

***USING THE TRAFFIC SYSTEM
MESSAGE BULLETIN BOARD***



A training course for REACT Teams and members

This is the first of a series of short courses for REACT members to train to perform communications duties in specific disaster response roles.

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I. THE PROBLEM AND THE SOLUTION

As communicators and as an organization of communicators we face three significant problems that impact our ability to efficiently support other agencies in disasters as to manage our own ability to respond to disasters:

- (1) Disaster and major emergency communications depend on written messages. Everything that goes into an emergency operations center or an incident command post is committed to paper, whether that paper is actual paper or a recoverable message recorded in incident management software.
- (2) If we are to be able to respond as a national and international organization to disasters we have to be able to communicate across our teams, councils, and regions and with REACT International headquarters in a form that can be made a permanent record. If our members of teams are to be recognized as efficient disaster communicators they have to be able to send and receive formal messages in one of several formats including the American Radio Relay League and International Amateur Radio Union standard formal message and Incident Command System Form 213 message format.
- (3) We currently lack a way to train our members in message procedures and to maintain their proficiency. We also lack a way to recover messages we handle for reconstruction, training, and in case of litigation.

To address these issues we have established a three phase program to, first. train our members in traffic handling and traffic net procedures. We already have two nets which perform a valuable function for our organization, but these are not traffic nets designed to handle a large volume of formal message traffic in short periods of time.

Second, we have established a message bulletin board hosted on Boardhost.com to provide a practice space for writing messages, a record capability to preserve all messages handled by our traffic system, and a backup capability against the failure of voice nets.

Third, we will operate a regular traffic net online on a schedule that allows enrolled REACT members to maintain proficiency in handling messages. This net will allow interface with other nets and provide for broad participation by our members regardless of the radio service in which they operate or their license class.

II. WHAT IS A BULLETIN BOARD?

If you have been around personal computers for some time, you may remember the early days pre-email when we posted messages to bulletin boards. Most computer users probably think that the bulletin boards went away a long time ago when e-mail and discussion forums took over the Internet communications world. Actually not. There was a drastic reduction in the number of bulletin boards, and the home computer based bulletin board largely disappeared. However, commercial vendors of bulletin boards survived. The boards got more sophisticated, added features, and remain a simple to use, capable way of communicating and tracking responses to those communications. The key feature is sequential threaded communications in which you post a message, and other users can add to thread to indicate they have read the message, taken action on it, etc.

III. ACCESSING THE BULLETIN BOARD

To gain access to the Bulletin Board you must (1) be a current REACT International member (Team member or Affiliate member), (2) have completed this course with a passing score on the online final learning check, (3) complete training on protecting privacy and sensitive information, (4) retain a copy of this manual for reference in using the bulletin board, and (5) contact the REACT training staff for a station identifier and a password.

For your own protection do not share the bulletin board URL, your identifier, or your password. Because we will handle disaster communications on this system, you may have some liability if someone else misuses your identifier and password to access the system.

IV. USING THE BULLETIN BOARD

The Bulletin board provides the ability to do three key things to assist message transmission and documentation: (1) search for messages on a specific topic, (2) compose and post messages using a standard format, and (3) document the receipt and delivery of messages while retaining a copy of the message.

SEARCH

The first fill-in box on the page is a search term box that allows sorting of messages. Enter the name of an event or message subject, and click on submit to retrieve all

related messages. Messages which do not use the search term you enter as their title are not retrieved.

Hello Traffic241  [Private Messages](#) | [User Options](#) | [Log Out](#)

current EASTERN TIME August 28, 2017, 14:48:15

ENTERING THE MESSAGE

Below the search box is the current time that will be displayed on the message listing on the bulletin board. Message listing time and date is keyed to current Eastern Time, Universal Coordinated Time (UTC or ZULU minus 4 hours in United States Daylight Savings Time or minus 5 hours normally). Time is in 24 hour clock time, hours: minutes: seconds.

Post a Message

Subject:

Message:

B / **I** / **U**

By posting, you confirm that you have read and agreed to be bound by the board's [usage terms](#).

The next box is for the message SUBJECT, the general category of the subject of message. This appears as the subject line in the bulletin board. The SUBJECT is not transmitted as part of the message – it is strictly for internal sorting purposes.

