





ENCRYPTION WIZARD



FLWRAP W/FLDIGI
FLAMP W/FLDIGI

How do I send an Encryption Wizard encrypted file by HF radio?

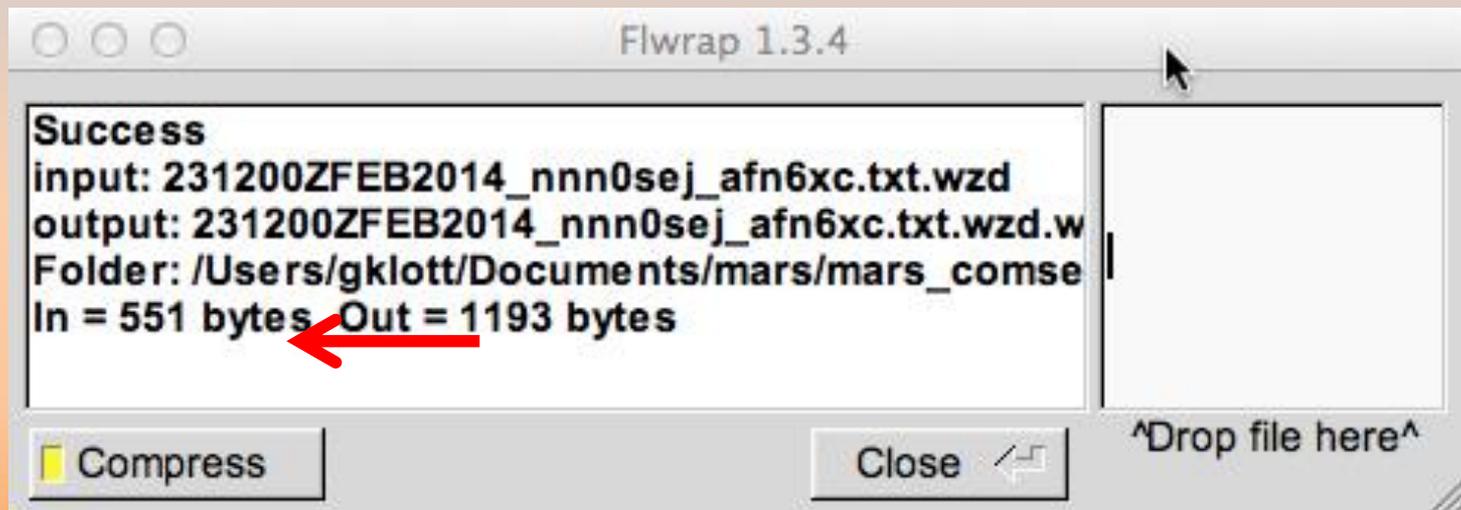
For now we have to use an INTERIM method,
which can be done in one of two ways

1. FLWRAP W/FLDIGI
2. FLAMP W/FLDIGI

#1

FLWRAP W/ FLDIGI

- Create message in a Text editor,
- (not a word processor) & save as a .txt
- Drag & drop into Encryption Wizard and Encrypt
- Drag & drop the .WZD file into FLWRAP,
- *Ensure you check “Compress” in lower left*



then drag & drop the WRAP file into FLDIGI & send your message

The screenshot shows the FLDIGI software interface. The title bar reads "fldigi - NO CALLSIGN SET". The menu bar includes "File", "Op Mode", "Configure", "View", "Logbook", and "Help". The status bar at the top right shows "Spot", "RxID", "TxID", and "TUNE".

The main control area contains the following fields:

- Hamlib FT-857
- Freq: 1500
- On/Off: On
- 1834
- In/Out: In
- Call: [empty]
- Op: [empty]
- Az: [empty]
- Qth: [empty]
- St: [empty]
- Pr: [empty]
- Loc: [empty]

The central display area is a large yellow rectangle, which is the area where the message file is loaded. Below this, a text area displays the message content, starting with "[WRAP: beg] [WRAP: 1f] [WRAP: fn 022114Z FEB 2014.txt.wzd] [b64: start] AUxaTUEAAAUuXQAAAAQAipXHk1linGRd7bYtjICf73Ddc5J1NxeLsLxfh0hq1nunPrTDJ/m9".

