

Tompkins County, New York

Department of Emergency Response



Radio Amateur Civil Emergency Service (RACES)



Emergency Communications Service Plan for the Support of Local Government During Emergencies

Revised: 06/28/2019

1. MISSION STATEMENT

The mission of the Tompkins County RACES program is to provide trained licensed Amateur Radio volunteers to assist with emergency communications in accordance with Federal Communications Commission (FCC) rules and regulations during a time of crisis.

2. OPERATIONAL GOALS

When activated by the Tompkins County Department of Emergency Response in the event of an emergency or specified training, event, drill, or exercise, RACES may:

- a. Supplement the public communications infrastructure through high quality communications.
- b. Provide back-up communications to designated agencies until normal communications are restored.
- c. Provide a viable response to local or county communication system outages or overloads.
- d. Provide backup civil defense communications services.
- e. Assist government officials in the protection of life and property by providing accurate communications in a timely manner.
- f. Provide radio communication for civil preparedness purposes only, during periods of local, regional or national civil emergencies or natural disasters, such as fires, floods, tornadoes, and man-made disasters to include acts of terrorism and war.
- g. Provide operations that involve emergency message handling on Amateur Radio Service frequencies that typically involve messages between critical locations such as hospitals, emergency services, emergency shelters, and any other locations where such communication is needed.
- h. Provide communications and/or other assistance where required and/or as assigned by the Tompkins County Department of Emergency Response or State of New York Office Department of Homeland Security and Emergency Services (DHSES) to aid in accomplishing their mission(s) in areas such as public-safety, or other government communications and emergency radio/wireless equipment operations and repair.

3. PURPOSE

This plan is intended to provide coordinated operation between County of Tompkins government officials and the Tompkins County RACES during times when there are threats to the safety of life and/or property. Maximum benefits can be obtained only through careful planning that identifies the organizations, agencies, and individuals and assigns a definitive role to each. This plan enables agencies and organizations having emergency responsibilities to include the Tompkins County RACES in local emergency plans and programs.

This plan becomes official for the County of Tompkins, New York when signed by the Director of the Tompkins County Department of Emergency Response and the Tompkins County Amateur Radio Association (TCARA) RACES Radio Officer. Under this plan, the Director of the Department of Emergency Response is empowered to request the use of available volunteer communications facilities and personnel. Acceptance of or participation in this plan shall not be deemed as a relinquishment of license control, and shall not be deemed to prohibit an amateur radio service licensee from exercising independent discretion and responsibility in any given situation under the terms of its license.

4. AUTHORITY

Part 97 Subpart A, FCC Rules and Regulations.

5. AREAS COVERED

Tompkins County faces a variety of threats both natural and technological, for which it must be prepared to respond. A wide range of potential emergencies has to be considered by emergency services personnel, whether paid or unpaid. Any of these threats could occasion the requirement for qualified emergency communications to assist, supplement, augment or replace existing government facilities. Such threats include:

- a. Severe storms, tornadoes, and flash floods, as well as slower rising but devastating floods along river basins and valleys. Icing and snow may be an additional hazard under certain conditions.
- b. Dam failure from natural or man-made causes resulting in extensive damage and potential loss of life in areas that would be affected by the sudden surge of water and debris.
- c. Unusual incidents can arise out of terrorism, urban unrest or mass actions
- d. Large scale transportation accidents that can occur from a variety of causes, including automobiles, buses, military and civil aircraft, trains and other means.

- e. Chemical and hazardous material spills and chemical releases that affect the population with both immediate and long-term health hazards.
- f. Key economic and industrial centers, such as power generating facilities, could be targets for nuclear, conventional war or armed aggression that can spill over into other areas.

6. JURISDICTIONS AND AGENCIES COVERED

The jurisdictions covered by this plan are in the County of Tompkins and its political subdivisions.

This plan provides for the interaction with emergency planning and response agencies.

7. RADIO OFFICER AND STAFF ORGANIZATION

The organizational diagram for the implementation and administration of these resources is shown below. Written operational procedures are issued as required and maintained in a separate Standard Operating Procedures manual (**Appendix A**).



A list of current Tompkins County key personnel with contact information shall be provided to the RACES Radio Officer by the Department of Emergency Response (**Appendix C**).

8. PARTICIPANTS

TCARA RACES members are those participants who participate in the program in an ongoing basis. Amateur Radio operators and others enrolled under the provisions of this plan shall be registered as Civil Defense workers in accordance with Article 2/B, Section 29b, of the New York State Executive Law. Due to the sensitive nature of the activities of this level of participant, enrollment shall include, if necessary, authorization for verification of loyalty and reliability through appropriate local records checks, as by the Tompkins County Department of Emergency Response. These participants are expected to report to their assignments as quickly as possible when assigned. Each participant shall be issued a picture identification card from the Department of Emergency Response. A roster of current members shall be maintained by the RACES Radio Officer (**Appendix D**).

Tompkins County Department of Emergency Response has adopted the National Incident Management System (NIMS) program as recommended by the U.S. Department of Homeland Security to be the guide in executing the life cycle of an emergency.

Since RACES is an integral element of the Department of Emergency Response's organization, and since they function in the Planning Section as Technical Specialists, all members are required to maintain an active license in the grade of Technician or above and complete the following training either through local training courses or Federal Emergency Management Agency (FEMA) Independent Study program (the current version of each FEMA course should be completed, i.e.: IS 200.c):

- a. IS 100 - Introduction to the Incident Command System (ICS)
- b. IS 200 - ICS for Single Resources and Initial Action Incidents
- c. IS 700 - An Introduction to the National Incident Management System
- d. IS 800 - National Response Framework, An Introduction

The following ARRL courses are highly encouraged:

- a. EC-001, Introduction to Emergency Communication
- b. EC-016, Public Service and Emergency Communications Management for Radio Amateurs
- c. EC-015, ARRL Public Relations

9. STANDARD OPERATING PROCEDURES

Tompkins County RACES members shall follow Tompkins County RACES Standard Operating Procedures (**Appendix A**).

10. RESOURCES

These Tompkins County RACES members are available to all government services/agencies as required, but are not assigned exclusively to any one service.

Specific needs for emergency communications using communications volunteers in government service by departments or agencies of this jurisdiction are a part of this service, and are coordinated by the Director of the Department of Emergency Response. Amateur radio operators are organized to provide communications services only, and are not required to serve in any other function except at their discretion and approval of a government official (such as the Director of the Department of Emergency Response or Incident Commander).

11. NETWORKS

This service operates nets on any one of the primary and secondary frequencies found in **Appendix B**.

12. EQUIPMENT RESOURCES

There are fixed, portable and mobile stations under the provisions of this plan. The majority of the equipment is owned and operated by the Tompkins County Department of Emergency Response. All networks will be available at the Emergency Operations Center (EOC) and at alternate area EOCs.

13. ACTIVATION PROCEDURES

Upon notification or determination of an emergency condition or situation posing an extraordinary threat to life and/or property, the Tompkins County Director of the Department of Emergency Response, or a designated representative, will contact the RACES Radio Officer.

