



SCHE  **ART**
South Carolina
Healthcare Emergency
Amateur Radio Team

**Redundant Communications
Initiative for Hospitals and
Healthcare Facilities**

Points of Contact

- **William (Bill) Dease**, SCHEART Training Coordinator, USC Center for Public Health Preparedness (USC-CPHP)
- **Charlie Miller**, Network Coordinator, Amateur Radio Emergency Service (ARES) Coordinator and SC Radio Amateur Civil Emergency Service (RACES) Officer
- **John Crockett, Jr.**, SCHEART Contractor, Manager of Transmitter Operations, SC ETV

Mission

To strengthen statewide communications infrastructure when normal means of communication are lost or crippled, using ham radio as a source for backup communications for the Palmetto 800 MHz system.

Communications

WHEN
ALL
ELSE
FAILS...



■ Primary Systems

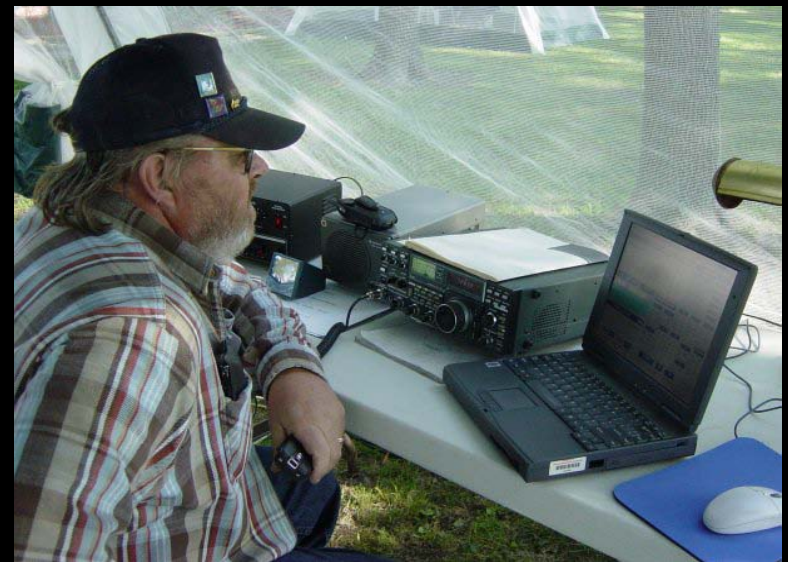
- Telephone Landlines
- Cellular Phones
- PDAs and BlackBerrys

■ Emergency Systems

- 911
- Two-Way Radios
- 800 MHz Radios

■ Redundant Systems

- Satellite Phones and Radios
- Ham Radios



Brief History



- Original **HEART** project piloted in 2005 at the Medical University of South Carolina
- Partnership among ham radio engineers to provide a dedicated redundant communications system
- Support for hospitals around port city of Charleston
- Success of the project led to **SCHEART**

Partnerships

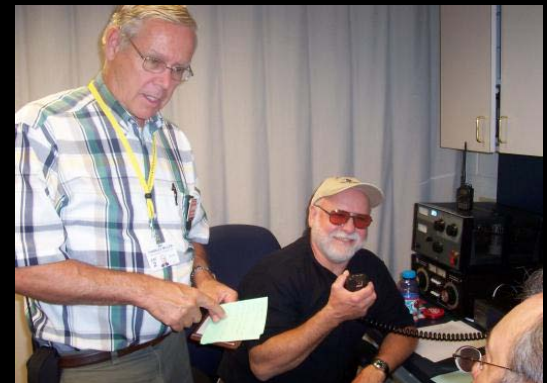


State and local partnerships

- Aiken County Emergency Management Services (EMS)
- American Radio Relay League (ARRL)
- USC, Hams Coordinating Committee (UHCC)
- South Carolina Healthcare Emergency Amateur Radio Team (SCHEART)
- Amateur Radio Emergency Services (ARES)
- Carolina Amateur Radio Emergency Services (CARES)
- Medical University of South Carolina (MUSC)
- South Carolina Educational Television (ETV)
- South Carolina Hospital Association (SCHA)
- South Carolina Department of Health Environmental Control (SCDHEC)
- South Carolina Emergency Management Division (SCEMD)
- York Technical College (YTC)

Engage Hams in All Strategies

- State Section Emergency Coordinator (gatekeeper)
- District and County Emergency Coordinators
- Enthusiasts and club members
- Hospital volunteers and staff
- State and local public health



USC-CPHP

Four-Pronged Approach

1. Training and Licensing Courses
2. Facility Assessments
3. Radio Response Teams
4. Exercises



Four-Pronged Approach

1st Prong = Training to build individual capacity

- Training and Licensing Program
 - Satellite broadcasts
 - Regional trainings
 - Hospitals and healthcare agencies

- Communication Nets
 - Train Radio Response Teams
 - Establish guidelines



Four-Pronged Approach



2nd Prong = Facility assessments to build organizational capacity

- Conducting hospital facility assessments
- Authorization complete for 64 hospitals
- Recommend type of equipment needed to access the **SCHEART** network

Four-Pronged Approach



3rd Prong = Radio Response Teams to build capacity among individuals and across agencies

- HIPAA regulations and hospital requirements
- NIMS, HICS, ID Badges, etc.
- Hospital surge, quarantine and decontamination procedures
- Perimeter security and Alternate Care Sites

