Using the Request for Information Strip Reader

Exercise Message Submission Window
February 14 00:00 UTC – February 20 08:00 UTC

Difficulty Level: Intermediate

Overview: The Winlink folks update their forms on a regular basis - it often seems like every other day! Recently a note came in that several new forms had been added, so we took a look. One of the forms we haven't noticed before is the *Request for Information Strip Reader and Response Creator.* It deals with some concepts we haven't touched on before, so we'll check it out this month.

According to the form's Operator's Info link, this form is rooted in the MARS (Military Auxiliary Radio System) and CFARS (Canadian Forces Auxiliary Radio System) programs. It provides a way to import MARS Request for Information (RI) strips and create a response to them. The strip utilizes terms and formats specific to the MARS usage and will not be familiar to most Hams. The strip is similar to a CSV file but uses forward slashes (/) instead of commas to separate data items. They give the example: /LAT DEG DEC(##.#####[N])/. This strip is asking for latitude in decimal degrees, 2 digits before the decimal point and 5 digits after the decimal point and North latitude. The hash marks are called a mask and are frequently used to indicate the format for a number. The info link has a more complete listing of the types of masks used by MARS.

AI provides a little more background:

An RI (Request for Information) typically follows a multi-part process and uses a standardized format, or "strip," for radio transmission. This strip can contain:

- ***The request: An agency, such as the Federal Emergency Management Agency (FEMA), might need information, like a status report from a specific location after a natural disaster.***
- ***The transmission: A MARS member acts as a relay, transmitting the request to another operator near the target area. The member in the field will complete the request and format the response according to the standardized strip format.***

- ***The response: A MARS member in the field collects the needed information and relays it back to the originating agency in the same strip format.***

The Winlink form allows us to import the Strip and form a response to it. In the information link in the form, KB1TCE is listed as the point of contact for questions and we reached out to him. He was very helpful in providing background and also referred us to W1CPR who provided more reference material and examples of the usage. The biggest take-aways were pointers to Radio Relay International, who originated the Winlink form. A link to a presentation they did on gathering weather information is in the resources below. When you check it, there is some general information at the beginning but several slides later it gets to the strip material.

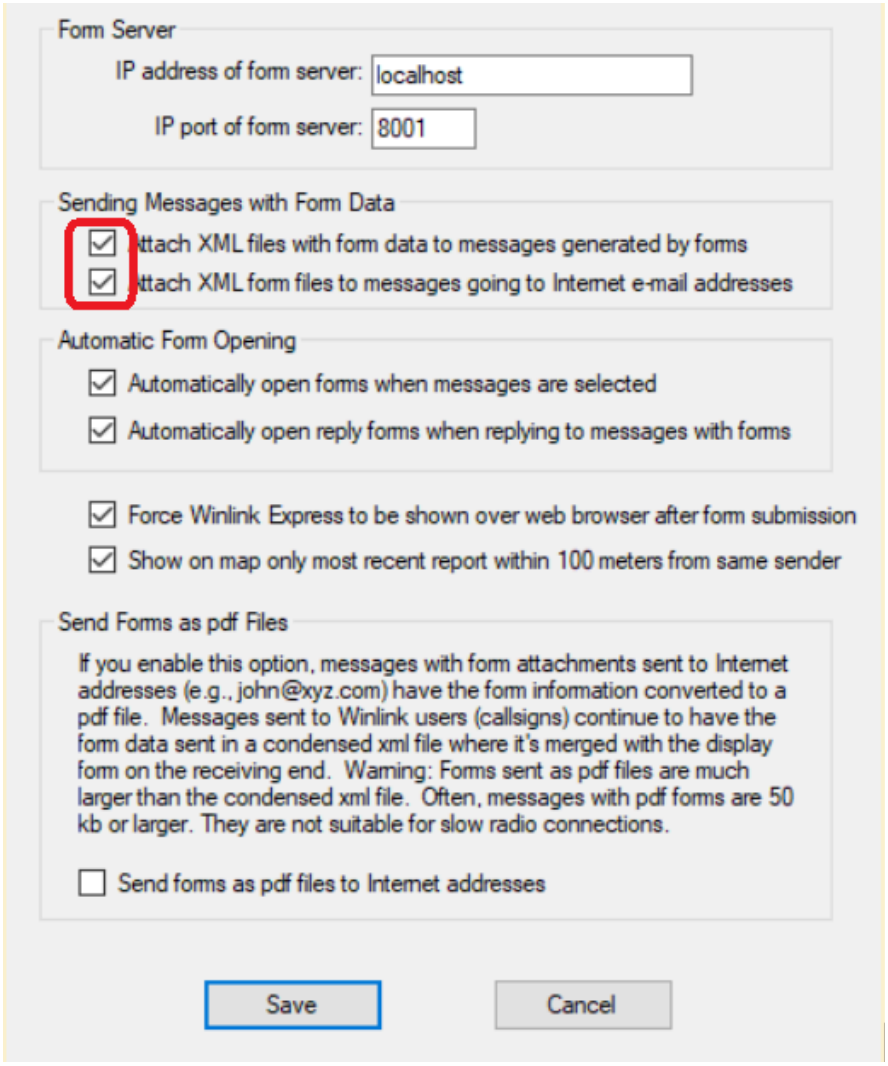
Purpose: Understand and use the Winlink Express Request for Information Strip Reader and Response Creator.txt template to create a response to a request for information.