The bottom control panel includes a mode selector with buttons for "CQ", "ANS", "QSO", "KN", "SK", "Me/Qth", "Brag", "T/R", "Tx", "Rx", and "TX". Below the mode selector is a frequency scale from 500 to 3500 kHz. At the very bottom, there are additional controls for "WF", "MT63-2KL", "AFC", and "SQL".

When receiving a WRAP file

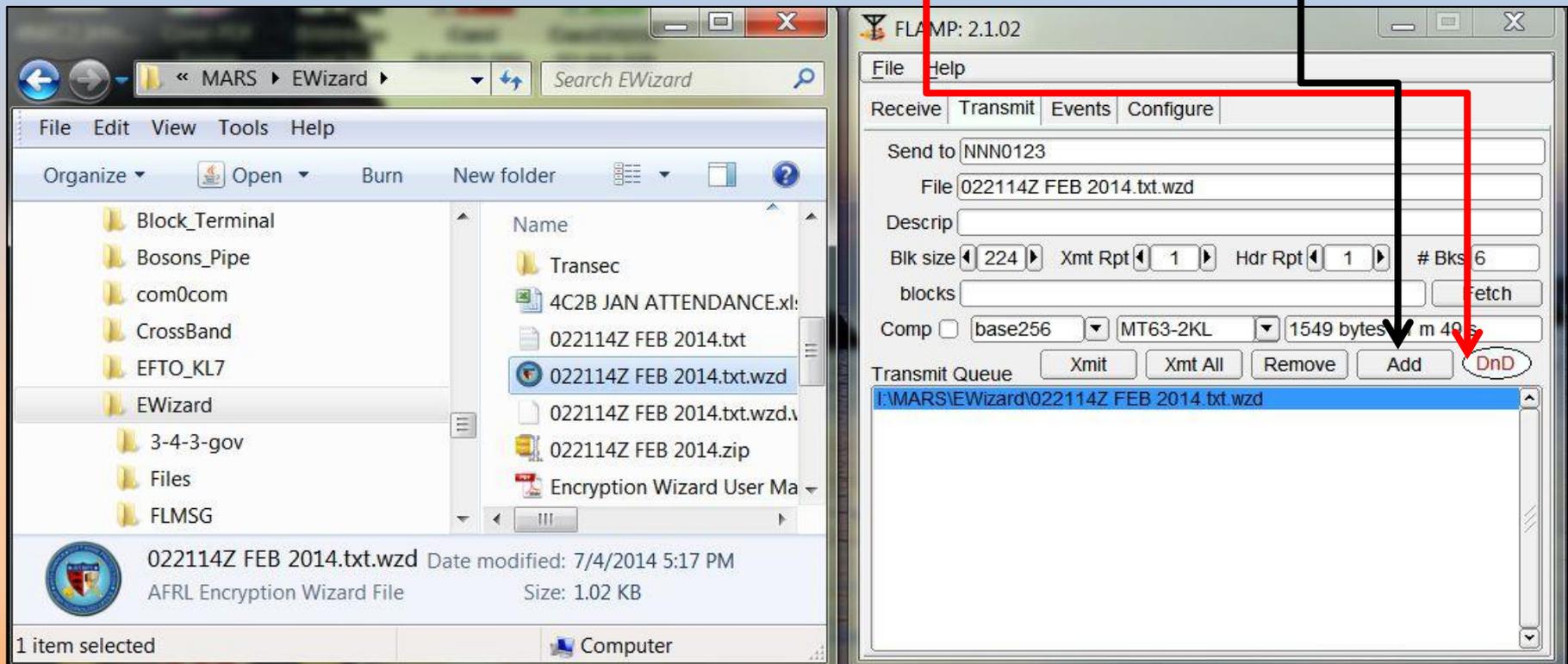
Reverse the process upon receive

In FLDIGI, select from [WRAP:beg] through [WRAP:end]
Name & save the file & add .WRAP. ie: Received.txt.wrap (use text editor not
word processor)
Drop .wrap file into FLWRAP
Drop .wzd file into EW - decrypt
Open .TXT file

