# GPS Awareness

*Special thanks to Matt Breininger with Sherman County Rural Fire Department and Kansas Task Force 7 for developing this GPS Awareness course.*

# Module 1

# Maps and United States National Grid

# Learning Objectives

By the End of this module the student will be able to:

- Differentiate maps and information between multiple style maps.

- Determine USNG coordinates from an assigned location.

- Use scaled mapping tool to produce USNG coordinates.

# Unit 1.1 – Map Styles and Features

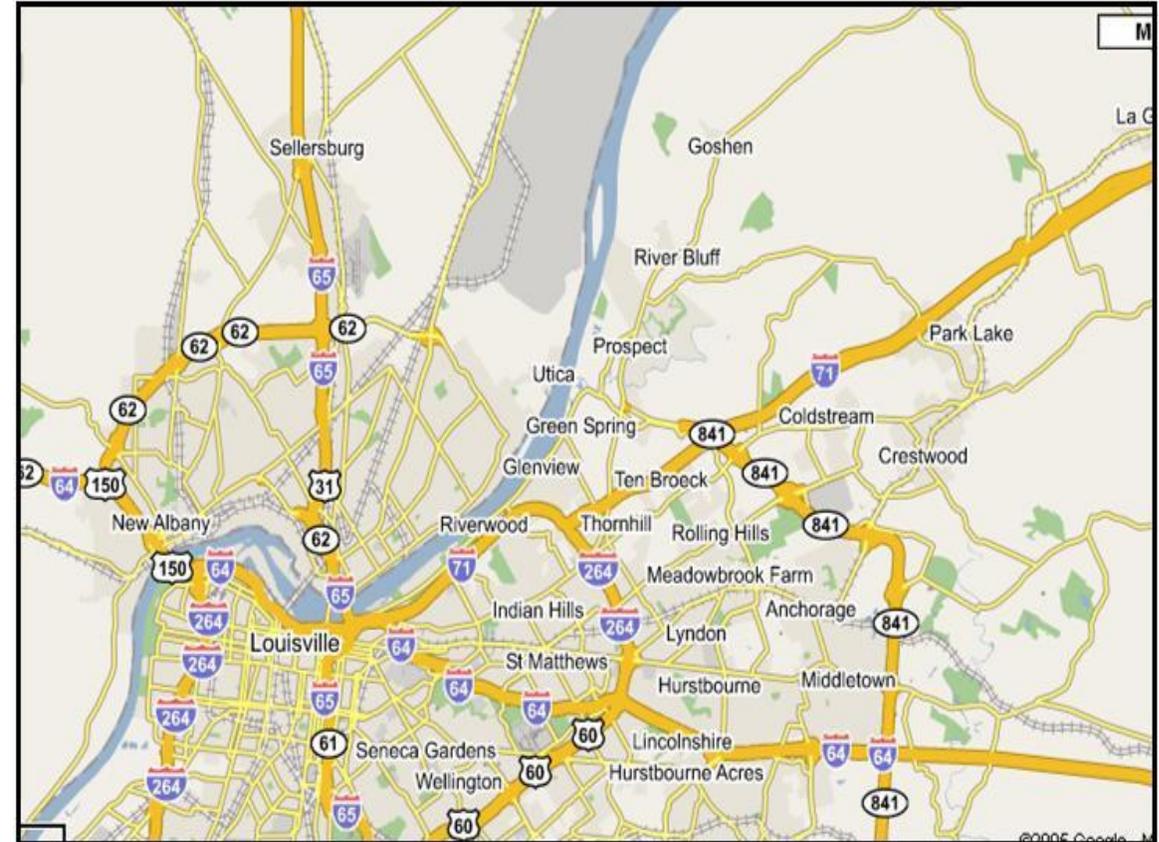# Maps' Purpose with a Technical Search Team

■ Ways to navigate:

- *Hansel & Gretel / breadcrumb trail*
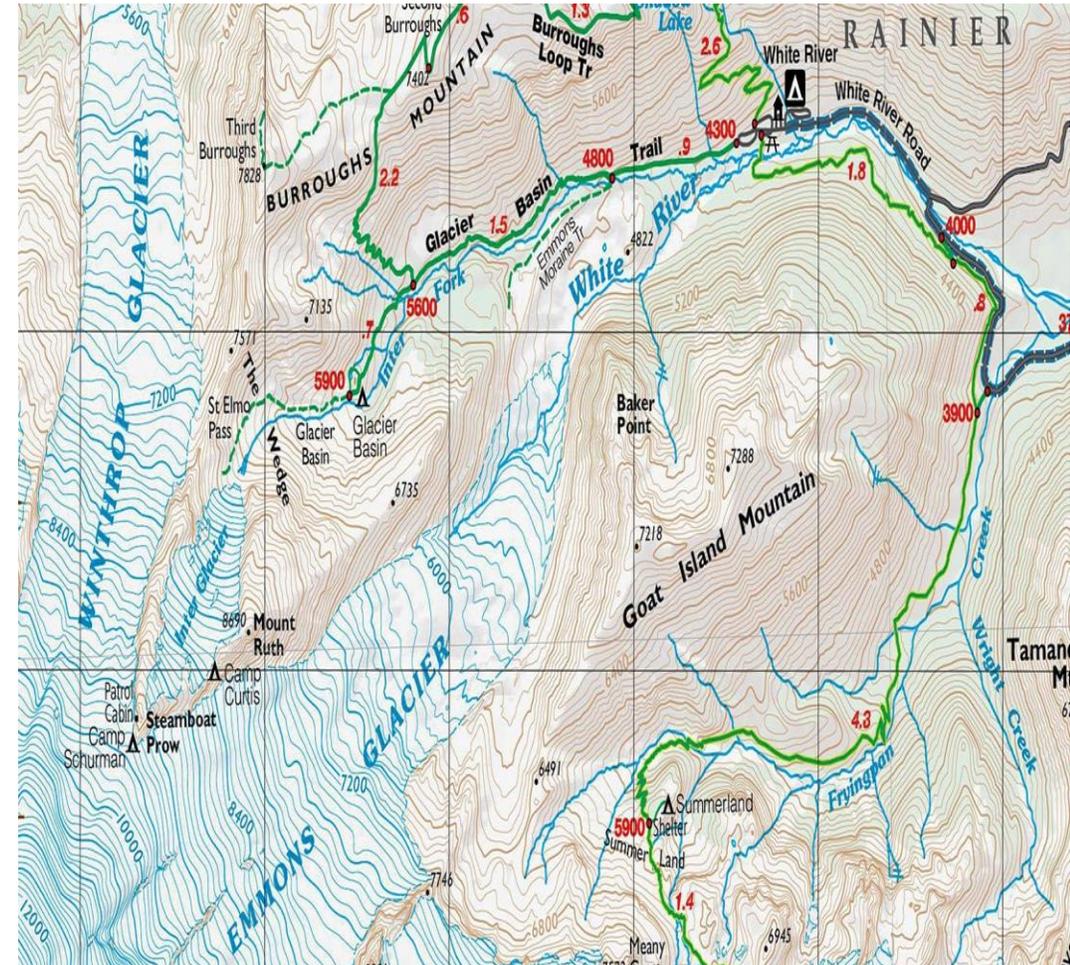
- *Compass*

- *Maps*

- *GPS*

# Map Categories

- **Planimetric maps:**
  - *Common road maps*
  - *Specific area maps*
  - *Schematic maps*

# Map Categories

- Topographic maps:
  - *Contour maps*
  - *Shaded-relief maps: pictorial maps*

# Map Categories

■ Orthophoto maps:

– *Depict terrain & other features by color-enhanced photographic images*

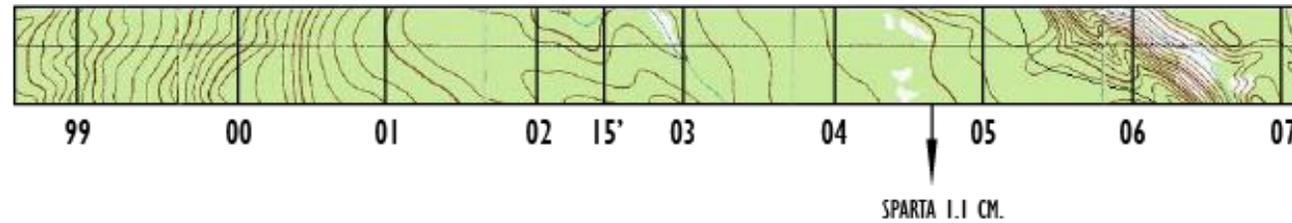– *Corrected for scale & same size as USGS topographic maps*
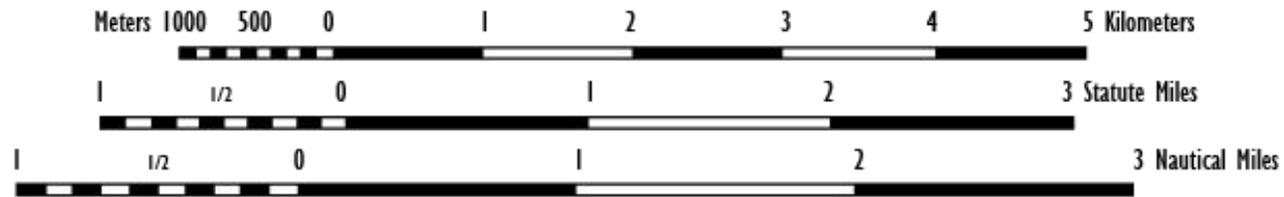
# Map Features

- Colors on maps:
  - *Black: cultural (human-made) objects*
  - *Red-brown: often superimposed on maps to make readable in red light*
  - *Blue: water*
  - *Green: military areas / significant vegetation*
  - *Brown: relief features.*
  - *Red: main roads & boundaries*

