HrMin - 24 Hour Time): 0830
Who signed it? 12.) Name: me 13.) Title: Chief

14.) HAS YOUR EMERGENCY OPERATIONS CENTER BEEN ACTIVTED? (check one) YES NO

15.) Can you tell me what MAJOR INCIDENTS are occurring now? (check one) YES NO

16.) Please Summarize INCIDENT, LOCATON and STATUS in the text areas below:

INCIDENT (Max 80 chrs.)

LOCATION (Max 60 chrs.)

STATUS (Max 60 chrs.)

16a.	Downtown concrete benches	Main Street	Benches make citizens' bottoms sore. Citizens revolting.
16b.			
16c.			
16d.			



City Scan Flash Report - Mozilla Firefox
New Source Options

File Edit View History Bookmarks Tools Help

Back Forward Reload Stop Home Print
Google

Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools

```

# CITY SCAN FLASH REPORT
# JS-ver. 2.1, 12-08-06
# TO COPY THE TEXT IN THIS WINDOW, FOCUS THIS WINDOW, THEN:
# Select All ASCII Text by typing Ctrl-A, then Ctrl-C to Copy.
# Next, RUN WordPad or Notepad and DO Ctrl-V to Paste into the editor body.
# Then DO Save-As to a TEXT Document file, or Paste directly into Outpost.
# Form Item numbers are followed by a colon (:)
# Answers are enclosed in brackets ( [ ] )
1a.: [Los Altos]
1b.: []
2.: [03/21/2007]
3.: [1940]
4.: [Bob Lacey]
5.: [Chief of Police]
6.: [800-555-1212]
7.: [145.57]
8.: [yes]
9.: [yes]
10.: [3/24/2007]
11.: [0830]
12.: [me]
13.: [Chief]
14.: [yes]
15.: [yes]
16a-I: [Downtown concrete benches]
16a-L: [Main Street]
16a-S: [Benches make citizens' bottoms sore. Citizens revolting.]
16b-I: []
16b-L: []
16b-S: []
16c-I: []
16c-L: []
16c-S: []
16d-I: []
16d-L: []
16d-S: []

```

8.) YES NO

9.) YES NO

14.) YES NO

15.) YES NO

STATUS (Max 60 chrs.)

Benches make citizens' bottoms sore. Citizens revolting.

16a)

16b)

16c)

16d)

16e)

16f)