To maximize the effectiveness of the search function, we use the following standard message subjects:

TEST	Transmitted to test system operations by the system administrator or a net control station. It has no operational or administrative content.
ADMINISTRATIVE + subject	Messages between teams, council, regions, and REACT International dealing with membership, finance, policies, training, and other administrative functions.
	<i>Example:</i> ADMINISTRATIVE Team Membership Fee
OPERATIONS + subject	Messages regarding public service operations, routine situation awareness or response readiness not related to a specific emergency event, or regarding an emergency or disaster which has not been declared or is not being supported by Traffic System operations.
	<i>Example:</i> OPERATIONS Type 4 Team
EXERCISE + Event Name	Messages transmitted related to participation in REACT or supported organization emergency or disaster drills or exercises.
	<i>Example:</i> EXERCISE Burlington Airport Disaster
EMERGENCY + Event Name	Messages transmitted as part of the response to a declared emergency or disaster
	<i>Example:</i> EMERGENCY Hurricane Harvey

This message subject is only for use on the Traffic System bulletin board – it is not transmitted as part of the message. The message precedence in American Radio Relay League and International Amateur Radio Union messages is set by the message content. This is not the same as the bulletin board subject which is used for general sorting and recovery of messages by subject area as opposed to sorting of messages. Thus the use of EMERGENCY as a subject may be for a message that could be an Emergency, Priority, Welfare, or Routine message. Similarly the use of

EXERCISE in the subject does not eliminate the need for the message text to start and end with the word Exercise.

The actual formal written message is typed in the bulletin board block MESSAGE.

The standard format for REACT messages is the ARRL/IARU format for amateur radio messages, with minor refinements for our purposes. This allows our messages to be transferred to the amateur National Traffic System (NTS), and for us to accept incoming messages from the NTS. An example message as it will appear is:

Number 3/P/Traffic241/19/Glen Allen VA/1244EDT/24August 2017/All
Stations/TROPICAL STORM HARVEY FORECAST LANDFALL SOUTH TEXAS
COAST AS CATEGORY 3 HURRICANE FRIDAY NIGHT X TEXAS MEMBERS
MONITOR SITUATION/Walter Green/REACT Training

Each block on the standard message form is separated by a forward slash / from the next block. These slashes would not be read when the message is transmitted by voice, and the block titles are also not read. To deconstruct the above message:

The message header or preamble:

- | | |
|----------------|---|
| Number 3 | Your message number. |
| P | Message precedence – in this case P for Priority (R is Routine, W is Welfare, EMERGENCY is emergency). |
| Traffic 241 | The station originating the message – this is a REACT Traffic System station, it could be an amateur call sign, a REACT team and number, a GMRS call sign, etc. |
| 19 | The check – there are 19 words in the text of the message, including the punctuation. |
| Glen Allen VA | The location of origin – in this case Glen Allen, Virginia. |
| 1244 EDT | The time the message was filed in 24 hour clock time with the standard acronym for the time zone (Eastern Daylight Time). |
| 24 August 2017 | The date the message was filed, in order day-month-year. |

The address:

All Stations This is the address. The maximum is name of individual, the duty position, the location, a telephone number, and an e-mail address.

The text: Typed all capitals to distinguish from the preamble and address. Punctuation is restricted to X (voice XRAY) or STOP (for messages that will be handled by international amateur operators) for period, and QUERRY for a question mark. Numbers are written as a normal group, not spelled out. Write telegraphically, eliminating every word that does not support the core meaning of the message. To determine the check, count the number of words, number groups, and punctuation marks.

The signature:

Walter Green The name of the originator.

REACT Training The position, organization or duty assignment of the originator.

Note that our format does not use handling instructions or ARRL standard numbered messages. This is to keep our voice transmissions in line with the Incident Command System requirement for plain language radio transmissions.