# Map Features: Scale and Distance

# Map Features
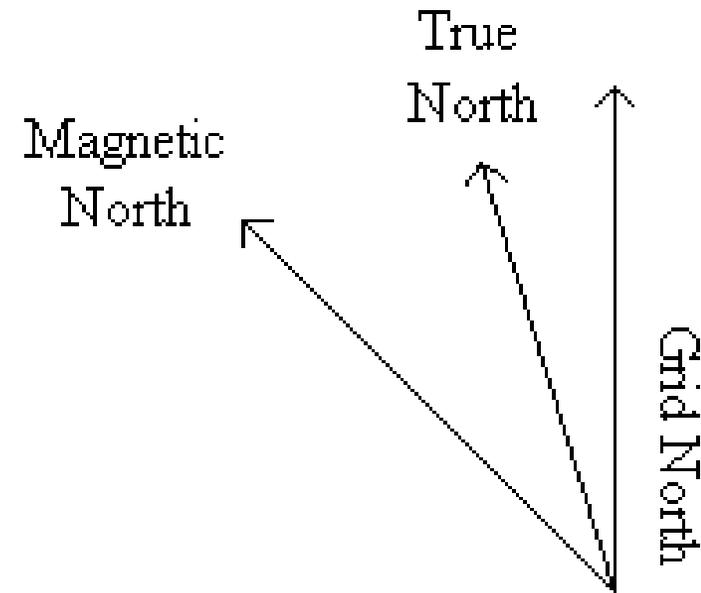
- **Measuring direction:**
  - *True north*
  - *Grid north*
  - *Magnetic north*

# Unit 1.2 – United States National Grid
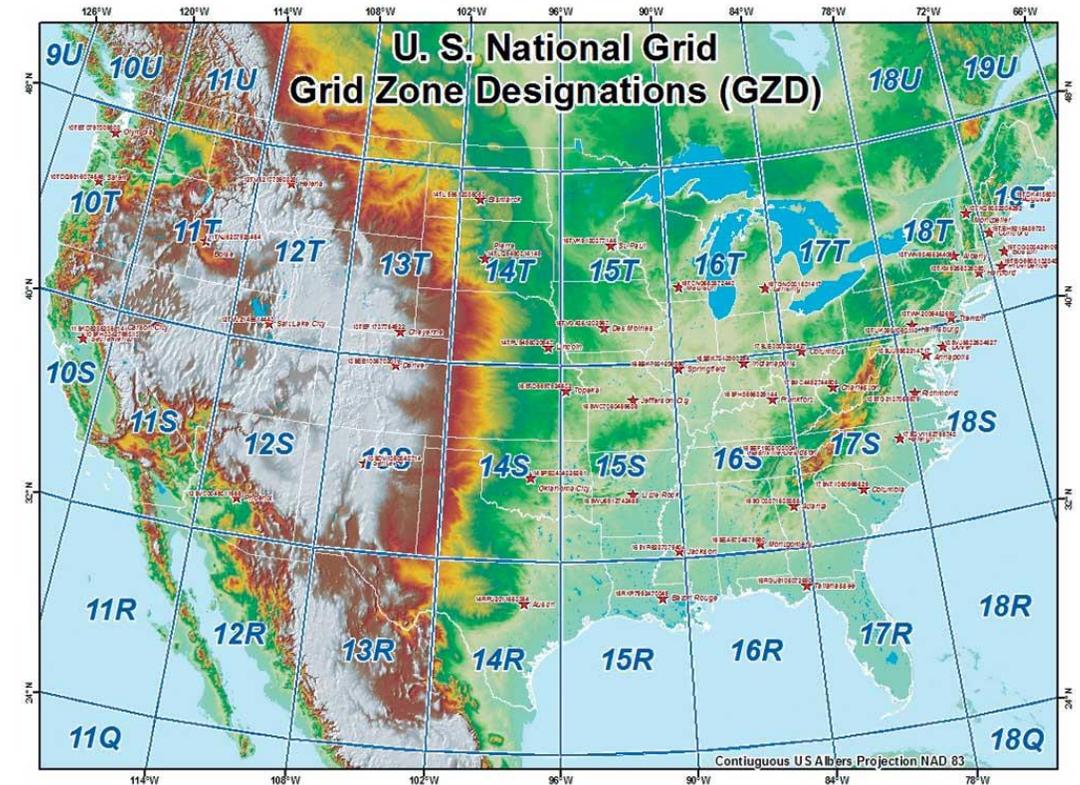
# What do you do when the roads are gone?

# What do you do when the Signs are gone?

# United States National Grid (USNG)

- A Navigation System replicating the military system.

- Adopted by FEMA, SUSAR and most state emergency agencies for mapping.



U. S. National Grid
Grid Zone Designations (GZD)

# The US National Grid

■ USNG is a ground-based coordinate system that uses the meter as a basic unit of measure

■ • It is anchored by NAD 83

■ • It is nearly identical to the Military Grid Reference System (interoperable with military standards)

■ • It is composed of three parts:

  – A grid zone identification (number and a letter)

  – A sub-grid zone identification called the 100,000-m Square ID (2 letters)

  – A coordinate value, separated into east and north components and measured as ground distance from standardized reference lines 37

# US National Grid format:

100,000-m Square ID

USNG format: 16R BU 1028 0976

Grid Zone Designation (GZD)
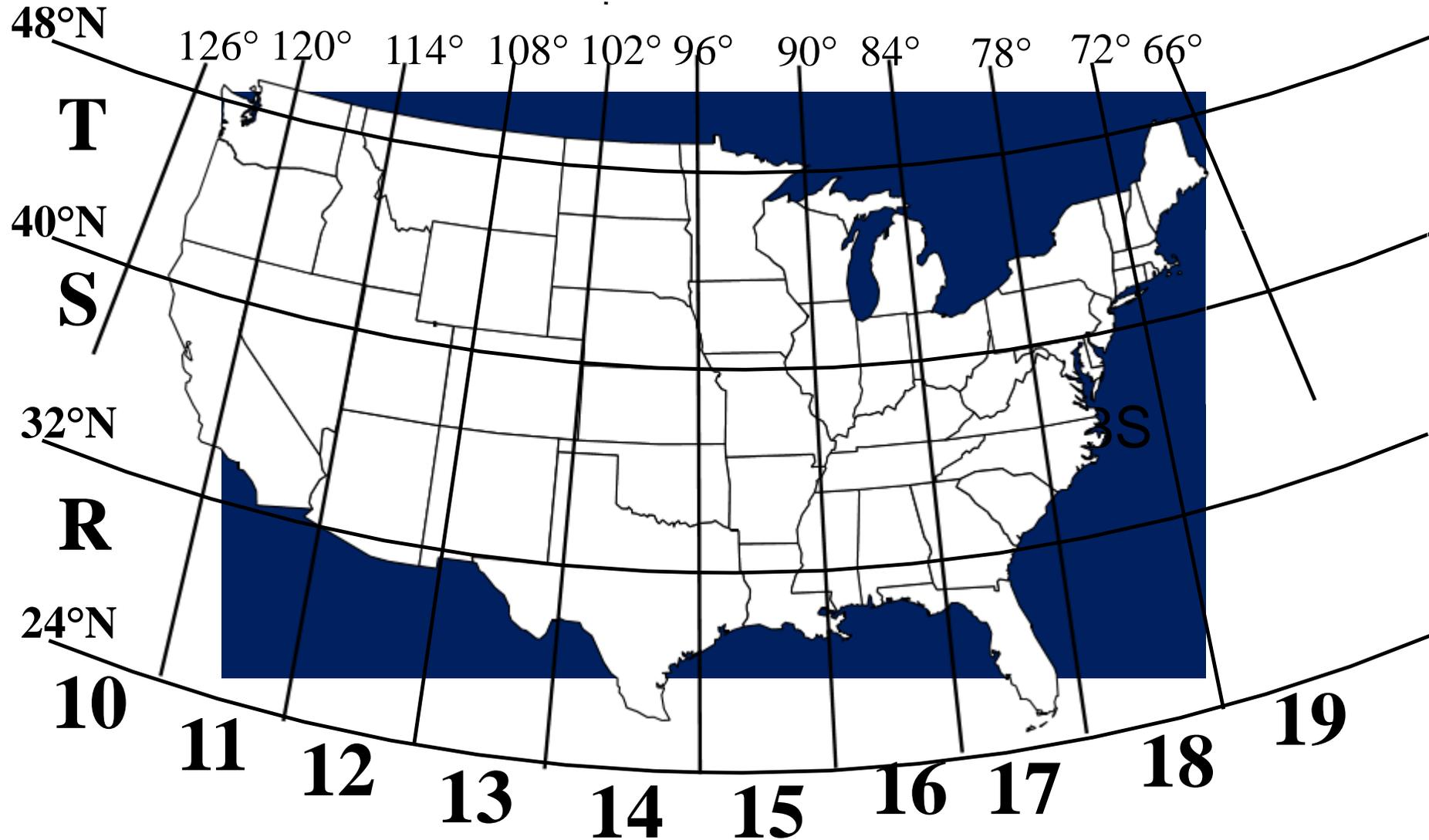(6° lat x 8° longitude quad)

