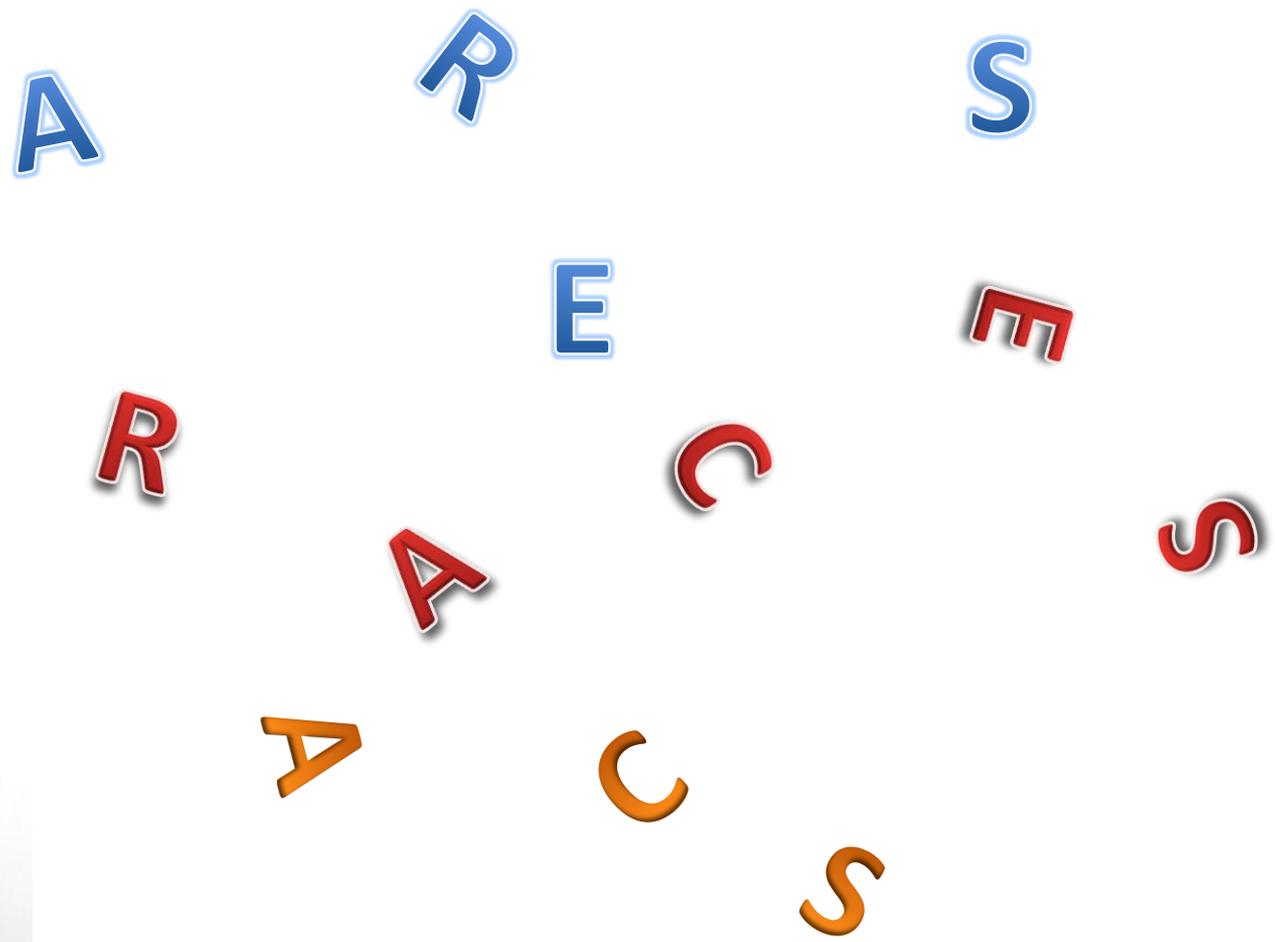




ARES, RACES, and ACS

So what do all those letters stand for?