YES NO

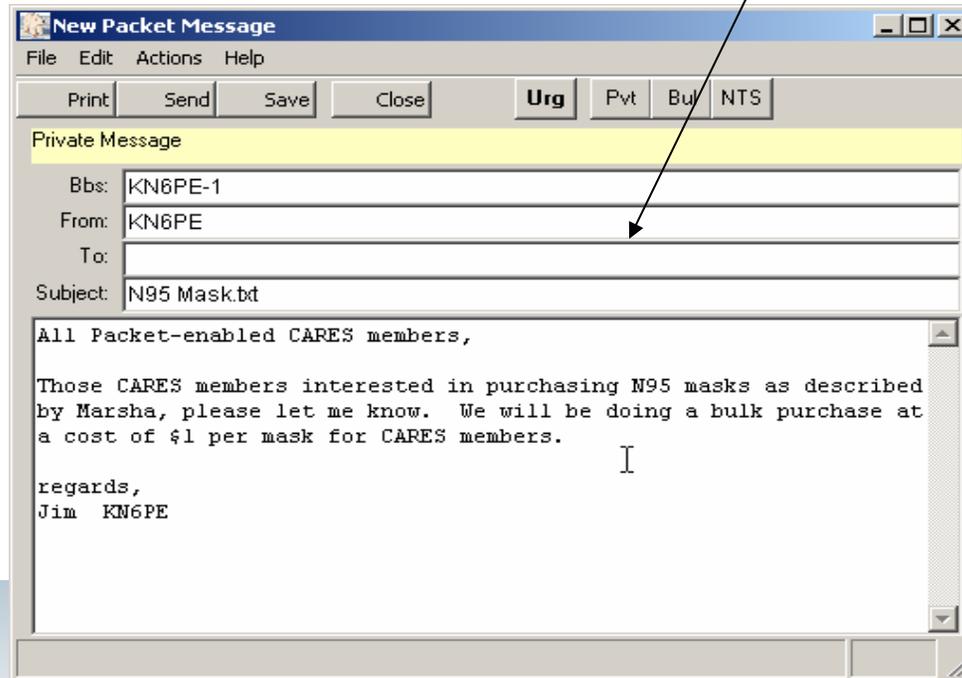
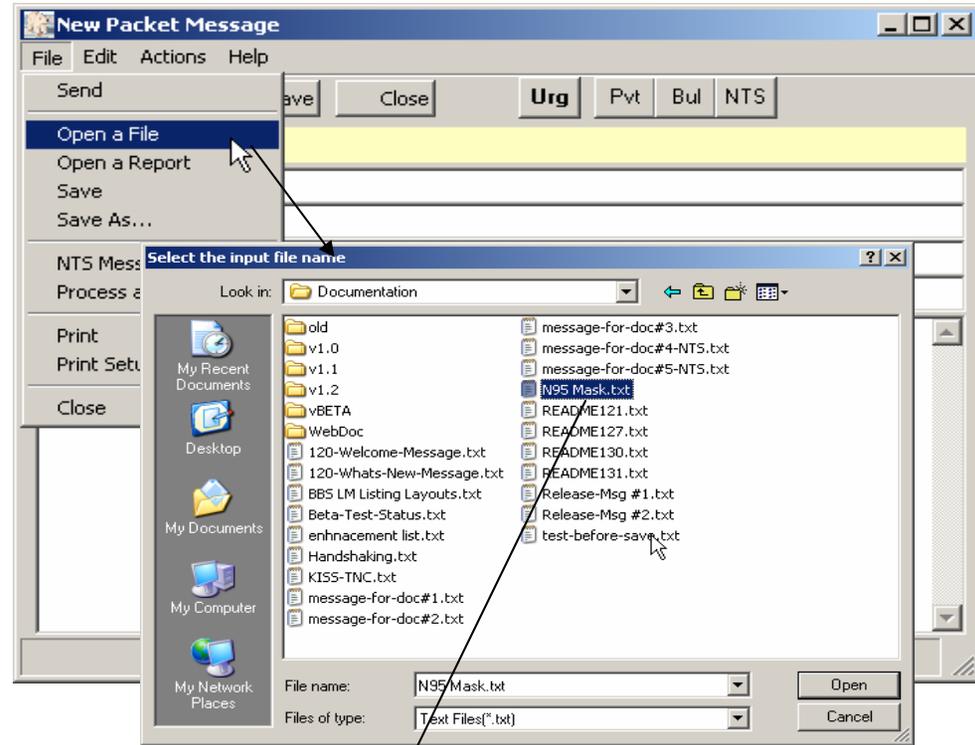
After Clicking on **SUBMIT**, you will get a text response in a new window. In that window, do Edit->Select All, Edit->Copy (or Ctrl-A, Ctrl-C) and paste (Ctrl-V) into the OUTPOST window, or open a WordPad or NotePad window and paste it into that and save to a TEXT Document file for later use.



Creating Messages

Import text from a file

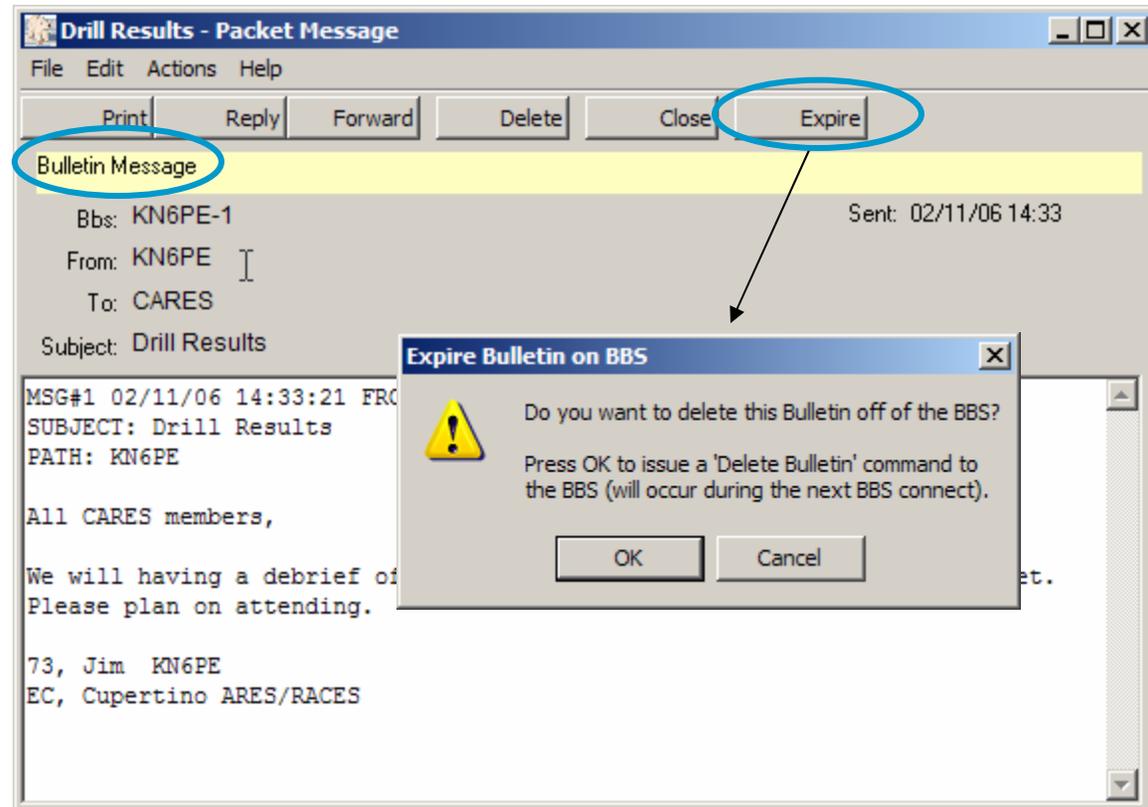
- Open a new message
- File > Open a file
- Select the text file, press OK
- Fill in the Destination and Subject.
- Press Send when done.