The Director of the Department of Emergency Response will use the following format when contacting the RACES Radio Officer:

“This is (name and title). I request that the RACES organization be activated for Tompkins County because of (description of emergency situation).”

In order to speed personnel activation during emergency conditions or provide other announcements, an authorized official may contact Tompkins County RACES members via the County’s mass notification system to assist with activation of the RACES organization.

This service is a communications resource covered by the master mutual aid agreement for Tompkins County and the State of New York. Requests from or to Tompkins County for assistance (mutual aid) are to be directed to the Director of the Department of Emergency Response.

Assistance offered by Amateur Radio operators not registered with the Tompkins County RACES program should contact the net control station for assignment and dispatch.

Upon cessation of the emergency, authorized officials shall contact the Tompkins County Radio Officer to terminate the response. A roll call will be initiated and all RACES members will acknowledge and confirm receive of the termination message.

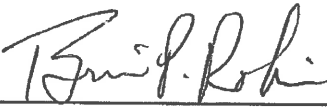
14. TESTS

Tests of the systems include a twice a month on the air meeting and drills as required. The tone alert and pager system shall also be tested at the same time.

15. REVIEW

This plan and its appendices shall be reviewed for completeness, currency, and accuracy not later than three (3) years after the latest approval date, with the exception of the RACES Plan (**Appendix F**) which shall be reviewed each January. Revisions and corrections will be issued to all plan holders.

This has been reviewed and approved by the following authorities for use by the communicators and for inclusion in the Tompkins County Comprehensive Emergency Management Plan (CEMP).

NAME	SIGNATURE	DATE
Brian Robison		7/9/19

Director, Tompkins County Department of Emergency Response

HUGH BAHAR - Hugh Bahar 7/8/2019

Tompkins County Amateur Radio Association RACES Radio Officer

- Appendix A - Tompkins County RACES Standard Operating Procedures
- Appendix B - Authorized RACES Radio Frequencies
- Appendix C - Key Personnel and Contact Phone Numbers
- Appendix D - RACES Members and Resources
- Appendix E - RACES Application
- Appendix F - RACES Plan

Appendix A

Tompkins County, New York

Department of Emergency Response



Radio Amateur Civil Emergency Service
(RACES)



Standard Operating Procedures

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Introduction

Instructions and general operating procedures presented in these Standard Operating Procedures (SOPs) are applicable to message traffic handling by Tompkins County RACES and used in all Tompkins County RACES events. All amateur radio operators are encouraged to use this document in training and/or activated net operations.

These SOPs will be followed for all drills and activations. Proper use of radio procedures including procedure words (pro-words) will be used by all RACES participants.

Description and Authority

RACES is an organization of Federal Communication Commission (FCC) licensed amateur radio operators who volunteer to provide radio communications for state and local governments during times of emergency. Created in 1952 primarily to serve in civil defense emergencies, RACES provides essential communications and warning links to supplement state and local government agencies during emergencies.

RACES is organized to provide emergency communications for civil preparedness purposes only. RACES is a special part of the amateur radio service sponsored by the Federal Emergency Management Agency (FEMA) and is conducted by amateur radio operators using their primary station licenses or by existing RACES stations. In the event that the President invokes the War Emergency Powers Act, amateur radio operators enrolled with their local emergency management offices would become limited to certain frequencies, while all other amateur operations would be silenced.

During an emergency, RACES is operated under the direct control of the activating emergency management office, as authorized by the FCC and the Commissioner of the New York State Division of Homeland Security and Emergency Services (DHSES).

RACES is authorized by Section 606 of the Communications Act of 1934 as amended by Part 97.407 of the FCC. A copy of FCC Part 97.407 can be found in Appendix I of this document. RACES guidance is also provided by FEMA document CPG1-15 March 1991.

NOTE: FCC rules, Part 97, still apply to all RACES stations and RACES operators participating in RACES operations.

Tompkins County RACES/ARES

The Amateur Radio Emergency Service (ARES) is the national amateur radio emergency preparedness organization sponsored by the American Radio Relay League (ARRL). This organization is different from RACES although they share many of the same goals. In many cases, ARES will be used as a public service organization to assist with communications during non-emergency events such as parades, foot and bicycle races, and community events.

Membership in the ARRL is not required for an amateur radio operator to be an ARES member. In general, ARES is organized to serve the public, while RACES is organized to serve the government; however, it is recommended that RACES members be enrolled in the ARES program. The additional

training received during ARES public service events can be of great value during times of emergency. In addition, there are times of emergency when ARES will be the first organization to activate for communications assistance.

As an emergency escalates, the emergency manager may call for a RACES activation. At this time, with radio operators already activated, the operation can smoothly go from an ARES operation to a RACES operation. When this occurs, RACES members are now under the supervision of the RACES Radio Officer and the Emergency Manager, and are no longer directly involved with the ARES operation. At this point, operations will usually move to the Emergency Operations Center (EOC) if the radio operators are not already there. It is suggested that one operator on each shift remain with the ARES operation to act as liaison between RACES and the non-RACES stations which may be involved supporting other agencies or organizations.

Whenever possible, RACES and ARES communications should be on different net frequencies. Cooperation between the ARES and RACES organizations is of high importance and cannot be understated.

RACES Eligibility

Any United States citizen who possesses a valid FCC Amateur Radio Operator License (Technician Class or higher) is eligible to become a member of RACES. All RACES operators are required to operate within the restrictions of their license class as per FCC Part 97.

RACES Membership

Amateur radio operators who wish to participate in the Tompkins County RACES volunteer program must complete the membership form used for Tompkins County RACES volunteer membership and submit it to the Tompkins County RACES Radio Officer. RACES membership at a county level does not provide membership in the New York State RACES volunteer program, and membership in RACES on a county and a state level is not dependent on membership in the other.

Tompkins County RACES Volunteer Program

A local level RACES program, managed and operated under the Department of Emergency Response (DOER), provides a cadre of trained RACES radio operators to be used in County facilities or other local government facilities when regular communications methods are either overloaded or not available.

RACES members at a county level may also provide supplemental radio operation of county-owned communications assets. RACES volunteers will not be authorized to drive a county-owned vehicle unless they are a current county employee.

Tompkins County RACES volunteer members could also be used when the County or a municipality does not have sufficient radio operators during a disaster. While most counties have a RACES organization, additional RACES operators may be needed for large scale, long term, or multi-county disaster operations. County requests for additional RACES operators will be done in the same manner currently used to request any state assets.

Disciplinary Action / Dismissal of Tompkins County RACES Radio Operators

Members must complete the required ICS, NIMS or other designated RACES within twelve (12) months of becoming a member of Tompkins County RACES. Any member who fails to complete the required ICS, NIMS, or other assigned training within the twelve (12) month period, without a valid reason, will have their RACES membership suspended until the training has been completed.

The Tompkins County RACES Radio Officer has the right to suspend any RACES member for willful, malicious violation of procedures, protocols, FCC rules and regulations, or the repeated failure to meet minimum RACES Nets or drill attendance opportunities necessary for RACES to accomplish its mission. An appeal of suspension may be made in writing within 30 days to the Director of the Department of Emergency Response.