#2

FLAMP W/FLDIGI

FLAMP has the advantage of being able to send an encrypted file **as is** ie: a .wzd file.
You can drag & drop to the red DnD or you can click ADD
and browse to the file you want to send. There is no wrapping or unwrapping involved



#2

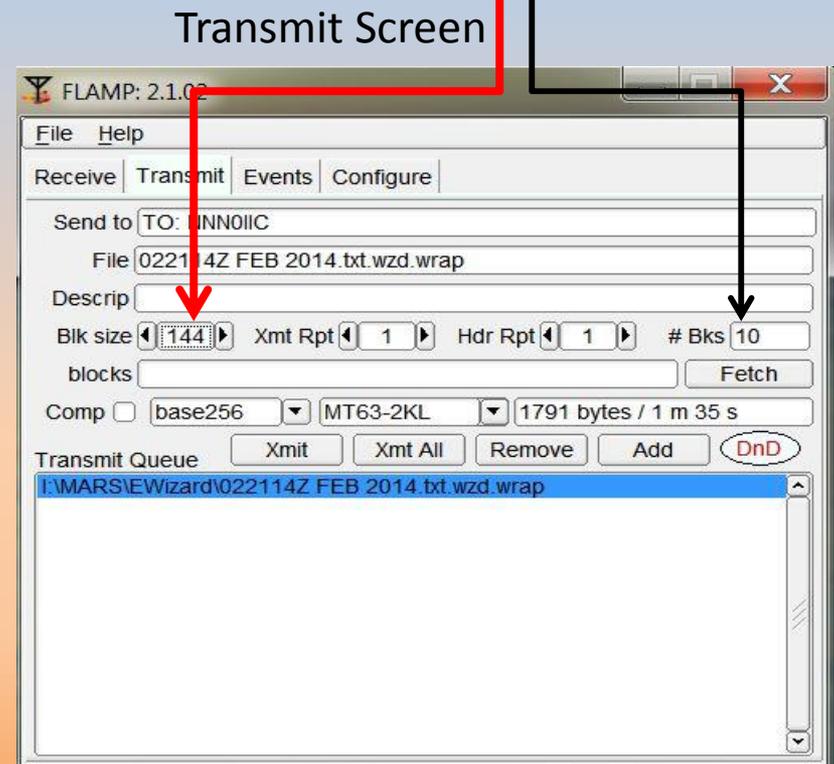
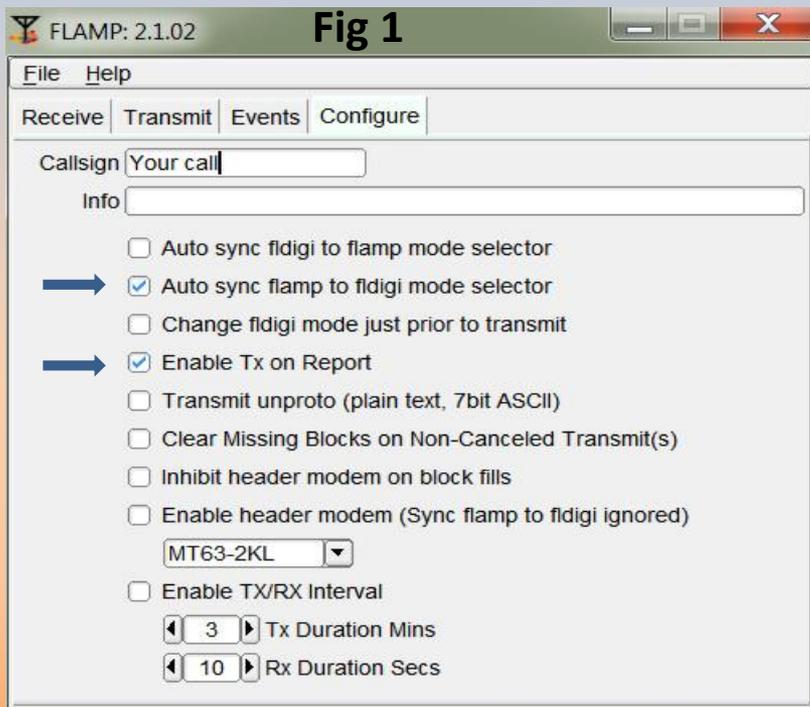
FLAMP W/FLDIGI