Easting    Northing

Grid Coordinates
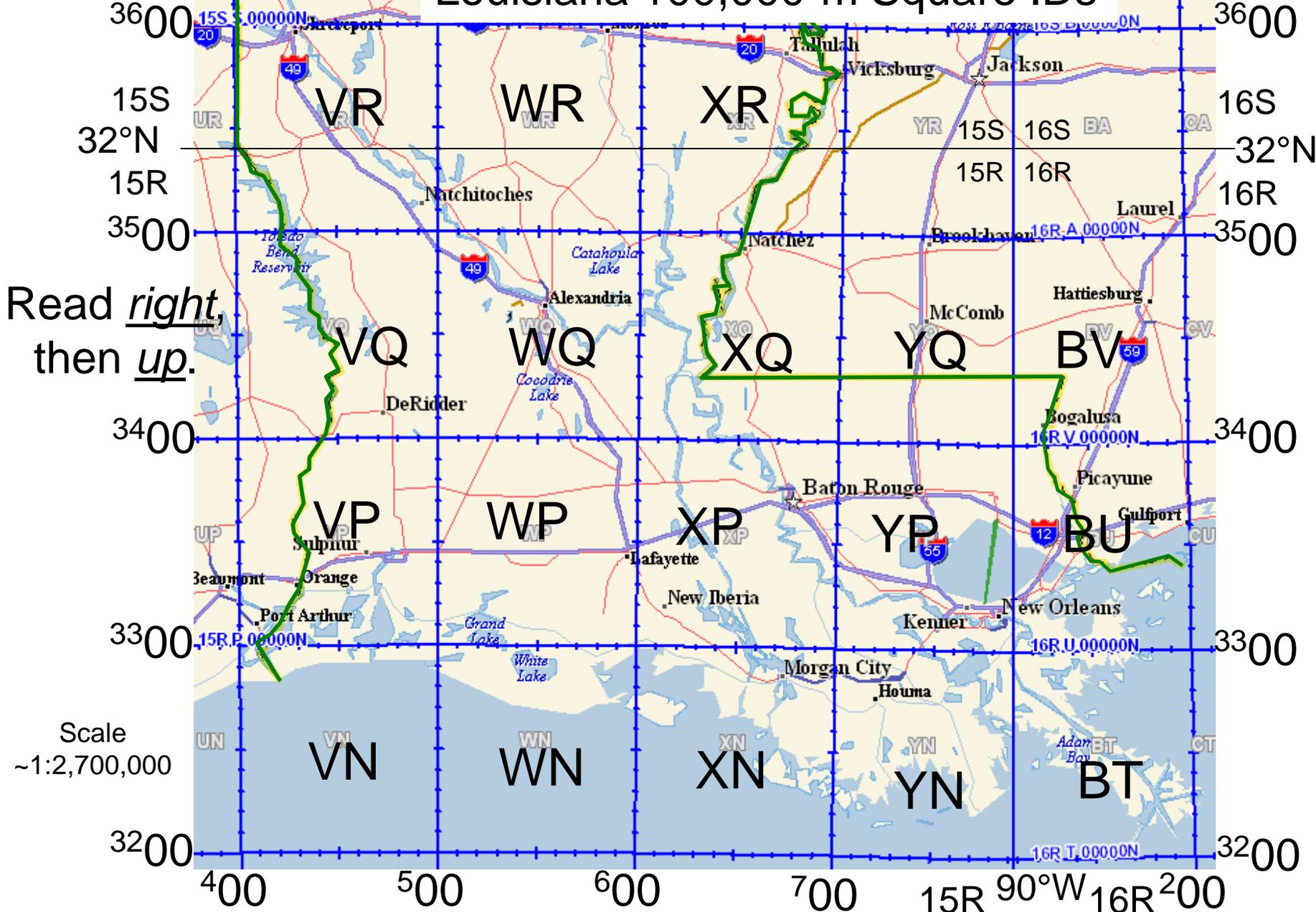
Read *right*, and *up*.

UTM format:  16R, 210280mE, 2309760mN
(Well suited for surveying / distance and direction calculations
and a component of the US National Grid.)

# U   UTM/USNG Grid Zone Designations

MGRS Grid Zone Designations

Louisiana 100,000-m Square IDs
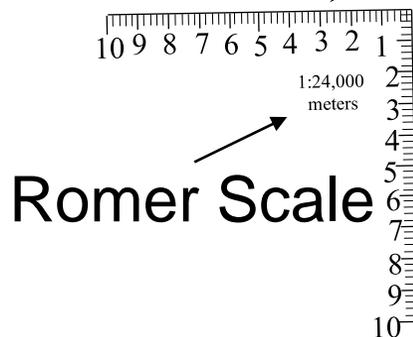
# *Reading USNG Grid Coordinates*

Water tank located at grid: 16R BU 1249 1084

Read RIGHT to grid line 12
Then measure right another 480-meters.

Principal Digits

Water Tank at grid: 12491084

(think 1249 / 1084)

4-digit:         12  10          = 1,000m
6-digit:        124  108         = 100m
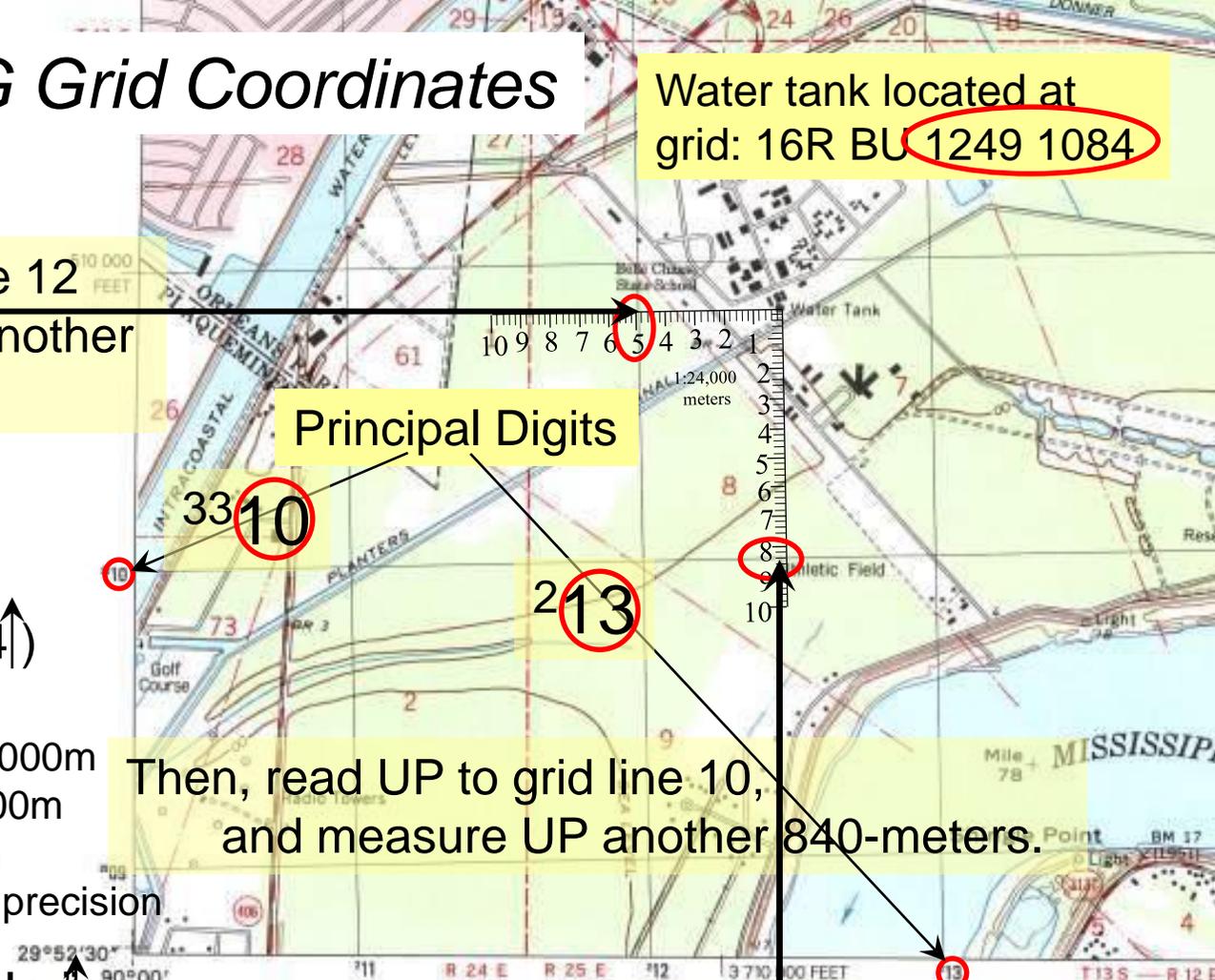8-digit:      1249  1084     = 10m
10-digit:  12490  10840  = 1m  precision

Then, read UP to grid line 10, and measure UP another 840-meters.

Read Right, Then Up.

Romer Scale

33 **10**

²**13**

10 9 8 7 6 5 4 3 2 1
1:24,000 meters
2 3 4 5 6 7 8 9 10

Produced by the United States Geological Survey

Topography compiled 1964.  Planimetry derived from imagery taken 1998 and other sources.  Public Land Survey System and survey control current as of 1967

North American Datum of 1983 (NAD 83).  Projection and 1 000-meter grid: Universal Transverse Mercator, zone 16
10 000-foot ticks: Louisiana Coordinate System of 1983 (south zone)

North American Datum of 1927 (NAD 27) is shown by dashed corner ticks.  The values of the shift between NAD 83 and NAD 27 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software.

There may be private inholdings within the boundaries of the National or State reservations shown on this map

City of New Orleans and Orleans Parish are coextensive

This quadrangle covers a subsidence area

Landmark buildings verified 1967

U.S. National Grid

100,000-m Square ID

BU

Grid Zone Designation
16R
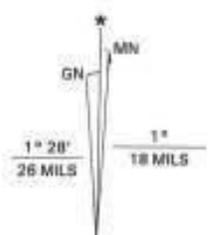
UTM GRID AND 2000 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET
CHALMETTE, LA

21

# Unit 1.3 – USNG Mapping Tools

# Map Tools

- 1:24,000 Scale Pocket Size UTM Grid
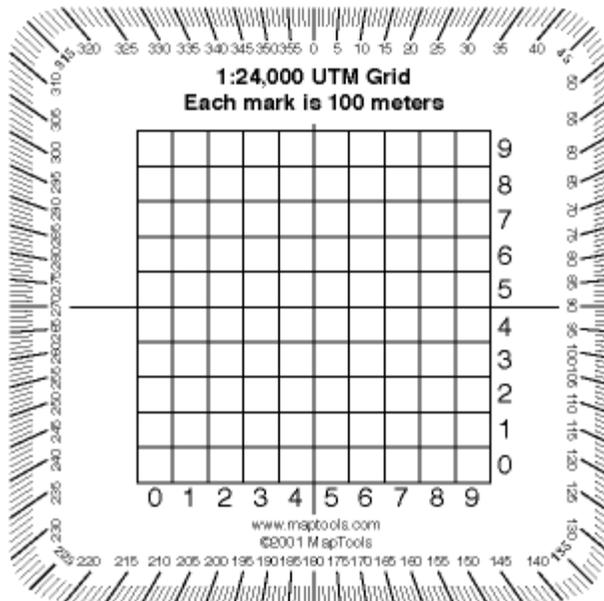


- 1:24,000 Pocket Sized Slot Tool
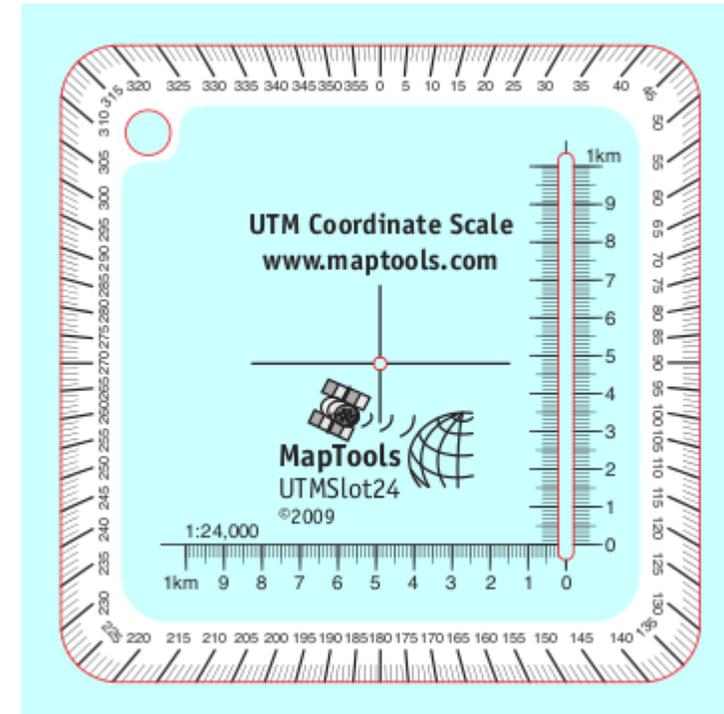
# How to precisely position the grid reader...