Identification of Tompkins County RACES Volunteers

DOER-issued ID cards will be issued to all Tompkins County RACES volunteers. These cards will remain Tompkins County property and must be surrendered if the volunteer leaves the Tompkins County RACES program for any reason.

Associated Costs for Tompkins County RACES Volunteers

If an operator is deployed away from his or her home area, meals and lodging may be provided according to the current Tompkins County travel rules and regulations. As per FCC regulations, no additional compensation may be made to any RACES volunteer.

Defense and Indemnification for Tompkins County RACES Volunteers

New York State Public Officer's Law § 17 provides for defense and indemnification for employees of public entities acting within the scope of their public employment or duties. Employee is defined as "any person holding a position by election, appointment or employment in the service of the state, including clinical practice pursuant to subdivision fourteen of the public health law, whether or not compensated, or a volunteer expressly authorized to participate in a state-sponsored volunteer program..."

The volunteers recruited by Tompkins County DOER and who are members of the Tompkins County RACES volunteer program will be provided this protection as the Tompkins County RACES volunteer program is a state-sponsored volunteer program.

Tompkins County RACES Membership

Individual members will register with the Tompkins County RACES Radio Officer. The Radio Officer will provide a list of RACES members to the Director of DOER, who will approve the individual's membership in RACES. The Tompkins County RACES Radio Officer, as well as the Department of Emergency Response, will maintain this list.

RACES members will be registered in one county only. If a member is registered in more than one county, and there is a need for RACES volunteers in multiple counties, it would be impossible for individual county emergency managers to know the number of volunteers available.

Insurance for Tompkins County RACES Members

Tompkins County will provide insurance for RACES volunteers activated to assist during an emergency, from the time of activation to the completion of the assignment. Travel time to the RACES volunteer’s home is not included.

Duties and Responsibilities of Tompkins County RACES Volunteers

1. Operate amateur radios already installed on site or in a vehicle. These radios may consist of radios in all amateur bands. The volunteer operator may only operate within their amateur license class privileges.
2. Operate government radios in multiple bands. These are operated under the license authorization of the government agency.
3. Operate as a net control on amateur radio frequencies.
4. Handle formal message traffic (ARRL Radiogram message form).
5. Provide mobile communications on scene. This may either be done with a handheld unit or a temporary installation of an amateur radio mobile unit. If performed in a government vehicle, a government employee will be the driver.
6. Temporary installation of radios and antennas. Tower climbing is prohibited.
7. Perform basic troubleshooting with regard to the use of RACES amateur radio equipment. This can include use of an SWR meter, multi-meter, or other places of test equipment as directed by the Communications Chief or Director of DOER or designee.
8. Use of basic hand tools. This includes, but is not limited to, soldering (or crimping) antenna connections, making and repairing DC power connections and making ground connections.
9. Assist members of Tompkins County communications or tactical teams as needed.
10. When operating in an Incident Command environment, the on-scene Safety Officer will have the complete authority regarding safe operations.
11. Any item of questionable safety should be brought to the attention of the safety officer or, in his/her absence, the Incident Commander.
12. RACES volunteers are not authorized to drive any county vehicles unless they are current Tompkins County employees

Training for Tompkins County RACES Volunteers

As per FCC regulations, all RACES operators must possess a current amateur radio license. A minimum license class of technician is required. The High Frequency (HF) RACES net requires a General Class or higher.

All amateur radio operators registering as Tompkins County RACES volunteers will be required to take the following training (current version of each course, i.e.: IS 100.c):

- | | |
|------------|-------------|
| 1. ICS 100 | 3. NIMS 700 |
| 2. ICS 200 | 4. NIMS 800 |

These classes must be successfully completed within 12 months of becoming a member of the Tompkins County RACES volunteer program. These classes are available on-line and may be done

either as online training or in a classroom environment. It is the volunteer's responsibility to provide certificates of course completion to the Tompkins County RACES Radio Officer.

A list with verifying documentation of any additional skills possessed by the radio operator should also be provided. This includes, but is not limited to, ARRL EmComm training, COML, COMT, Red Cross certifications, generator repair capabilities, MARS licensing, EMS training, etc..

Documentation of current amateur radio license class and all training completed will be provided to and maintained by the Tompkins County RACES Radio Officer.

Specialized training on the use and operation of other equipment in the Department of Emergency Response, as needed, will be provided by personnel from the Tompkins County DOER.

Tompkins County RACES Activation

Activation and deployment of Tompkins County RACES personnel will be made by the Tompkins County RACES Radio Officer, or designee, under the direct authority and supervision of the DOER Director. This is in accordance with FCC part 97.407(E). Under the ICS structure, a RACES volunteer will be identified as an "RDO" on the ICS 214 unless they hold a higher ICS qualification (i.e.: COML, COMT, etc.).

Duration of Activation

Duration of Activation

Tompkins County RACES volunteers should be prepared to operate for 12-hour shifts (the typical ICS operational period). Due to the varied nature of activations, deployment can be from a single operational period of 12 hours to several days at a time. When possible, the volunteer will be notified of the approximate length of deployment at the time of activation.

In the event of a simultaneous activation, the volunteer can only respond to one request at a time. RACES volunteers may transition between County to State or State to County.

Deployment Locations for Tompkins County RACES Volunteers

When activated, Tompkins County RACES volunteers will report to, and be under the direct supervision of, the Communications Chief. In the absence of a Communications Chief, RACES volunteers will report to the Director of DOER or designee.

RACES volunteer operators may be required to operate equipment in any of the following locations:

1. Tompkins County DOER radio room (92 Brown Road, Ithaca).
2. Tompkins County EOC or other municipally-owned facilities.
3. County or municipally-owned communications vehicles.
4. Field locations. This can include incident command posts and other field locations as required.
5. Operator's home station. This will not usually be a point of operation, but could occasionally provide a point of operation for a net control station.
6. Other locations as determined by the Tompkins County DOER.

Transportation to and from a deployment location is the responsibility of the RACES volunteer.

No County RACES volunteer will ever travel to any disaster site without prior approval of the DOER Director through the Tompkins County RACES Radio Officer. Travel into an area under a declaration of an emergency may violate certain laws in effect by the declaration of emergency.

Location of RACES Operations

Since RACES serves the government with supplemental communication, it is vital that RACES radio operators be available at the emergency operations center or command post, as requested by the Director of DOER. The Director of DOER or RACES Radio Officer will determine additional deployment of RACES operators. In most situations, RACES operators will be working in the field, and not from their homes.

Inter-County Operation

Any inter-county requests for RACES operators must be coordinated between the counties involved as there is no statewide mutual aid agreement for inter-county operation. If a county has chosen to provide insurance coverage for RACES volunteers, it must be determined by the county's insurance carrier if the insurance will cover a RACES volunteer for out-of-county operation.

When inter-county operations are required, the Director of DOER should request assistance from the New York State RACES Volunteer Program.