First, configure FLAMP, fig 1

FLAMP has several key features.

1. Sends the file as blocks, with no stopping & restarting like block term no sync to lose.
2. You can change the block size to control the # of blocks
3. Sending station can fill a missing block to multiple stations at one time.

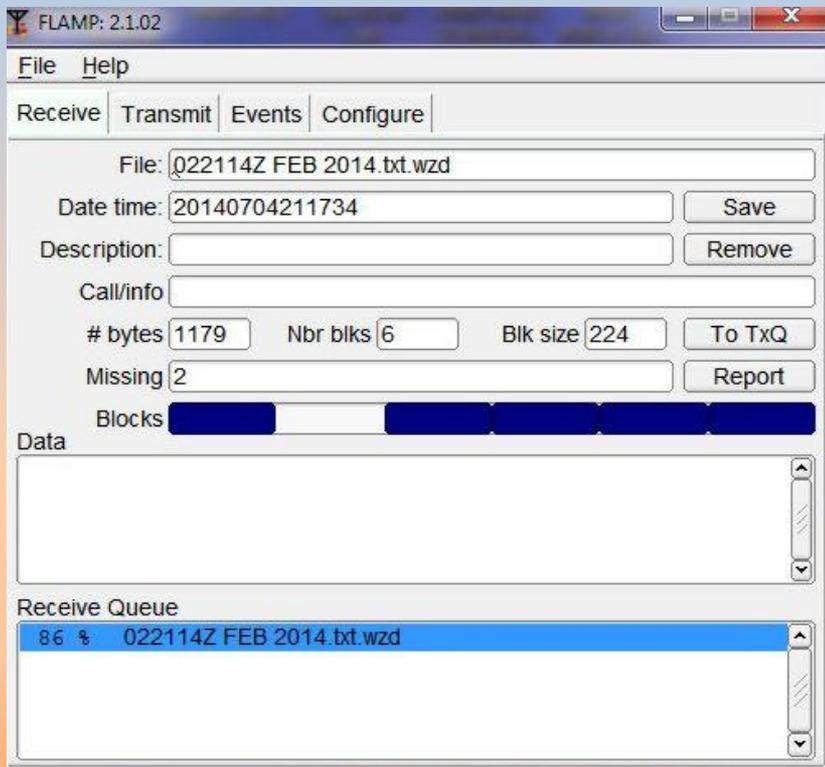
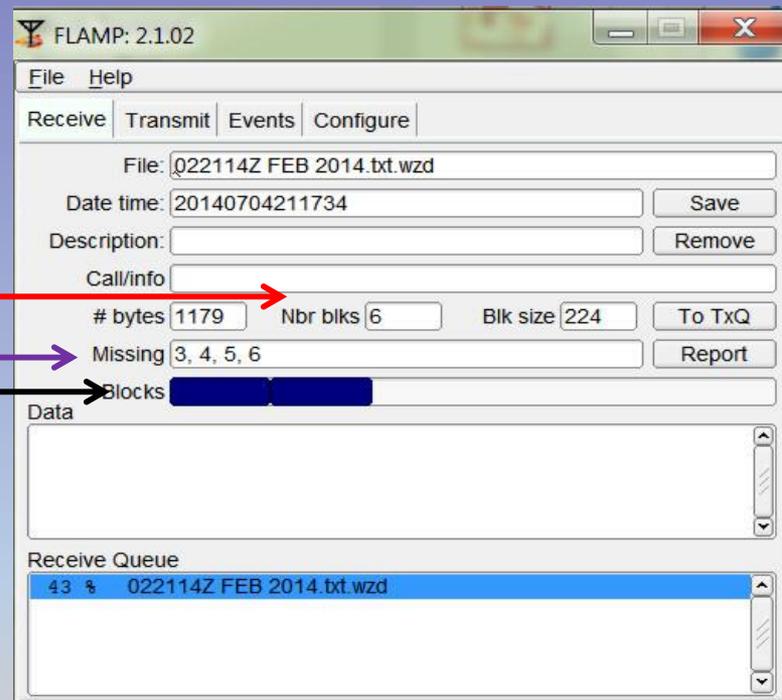
Put in your call sign,
Then only check these boxes