Point of Interest (POI)

**Correct**

Point of Interest (POI)
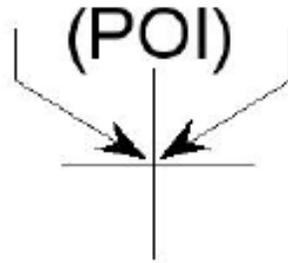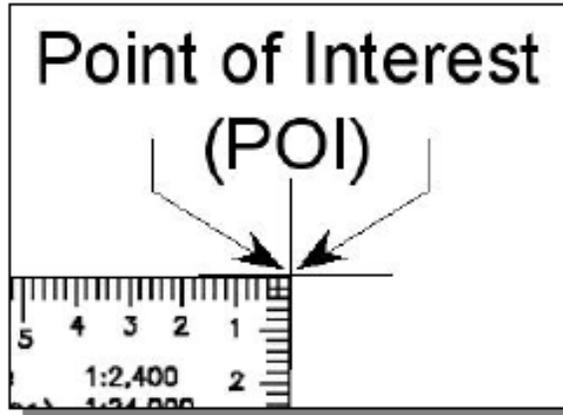
Correct point is the *vertex*.

**Trim vertex of a new grid reader before using!**

Grid: 1912, 1433

Athletic Field

19    14

**Wrong!**

Point of Interest (POI)
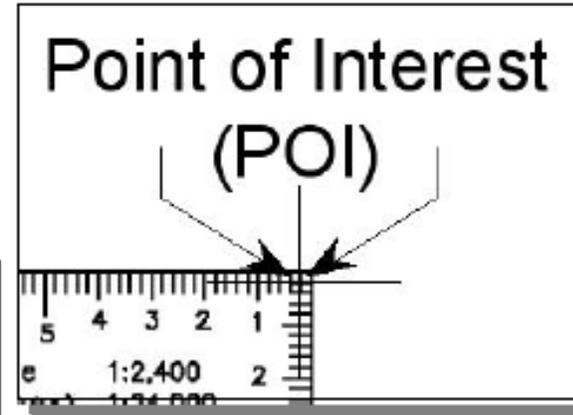
*Do not* use like a sight cross-hair.

# 1:24,000 Scale Pocket Size UTM Grid

# Scale

■ Representative Fractions…        1/24,000  or 1:24,000

■ 1 part on the map = 24,000 parts on the ground

■ ATTENTION TO DETAIL IS CRITICAL

■ At 1:24,000, a 0.5mm mechanical pencil lead dot on the map is equal to 12 meters!

# USNG in Disaster Response

■ Can be used to assign areas of responsibility without defined boundaries

■ Coordinate point position can define:

– *Survivor Locations*

– *Base of Operations*

– *Address of Significance*

– *Landing Zone (LZ)*

– *Hazards*

– *Survivor Collection Points*

– *Other?*

# Summary

- Multiple SAR agencies used a variety of geo-referencing systems during Hurricane Katrina, Causing confusion.

- USNG Geo-referencing scheme is to be used especially when a catastrophic incident is declared as required in the National Response Framework.

- ALWAYS READ RIGHT THEN UP.

- Attention to detail is key.

# Learning Activity 1.1



US National Grid Training Map
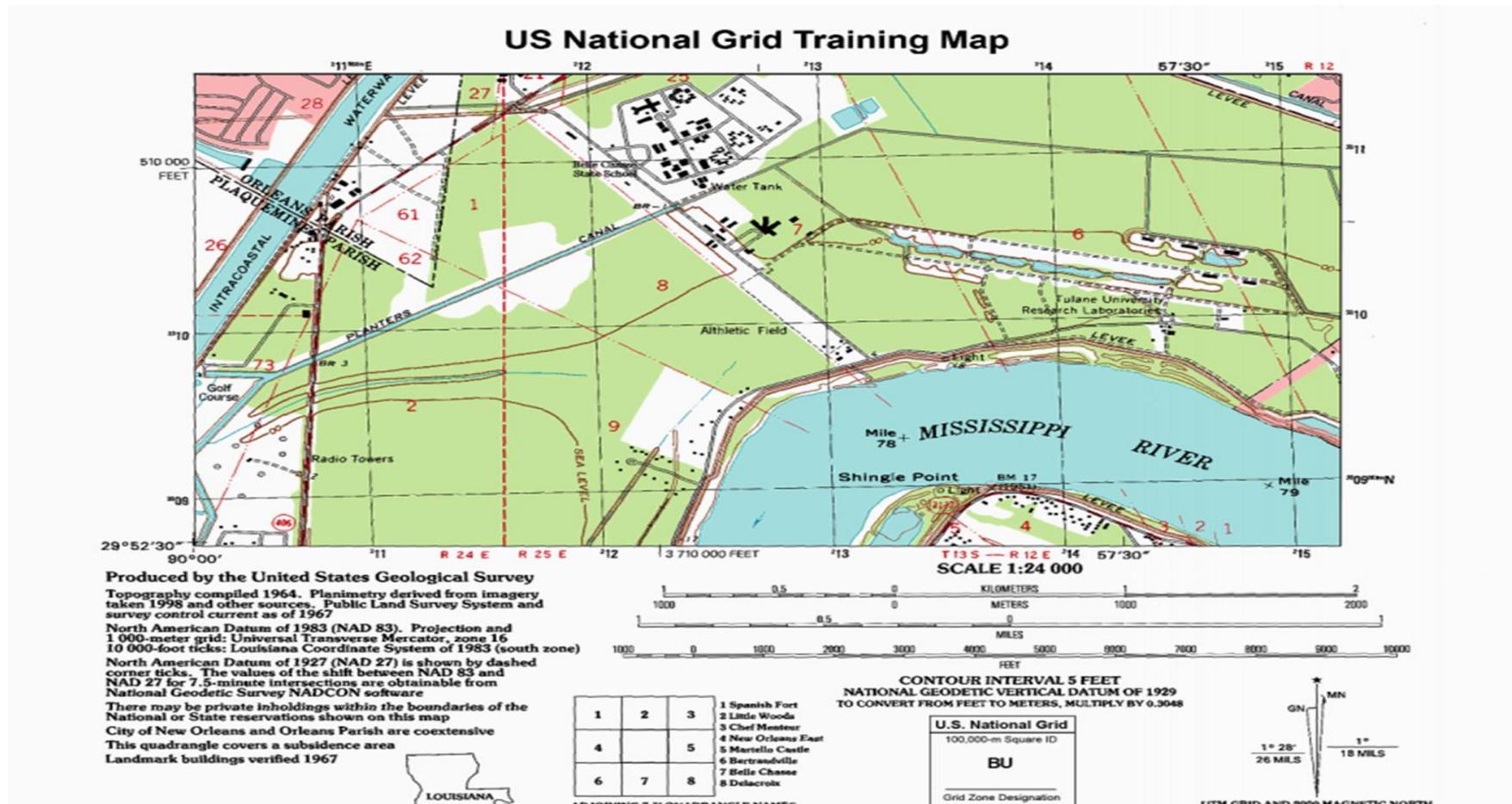
# Learning Activity 1.1

■ FIND GEO-COORDINATES

  – *Water Tank*

  – *Mile 78*

  – *Westernmost Radio Towers*

# Learning Activity 1.1 Answers

■ FIND GEO-COORDINATES

  – *Water Tank   16R BU 1248 1086*

  – *Mile 78   16R BU 1330 0928*

  – *Radio Tower   16R BU 1010 0920*

# Module 2

# Global Positioning Systems Operations

# Learning Objectives

By the End of this module the student will be able to:

- Recognize the operating principles of the GPS system.

- Show operation of GPS handheld functions in a search operation.

- Define Search Operations data collection information and procedures.

# Unit 2.1 - Global Positioning System

# What is GPS?

■ Global Positioning System is a network of satellites that continually transmit coded information, which make It possible to identify positions on earth by measuring distance from satellites. Those positions are reported in coordinates. (i.e. Lat/Long, USNG, etc)

# GPS Has 4 Primary Functions

■ Provides a position and coordinates

■ Can calculate distance and direction between any two waypoints, or a position and a waypoint.

■ Provides travel progress reports, like estimated time to waypoint.