Tompkins County RACES Nets

A list of HF RACES training nets can be found in Appendix III of this document. Update information on HF and local VHF nets can be found on the NYS Office of Interoperable and Emergency Communications (OIEC) website.

Radiotelephone (Voice) Procedures

Specific instructions for the conduct of communications employing radiotelephone procedures are found in Appendix IV of this document. Departures from these procedures may result in confusion, and thus reduce accuracy and efficiency of message handling.

Procedures for Other Digital Modes

Other digital modes such as WINLINK, Packet, Pactor, Pactor II, etc. may also be used for the transmission of RACES messages. Due to the built-in error checking in these modes, plain language will be used at all times. The use of Q-Signals and Pro-words are to be avoided. If an error is made during a keyboard-to-keyboard digital transmission, the sending operator will send: "The following was sent in error" followed by the words sent in error. This will be followed by the words "correction follows" followed by the proper text. If an error is discovered in a message sent to a bulletin board, the message will be withdrawn, if possible. If not possible, a subsequent message outlining and correcting the error will be sent.

A message is not considered as delivered until the receiving station acknowledges receipt of the message. A message left on a public or personal bulletin board is not considered as delivered until

acknowledged by the station for which it was intended. For this reason, keyboard-to-keyboard transmission is encouraged whenever possible.

RACES Message Format

Tompkins County RACES must use the standard message form as used by the American Radio Relay League (ARRL) and the National Traffic System (NTS). At the option of the net manager, individual nets may use this format immediately. The use of the pre-printed ARRL Radiogram message form is suggested, but not mandatory.

Specific instructions on the ARRL Radiogram message form can be found in Appendix VIII of this document.

RACES Training Sessions

RACES HF training nets will be held once each week as noted in the net schedule in the appendix of this document. These will be conducted to improve the efficiency and operation of net procedures and message handling.

The Net Control Station (NCS) of any RACES net involving more than one county will provide a weekly report of net activities to the NYS Radio Officer (this may be bi-weekly if the same station is the NCS for both weeks). This report will include the following:

- a. Date and time of each training session
- b. Roll call of all stations in the net, indicating the NCS and the assistant NCS
- c. Copy of the drill message sent
- d. Any other remarks or comments deemed necessary by NCS

The time permitted for RACES training is listed in FCC Part 97.407, E 4. A copy can be found in Appendix I of this document.

Net Control Station Duties and Authority

RACES nets are directed nets and will be treated accordingly. The authority of the NCS extends only to the operation of the net on the air; however, within the scope and while the net is in session, the authority of the NCS is absolute. It is the duty of the NCS to maintain strict discipline and adherence to standard operating procedures. The decisions of the NCS are final and its instructions must be complied with strictly and immediately.

The NCS will clear traffic within the net and dispatch traffic to points outside the net as is required.

The NCS derives authority from the Tompkins County RACES Radio Officer, who is responsible for the conduct of the net. The success or failure of net operations depends on keeping the net in order and operating swiftly and smoothly by the powers invested in the NCS for this purpose. The NCS may break into the net at any time if it is necessary to aid in the functioning of the net. The NCS must keep a written record of all stations in the net and the traffic they have for transmission.

Items Not Covered by this SOP

For all items not covered by this SOP, stations will follow established “on the air” RACES net procedures whenever possible.

Appendix I
FCC Rules Governing RACES

97.407 Radio Amateur Civil Emergency Service

- A. No station may transmit in RACES unless it is an FCC-licensed primary, club or military recreation station and it is certified by a civil defense organization as registered with that organization, or it is an FCC-licensed RACES station. No person may be the control operator of a RACES station, or may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.

- B. The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates invoking the President's War Emergency Powers under the provisions of section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, RACES stations and amateur stations participating in RACES may only transmit on the frequency segments authorized pursuant to part 214 of this chapter.

- C. A RACES station may only communicate with:
 - 1. Another RACES station;
 - 2. An amateur station registered with a civil defense organization;
 - 3. A United States Government station authorized by the responsible agency to communicate with RACES stations;
 - 4. A station in a service regulated by the FCC whenever such communication is authorized by the FCC.

- D. An amateur station registered with a civil defense organization may only communicate with:
 - 1. A RACES station licensed to the civil defense organization with which the amateur station is registered
 - 2. The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:
 - i. A RACES station licensed to another civil defense organization;
 - ii. An amateur station registered with the same or another civil defense organization;
 - iii. A United States Government station authorized by the responsible agency to communicate with RACES stations; and
 - iv. A station in a service regulated by the FCC whenever such communication is authorized by the FCC.

- E. All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only civil defense communications of the following types may be transmitted:
1. Messages concerning impending or actual conditions jeopardizing the public safety, or affecting the national defense or security during periods of local, regional, or national civil emergencies;
 2. Messages directly concerning the immediate safety of life or individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;
 3. Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and
 4. Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organization served. Such drills and tests may not exceed 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State, Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.

All other rules governing operation in the Amateur Radio Service must also be followed.

**Appendix II
Phonetic Alphabet**

Alpha
Bravo
Charlie
Delta
Echo
Foxtrot
Golf
Hotel
India
Juliet
Kilo
Lima
Mike
November
Oscar
Papa
Quebec
Romeo
Sierra
Tango
Uniform
Victor
Whiskey
X-Ray
Yankee
Zulu

Appendix III
New York State RACES HF Training Net

New York State RACES HF SSB Net
Sundays at 0900 local time
3993.5 kHz, LSB
Alternate: 7245 kHz, LSB

Appendix IV Radiotelephone (Voice) Procedures

All operators will transmit messages exactly as written or received. Pro-signs, pro-words, operating signals or abbreviations will not be substituted for text words or groups as written by the message originator.

An operator who receipts for a message is responsible for the timely delivery or relay of that message. Any long delay in delivery or relay of the message, or non-delivery of the message, must be immediately reported to the message originator.

The speed of transmission will be attained by employing standard voice phraseology and authorized pro-words. Operators will transmit messages only as fast as the receiving operator can record the message. In a net operation, the speed of the slowest operator will normally govern the speed of all stations in the net. This rule may be suspended by the Net Control Station (NCS) when practical reasons dictate urgency and a higher speed.

The inherent break in capability of modern equipment makes it possible to adopt CW break-in methods for voice transmissions. The break-in procedures outlined here are similar to CW operation. Break-in is a procedure whereby a receiving station may interrupt a transmitting station to request the transmitting station to wait, repeat, shift frequency, etc. Break-in will not be used when more than one station is receiving a message. To enhance this capability, the transmitting operator should occasionally pause for two or three seconds to permit the receiving operator to break-in as needed. Any transmission ending with the pro-word "Out" will also be followed by a give-second pause for possible "breaking" stations. During the transmission of a message, short pauses should occur between the heading and the text, at the end of phrases or sentences, and for every ten groups in long messages. An operator requiring a break-in will do so by transmitting his or her call sign. In an urgent situation regarding "immediate" or "Priority" traffic, the word "break" followed by the call sign will be used. For example: "Break K C 2 F T D."

VOX operation will not be used in any RACES operation. Standard push-to-talk methods will avoid inadvertent keying and interference from extraneous station noises.

