

# Network Control Stations

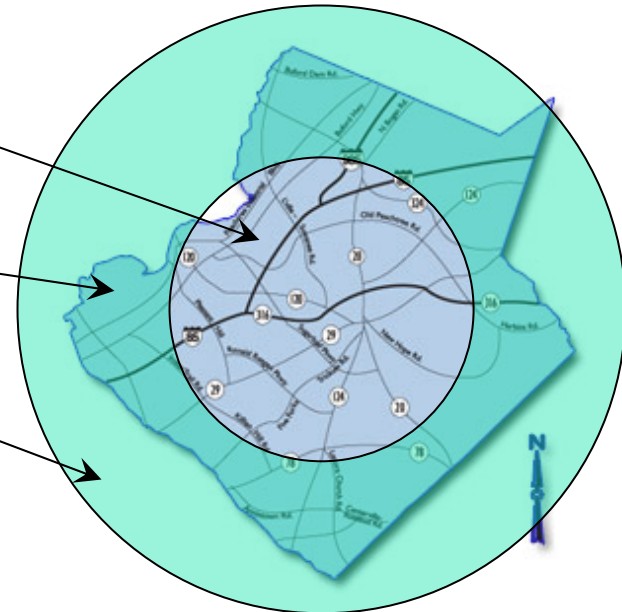
## Amateur Radio Emergency Service

### Gwinnett County, Georgia

Routine Local NCS

Critical Local NCS

Gwinnett Regional NCS



Prepared 2007 January 23  
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# NCS = focal point for most operations

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- Comm activities dispatching
- Allocates frequencies/channels
- Takes several forms and formats
- Is not the same as a liaison location
  - Operation may require separate liaisons



# Typical NCS locations ...

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- ... for Gwinnett County ARES
  - Usually a home QTH
  - Not collocated with served agency
  - May be activated “immediately”
  - No special equipment for voice nets
  - (Almost) always use GARS W4GR repeater(s)
  - Station must have good repeater rf access
  - Enables any member to be Gwinnett NCS



# Traditional communications functions for ARES

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- Typical communications topology ...
  - Hub-and-spoke ... “insulated” central dispatch
  - Messages originate and terminate inside net
  - Single relay link: originator → destination



# NCS dispatches ... no routine relaying

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- “No net rf interface” with adjacent jurisdictions
- One (most 2) voice channels utilized
- “Closed group” of operators
- Personal station areal performance not primary



# Operational exceptions ...

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- ... community services using on-site NCS
- ... but within scope of “routine” ...
  - Downtown Christmas parade (on-site)
  - Dog show (informal, ad hoc)
  - Hall County / Gainesville New Years Eve
- ... from more than “routine” to “very complex” e.g. SET-2006, SET-2005



# Three functional types of NCS

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- "Routine Local NCS"
- "Critical Local NCS"
- "Gwinnett Regional NCS"
- Type deployed is chosen by:
  - EC
  - AEC-Logistics
  - AEC-Nets
  - AEC-Response teams



# When

## **Routine Local NCS:**

Training net call-ups  
SKYWARN nets  
Community Support

## **Critical Local NCS:**

County disaster response.  
Repeater failure  
Multiple co-primary channels

## **Gwinnett Regional NCS:**

Multi-county coordinated wide area ops.  
Multi-area routes in use





# What

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## **Routine Local NCS:**

Conventional NCS

## **Critical Local NCS:**

NCS +

Knowledge of simplex-direct coverage, operations, options

## **Gwinnett Regional NCS:**

NCS +

Critical/Local +

Knowledge of multi-jurisdictional messaging +

Multiple radio channel handling ability.



# Who

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## **Routine Local NCS:**

Basic ARES members

## **Critical Local NCS:**

Basic ARES members +

Demonstrate knowledge of simplex and no-repeater options

Knowledge of temporary station set-up

## **Gwinnett Regional NCS:**

NCS +

Critical/Local +

Knowledge of multi-jurisdictional/high volume messaging

Multiple radio channel handling.