■ Accurate time measurement

# How Does it Work?

- GPS segments:
  - *GPS monitor stations*
  - *User segment*
- Location is everything
- Georeference format
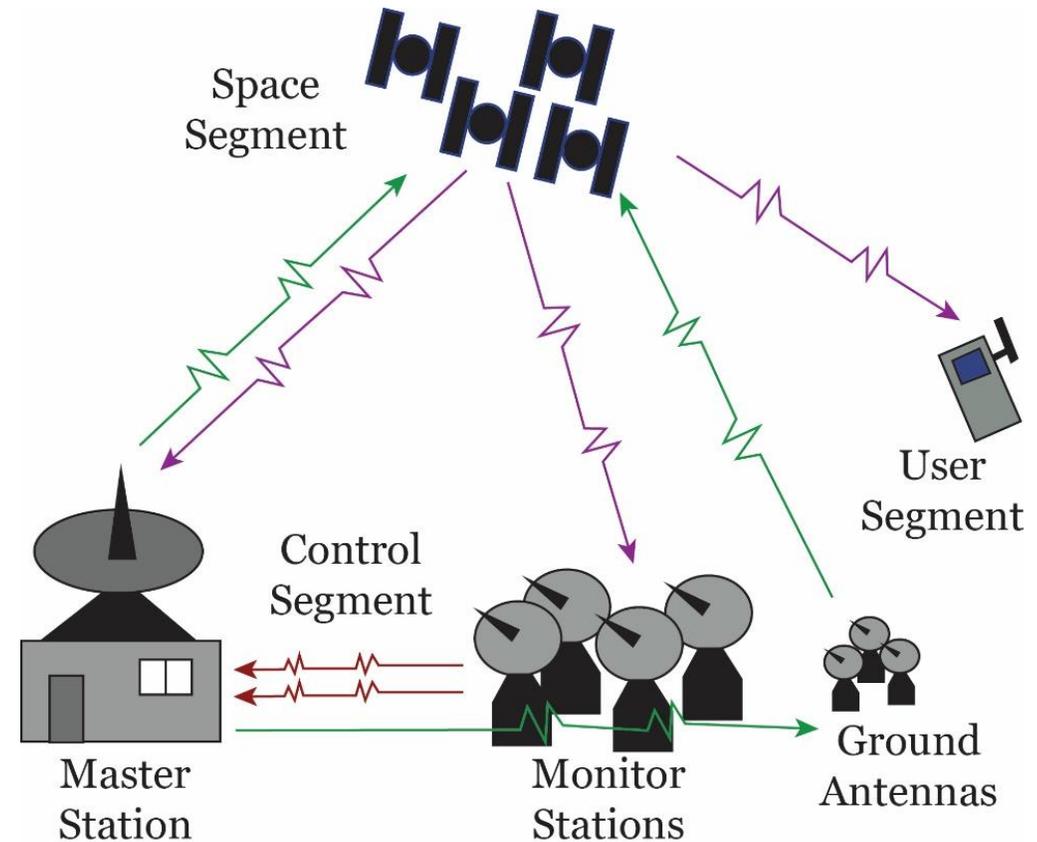
# Wide Area Augmentation System (WAAS)

- Ground based correction signal

- Corrects GPS satellite orbit and clock drift plus signal delays caused by atmosphere

- If your GPS is WAAS enabled be sure to have it turned on in the set up

- This will give an even more accurate location
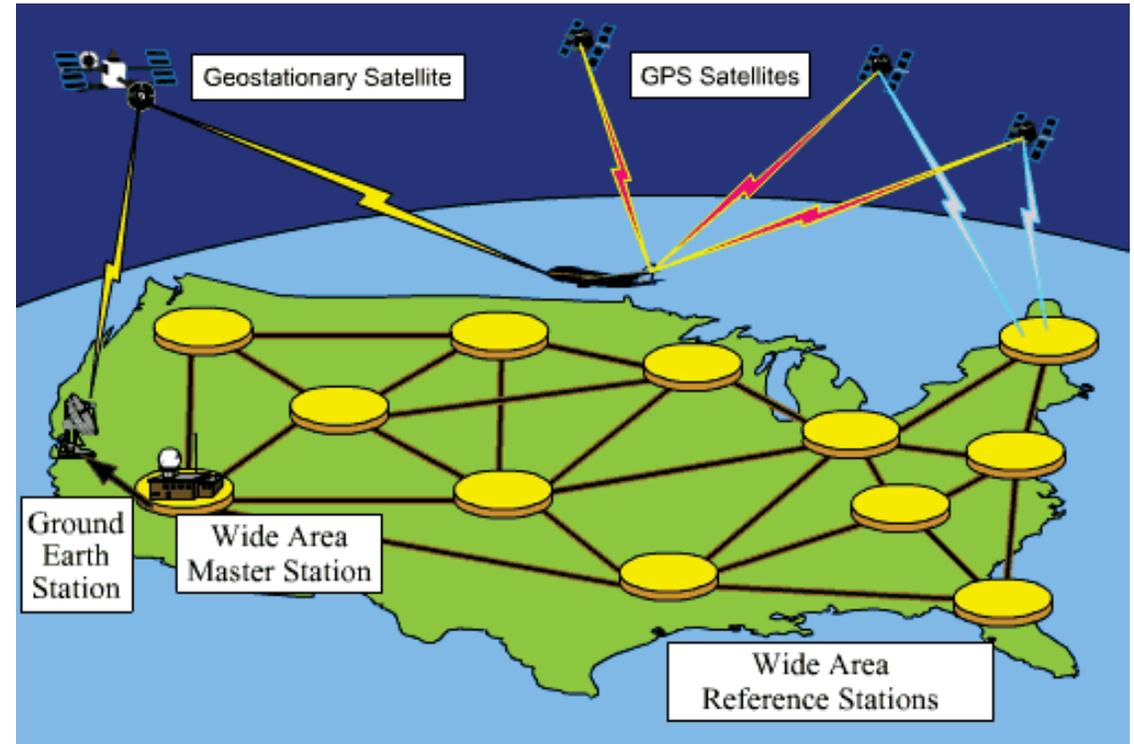
# Global Positioning System (GPS) Cautions and Considerations

■ Cautions when using GPS mapping tool:

– *Satellite geometry*

– *Clear overhead view*

– *Multipath*

– *Atmospheric effects*

# Global Positioning System (GPS) Cautions and Considerations

■ Cold start up is when a unit is started for the first time in a new area or after a long time of no use. It will take longer for the unit to locate & identify satellites. Thus longer time to usable data.

■ This can be overcome by turning on the GPS receiver prior to use. This way it can get your general location and be usable in a shorter time frame. This is termed a warm start up.

■ If you are going to be using a GPS Unit, turn it on as soon as you can to allow for proper set up.

# Selective Availability (S/A)

- Department of Defense placed "dithered" satellite time message to prevent GPS from being used against us. This made the coordinates only accurate to a set area which the military could change as they needed. In May 2000, Pentagon set S/A to Zero meters error. S/A can be reactivated, by the military, at any time.

# Global Positioning System (GPS) Cautions and Considerations

■ Considerations:
- *Using common datums*
- *Aligning coordinate systems & how to translate waypoints*
- *Allowing almanac downloads*
- *Moving the GPS while turned off*
- *Not allowing enough time for triangulation*
- *Deleting data from previous operational periods*

# Minimizing User Errors

- Keep GPS away from your body with antenna directed skyward for best reception

- Always verify your GPS is set to correct DATUM and coordinate system( This is the biggest cause of errors)

- Always verify you are receiving enough signals before making critical navigational decisions(at least three signals)

# Unit 2.2 – GPS Handheld Units

# GPS Use

- Compatible GPS Units

- Key functions and routines

- Basic features

- Proper initial setup
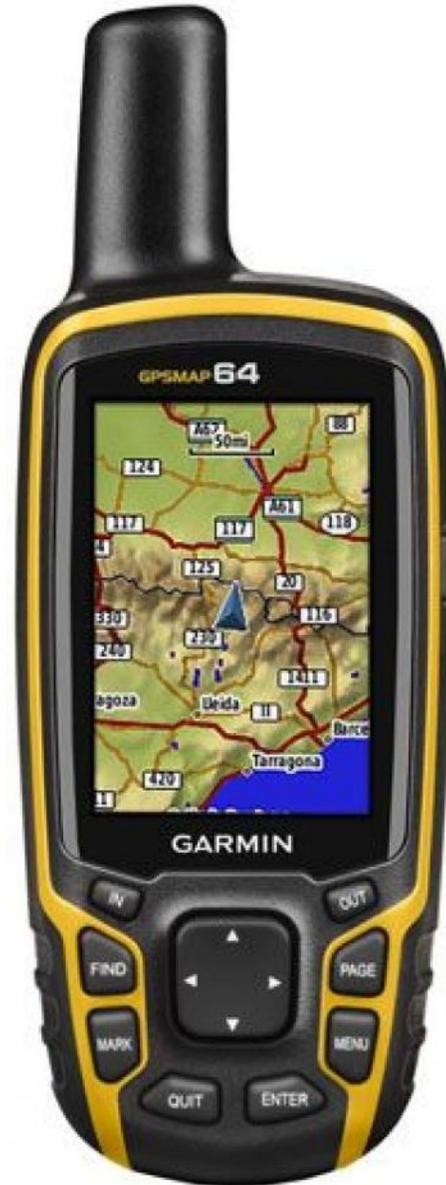
# Only Select GPS Handhelds are currently compatible with the FEMA System.

■ Most Common Models include:

– *Garmin 60 Series*

– *Garmin 62 Series*

– *Garmin 64 Series*

■ *64 Series Is Currently used by local Jurisdictions!*

■ Not as Common but still compatible models include:

– *Astro 320*

– *Dakota 10*

– *Dakota 20*

– *eTrex 20*

– *Rino 655t*

# Garmin GPS 60 / 62 Series Key layout



POWER Key

IN/OUT Zoom Keys

FIND/MOB Key

MARK Key

QUIT Key

ROCKER Key

PAGE/COMPASS Key

MENU Key

ENTER Key

# Garmin 64 Series Key Layout



- Only main difference in layout of Keys is the location of Power Button!

- POWER BUTTON LOCATION

# Power Considerations

- Two AA batteries, USB cable, 12v DC adapter

- Battery Life: 18 hours

- Alkaline batteries lose capacity in low temps

- Lithium batteries in below freezing temperatures

- Extensive use of backlighting, electronic compass, and audible tones significantly reduce battery life

# Power On the GPS

- Press and Hold Power Key

- Title Screen will appear. Generally has the unit ID listed

- Once powered on First Screen will be Satellite Status Page

# Satellite Status Page
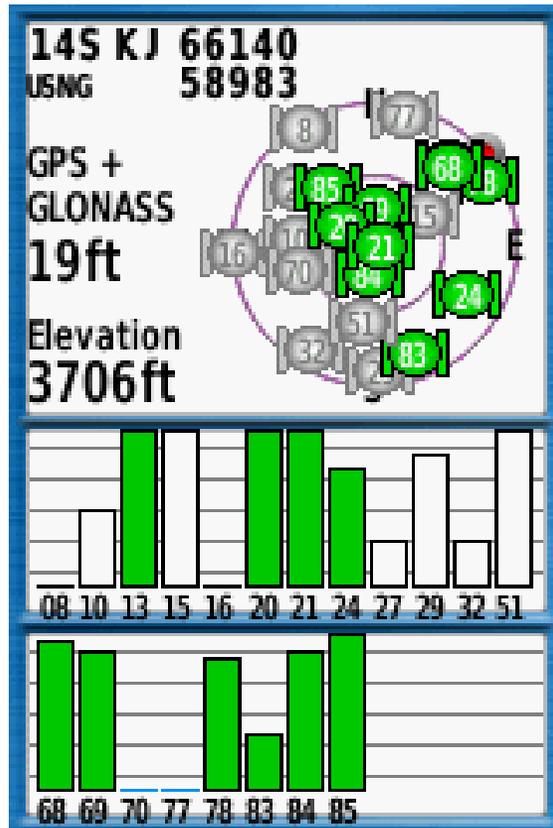


- Outer ring is horizon
- Inner ring is 45 degrees from horizon
- Bar Graph at bottom is individual Satellite signal strength
- Small Silver Circle with Red Dot is your travel direction

