



Amateur Radio Emergency Communications





Who? What? Why?



- The Players (Alphabet Soup)
 - FCC-Federal Communications Commission
 - Regulates all non-Federal radio emissions
 - Amateur Radio regulated under part 97 of the FCC Rules
 - 47CFR97
 - ARRL-America Radio Relay League (National Level)
 - Field Organization-Divisions-Sections-States-Affiliated Clubs
 - ARES-Amateur Radio Emergency Service (ARES)
 - LARG-Loudoun Amateur Radio Group
 - RACES-Radio Amateur Civil Emergency Service
 - Federal Program under FCC-Part 97



ARES in Loudoun



- Predominantly Supported by LARG members
- Served Agencies:
 - Red Cross
 - County EOC
 - Dulles Airport
 - Hospitals
 - In Developmental stages
 - CERT
 - In Developmental stages





Amateur Radio Operator Activities



- Provide Technical Skills/Material to set up Communications systems when and where needed
- Provide Skilled Communications services
 - Voice messages formal/informal
 - Text messaging (Packet/other Digital Modes)
 - Video (Amateur TV)
 - Location (APRS)



LARG/ARES Public Service



- Reston Bike Club/ Loudoun Red Cross Ride through Loudoun:
 - Annual Event; Usually August
 - Amateur Radio Stations at each rest stop
 - Amateur Radio Stations with Support Vehicles
 - VHF Primary/HF voice frequencies employed



Public Service Events (Continued)



- First Night Leesburg (Annual)
 - Set up portable-town wide radio system
 - Monitor Attendance at each venue
 - Locate Volunteers
 - Check the status of each venue's supplies
 - Check/Report facility issues
 - Locked Doors
 - Water leaks



Emergency Drills

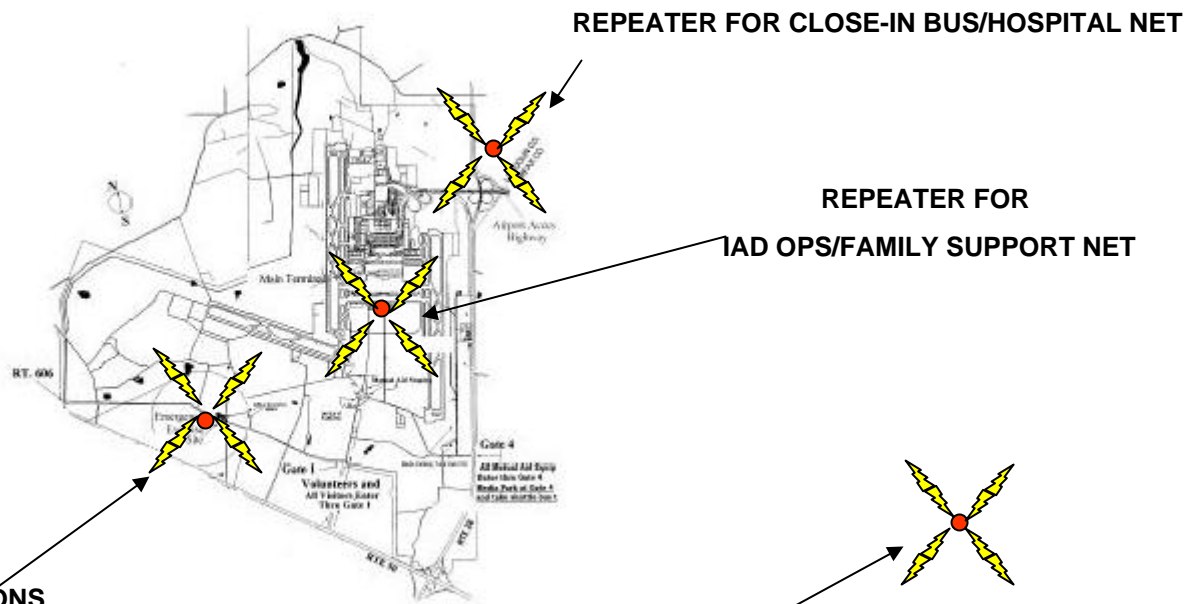


- Dulles Drill-2000, 2004
 - Provided On-site Communications support
 - Provided Communications for Buses transporting ambulatory “patients”
 - Linked all operations sites on/off the airport
 - Staging areas
 - Operations Center
 - Crash Site
 - Hospitals





DULLES DRILL: AMATEUR RADIO COMMUNICATIONS NETWORK



•ATV TX & COICE NET CONTROL STATIONS

•OPERATES ON-SITE NETS FOR:

- CRASH SITE
- STAGING AREAS
- OPS/FAMILY SUPPORT
- CLOSE-IN BUS/HOSPITAL

•PORTABLE SHELTER AT FAIRFAX TRANSFER STATION

•NET CONTROL FOR OUTLYING BUSES & HOSPITALS

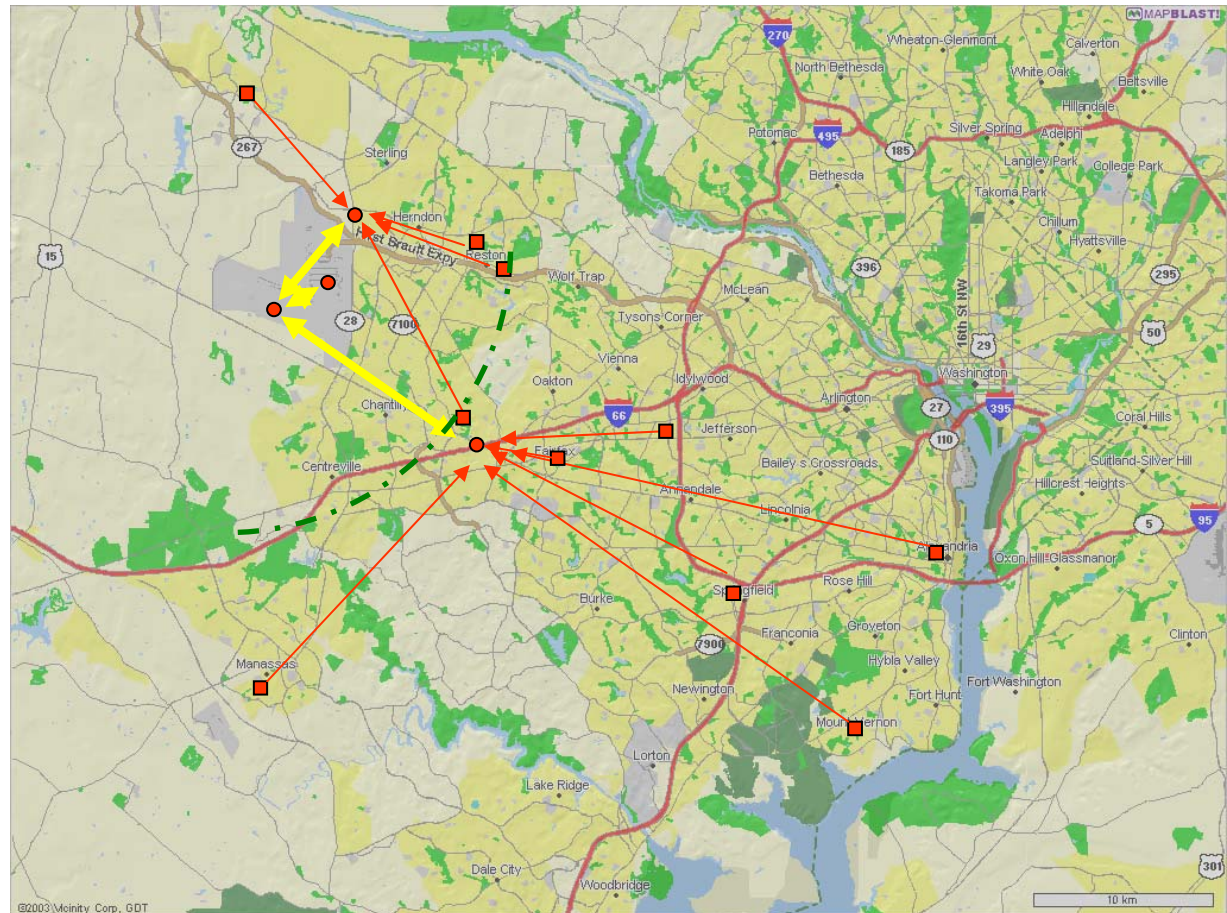
•MEMBER OF ON-SITE UHF NET



AMATEUR RADIO AREA OF RESPONSIBILITY FOR THE DRILL



- HOSPITAL
- REPEATER OR NET CONTROL STATION
- IN-NET RADIO LINK
- ↔ RADIO LINK BETWEEN NETS
- DEMARCATION LINE BETWEEN INNER AND OUTLYING NETS





Actual Emergencies



- 9-11-01
 - Provided Voice Link and Staffing between Dulles Marriott and Loudoun Red Cross Chapter – 24+ hours
 - Prepared for Comm Support for Bloodmobile
 - (operation later cancelled but Loudoun Red Cross had direct knowledge of what was happening at the site via Ham Radio)



Actual Emergencies



- Hurricane Isabel
 - VHF/UHF and HF at the EOC
 - Setup Full Staffing-Through Tear Down
 - VHF/HF at Relocation Centers
 - Loudoun Valley HS
 - Heritage HS
 - Dominion HS
 - Additional Equipment Staged at Purcellville FD



Other Emergency Support



- Skywarn
 - Provides real time regional severe weather observations to National Weather Service
 - Skywarn observations are often re-broadcast on NOAA weather Radio



Family Emergency Preparedness



- Become a HAM Family
 - Provides your family with access to Amateur Radio Spectrum and Infrastructure
 - Local
 - Regional
 - Worldwide
 - Gives you access to broad range of technical skills
 - Radio Communications
 - Emergency Power
 - Batteries
 - Geo Location
 - Weather Monitoring
 - Emergency Management
 - Science and Technology
 - Gives you a reliable link to family, friends and Emergency Services when the chips are down



Amateur Radio Licensing Requirements



- Study for and pass test in basic radio technology, operating practices and rules
 - HF Privileges require 5 WPM Morse Code
 - There is continued debate about the future of Morse Code
 - Remains the most reliable mode for the minimum of power and equipment



Amateur Radio Resources



Loudoun Amateur Radio Group (LARG)

- Meets 3rd Saturday @ Trinity Lutheran Church, W. Market & Catoctin Cir, Leesburg, 8:30 AM
- Weekly Net Meeting on 145.31 MHz
- www.k4lrg.org
- Fall classes are scheduled



Resources (cont.)



- American Radio Relay League (ARRL)
 - National organization
 - Provides Educational Materials
 - Represents HAMS to Congress and International Agencies
 - Field Organization
 - Direct contact for Member Services
 - Manages Traffic Nets
 - Organizes and Supports ARES
 - <http://www.arrl.org>



Questions



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