Resources:

- Army MARS https://www.usarmymars.org/home
- Air Force Mars https://www.acc.af.mil/Units/CCC/MILITARY-AUXILIARY-RADIO-SYSTEM/
- RRI https://radiorelay.org/files/presentations/WXOBS_Power_Point-v1.5_2025-8-1.pdf
- MGRS Reference Information: https://www.maptools.com/tutorials/mgrs/quick_guide?srsltid=AfmBOor37daZzLcvHeCvg5V0EyzM9V2lk1_kCbjAqXKzsQk8Iw8Caony
- https://en.wikipedia.org/wiki/Military_Grid_Reference_System
- NWS CWA information: https://www.weather.gov/bgm/severedefinitions

Special Configurations:

- Recent configurations of Winlink have provided options on whether transmission of Form Data XML files for the current form are transmitted with each document. If not transmitted, the HTML form will not display. The ETO Feedback process uses this form data XML to parse the data in the exercise, so it should be provided. Ensure that the Form Data settings are configured for ETO Exercises submissions.
- This dialog can be found under **Settings ⇒ Form Settings…**



Exercise Instructions:

Open the Request for Information Strip Reader and Response Creator form
1. Open Winlink Express. Be sure to do any updates that show up when Winlink is started. Start a new message and in the new message window click on **Select Template**. Navigate to **Standard Forms->General Forms** and find the entry for **Request for Information Strip Reader and Response Creator.txt.** Select this form and it will open in your browser. It would be a good idea to review the information in the **Operator Info - Read Please** link. 2. Click on the Setup button and enter **EmComm Training Organization**. 3. At the top of the first box, you will see some information on **Character count**. Ignore this, it will be filled in automatically. 4. The box below the Character count is where we will enter the RI Strip.

Enter RI Strip and Create Response

1. A text file titled **Strip Sample.txt** is provided with this exercise. Save the file to a place on your drive that you will be able to find it. After saving the file, double click it to open it. It should open in Notepad or some similar text reader.
2. Copy all of the text from the text file and paste it into the box below the character count. The character count above the box should now show 367 characters (you may have to click on the box). If not, something was missed when copying the strip from the text file. To start again, click on the **Reset Form** button near the bottom of the page. Go through the previous steps and closely watch what you copy from the text file.
3. Click on the **Parse Strip** button. This will translate the strip into a series of rows below the headings **Strip Question** and **Answer**.