ARES → Amateur Radio Emergency Service

RACES → Radio Amateur Civil Emergency Service

ACS → Auxiliary Communication Service

All are services

All deal with communications

Let's look at each one separately



The Amateur Radio Emergency Service<sup>®</sup> (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes.

# At the national level



ARES is under the supervision of the  
ARRL Field Services  
and Radiosport Manager



Advise all ARES officials

Maintain contact with federal government and other national officials concerned with amateur radio emergency communications potential



**official  
policy**

Carry out the ARRL's policies regarding emergency communications

# At the section level



The Section Emergency Coordinator (SEC) is the assistant to the Section Manager (SM) for emergency preparedness. The SEC is appointed by the SM to take care of all matters pertaining to emergency communications and the Amateur Radio Emergency Service (ARES) on a section-wide basis. There is only one SEC in each ARRL section.



Encourage all groups of community amateurs to establish a local emergency organization.



Advise the SM on all section emergency policy and planning, including the development of a section emergency communications plan.





Cooperate and coordinate with the Section Traffic Manager so that emergency nets and traffic nets in the section present a

united public service front, particularly in the proper routing of Welfare traffic in emergency situations.



ARRL — the national association for Amateur Radio™

## RADIOGRAM

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
TO					THIS RADIO MESSAGE WAS RECEIVED AT		
PHONE NUMBER E-MAIL					AMATEUR STATION		PHONE
					NAME		E-MAIL
					STREET		
					CITY, STATE, ZIP		
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
REC'D	FROM	DATE	TIME	SENT	TO	DATE	TIME

This message was handled at no charge by a licensed Amateur Radio operator, whose address is shown in the box at right above. No compensation can be accepted by a "ham" operator. A return message may be filed with the "ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225 Main Street, Newington, CT 06111 or [www.arrl.org](http://www.arrl.org).

The ARRL is the national association for Amateur Radio and the publisher of QST magazine. One of its functions is promotion of public service communication among Amateur Radio operators. To that end, the ARRL has organized the National Traffic System for daily nationwide message handling.



Cooperation and coordination should also be maintained with other section leadership officials as appropriate, particularly with the State Government Liaison and Public Information Coordinator.





Maintain contact with other communication services and serve as liaison at the section level with all agencies served in the public interest, particularly in connection with state and local government, civil preparedness, Federal Emergency Management Agency, American Red Cross, Salvation Army, the National Weather Service, and so on.



The SEC has many other duties as well. He is responsible for promoting ARES membership drives, developing activities and tests at the section level, collecting information from local ARES groups, reporting information to the SM and ARRL.



Official Emergency Station

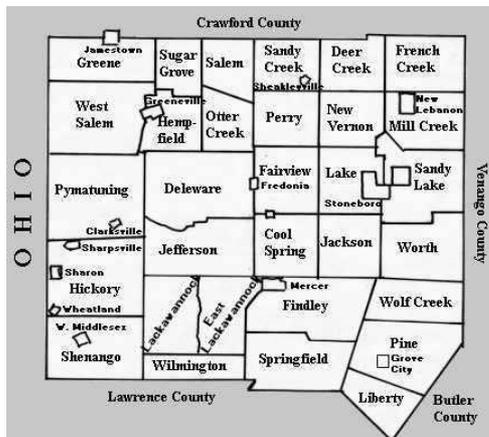


He is responsible for recommending candidates for Emergency Coordinator and District Emergency Coordinator to the Section Manager, and determines the areas of jurisdiction of each appointee. He handles the Official Emergency Station appointments.

# At the local level

The local ARES program is coordinated through the local Emergency Coordinator.

The ARRL Emergency Coordinator is a key team player in ARES on the local emergency scene. Working with the Section Emergency Coordinator, the DEC, and Official Emergency Stations, the EC prepares for and engages in management of communications needs in disasters. To be appointed as an EC requires a Technician Class or higher Amateur Radio license and ARRL membership.