When receiving a file you will see the # of blocks.

As each block is received it will show on the blocks line.

Any missing blocks will be shown on the missing line



At the end of transmission any station missing a block or blocks will so state when it is their turn to rgr the msg, ie: de nni4ic missing block 2, over In turn, stations missing a block will click on Report, after all stations missing blocks have reported, the sending station clicks on FETCH

Flamp parses all of the received data from one or more reporting stations. It combines them, discards duplicates and sorts the missing blocks numerically. It then updates the "blocks" entry control with the requested blocks. Missing header information assigns '1' to the missing block list, triggering a retransmission of the header information.

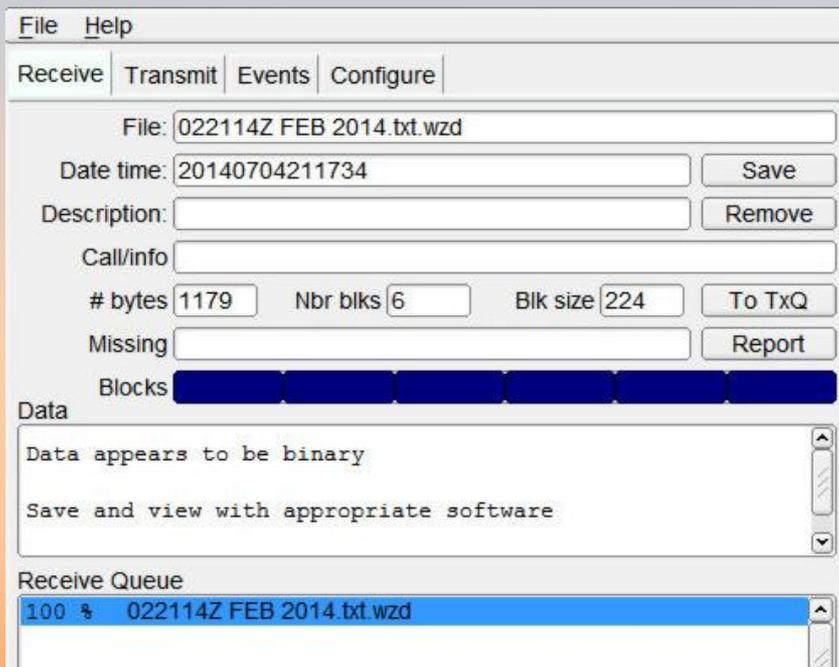
The combined set of missing blocks will appear as shown below along with total file size and transmission time.