Details on the strip

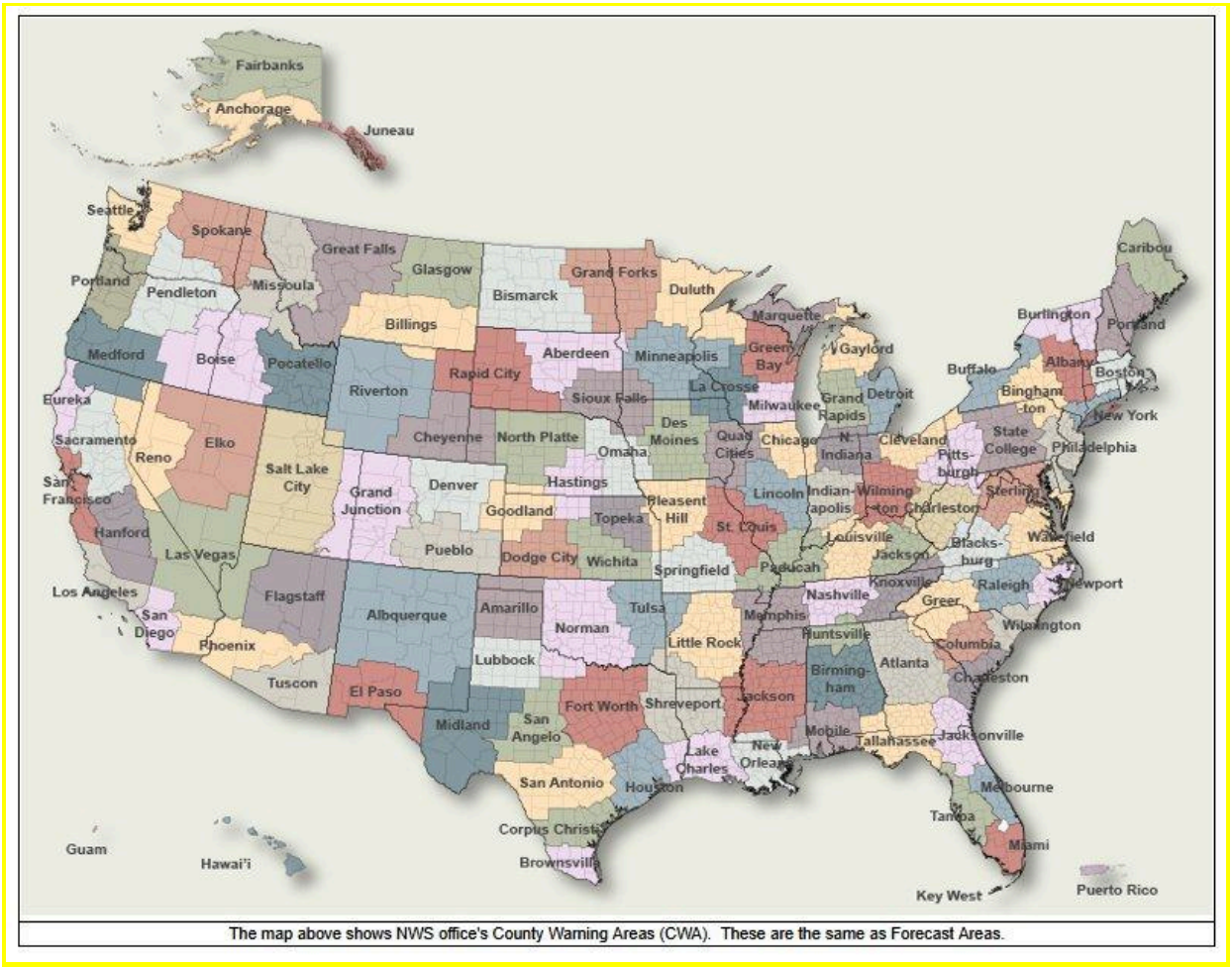
The sample strip file contains:
ETO/CALL SIGN/SKYWARN ID(or NA)/CITY/STATE (AA)/MGRS (9 CHARACTERS)/NWS CWA(AAA,NA)/ /OBSERVATION TIME Z (DDHHMMZ)/ /WIND DIR (AAA)/AVE SPEED MPH (###)/GUSTS MPH (###)/ /CLOUDS (CLR,FEW,SKT,CB,OVC,TCU)/ /TEMP DEG F (### M=MINUS)/ /BAROMETER MB (####R#)/BAROMETER 3 HR TREND (R,S,F)/ /PRECIP TYPE (RA,SN,SL,PL,GR,NONE)/CURRENT PRECIP INS (###R##,NA)//COMMENTS,DAMAGE//