Promote and enhance the activities of the Amateur Radio Emergency Service (ARES) for the benefit of the public as a voluntary, non-commercial communications service.

Manage and coordinate the training, organization, and emergency participation of interested amateurs working in support of the communities, agencies, or functions designated by the Section Emergency Coordinator/Section Manager.



Establish viable working relationships with federal, state, county, city governmental and private agencies in the ARES jurisdictional area which need the services of ARES in emergencies.

Develop detailed local operational plans with served agencies and partners in his jurisdiction.



Establish local communications networks run on a regular basis and periodically test those networks by conducting realistic drills.

DRILLS



NETS

In times of disaster, evaluate the communications needs of the jurisdiction and respond quickly to those needs. The EC will assume authority and responsibility for coordinating emergency response and performance by ARES personnel under his or her jurisdiction.

Work with other non-ARES amateur providers of Amateur Radio emergency communications.



Work for growth in your ARES program.



# Some familiar faces

Joe  
Shupienis  
W3BC



Section  
Manager

Section Emergency  
Coordinator

District Emergency  
Coordinators

Emergency  
Coordinators

Assistant Emergency  
Coordinators



Harry  
Bloomberg  
W3YJ

Mike  
Varga  
NR3C



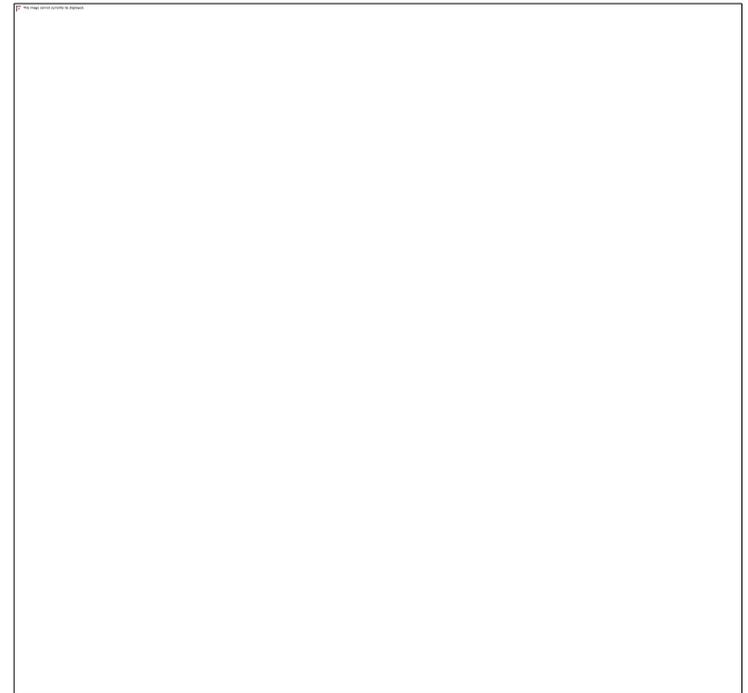
# Radio Amateur Civil Emergency Service



*A radio service using amateur stations for civil defense communications during periods of local regional or national civil emergencies.*



*RACES came into being following World War II when the international situation was destined to be tense and the need for some civil-defense measures became apparent.*





*RACES is a radio service available to government emergency management organizations at all times, for official government emergency communications as specified in 47 CFR 97.407 and 97.111(a)(4).*

*There is no specific declaration or emergency event that activates RACES. The “activation” is the direction of the emergency management official to properly qualified individuals to engage in the permitted types of communications in the Radio Amateur Civil Emergency Service.*



*Except for two specific cases, any communications that could be conducted under the RACES rules can also be conducted under the Amateur Service (non-RACES) rules.*