# Main Pages

Cycle through pages wit the Page or Quit button

This is the Standard GPS Page Layout
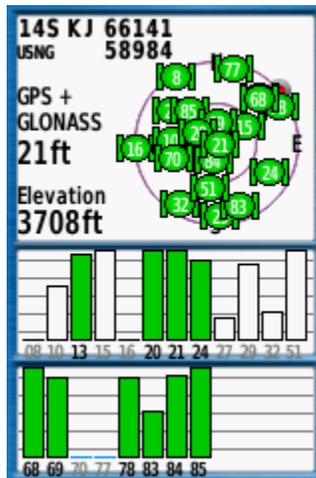
| Satellite | Map | Tracks | Compass | Trip |
|-----------|-----|--------|---------|------|
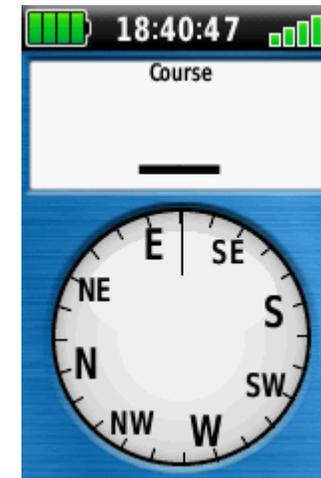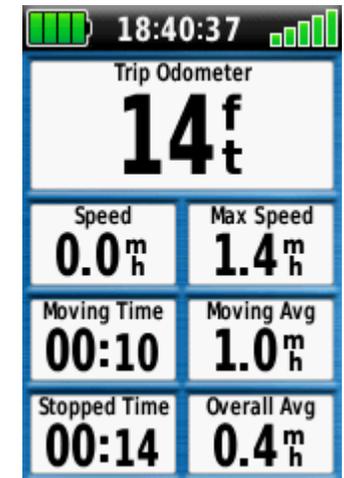
# Main Menu



- Pressing the Menu Button twice from any page will bring you to the main menu

- Menu is also included in the main layout screens

# Main Menu (Continued)

- Setup Menu is underneath main menu

- This is only to be used to verify setup is correct.

- <u>DO NOT CHANGE ANY SETTINGS PROGRAMMED BY THE PLANS TEAM</u>

# Setup

**Setup Menu**



**System Page**



**Position Format**



**Page Sequence**

# Mark Waypoints

- To mark a Waypoint click the Mark Button on GPS Unit.

- Verify the correct symbol is selected

- Check waypoint number

# Unit 2.3 – Search Team Data Collection

# What are we recording?

Geo-located waypoints shall be entered every time a search team encounters:

- Damaged structures

- Failed structures

- Destroyed structures

- Undamaged structures

- Possible victims detected

- Confirmed Victims

- Human remains located

- Persons rescued

# What are we recording?
## continued

- Persons assisted
- Persons evacuated
- Persons needing Follow-up*
- Persons sheltering in place
- Animal problems
- Significant Hazardous materials incidents
- Fires
- Major transportation route disruptions (e.g. bridges or roads blocked or out)
- Representative waypoints showing edge of current water inundation shall be marked
- Targeted Searches
- Four "spare" mission specific icons are available for incident specific data, if required.

# Custom Waypoints



| | | | | | |
|---|---|---|---|---|---|
| 1 - Structure No Damage | 2 - Structure Damaged | 3 - Structure Failed | 4 - Structure Destroyed | 5 – Assisted | 6 - Evacuated |
| 7 – Rescued | 8 - Follow-Up Form | 9 - Victim Detected | 10 - Confirmed Victim | 11 - Human Remains | 12 – Human Remains Removed |
| 13 - Shelter in Place | 14 – Animal Issue | 15 – Fire Incident | 16 - Hazardous Material Incident | 17 – Targeted Search | 18 - Flood/Water Level |
| 19 - Helicopter Landing Site | 20 – Route Blocked | 21 - Extra 23 | 22 - Extra 24 | 23 - Extra 23 | 24 - Extra 24 |

# What else?

- In addition, waypoints should be used to track AHJ/Mission specific data.



| | | | | | |
|---|---|---|---|---|---|
| 1 - Structure No Damage | 2 - Structure Damaged | 3 - Structure Failed | 4 - Structure Destroyed | 5 – Assisted | 6 - Evacuated |
| 7 – Rescued | 8 - Follow-Up Form | 9 - Victim Detected | 10 - Confirmed Victim | 11 - Human Remains | 12 – Human Remains Removed |
| 13 - Shelter in Place | 14 – Animal Issue | 15 – Fire Incident | 16 - Hazardous Material Incident | 17 – Targeted Search | 18 - Flood/Water Level |
| 19 - Helicopter Landing Site | 20 – Route Blocked | 21 - Extra 23 | 22 - Extra 24 | 23 - Extra 23 | 24 - Extra 24 |

# Follow up form documentation

- Select the "Follow up" icon

- Name the waypoint.  This is typically a number

- Complete the necessary information in the form

# Waypoints vs. paper documentation:

- Note: it may be necessary to enter multiple icons for each waypoint

  - *i.e., undamaged structure, shelter in place, animal issue*

- Search Team leader's ICS 214 is still needed and applicable.

- Supplementary forms (e.g. US&R Follow-up Form) are recommended for:

  - *Documenting searches on multi-story and multi-occupancy buildings (Original for TF Records, Copy for IST, Copy for AHJ).*

# Common Operating Picture

# Once back at the BoO, Plans will:

Immediately upon return from search assignments (or at intervals designated), the task force shall download and process the GPS data to create a .gpx file.

This allows the Plans team to build an image and overlay it into Google Earth!
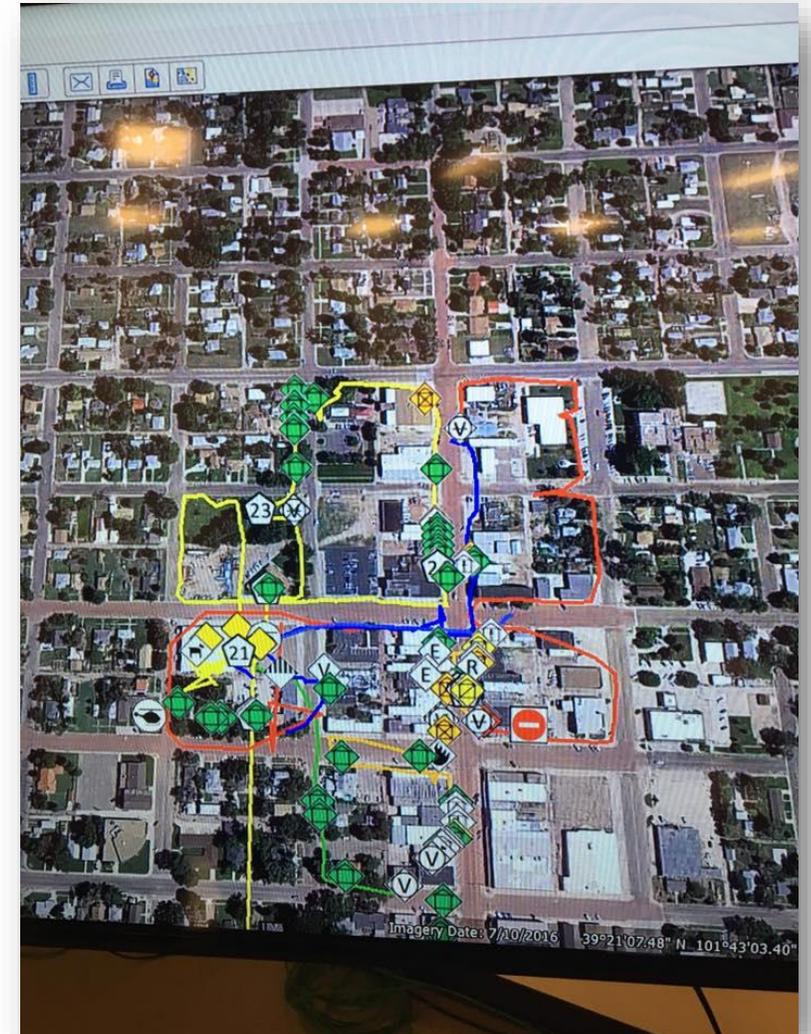
# What can we see on Google Earth with overlay?

Impact Area / Incident Location
- *Trajectory (current & future status)*
- *Planned searches with grid of incident*
- *Resources at risk (critical infrastructure such as nuclear power plants, hospitals, etc.)*
- *Geographic work areas (Division and branch boundaries)*
- *ICS Facility Locations*
- *Jurisdictional boundaries (city, county/parish, state)*
- *Safety or security zones*
- *Drop points*
- *Date, time, initials and agency of map origin*
- *Annotations including US National Grid and Latitude & Longitude*
- *Roads (with names as scale allows)*
- *Map scale*
- *Water inundation boundaries (in flooded areas)*

# Summary

- GPS cautions & considerations

- GPS use in US&R operations

- How to use the Garmin GPS

- GPS unit buttons / function

- GPS waypoints

- Data Collection criteria

# Module 3

## Search strategies and definitions

# Learning Objectives

By the End of this module the student will be able to:

- Understand Search modes

- Define FEMA Search Marking Systems

- Discuss the Various methods of marking Search Data

- Complete a search marking sticker in compliance with FEMA's marking system.

# Unit 3.1 – Search modes

# SEARCH PHASES

- **PHASE ONE –** Assessment of the disaster area (Recon).
- **PHASE TWO –** Removal of surface victims (Primary).
- **PHASE THREE –** Search and rescue of victims from accessible voids (Primary and/or Secondary).
- **PHASE FOUR –** Selected debris removal to locate and rescue victims (Secondary).
- **PHASE FIVE –** General debris removal, usually conducted after all known victims have been removed (Secondary).