Procedure for Voice Operation of a RACES Net

- A. Open with net prologue. The Net Control Station (NCS) will ask for any stations with traffic. If any traffic is present, NCS will ask for stations able to handle the traffic to check in. After clearing any such traffic, stations will call into the net in the order as designated by the NCS.
- B. After station call-up, NCS will appoint an assistant net control station.
- C. Upon completion of the net, the RACES net closure will be used.

- D. All stations in the net will maintain a written log, and be prepared to assume the duties on NCS or assistant NCS if the need arises.

Pro-words and Radiotelephone (Voice) Net Techniques

Operating Signals: Operating signals (Q Signals) will not be used for voice operation. In all voice operation, the operating information will be conveyed by concise phrases, procedures, and pro-words as described in the following pages.

Signal Strength and Readability: A station assumes it has readability of “good” unless otherwise notified. Signal strength and readability reports will not be exchanged unless communication is unsatisfactory. When a report is necessary, concise phrases such as “weak but readable” or “strong but distorted” or “loud and clear” are to be used. Reports such as “Q5” or “59” will not be used. A station suspecting a problem and desiring a signal report should transmit “How do you read?” or “How is my signal?” or “What is my readability?”

Test Signals for Receiver or Transmitter Adjustment: When it is required for a station to perform on-the-air testing for transmitter or receiver adjustments, such signals should not continue for more than fifteen seconds. Testing will be followed by the call sign of the transmitting station and the pro-word “out”. If this is to be done on a net frequency, permission must first be obtained from the NCS. As good operating practice dictates, tune up should be done off the air with a “dummy load” whenever possible.

Phonetic Alphabet: The standard phonetic alphabet will be used when necessary for purposes of clarity to spell difficult words or groups, or to identify any letter of the alphabet. The word or group to be spelled will be preceded by the words “I spell”. If the operator can pronounce the word or group to be spelled, this will be done before and after the phonetic spelling to identify the word. A single letter of the alphabet will be identified phonetically, preceded by the pro-word “initial”. The phonetic alphabet can be found in Appendix II of this document.

Use of Numbers: Numbers may be either sent as digits or spelled out. When spelled out, numbers are expressed in words for each digit except even hundreds or thousands. Examples: 123.4 is said as “one two three decimal four” and is thus unmistakable. However, if this were said as “one twenty three decimal four”, it could be mistaken as 1203.4. Cardinal numbers rather than ordinal numbers will be used whenever practical (i.e.: for the number 62, “six two” will be said instead of “sixty-two”).

Pro-words: Pro-words are pronounceable words or phrases, which have been, assigned a very specific meaning for expediting message handling where radiotelephony (voice) procedure is used. A list of pro-words authorized for general RACES use is in Appendix VII of this document.

Note on Pro-words “Over and Out”: “Over” and “out” are never used together to end a transmission. Every transmission will end either with “over” or “out”. The pro-word “over” is to be used when an answer is requested or expected. When no answer is expected, transmissions will end with the pro-word “out”.

ARRL Numbered Radiogram Messages: The use of ARRL Numbered Radiogram Messages is authorized for RACES use. A list of these messages can be found in Appendix IX of this document.

Tactical Call Signs: Tactical call signs will be employed for all multi-county and statewide emergency nets. The use of tactical call signs does not relieve the operator from station identification requirements as listed in FCC Part 97. These tactical call signs will identify the location of the station, rather than the individual RACES operator. This is especially important when operations extend for more than one operational period or operator shift.

Appendix V
Format for a RACES Radiotelephone (Voice) Training Net

This is (*NCS call sign*), Tompkins County Department of Emergency Response Net Control in the Radio Amateur Civil Emergency Service, operating on 3993.5 kilohertz (or other frequency of operation) by authority of the Federal Communications Commission and the Director of the Tompkins County Department of Emergency Response. This is a directed net, alerted for the purpose of a RACES training drill. Those not directly concerned with this RACES exercise are requested to keep this frequency clear. I will pause for 10 seconds to allow stations to adjust equipment... Out.

Any stations with traffic of higher than routine precedence, call ... Over.

If any traffic higher than routine is present, NCS asks for stations able to handle the traffic to check in, and the traffic is now handled.

This is (*NCS call sign*), net control. I now request stations to check in by region. Stations in Region 1, call... Over.

NCS will record all stations checking in from Region 1.

I roger (calling stations are acknowledged; call signs are given phonetically).

Are there any other stations in Region 1, or relays from Region 1? ... Over.

Additional stations are acknowledged as above, with the pro-word "I roger".....

This procedure is repeated for Regions 2, 3, 4 and 5.

Any station, in any Region, wishing to check in, give your Region followed by your call sign.

Acknowledge these stations as above and give call sign of station, they will follow and be followed by in the net listing.

Appoint an assistant NCS.

All stations, prepare to copy drill message ... Out.

Drill message is now given. All drill messages will begin with the pro-word "drill".

(*Call sign of assistant NCS or any other station in the net*) read back the message ... Over.

Are there any stations requiring this? ... Over.

Do necessary fills for message.

All stations beginning with (call sign) in Region (first region in net) roger the message ... Over.

*After stations have rogered the message, verify the station count with the assistant NCS.
Release any stations that have requested to secure after the message.*

This is (NCS call sign), net control for the Tompkins County RACES net. Are there any other stations wishing to check into this net? If so, call ... Over.

Have assistant NCS critique the session.

Add any additional information deemed necessary by the NCS.

Ask for additional comments or words for the net.

Closing: This is (NCS call sign), Tompkins County Department of Emergency Response Net Control in the Radio Amateur Civil Emergency Service, operating on 3993.5 kilohertz by authority of the Federal Communications Commission and the Director of the Tompkins County Department of Emergency Response. All units close station. This is (NCS call sign) closing net and station... Out.

Appendix VI
Net Prologue and Closure for Emergency Net

This is (*NCS call sign*), Tompkins County Department of Emergency Response Net Control in the Radio Amateur Civil Emergency Services, operating on 3993.5 kilohertz (*or other frequency of operation*) by authority of the Federal Communications Commission and the Director of the Tompkins County Department of Emergency Response. This is a RACES net activation. This is not a drill. I say again, this is not a drill. Those not directly concerned with this RACES activation are requested to keep this frequency clear. I will pause for 10 seconds to allow stations to adjust equipment... Out.

Any stations with traffic of higher than routine precedence, call... Over.

Traffic of precedence higher than routine is now handled.

NCS will now take check-ins and appoint an assistant net control station.

Any routine traffic is now handled.

Additional net business will be conducted as required.

Closing: This is (*NCS call sign*), Tompkins County Department of Emergency Response Net Control in the Radio Amateur Civil Emergency Service, operating on 3993.5 kilohertz (*or other operating frequency*) by authority of the Federal Communications Commission and the Director of the Tompkins County Department of Emergency Response. All units close station. This is (*NCS call sign*) closing net and station... Out.