Once the message is complete, click on the Submit button to post the message to the Bulletin Board. The message will appear as follows:

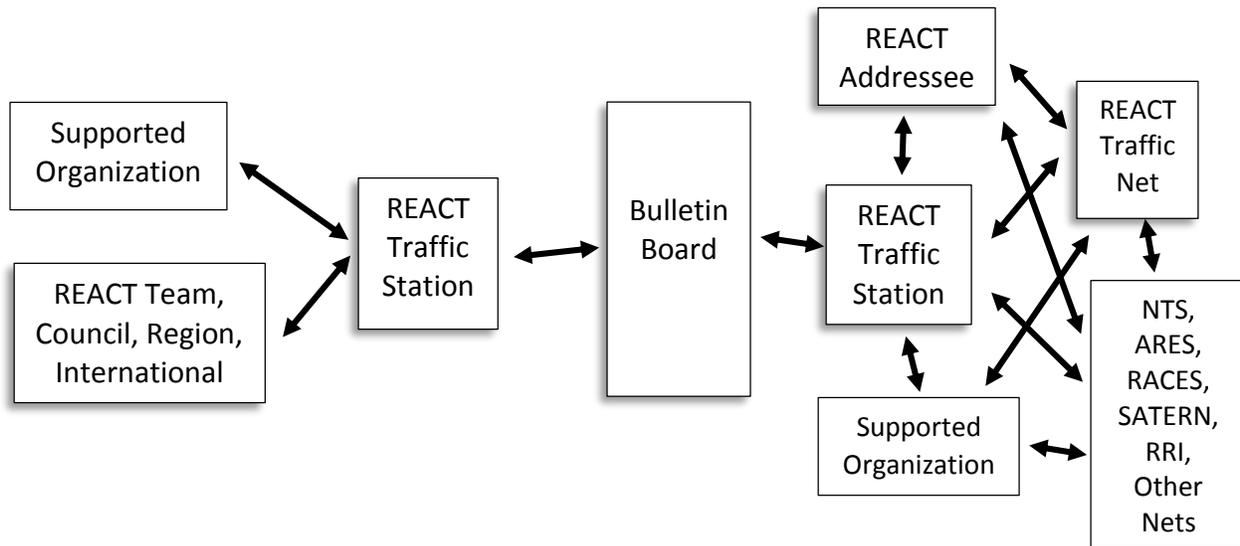
OPERATIONS Potential Tropical Cyclone 10 - **Traffic241** August 28, 2017, 14:48:11

The “OPERATIONS” followed by “Potential Tropical Cyclone 10” indicates that this message is about a possible developing disaster that has not yet been declared. “Traffic241” is the identity of the Traffic System station that has listed the message. “August 28, 2017, 14:48:11” shows that this message was posted to the Bulletin Board at 2:48 pm and 11 seconds on 28 August of 2017.

Remember – never alter or edit a message that you receive for transmission. Transmit it as received. If you change the message you may become legally responsible for the consequences of that change.

HANDLING A MESSAGE

A posted message achieves nothing if it is not delivered, and if we don't know whether it has been delivered. It is important to understand that the bulletin board is a storage facility. The following diagram illustrates its function.



Interpreting the flow in the diagram gives you the basic concept for record communications for REACT International.

First - A message originates from either (1) an organization we support in an emergency or disaster or exercise, or (2) a REACT Team, Council, Region, or REACT International headquarters.

Second – The message is hand delivered, faxed, mailed to, telephoned, e-mailed to, or transmitted by radio to a trained operator of a REACT Traffic Station.

Third – The operator posts the message to the bulletin board.

Fourth – That operator, or any other trained operator, picks up the message from the bulletin board, and depending on the state or an emergency or disaster, the urgency of the message, the means of communication available, and current memorandums of understanding/agreement with other communications organizations, transmits it to:

- (1) The REACT addressee or the supported organization by hand delivery, fax, mail, telephone, e-mail, or radio.

(2) The REACT Traffic Net which delivers it either directly or through another organization net to either the REACT addressee or to a supported organization.

(3) A National Traffic System, Amateur Radio Emergency Service, Radio Amateur Civil Emergency Service, Salvation Army Team Radio Network, Radio Relay International, or other REACT or other organization net for delivery to either the REACT addressee or to a supported organization.

Note that all arrows in the system are two headed – messages flow from originator to addressees, and from addressees to originators.

The reality of disaster communications is that normal communications may be destroyed, damaged limiting their capacity, or overloaded. Under these conditions Traffic Stations will need to use maximum flexibility in finding routes to deliver messages that are time sensitive. During normal operations the primary purpose will be to provide internal REACT communications (the shadowed boxes in the diagram). In exercises the pathways to be used will be established in the exercise communications plan.