Missing 2,4 Report

Blocks

Fig 1



File Help

Receive Transmit Events Configure

File: 022114Z FEB 2014.txt.wzd

Date time: 20140704211734 Save

Description: Remove

Call/info

bytes 1179 Nbr blks 6 Blk size 224 To TxQ

Missing Report

Blocks

Data

Data appears to be binary

Save and view with appropriate software

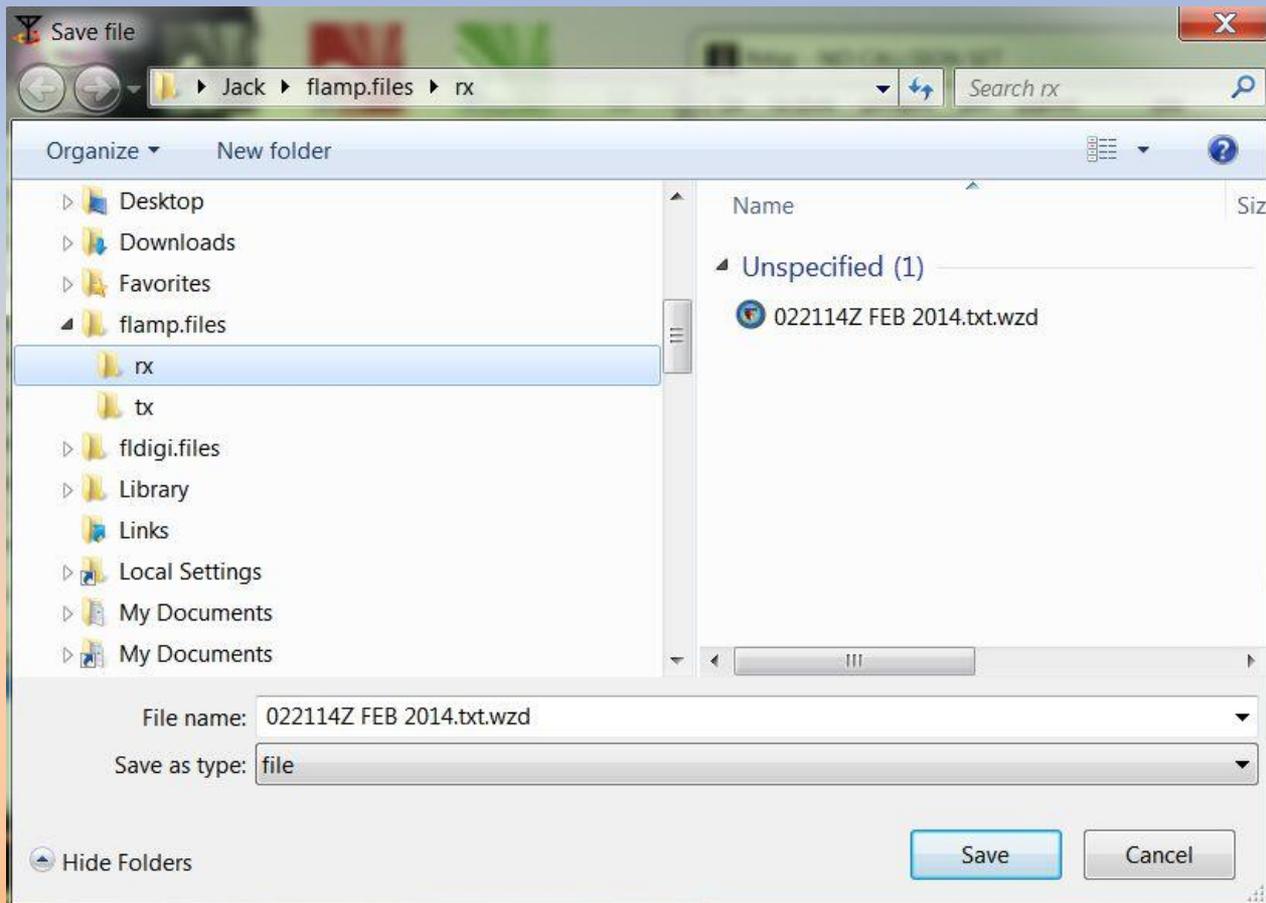
Receive Queue

100 022114Z FEB 2014.txt.wzd

After any missing blocks or header info has been resent your receive window will look like this: (fig 1)

The Data window tells you that you need to save and view with the appropriate program

When you click SAVE the FLAMP Rx folder opens, save the file, then drag & drop into Encryption Wizard and decrypt.





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