*Those two exceptions are:*



*Communications with US Government radio stations for RACES communications.*

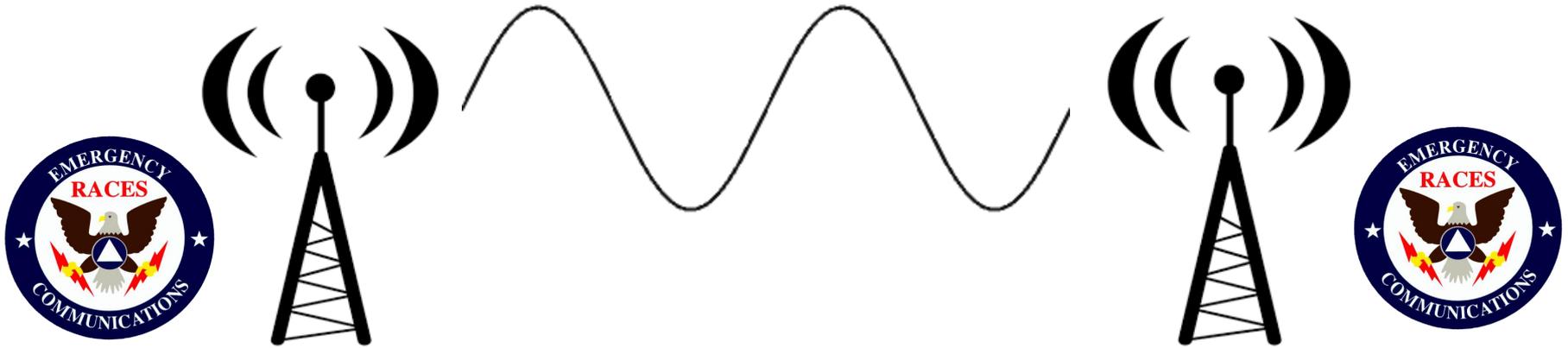


*Communications in RACES when the Amateur Service has been ordered off the air by the President's war emergency powers under Title 47 of the United States Code, Section 606 (47 USC 606).*

# What stations may a RACES station communicate with?

A station operating under RACES may only communicate with:

- 1) A RACES station licensed to the local civil defense organization
- 2) Other RACES licensees
- 3) Certain amateur stations registered with civil defense organizations
- 4) Certain US government stations authorized by the responsible agency to communicate with RACES stations
- 5) Stations in a service regulated by the FCC when authorized by the FCC [97.407(d)]



What type of communications may be transmitted by stations operating under RACES?



1) Impending danger to the public or affecting national defense during emergencies





2) The immediate safety of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and combating armed attack and sabotage



3) The dissemination of information to the public from a local civil defense organization or other government or relief organization



#### 4) Communications during RACES drills [97.407(e)]



# ACS

The Auxiliary Communications Services (ACS) for the Commonwealth of Pennsylvania is a volunteer-based emergency communications reserve program.



These volunteers come from a variety of backgrounds, including radio, information technology, telephone, microwave, satellite, medical, law and other professional backgrounds. Personnel may or may not hold FCC licenses.



An important element in the ACS model is removing **the false concept that a volunteer communications reserve is one in which ONLY amateur radio resources and frequencies are utilized** in support of government communications.

Many programs will continue to rely heavily upon amateur radio resources. **Other resources include, but are not limited to: GMRS radio, citizens band radio, microwave, and digital communications.**



The ACS program is based on and includes RACES, **but broadens the scope to include the use of non-amateur radio volunteers,** only utilizing them during emergencies.

The Pennsylvania ACS Program provides the mechanism to support county and regional disaster response organizations and their resources on a statewide basis.

# Mercer County ACS/RACES/ARES

Amateurs are generally affiliated with both RACES and ARES. ACS acts as an umbrella under which multiple services exist side by side.



In order to be permitted to function under RACES, amateurs must be registered with the Mercer County Department of Public Safety – Frank Jannetti is the Director. Mercer County Radio Officer Mike Varga, NR3C, acts as the liaison between the county and registered amateurs.



**REQUIRED**

Currently, there are some additional requirements that must be met in order to serve under the ACS umbrella.