As a message goes through this system, we use the response box to track the message's status. Click on the posted message title line to open the message; this displays a response box below the message text at the top of the page.

Post a Response

Subject:

Re: OPERATIONS Potential Tropical Cyclone 10

Message:

B / **I** U

Post

Preview

By posting, you confirm that you have read and agreed to be bound by the board's [usage terms](#).

First, replace the “Re: OPERATIONS Potential Tropical Cyclone 10” with one of the standard action terms below:

Message sent to	Use this when you actually transmit the message, whether by telephone, e-mail, radio, fax, etc. Identifies to whom the message was transmitted. This may be the addressee or another station that will transmit the message to another net for delivery or directly to the addressee. Posted as response to the main message.
Receipt	The receipt line shows that the addressee has acknowledged receiving the message. Posted as a response to <i>Message sent to</i> , or <i>To net</i> .
Undeliverable	The message could not be delivered. Indicate why, for example, “no communications to area,” “no station available to transmit,” “error in e-mail address,” etc. Posted as a response to <i>Message sent to</i> , or <i>To net</i> .
Scheduled	Indicates a message that should be transmitted on the next Traffic System voice net. Typically these are messages that are Routine, not time sensitive, and that provide useful transmission and copying practice. Posted as response to the main message.
To Net	Indicates the time and net to which a message is transferred for further delivery. Posted as response to <i>Scheduled</i> .

Examples of these include:

A message sent to:

Message sent by e-mail to REACT International Headquarters, Region 3 Director and:

Tier 1 ERT REACT
 Space Coast REACT
 Flagler County Assist REACT
 Tampa Bay REACT
 North Okaloosa REACT
 Shoal River REACT
 Burke County REACT
 REACT of Cleveland County

A receipt:

At 1415 e-mail acknowledgement of message by Region 2 Director.

An undeliverable:

Message to Middle Georgia REACT returned as undeliverable. Search for Team URL indicates URL no longer active.

A scheduled:

Transmit 10 October 2017 Traffic Net.

A to net:

Transmitted all stations 10 October 2017 Traffic Net.

The completed thread for the message should allow all traffic handlers to easily check the status of a message and determine where it has been and who has handled it. For example:

EMERGENCY Hurricane Irma - **Traffic241** *September 6, 2017, 13:21:50*

- Message sent to: - **Traffic241** *September 6, 2017, 13:33:34*
 - Receipt: - **Traffic241** *September 7, 2017, 10:09:30*
 - Receipt: - **Traffic241** *September 7, 2017, 10:07:51*
 - Undeliverable: - **Traffic241** *September 6, 2017, 13:34:30*

Replies from the message addressee are not entered in the thread of the original message – they should be composed and posted as new messages.

A CAUTION

This system creates a written record of all formal traffic consigned to it. Proofread your messages for spelling and to make sure that the intent of the message is clear and unambiguous. How others perceive our organization depends in large measure on what they see of us. Sloppy messages with spelling errors, off topic inserts, inappropriate language, etc., do not present the image of professionalism consistent with an expert volunteer communication service.

Remember also that disaster communications may include privacy information that is protected by law or by supported organization policy. Before transmitting personal data make sure that it is permissible to do so.

V. ICS FORM 213 MESSAGES

The Incident Command System uses a national standard message form, the ICS Form 213, as part of the National Incident Management System. In Canada the standard organizational model is the Incident Management System, and the identical form is an IMS Form 213. Standards for ICS Form management allow organizations to make changes in the form to meet organizational needs. In this case we use a ICS Form 213A, with minor changes to make it easier to track where the message has been.