Look at the populated section that was just created and you should see that each row is a section of the strip. As mentioned, the strips use */* characters to separate the sections. Look at the first few items in the strip. The first item is called the WXOBS - the weather observer. The strip is providing the answer for who is the weather observer as ETO. You should see in the parsed results that ETO has been populated automatically. The next item is your call sign, followed by a Skywarn ID if you have one. If not it tells you to use NA. Next is the City and State. The state uses a mask (AA) which means use two alphabetic characters. (For Canadian Provinces and Territories use the two letter P/T Abbreviation. If you are DX please use a two letter abbreviation for your equivalent to a state.)

Next is the MGRS coordinates and they are looking for 9 characters. If you are not sure of your MGRS, one easy way to find it is to go to the Settings tab in Winlink at the top of the window and scroll down 5 or 6 items to the GPS/Position Reports. Click on it and in the new box, if you have entered your Latitude and Longitude it will show the MGRS. (If you haven't, now is a good time to enter them. There are mobile phone apps that will give you position information accurate to 3-4 meters.)

Winlink will report the MGRS with 15 digits which is the standard, but this strip is asking for 9 digits which is an abbreviated form and has less precision. To get from 15 to 9 digits you will truncate (cut) digits from the end of the MGRS coordinate, but there is a catch. The end of the coordinate contains two parts, an Easting position and a Northing position. To demonstrate, we'll use the MGRS coordinate **10SGJ0683244683**. The last 10 digits are the part we need to change. We will split them into two 5 digit parts parts **06832 and 44683.** To get to 9 digits total we need to trim three digits from each part. They become **06** and **44** and the new 9 digit MGRS is **10SGJ0644**.

Next is the NWS CWA - the county warning area. The CWA is the same as the Forecast Area. A full size map is on the NWS page in the resources at the beginning of this exercise. Note for our Canadian and DX friends. We did not find an equivalent system to recommend. Instead please either choose a CWA close to your part of your country or use CAN or DX as the CWA.



The map above shows NWS office's County Warning Areas (CWA). These are the same as Forecast Areas.

For example, if you live in the North Mid/Eastern part of Ohio, you are in the Cleveland CWA. NWS uses abbreviations for the CWA's. For Cleveland it is CLE. An easy way to find your abbreviation is to go to https://www.weather.gov/. On this page click on your location on the map

and a new page will open with weather information for that location. Look at the URL in the box at the top of the page and your abbreviation will be the last part of the URL.

You will probably be familiar with the rest of the information in the strip. There are a couple quirks you should note. The writer of the strip wanted to divide the strip into parts with a blank line between the parts. You will see */ /* in the strip where they put the blank lines and in the parsed strip section you will see the blank lines. In the next section you are going to add your answers to the weather questions.

Generate the Reply Strip

1. The next step is to enter your answers in the boxes below the **Answer** heading. You will use your current weather conditions to complete the table. If you can't find an answer for an item, put **NA** in. For detailed weather information you can use the same page we used to get the CWA abbreviation. Look along the top for the **Forecasts** menu item and choose the local link.
2. Some of the fields use abbreviations we may not be familiar with. The following may help: Clouds- (CLR,FEW,SKT,CB,OVC,TCU) is Clear, Few, Scattered, Cumulonimbus, Overcast, and Towering Cumulus. Precipitation Type (RA,SN,SL,PL,GR,NONE) is Rain, Snow, Sleet, Ice Pellets, Hail, None.
3. The barometric pressure in the strip asks for millibars - your resource may provide it in inches of Mercury. You can convert them on this website: https://www.metric-conversions.org/pressure/inches-of-mercury-to-millibar.htm
4. Wind direction shows a mask for three characters, such as NNW. If the wind direction is one or two characters, such a N or NW, please use the one or two character abbreviation.
5. In each of the blank fields between sections of the strip, enter three space bars to maintain the gap between sections.
6. When you have completed entering your answers, click on the **Create Reply Strip** button. A new strip will be generated in the box below the button with your answers. From here there are two options to proceed.
7. The first is to use the **Copy Strips to Clipboard** button below the new strip. As the name says, it will copy to the clipboard. This allows you to paste the data into a message such as a Radiogram. Note that the copy to clipboard copies both the original strip and your answers.
8. The second is to use the **Submit** button. This will insert the original strip and your answer strip into the message we started at the beginning of this exercise. We will use this option. In your message, confirm that it looks like the information you entered. The subject will be automatically populated as ETO Strip Response.