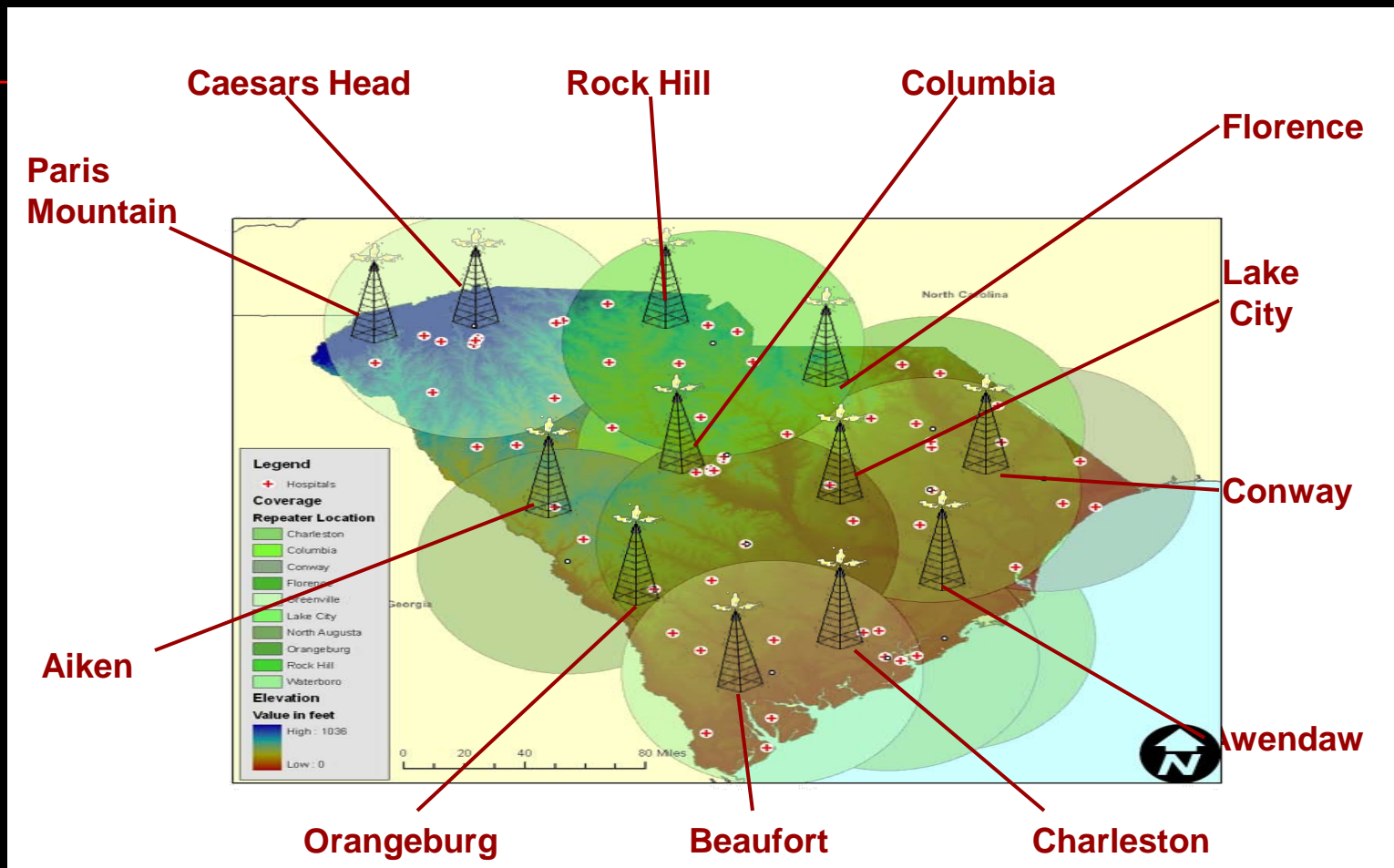
Four-Pronged Approach

4th Prong = Exercises to build local capacity to use hams!

- Tabletops, Hospital Drills, and Full-Scale Exercises
- Recent earthquake exercise experience was successful. . .
- As a result, **SCHEART** was written into the State Emergency Operations Plan!



SCHEART Network



Leveraging Resources



Hospital Preparedness Program (SC DHEC)

- Centralized public health/environmental health system
- DHEC's HPP Program Manager oversees purchase of hospital radios and equipment
- DHEC's HPP Program Manager is member of the SCHEART Steering Committee



Leveraging Resources

South Carolina Hospital Association (SCHA)

- Emergency Planning Coordinator is a member of SCHEART Steering Committee
- Champion and major supporter
- Ideal home for the ham radio net control station
- Direct link to hospitals in major disasters

Leveraging Resources



South Carolina Educational Television (ETV)

- Built infrastructure statewide
- Leveraged major funding to do so
- Will maintain infrastructure for life of system
- Offers use of fuel tanks, trucks to support operations in emergencies

Wrap Up



Take Home Messages:

- **SCHEART** is a safety net – not the first line of communications.
- The success of this project is attributed to its partnerships and involving hams at all levels.
- We need volunteers to support hospitals and healthcare facilities.

Questions?

USC Center for Public Health Preparedness

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