These include the completion of four (4) NIMS courses and a Pennsylvania State Police background check. The NIMS courses are good for life while the background check must be renewed every two years.



PF 4-104 (2-2015) PENNSYLVANIA STATE POLICE REQUEST FOR CRIMINAL RECORD CHECK

This form is to be completed in use by the requester. Information will be mailed to the requester only. If this form is not mailed or not properly completed, it will be returned unprocessed to the requester. A receipt will also be mailed to you.

TRY OUR WEBSITE FOR A QUICKER RESPONSE: [bits.cops.state.pa.us](http://bits.cops.state.pa.us)

NAME: REQUESTER  
ADDRESS:  
CITY/STATE: ZIP CODE:

CONTACT TELEPHONE NUMBER (INCLUDE AREA CODE):

MAIL ADDRESS OF RECORD CHECK PARTY: NAME: ADDRESS: CITY/STATE: ZIP CODE:

REASON FOR REQUEST:

INTERNATIONAL ADOPTION - INTERNATIONAL ADOPTION MUST BE NOTARIZED AND MAILED IN 2015 IN FOR REQUEST:

ACCESS & REVIEW - NOT FOR EMPLOYMENT PURPOSES. MUST BE MAILED INTO THE CENTRAL REPOSITORY WITH A COPY OF A VALID GOVERNMENT ISSUED PHOTO, B.S.S. TIER 1 & CONDITIONS

WARNING: IS PA, P.C. 8961 UNDER PENALTY OF LAW. MISREPRESENTATION OR FALSE STATEMENTS OF IDENTITY TO OBTAIN CRIMINAL HISTORY INFORMATION OF ANOTHER IS PROHIBITED AS AUTHORIZED BY LAW.

Homeland Security is Everyone's Responsibility - Pennsylvania Terrorism Tip Line 1-888-280-1919