REACT use of the ICS Form 213A will generally be for longer messages with multiple addressees that can be delivered by e-mail or fax. A typical example is a daily Situation report:

1. Hurricane Irma
2. REACT International Headquarters
Region 3 Director
Tier 1 ERT REACT
Space Coast REACT
Flagler County Assist REACT
Tampa Bay REACT
North Okaloosa REACT
Shoal River REACT
Burke County REACT
REACT of Cleveland County
Western Carolina REACT
REACT 74
Lake Royale REACT
Caldwell County REACT
Greensboro REACT
Halcones REACT De Camuy
Colleton County REACT
Star Mountain REACT Radio Club
3. Walter Green/REACT Training
4. Hurricane Irma REACT Situation Report 2
5. 10 September 2017
6. 1830 EDT

- 7.a. Hurricane Irma remains a dangerous Category 2 storm tracking north on Florida west coast. After crossing the Florida Panhandle track will impact GA AL MS TN KY and may cause river and flash flooding from FL north over next 5 days.
- 7.b. REACT Traffic System operating to test disaster capability. Operational for 11 days. 13 messages sent to 16 Teams, Region 3 Director, Region 2 Director, REACT International Headquarters. Number undeliverable e-mail addresses reduced to 2. 9 message receipt acknowledgements received.
- 7.c. Flagler County Assist REACT 4800 assisting with registration and social media support in Flagler County Emergency Operations Center and providing SKYWARN severe weather reporting.
- 7.d. Colleton County REACT 3153 is Released due to change of the storm track to the west.
- 7.e. Tier 1 ERT REACT 6244 reports ready in case of impacts in Virginia.
- 8. Walter Green, REACT Training

The numbered lines of text correspond to the specific blocks on the ICS/IMS Form 213 as follows:

1.	The incident name
2.	To (name and position). Agency name should be included if other than REACT.
3.	From (name and position). Agency name should be included if other than REACT.
4.	Subject. This is the specific subject of the message. In the above example “Hurricane Irma REACT Situation Report 2” clear identifies the contents of the message.
5.	Date the message was written. Our practice is day-month-year.
6.	Time the message was written in 24 hour clock notation in local time. Our practice is to include the time zone.
7.	Text. Write as telegraphically as possible eliminating all unneeded words. We separate paragraphs as 7.a., 7.b., etc.
8.	Approved by (name, position and title). The position is normally an ICS position. Date and time of approval using standard notation may be included if different from time message was written or if approver is someone other than the individual from whom the message originates in line 3.

If you are preparing an ICS/IMS Form 213 message for transmission with a reasonable expectation that it will be transmitted by voice, make every effort to edit it to a 25 word maximum for the section 7 text. Longer messages have a higher

potential for garbles. Remember – never alter or edit a message that you receive for transmission. Transmit it as received. If you change the message you may become legally responsible for the consequences of that change.

VI. OPERATIONAL PRINCIPLES

The Traffic System, of which the bulletin board is part, is a record communications system for the generation, acceptance, transmission, and delivery of formal written messages in standard formats.

On a day-to-day basis the Traffic System is used primarily for training and secondarily to support the operational and administrative activities of REACT Teams, Councils, Regional Directors, and REACT International, promoting communication between all levels of the REACT organization.

In communications and disaster exercises the Traffic System may accept and handle messages from or to any agency or organization with which REACT International has an established relationship by memorandum of understanding or agreement or any agency or organization supported by REACT Teams on a local basis. This includes the Simulated Emergency Test and local, state, national, and international exercises.

In crisis operations, including declared natural and man-made major emergencies and disasters and national security incidents, the Traffic System may accept and deliver messages, within the limits of its capabilities, to and from any recognized communications organization or response and recovery agency with compatible methods of transmission.

The operation of the Traffic System is not intended to replace the operations of existing REACT Zello and Echolink nets or any future net. Traffic may be routed to and accepted from these nets by the Traffic System. Because both nets encourage participation by other than REACT members, internal REACT administrative communications should be carefully screened for sensitivity before using such open systems.

The Traffic System in exercises and disasters may be tasked to transmit sensitive and privacy information for governmental or voluntary agencies. All members are required to treat such traffic as confidential and not release such messages to anyone other than the addressee or to a recognized station of an established communications

system capable of providing protection to the information in the message. Open nets where participants cannot be identified must not be used under these conditions.

VII. THE DUTY CYCLE

Individuals assigned Traffic System call signs are expected to check the Bulletin Board on a regular schedule averaging twice a week for posted message traffic. When a major emergency or disaster is potentially developing in any country in which REACT International has member teams with representation in the Traffic System, checks for traffic should be at least daily. In the event of an ongoing serious event with REACT participation, the duty Net Control Station will schedule all available stations to serve shifts to handle any traffic received.