Special Message Handling

Bulletins

- To create, click on “bulletin” when writing message.
- To delete a bulletin off of the BBS that you originated...
 - Retrieve the bulletin from the BBS
 - Open the message
 - Press Expire
 - On the next send/receive session, the bulletin will be deleted off of the BBS.

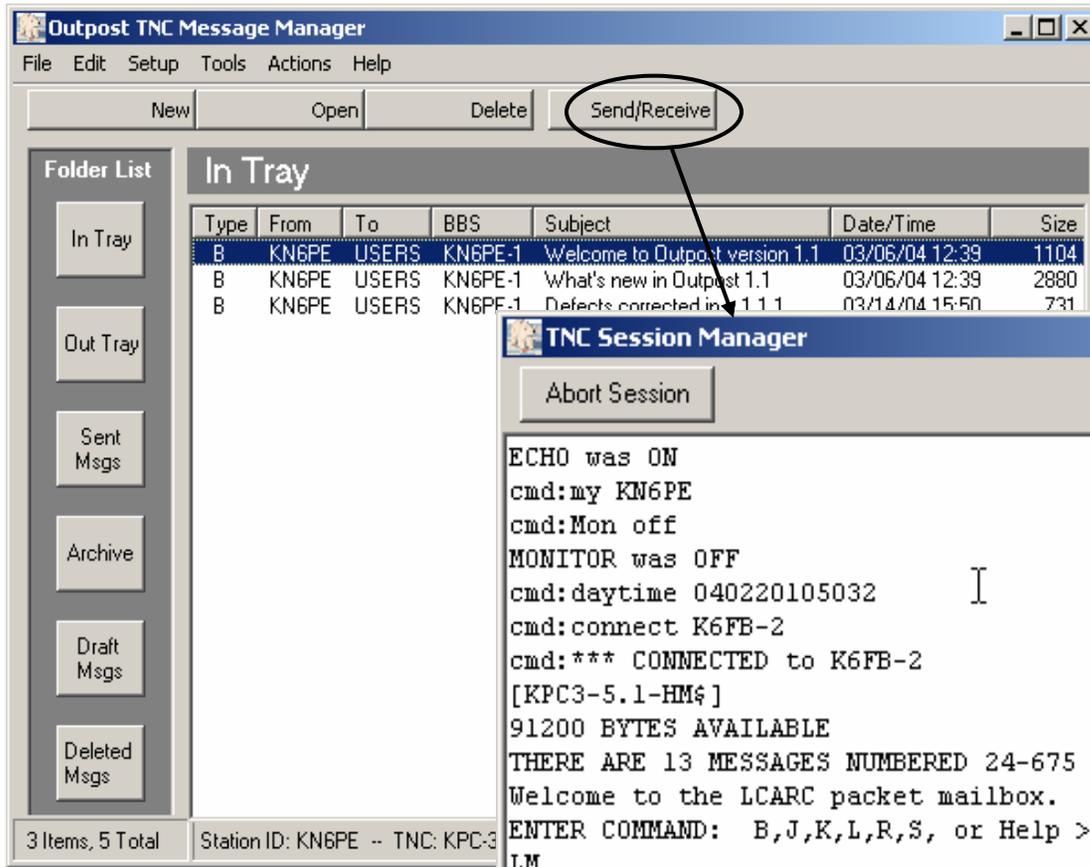


Notes

- You can only delete bulletins that you create



A Typical Session



For more information

Send inquiries to...

Jim Oberhofer, kn6pe@arrl.net

Visit the Outpost website...

<http://www.CupertinoARES.org/projects/outpost>

Or, Google... outpost packet