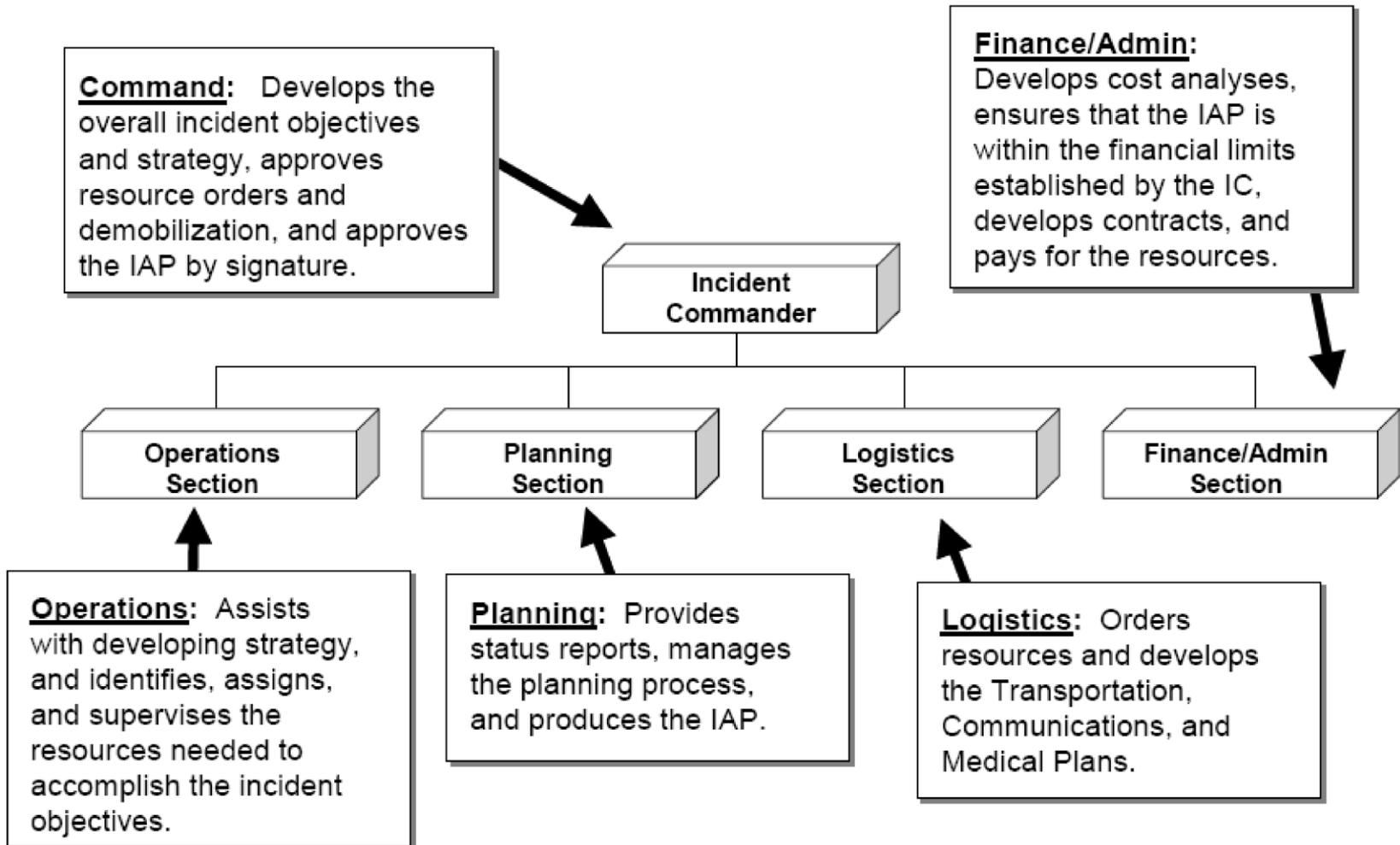
**pennsylvania**  
STATE POLICE



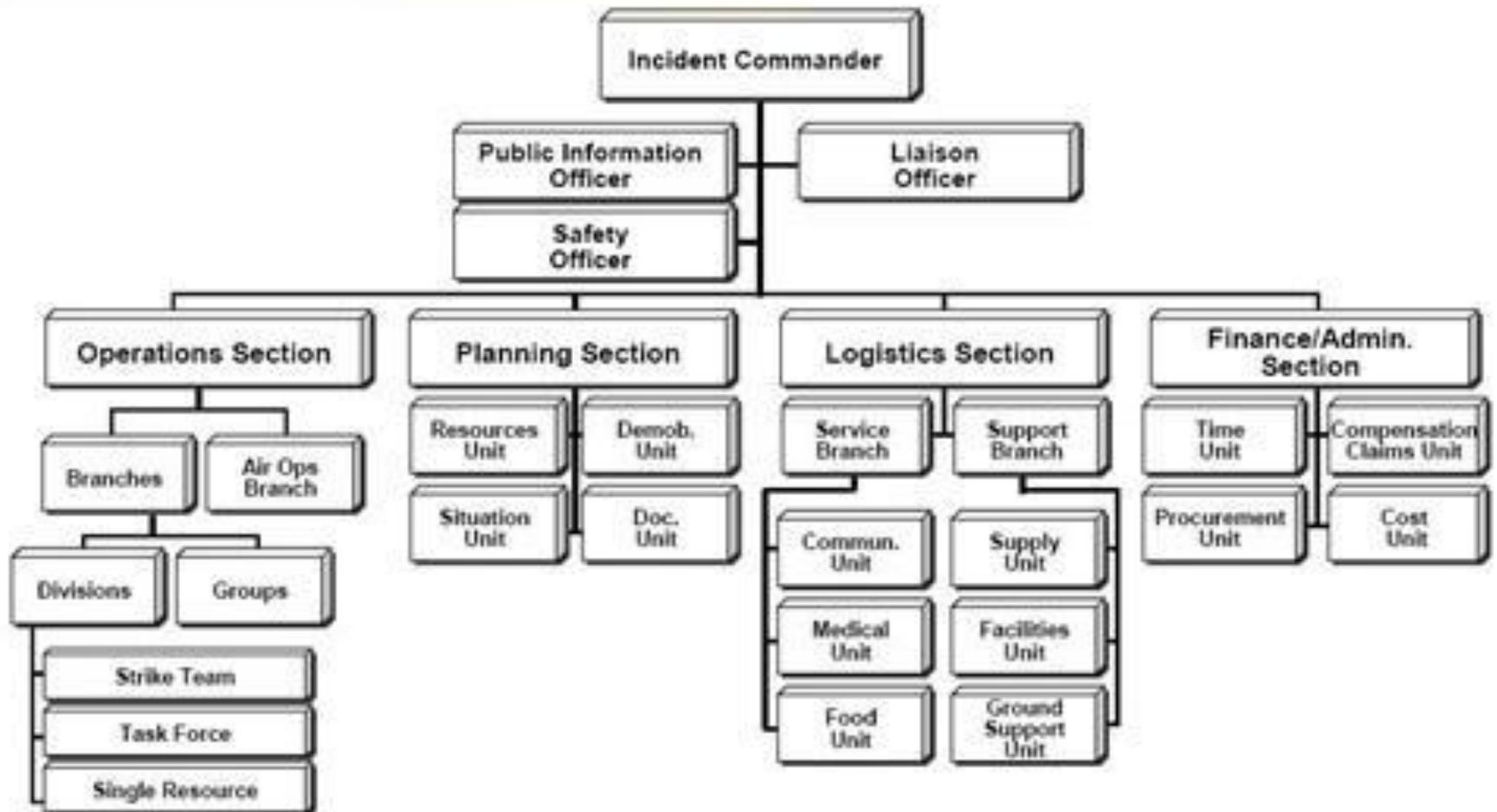
NIMS Training

The National Incident Management System (NIMS) provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.

# The Incident Command System or ICS is studied in detail



# ICS can become rather complex



# The following free, online courses are required:

IS-100.B: Introduction to Incident Command System,  
ICS-100

IS-200.B: ICS for Single Resources and  
Initial Action Incidents

IS-700.A: National Incident Management System  
(NIMS) An Introduction

IS-800.B: National Response Framework,  
An Introduction

ARES membership requires a current application in addition to a Technician class amateur radio license. The membership Application is to be submitted to the local Emergency Coordinator Mike Varga, NR3C



UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION  
AMATEUR RADIO LICENSE  
K8MKWS

MALLERNEE, JOHN R.  
ARMED FORCES RETIREMENT HOME  
WASHINGTON, DC 20011-8400

FCC Registration Number (FRN): 9010578433

Special Conditions / Endorsements

NONE

Grant Date	Effective Date	Print Date	Expiration Date
03-16-2004	03-29-2010	03-30-2010	03-16-2014

File Number	Operator Privileges	Station Privileges
0004190645	General	PRIMARY

THIS LICENSE IS NOT TRANSFERABLE

*John R. Mallernee*  
(Licensee's Signature)

FCC 608 - Mar 2007

Name \_\_\_\_\_ Call \_\_\_\_\_

Amateur Radio Emergency Service  
Registration Form

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone (home) \_\_\_\_\_ Email Address: \_\_\_\_\_ @ \_\_\_\_\_

Locality \_\_\_\_\_ License Class \_\_\_\_\_

Check (✓) Bands/Modes you can operate

	160	80	40	20	15	10	2	75cm	Other
CW									
SSB									
FM									
RTTY									
Mobile									
Packet									

If you operate Packet, do you run a BBS? If so, what is the PBBS call sign? \_\_\_\_\_