**Appendix VII
Procedure Words (Pro-words)**

Pro-word	Meaning
Affirmative	Permitted, granted, yes
All after	Say again all that part of your transmission after _____
All before	Say again all that part of your transmission before _____
ARRL	ARRL numbered radiogram message follows
Break	I hereby indicate the separation of the text from other portions of the message. This is used at the beginning and end of text in a message. Also used to mean, "I desire you to stop your transmission."
By authority of _____	Name of official who is authorizing the transmission
Correct Correction	You are correct, that is correct An error has been made in this transmission, transmission will continue with last word correctly transmitted; an error has been made in the transmission (or message indicated), the correct version is _____; that which follows is a corrected version in answer to your request for verification.
Disregard this transmission	This transmission is in error, disregard it. (This pro-word will not be used to cancel any transmission that has been completed and receipted for.)
Drill	The pro-word drill will be the first word given in the body of all drill messages. This pro-word will be included in the word count.
Figure(s)	Numeral(s) or number(s) to follow
From	The originator of this message is indicated by the designation immediately following
Groups	This message contains the number of groups indicated by the numeral following
Incorrect	You are incorrect; that is incorrect; the correct version is _____
Initial	A single letter or initial follows

I read back	The following is my response to your instructions to read back, meaning, I read back everything exactly as transmitted
I say again	I am repeating transmission or portion indicated
I spell	I shall spell the next word phonetically
I verify	That which follows has been verified at your request and is repeated (to be used only as a reply to "verify")
Message follows	A message which requires recording is about to follow (transmitted Immediately after the call)
More to follow	I have more messages, traffic, or information for you
Negative	Not receiving, no
Out	This is the end of my transmission to you. No response is required or Expected; after the pro-word "out", all stations will pause for a five-Second interval to listen for stations desiring to break-in
Over	This is the end of my transmission to you; a response is required or expected
Read back	Repeat this entire transmission exactly as received
Relay	Station called transmit to _____
Roger	I have received your last transmission satisfactorily, The pro-word <i>roger</i> is also used by stations, confirming receipt of a message and by NCS when checking stations into a net.
Say again	Repeat all of your transmission. Followed by identification data means: "Repeat _____ (portion indicated)
Speak faster	Your transmission is too slow, increase speed of transmission
Speak slower	Your transmission is too fast, decrease speed of transmission
This is	This transmission is from the station whose designation follows
Time	That which immediately follows is the time or date-time group Of the message

To	The addresses, whose designations immediately follow, are to act on this message
Unknown station	The identity of the station with whom I am attempting to establish Communications is unknown
Verify	Verify entire message (or portion indicated) with the originator and Send correct version. To be used only at the discretion of the Addressee to whom the questioned message was directed
Wait	I must pause for a few seconds (not to exceed 30 seconds)
Wait _____	I must pause for ____ minutes (expressed in numerals)
Word after	Repeat the word after _____
Word before	Repeat the word before _____
Word twice	Communication is difficult. Transmit(ing) each word twice; this pro-word may be used as an order, request, or as information

Appendix VIII
ARRL Std. Msg. Form as Adapted for NYS RACES

Number: This is the message number as assigned by the originating operator.

Precedence: This is the order of transmission of messages.

The following sequence will be used:

- A. Emergency: any message having life or death urgency to any person or group of persons that is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials, or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. When in doubt, do not use it.
- B. Priority: important messages having a specific time limit. Official messages not covered in the Emergency category. Press dispatches and other emergency-related traffic not of the utmost importance. Notification of death or injury in a disaster area, personal or official.
- C. Welfare: a message that is either
 1. An inquiry as to the health and welfare of an individual in the disaster area; or
 2. An advisory or reply from the disaster area that indicates all is well should carry this precedence.

These messages are handled after Emergency and Priority traffic, but before Routine.

- D. Routine: most traffic in normal times will bear this designation. In disaster situations, traffic labeled "Routine" should be handled last, or not at all when circuits are busy with "Emergency", "Priority", or "Welfare" traffic.

HX (optional): These are the handling instructions, and are optional.

HXA – (followed by number)

Collect landline delivery authorized by addresses if within _____ miles. (If no number, authorization is unlimited)

HXB – (followed by number)

Cancel message if not delivered within _____ hours of filing time; service originating station.

HXC

Report date and time of delivery to originating station.

HXD

Report to originating station the identity of station from which received; plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date and time and method of delivery.

HXE

Delivering station get reply from addresses, originate message back.

HXF – (followed by number)

Hold delivery until _____ (date).

HXG

Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

Station of Origin: This is the call sign of the station originating the message.

Check: This is the word count of the message. To maintain accuracy of transmitted messages, each transmitting station must assign an accurate word count to the message. All messages will include a word count. The following rules are used for counting word groups:

- A. Count the pro-word word “Drill” in the word count.
- B. Count text groups.
- C. Punctuation and symbols are not counted unless spelled out. Punctuation or symbols included in web names or chemical names are an integral part of the name and will not be counted as separate groups (see items “D”, “F” and “H” below. The use of an “operator’s note” may be of assistance in sending web addresses or long chemical names.
- D. Any sequence of characters not interrupted by a space is counted as one group.
- E. Pro-word “break”, which precedes and follows the text, is not counted in the word count.
- F. An internet address or web site address will count as one word group.
 - a. Examples:
 - John.Doe@anynet.com (Group count = 1)
 - <http://www.abcde.com/~def> (Group count = 1)
- G. Each word and initial of the proper names of persons and places (countries, states, counties, cities, streets, etc.) consisting of two or more separate words will be counted.
 - a. Examples:
 - i. New York (group count = 2)
 - ii. 123 Main Street (group count = 3)

- iii. Robert A. Jones (group count = 3)
- iv. 12AU7 (group count – 1)
- v. 48 dash 321A (group count = 3); here, a space is on either side of the dash (48 – 321A); therefore, this example equals three word groups
- vi. Telephone numbers will count as three (3) words (area code, prefix, number)

H. Chemical names and formulas

- a. Chemical names and formulas will follow the protocol listed in item D
- b. Examples:
 - i. Sulfuric Acid (group count = 2)
 - ii. 1.3 -Dichloropropanol-2 (group count = 1); said as “figures one comma figures three dash delta India Charlie ...etc...dash figures two)
 - iii. H₂SO₄ (group count = 1); said as “hotel subscript figures two sierra oscar subscript figures four”

Punctuation: Punctuation will not be used unless it is necessary to attain clarity. If used in other than an internet address or URL, punctuation will be spelled out. If used in an internet address or URL, punctuation may be spelled out if required (operator discretion). At times, the letter “X” in place of specific punctuation may appear in messages originated by military and non-RACES stations. In this case, the letter “X” will be counted as one group. This will not be used by originators of RACES messages in lieu of punctuation.

Place of Origin: All RACES operators will use this field as the “From” field for the location requesting the message to be sent. Example: “Tompkins County EOC” or “State EOC”.

Time Filed: The local time the message is generated. This will be given in 24-hour notation.

Date: The month and date in which the message was created. The use of the year in the date is optional.

To: Person or agency the message is being sent to.