9. Address the To: field in your message to **your Clearinghouse and in the CC: field enter ETO-BK, and optionally, your personal E-mail address.**

Check for Incoming messages and send the message to your Clearinghouse and ET-BK

1. It is a good idea to check for incoming messages prior to sending a message. You can do this via RF, but this is a case where it makes sense to use Telnet if you are connected to the internet. Check that there are no messages in your Outbox. If there are, move them to the "Saved Item" folder. You can move them back to the Outbox for transmission after the exercise.
    a. Click on any messages you need to move to highlight them.
    b. At the top of the window, click on the pull down for "Move To" and select "Saved Items" Folder.
    c. Click on "Move To."
2. Start a Telnet session and download any incoming messages.
3. Close the Telnet Session.
4. Now move your message out of **Drafts** and into the **Outbox**.
    a. Click on the "Drafts" folder, confirm your message is there.
    b. Click on your message to highlight it.
    c. At the top of the window, click on the pull down for "Move To" and select "Outbox" in the list.
    d. Click on "Move To."
5. Start a **HF or VHF/UHF** session and connect to your favorite RMS node to send the message. Our goal is for everyone to be able to use RF to send messages, but if you are not ready for that yet, please use **Telnet** to send the message.
6. Close the session after the message is sent.

End of Exercise

Sample form is below

Request for Information Strip Reader and Response Creator

ETO Winlink Thursday

Setup Click to add your agency/group name to title

Operator Info - Read Please

Request Charcter count: 367 of 600 Insert a Standard Information Strip Instructions for Standard RI Strips

ETO/CALL SIGN/SKYWARN ID(or NA)/CITY/STATE (AA)/MGRS (9 CHARACTERS)/NWS CWA(AAA,NA)/ /OBSERVATION TIME Z (DDHHMMZ)/ /WIND DIR (AAA)/AVE SPEED MPH (###)/GUSTS MPH (###)/ /CLOUDS (CLR,FEW,SKT,CB,OVC,TCU)/ /TEMP DEG F (### M=MINUS)/ /BAROMETER MB (#####R#)/BAROMETER 3 HR TREND (R,S,F)/ /PRECIP TYPE (RA,SN,SL,PL,GR,NONE)/CURRENT PRECIP INS (###R##,NA)//COMMENTS,DAMAGE//

Parse Strip

Strip Question	Answer
ETO	ETO
CALL SIGN	KD8NZF
SKYWARN ID(or NA)	099 478
CITY	Poland
STATE (AA)	OH
MGRS (9 CHARACTERS)	17TNF32424277
NWS CWA(AAA,NA)	CLE
OBSERVATION TIME Z (DDHHMMZ)	SU0914Z
WIND DIR (AAA)	NNE
AVE SPEED MPH (###)	003
GUSTS MPH (###)	006
CLOUDS (CLR,FEW,SKT,CB,OVC,TCU)	SKT
TEMP DEG F (### M=MINUS)	080
BAROMETER MB (#####R#)	0030.1
BAROMETER 3 HR TREND (R,S,F)	S
PRECIP TYPE (RA,SN,SL,PL,GR,NONE)	NONE
CURRENT PRECIP INS (###R##,NA)	NA
COMMENTS,DAMAGE	NONE

Create Reply Strip

ETO/KD8NZF/099 478/POLAND/OH/17TNF32424277/CLE/ /SU0914Z/ /NNE/003/006/ /SKT/ /080/ /0030.1/S/ /NONE/NA/ /NONE//

Copy Strips to Clipboard

Submit Reset Form

Form based on a concept by the SHARES Region 1 Interoperability Group Version 1.4