Can your home station operate from emergency power? (Yes/No) \_\_\_\_\_

Which bands can you operate from emergency power? \_\_\_\_\_

How many hours of operation can you sustain on emergency power? \_\_\_\_\_

List any other activities you volunteer for/with that may affect your availability to respond to an emergency (volunteer fire-fighter, EMT, CAP, MARS, or any other organization) \_\_\_\_\_

Date of this form \_\_\_\_\_ Signed \_\_\_\_\_

Send to your local EC if known or to a/SEC Virginia Section, K4KHZ, 124 Summit Dr, Rich Creek, VA 24147

FD-95A

Other items necessary to maintain a good standing in ACS/RACES/ARES:



Current SKYWARN training



Recommended HAZMAT training at the Awareness level

# Last but Not Least

Participation in at least three (3) emergency events, drills/training events, and/or public service events per year

Attendance of at least two (2) ACS/RACES/ARES meetings per year



Meetings are held on the second Wednesday of January, April, July and October at 6:30pm at the Dept. of Public Safety building in Mercer, PA

# Some typical functions that take place:

Penn State – Shenango & Sharpsville Food Pantry 5k Races



MS-150 Bike-a-thon



Monthly Radio Tests at 4 county Hospitals



ARRL Simulated Emergency Test



# Weekly HF ARES/RACES Nets

WPA ARES Net

9am Saturday – 3983kHz

WPA RACES Net

9am Sunday – 3990.5kHz

Statewide RACES Net

1<sup>st</sup> Sunday of every month

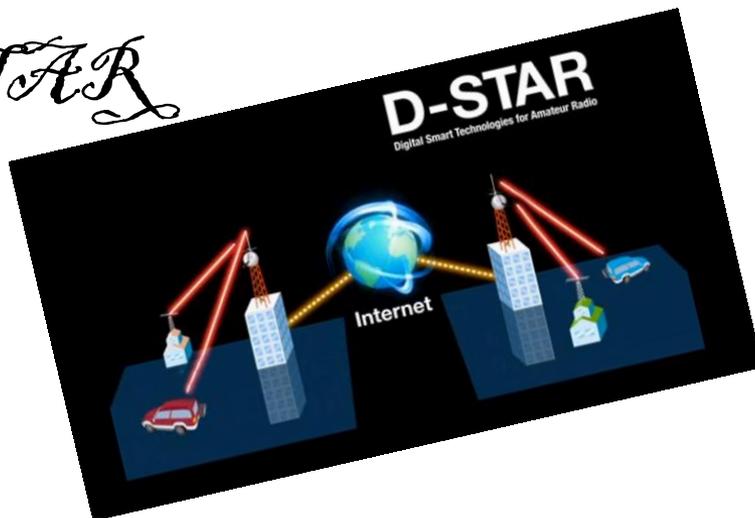
8am – 3993.5kHz

These nets are a good place to get started.

Other training nets exist and should be explored once familiar with some of the basics.



D-STAR



APRS

What is APRS?

- APRS stands for Automatic Packet Reporting System or Automatic Position Reporting System.
- APRS was developed in the early 1990's by Bob Bruninga, WB4APR, for tracking and digital communications with mobile GPS equipped stations utilizing Amateur two-way radio.

OTHER AREAS TO EXPLORE!



FL-Digi

# The ARRL offers two online courses that can help you learn more:

[Introduction to Emergency Communication \(EC-001\)](#)

[Public Service and Emergency Communications Management for Radio Amateurs \(EC-016\)-](#)

These allow you to learn at your own pace with the aid of a mentor.

There are also possibilities to have courses taught in person.

.

Plus, the ARRL website has much information on ARES and EmComm.

# When the BIG ONE hits again, will we be ready?



**YES**

**NO**



RACES and ARES are both vital organizations and need your participation to make them effective.

To register for RACES, contact your local civil defense office or Emergency Operations Center. To register with ARES, complete [ARRL Form FSD-98](#) and send it to your local EC.

Credits:

ARES Manual

CFR Part 97 FCC Rules

ACS website

FEMA website

[arrl.org](http://arrl.org)