Body of Text: The text will be given as plain language whenever possible. ARRL numbered radiograms are permitted, and are encourage in times of poor propagation conditions. A list of these ARRL numbered radiograms can be found in Appendix IX of this document. This list should be posted at all radio operating positions.

Signature: This is the name of the person requesting the message to be sent. This name will be followed with the pro-words “By authority of”, followed by the name of the emergency manager or other official authorizing the message to be sent.

Use of Operator’s Note: If the sending operator believes that a clarification is needed within a message, an “operator’s note” may be added to any message being sent. This will be added after the

signature and will not be counted in the word count. The use of an operator's note may be useful when sending long chemical names or web addresses. Care must be taken by the operator to be certain that the operator's note does not infer a change in meaning of the text as written by the originator of the message.

Appendix IX
ARRL Numbered Radiogram Messages

The letters "ARRL" are inserted in the preamble in the check and in the text before spelled out numbers, which represent texts from this list. Note that some ARRL texts include insertion of numerals.

Group One: For Possible "Relief Emergency" Use

- ONE Everyone safe here. Please don't worry.
- TWO Coming home as soon as possible.
- THREE Am in _____ hospital. Receiving excellent care and recovering fine.
- FOUR Only slight property damage here. Do not be concerned about disaster reports.
- FIVE Am moving to a new location. Send no further mail or communication. Will inform you of new address when relocated.
- SIX Will contact you as soon as possible.
- SEVEN Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
- EIGHT Need additional _____ mobile or portable equipment for immediate emergency use.
- NINE Additional _____ radio operators needed to assist with emergency at this location.
- TEN Please contact _____. Advise to standby and provide further emergency information, instructions or assistance.
- ELEVEN Establish Amateur Radio emergency communications with _____ on _____ MHz.
- TWELVE Anxious to hear from you. No word in some time. Please contact me as soon as possible.
- THIRTEEN Medical emergency situation exists here.
- FOURTEEN Situation here becoming critical. Losses and damage from _____ increasing.
- FIFTEEN Please advise your condition and what help is needed.

- SIXTEEN Property damage very severe in this area.
- SEVENTEEN REACT communications services also available. Establish REACT communication with _____ on channel _____.
- EIGHTEEN Please contact me as soon as possible at _____.
- NINETEEN Request health and welfare report on _____.
(State name, address, and telephone number)
- TWENTY Temporarily stranded. Will need some assistance.
Please contact me at _____.
- TWENTY ONE Search and Rescue assistance is needed by local authorities here.
Advise availability.
- TWENTY TWO Need accurate information on the extent and type of conditions now
Existing at your location. Please furnish this information and reply without delay.
- TWENTY THREE Report at once the accessibility and best way to reach your location.
- TWENTY FOUR Evacuation of residents from this area urgently needed. Advise plans for help.
- TWENTY FIVE Furnish as soon as possible the weather conditions at your location n.
- TWENTY SIX Help and care for evacuation of sick and injured from this location
needed at once.

Group Two: Routine Message

- FORTY SIX Greetings on your birthday and best wishes for many more to come.
- FIFTY Greetings by Amateur Radio
- FIFTY ONE Greetings by Amateur Radio. This message is sent as a free public service by ham
radio operators at _____. Am having a wonderful time.
- FIFTY TWO Really enjoyed being with you. Looking forward to getting together again.
- FIFTY THREE Received your _____. It is appreciated. Many thanks.
- FIFTY FOUR Many thanks for your good wishes.
- FIFTY FIVE Good news is always welcome. Very delighted to hear about yours.

- FIFTY SIX Congratulations on your _____, a most worthy and deserved achievement.
- FIFTY SEVEN Wish we could be together.
- FIFTY EIGHT Have a wonderful time. Let us know when you return.
- FIFTY NINE Congratulations on the new arrival. Hope mother and child are well.
- SIXTY ** Wishing you the best of everyone on _____.
- SIXTY ONE Wishing you a very Merry Christmas and a Happy New Year.
- SIXTY TWO Greetings and best wishes to you for a pleasant _____ holiday season.
- SIXTY THREE Victory or defeat, our best wishes are with you. Hope you win.
- SIXTY FOUR Arrived safety at _____.
- SIXTY FIVE Arriving _____ on _____. Please arrange to meet me there.
- SIXTY SIX DX QSLs are on hand for you at the _____ QSL Bureau.
Send _____ self-addressed envelopes.
- SIXTY SEVEN Your message number _____ undeliverable because of _____.
Please advise.
- SIXTY EIGHT Sorry to hear you are ill. Best wishes for a speedy recovery.
- SIXTY NINE Welcome to the _____. We are glad to have you with us and hope you
Will enjoy the fun and fellowship of the organization.

** Can be used for all holidays.

Appendix B



RADIO AMATEUR CIVIL EMERGENCY SERVICE and AMATEUR RADIO EMERGENCY SERVICE

AUTHORIZED RADIO FREQUENCIES AND TRAINING DRILL INFORMATION



ARES/RACES Frequencies and drill times below will begin as TCARA ARES training for Tompkins County until Tompkins County RACES applicants are approved by the Tompkins County Director of Emergency Response (DOER) and County-provided RACES equipment are deployed at the DOER-designated locations. ARES members are asked to make at least two check-ins per month on any of the VHF, UHF or HF frequencies, below. RACES members will be required to check in twice-monthly.

It is not necessary to check in on all frequencies or bands. Net control will keep a log of all contacts.

Note that the Tompkins County Swift911™ notification system for RACES members shall be tested monthly. RACES members are not required to respond, as test results are generated automatically.

Recurring Tompkins County ARES check-ins:

First Monday of each month at 8:00 P.M. local time TCARA ARES net control will accept check-ins on each of the five (5) following VHF and UHF frequencies, in succession, while net control will continuously monitor 146.940 for local VHF traffic questions:

1. 146.970(-) TCARA Primary Repeater and ARES Primary Emergency Frequency
2. 146.940(-) TCARA Secondary Repeater and ARES Secondary Emergency Frequency
3. 147.570 (simplex) TCARA Primary Simplex and ARES Tertiary Emergency Frequency (after final check-in net control will ask you to report who you are able to hear)
4. 146.970 (simplex) TCARA Secondary Simplex and ARES Quaternary Emergency Frequency
5. 449.025(-) TCARA D-STAR...set to Local CQ and Ithaca repeater

Optional: Test of the 146.610 and 146.895 repeaters

First Wednesday of each month at 8:00 P.M. local time TCARA ARES net control will accept check-ins on each of the six (6) following HF SSB frequencies, in succession, while net control will continuously monitor 146.940 for local VHF traffic questions:

1. 3925.00kHz, SSB, LSB, NYS Phone Net Frequency ARES/NTS (after final check-in net control will ask you to report who you are able to hear)
2. 3955.00 kHz, SSB, LSB, WNY and NNY Emergency Frequency
3. 3990.00 kHz, SSB, LSB, WNY Emergency Net Frequency ARES
4. 3993.50 kHz, SSB, LSB, NYS RACES Net Frequency
5. 7230.00 kHz, SSB, LSB, NYS Emergency Frequency (after final check-in net control will ask you to report who you are able to hear)

Appendix B

6. 7245.00 kHz, SSB, LSB, NYS RACES Emergency Frequency

Optional:

- Test of the 60 Meter 5330.5 kHz channel up to 100 Watts ERP maximum (after final check-in net control will ask you to report who you are able to hear)
- Test of the 6 Meter 50.4 MHz frequency on FM and SSB, USB (after final check-in net control will ask you to report who you are able to hear)

WAR EMERGENCY

97.407 Radio amateur civil emergency service.

(b) The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates invoking the President's War Emergency Powers under the provisions of section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, amateur stations participating in RACES may only transmit on the frequency segments authorized pursuant to part 214 of this chapter.