# Where

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## **Routine Local NCS:**

Home QTH

## **Critical Local NCS:**

Home

Possible central site

Capable of establishing new/temporary central site/repeater

## **Gwinnett Regional NCS:**

Routine Local + Critical Local +

Knowledge of geo-topographics for best regional access



# How many people

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## **Routine Local NCS:**

Solo NCS +

ANCS (also solo) at separate location

## **Critical Local NCS:**

Collaboration likely in duets and trios

... at common location

## **Gwinnett Regional NCS:**

Collaboration probable, trios, quartets, et al

Operates best as a team



# Response teams

## **Routine Local NCS:**

Members function within home response team

## **Critical Local NCS:**

Within home response team

May be coordinated for special duty

## **Gwinnett Regional NCS:**

Defined purpose response team

Primary responsibility – complex NCS situations

Individuals available to other teams by coordination

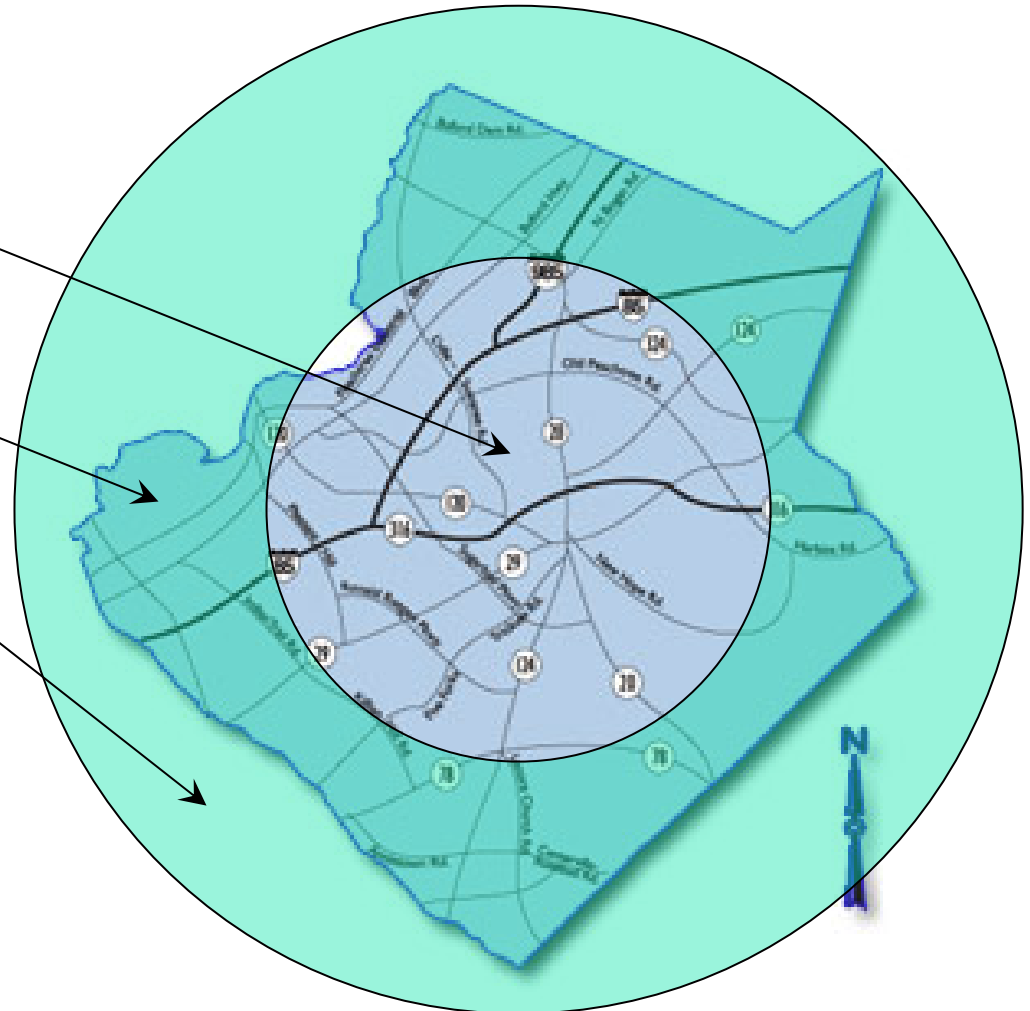
May include multi-team member assignments

# ARES NCS function levels

**Routine Local NCS**

**Critical Local NCS**

**Gwinnett Regional NCS**



Concept representation only  
Not to scale  
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