Operations - Wartime Situations and RACES Drills

List of Frequencies (Wartime Emergency Situations).

The frequency bands listed below are available to stations operating in RACES on a shared basis with the amateur service. In the event of an emergency that necessitates the invocation of the President's War Emergency Powers under the provision of Section 706 of the Communications Act of 1934, as amended, RACES stations, as defined by FCC Rules, and, amateur stations participating in RACES may transmit on the following frequencies:

KHz:	MHz:
1800-1825	28.55-28.75
1975-2000	29.237-29.273
3500-3550	29.45-29.65
3930-3980	50-35-50.75
3984-4000	52-54
7079-7125	144.50-145.71
7245-7255	146-148 (All local repeaters are within this restriction)
10100-10150	2390-2450
14047-14053	
14220-14230	
14331-14350	
21047-21053	
21228-21267	

Appendix B

In addition, 1.25 cm (223.0-225.0), 70 cm (420.0-450.0), and 23 cm (1240-1300 MHz) are available.

Frequencies at 3.9935 MHz and 53.30 MHz are used in emergency areas to make initial contact with military units and for communications with military stations on matters requiring coordination.

Appendix C



**TOMPKINS COUNTY
RADIO AMATEUR CIVIL EMERGENCY SERVICE
KEY PERSONNEL
CONTACT INFORMATION**



Name	Title	Department	Phone Numbers	Email Address
Brian Robison	Director	Emergency Response	Cell: 607-351-3601 Office: 607-266-2626	brobison@tompkins-co.org
Jessica Verfuss	Deputy Director	Emergency Response	Cell: 607-745-7344 Office: 607-266-2632	jverfuss@tompkins-co.org
Christina Dravis	Communications Center Manager	Emergency Response	Cell: 707-310-0747 Office: 607-266-2630	cdraavis@tompkins-co.org
Jack Crance	Systems Manager	Emergency Response	Cell: 607-624-9065 Office: 607-266-2628	jcrance@tompkins-co.org
Tompkins County Dispatch	Dispatch Supervisor Non-Emergency 24/7	Emergency Response	Office: 607-266-5671 Office: 607-273-8000	911supervisor@tompkins-co.org
Hugh Bahar	RACES Radio Officer	TCARA	Cell: 607-592-2197	hrb2@cornell.edu
TBD	Asst. RACES Radio Officer	TCARA		

Updated 06/28/2019

Appendix D

Total Members: 2
Date Updated: 06/28/2019

Appendix E



**AF2A
TOMPKINS COUNTY
RADIO AMATEUR CIVIL EMERGENCY SERVICE
APPLICATION**



LAST NAME: _____ FIRST NAME: _____ MI: _____

ADDRESS: _____ CITY: _____ ZIP: _____

HOME PHONE: _____ CELL PHONE: _____ TEXT? YES / NO

EMAIL ADDRESS: _____

OCCUPATION: _____ EMPLOYER: _____

DATE OF BIRTH: _____ DRIVER'S LICENSE: _____ CLASS: _____

AMATEUR CALL: _____ CLASS: _____ EXPIRATION DATE: _____

AFFILIATIONS (ARRL, MARS, NTS, SKYWARN, CAP, ETC.): _____

OPERATING MODES (CW, HF-DIGITAL, VHF-PACKET, SSTV, ATV, SATELLITE, WINLINK, ETC.): _____

EQUIPMENT/SKILLS YOU POSSESS THAT MAY BE HELPFUL IN TIMES OF AN EMERGENCY: _____

Please forward proof to the Tompkins County RACES Radio Officer that you have taken the following courses, and provide dates of completion and initials.

The following Federal Emergency Management Agency (FEMA) Independent Study Program courses are required for RACES membership (the current version of each course should be completed (i.e.: IS 100.c):

IS 100 – introduction to the incident Command System (ICS)

IS 200 – ICS for Single Resources and Initial Action Incidents

IS 700 – An Introduction to the National Incident Management System (NIMS)

IS 800 – National Response Framework, An Introduction

Date Completed / Initials

_____ / _____

_____ / _____

_____ / _____

_____ / _____

Appendix E

The following American Radio Relay League (ARRL) courses are highly encouraged but are not mandatory for RACES:

	<i>Date Completed / Initials</i>
EC-001 – Introduction to Emergency Communication	_____ / _____
EC-015 – ARRL Public Relations	_____ / _____
EC-016 – Public Service & Emergency Communications Management for Radio Amateurs	_____ / _____

I hereby apply for membership in the Tompkins County Radio Emergency Civil Emergency Service (RACES). I understand that, as a RACES member, I may have access to confidential information and secure sites, and will be serving on behalf of Tompkins County. I understand that the information I have submitted in this application will be verified, and I hereby authorize the Tompkins County Department of Emergency Response to conduct a background check for the purpose of determining my fitness for membership. If accepted, I understand that my membership may be revoked at any time by the Tompkins County Department of Emergency Response.

Signature of Applicant

Date

Tompkins County RACES Radio Officer

Date

Director, Department of Emergency Response

Date

Appendix F



**RADIO AMATEUR CIVIL EMERGENCY SERVICE
2019-2020 PLAN
FOR TOMPKINS COUNTY
(To Be Updated Annually)**



Revision Date: June 28, 2019

This RACES plan has been developed by Tompkins County Department of Emergency Response in cooperation with the Tompkins County RACES Radio Officer to establish the current and/or upcoming needs and goals for Tompkins County RACES. This plan should be reviewed each January by the Department of Emergency Response and the RACES Radio Officer and updated as necessary.

GOAL #1: Establish RACES program in Tompkins County, including the development of an Agreement, Standard Operating Procedures, and Application process.

DATE COMPLETED: _____

GOAL #2: Recruitment and training of initial RACES members. Total membership should reach a strength that is considered adequate by the RACES Radio Officer.

DATE COMPLETED: _____

GOAL #3: Determine coverage and equipment needs (including antennas and power sources) for RACES to operate a radio system to allow RACES to provide back-up radio communications in the event of a complete or partial Public Safety radio system failure. This should include portable, mobile and fixed operations.

DATE COMPLETED: _____

GOAL #4: Develop policy and procedures for RACES to provide back-up radio communications to the Department of Emergency Response/9-1-1 Center in the event of a complete or partial Public Safety radio system failure.

DATE COMPLETED: _____