# Search Types
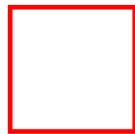
| | |
|---|---|
| <span style="color:red">□</span> | **1 Recon** Preliminary survey (not search), assessing structures, safety, and HAZMAT |
| <span style="color:orange">▨</span> | **2 Rapid/Hasty Search** Quick surface search of areas likely to contain victims, focusing on detection |
| <span style="color:yellow">▨</span> | **3 Primary Search** Minimum 360 of every structure may include a quick interior search per the ROE |

- Recon – Preliminary Survey (NOT A SEARCH) Assessing Structures, Safety and Hazmat.

- Rapid / Hasty – Quick Search of Areas likely to contain victims.

- Primary Search – Minimum 360 of every structure may include a quick interior search.

# Search Types
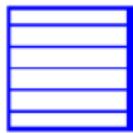


4 **Secondary Search (Low)** Systematic search of the interior and exterior of every structure

5 **Secondary Search (High)** Exhaustive de-layering, complete search of every void space in an affected area

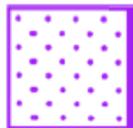6 **Targeted Search** Priority search at a specific location requiring immediate attention and amplified effort

- ■ Secondary Search (Low) – Systematic search of the interior and exterior of every structure

- ■ Secondary Search (High) – Complete De-Layering Style search of EVERY void space in an affected area

- ■ Targeted Search – Priority Search at a specific location

# Recon

- Recon is a State of Mind
  - *Do the Most good for the most people.*
  - *Give you your first real picture of the entire event*
  - *Quick and dirty*
  - *Information from recon will shape the response effort*

- ***Recon is triage........  NOT search or rescue!***

# Rapid / Hasty Search

- Fast Paced search to locate and remove lightly trapped victims.
  - *Victims moved to collection points*
- Mark location of victims unable to be removed and call for resources while search continues.
- Documentation is Critical

# Primary Search

- Quick search of Structures likely to Contain victims. <u>LOOKING IN... NOT GOING IN!</u>

- May include Physical, Canine and Technical.

- May perform actions to correct immediate life threatening injuries.

- Survivor and human remains locations marked with standard system per ROE.

# Secondary Searches

- Complete systematic search of every structure

- This may involve EXTENSIVE debris removal

- Low coverage is searching the void spaces

- High coverage is de-layering down to ground level

- Remains and survivors marked with standard systems

# Targeted Search

- Specific Location Search

- Usually Assigned by the AHJ or IC with local knowledge

- Pre Identified Facilities

- Search Phases will be done completely at location before moving on to next.

# Search Phases

| | | |
|---|---|---|
| I | **Recon** | Intelligence gathering |
| II | **Hasty** | Surface survivors removed and evacuated |
| III | **Primary** | Searching accessible voids that may contain survivors |
| IV | **Secondary** | Selected debris removal. Extended operations required to extricate survivors |
| V | **Search completed** | General debris removal |

■ Understanding and utilizing the search strategies and standard definitions is necessary to accomplish the assigned search and rescue objectives

# Unit 3.2 – Search Marking Systems

# General Background

■ During the 2005 Hurricane season 20,000+ Structures were searched

■ Large amounts of Spray paint were used with varying visual effects

■ Inconsistent markings were found or missed due to multiple styles from multiple agencies

■ Multiple searches were done on structures due to inaccurate search info

■ Search operations were redundant and that had a negative effect on teams

# Inconsistent Markings

# Consistency

- US&R Program directive established standards on Search markings in 2005

- To eliminate confusion while searching & marking, materials used & methods implemented should be coordinated between FEMA IST & local AHJ



U.S. Department of Homeland Security
Washington, D.C. 20472

**FEMA**

### US&R PROGRAM DIRECTIVE – 2013-014

August 20, 2013

FOR:    National Urban Search & Rescue Response System
        Task Force Representatives

FROM:   Fred Endrikat, Chief
        Urban Search and Rescue Branch

SUBJECT:   US&R Program Directive 2013-014 – US&R Marking System (Supersedes
           US&R PDs: 2005-009, 2005-010 and 2006-018)

In order to expedite and reduce redundant search operations in large area disasters, there is a need to provide a rapid and clear search marking for task forces and other agencies. The National Urban Search and Rescue (US&R) Response System's (the System) Operations Group held their 2011 annual meeting October 25- 27, 2011 in Denver, CO. During the meeting the Search Work Group Chair presented a revision to Recommendation 06-01 – *US&R Search Assessment Marking System*. The revision added "Primary", "No Entry" and "Secondary" at the bottom of the additional information box of the search sticker approved for use by the System.

This serves as a reminder to note the search type per the original recommendations:

- To increase consistency with search sticker marking, the word describing the type search completed (i.e., Primary, Secondary) should be written inside the box marked "additional information." If no entry is made into the structure, the words "No Entry" should be written inside the box.
- The incomplete search marking is only used if the level of search in the IAP/TAP cannot be completed for any reason.

In addition to the sticker change it was recommended to review and consolidate all US&R Markings Program Directives (PD) into a single PD. No changes were made to other US&R Marking standards.

**REQUIRED ACTIONS**

This US&R Program Directive supersedes PDs: 2005-009 – *Search Assessment Marking System;* 2005-010 – *US&R Victim Marking System;* and 2006-018 – *US&R Search Marking Labels.*

The revised search sticker is attached. Previously printed search stickers are valid, there is no requirement to print new stickers until existing stock is depleted.

# Where do We Start?

- Standardization!

- The Street side is ALWAYS the Alpha side

- Markings are generally made immediately adjacent to entry point that has been identified as posing lowest amount of risk
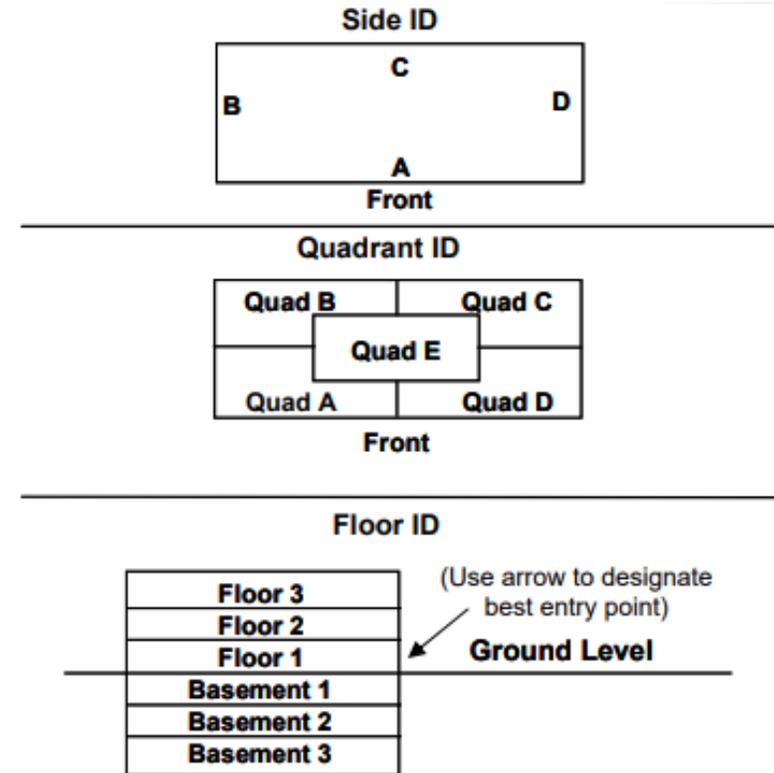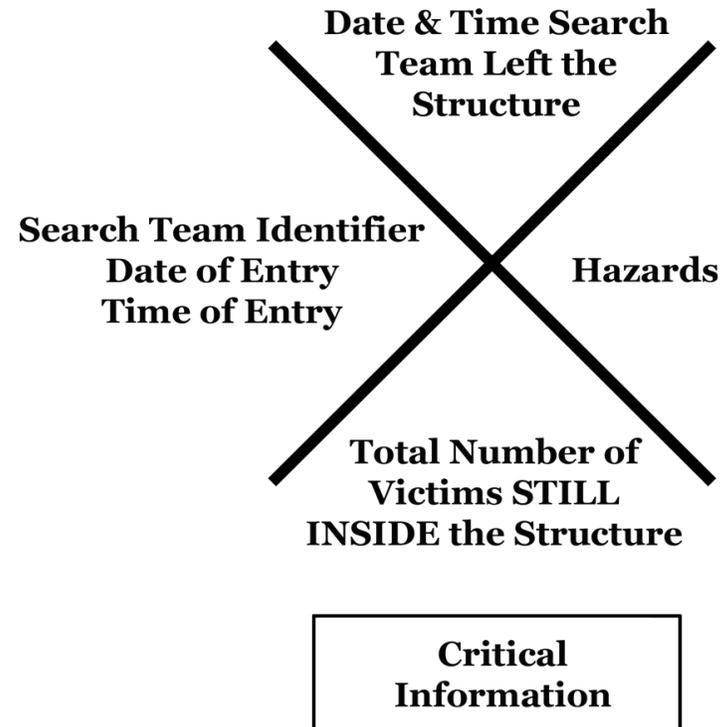
# Search Marking - Entering

■ Entering a structure:

– *Distinct marking at entrance*

– *2 foot slash made upon start of search*

– *Search team identifier,
date, & time written to
left of slash*

Search Team
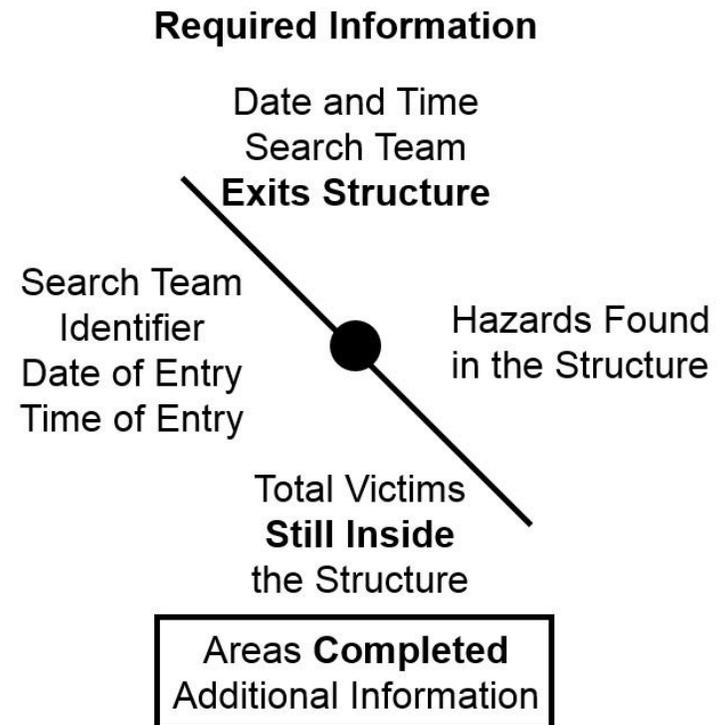Identifier
Date of Entry
Time of Entry
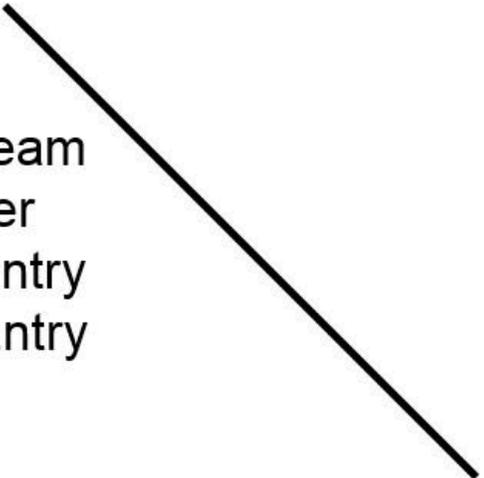
# Search Marking - Exiting

■ Exiting a structure (completed searches):

– *Completion of search:*

Add second slash to complete "X"

– *Top quadrant:*

Date & time team exited

– *Right quadrant:*

Hazards located

– *Bottom quadrant:*

Live (L) / deceased (D) victims inside structure

No victims inside = 0

– *Critical information:*

Box under marking



**Date & Time Search Team Left the Structure**

**Search Team Identifier**
**Date of Entry**
**Time of Entry**

**Hazards**

**Total Number of Victims STILL INSIDE the Structure**

**Critical Information**

# Search Marking - Incomplete

■ Exiting a structure (incomplete searches):

– *Large dot at midpoint of slash*

– *Completed quadrant information*

– *Incomplete search marking only used if level of search in IAP cannot be completed*

– *Cross slash not applied*

**Required Information**

Date and Time
Search Team
**Exits Structure**

Search Team
Identifier
Date of Entry
Time of Entry

Hazards Found
in the Structure

Total Victims
**Still Inside**
the Structure

Areas **Completed**
Additional Information

# Interior Search Markings

- Same System just not as Detailed

- Made on the door of every room

Made Upon Entering

Made Upon Exiting

Identify Any Hazards
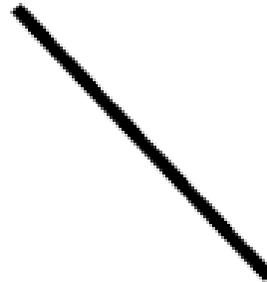
Identify Any Victims
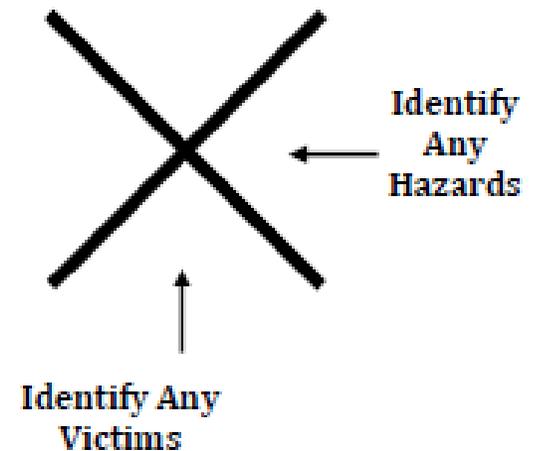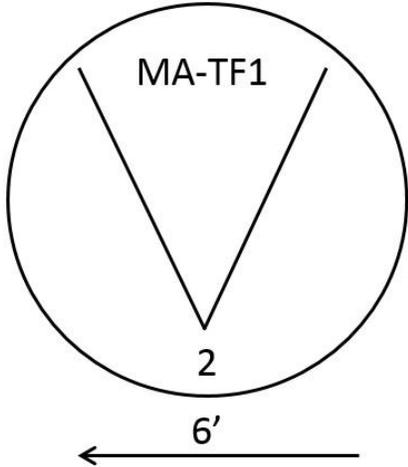
# Victim Marking System

- Placed near each victim to identify person's specific location & condition

- If no victims found, area marked with "0"

- Made by search team when known / potential victim is located & not immediately removed

- Victim location marking symbols & number of victims, if known, keep on developing site map during search of structure / area
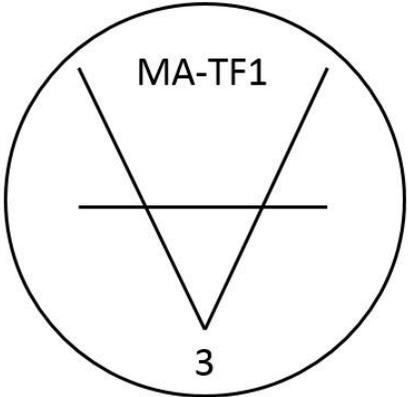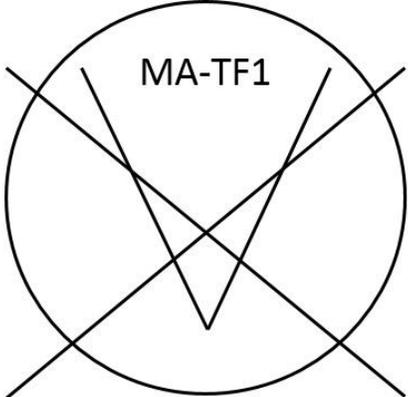
# Victim Marking System
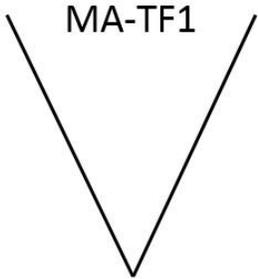


| | | | |
|---|---|---|---|
| MA-TF1 | MA-TF1 | MA-TF1 | MA-TF1 |
| | 2 | 3 | |
| | ← 6' | | |
| Potential live victim and team identifier | Victim confirmed and alive; if more than one victim, place number below V. Arrow points towards victim with distance. | Victim confirmed and deceased; if more than one victim, place number below V. | Victim extricated |

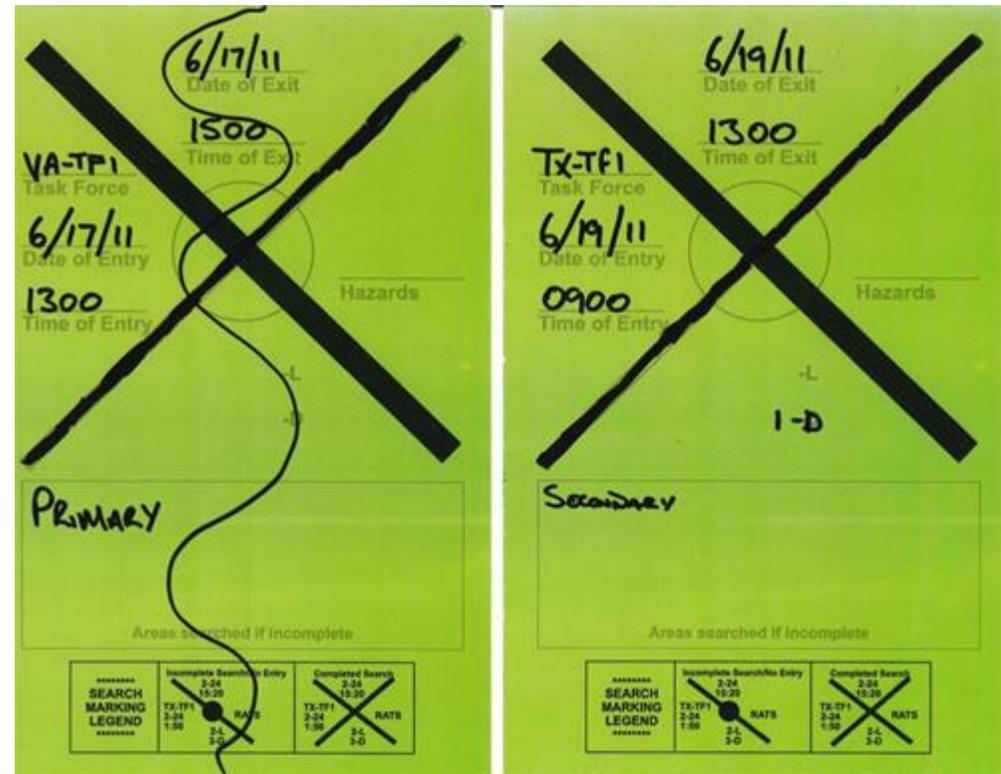# Unit 3.3 – Search Sticker and Marking Methods

# How Do we Mark?



- Fluorescent-colored paint sticks
- lumber crayons
- aerosol spray paint used

# Search Sticker

- Provides users with information to apply **CONSISTENT** FEMA search markings

- Doesn't permanently damage the structure!

- Keeps already distraught victims from becoming more upset upon return home!

# Summary

- Search and Rescue responders must have a uniform standardized system for marking buildings and victims to indicate the status of searched structures.

- Common search marking systems reduce redundancy

- Marking methods are based on authority having jurisdiction

# Learning Activity 3.1

■ Practice Filling out search stickers based on the following Scenarios!

# Scenario 1

At 1400 Hours on May 5th 2018 your Squad made entry into a 2 story home to conduct a primary search.

Search was completed at 1430 hours with no victims found but electrical was still energized to the home.

# Scenario 2

You Squad has been tasked with a Primary search of a Structure on the Corner of Willow and 7<sup>th</sup>.

Your Squad makes entry at 1656 hours on July 20 2017 and finds 2 victims who insist on Sheltering in Place.

No hazards are found and you team exits at 1732.

# Scenario 3

You Squad makes entry into a home at 0340 on December 12, 2017. Upon Entry your team finds 3 deceased victims in the front entryway.

As you make your way further into the home you hear a loud whistling noise and discover a strong smell of natural gas.

Your Squad boss orders an immediate evacuation and your team exits the structure at 0356.

# Scenario 4

At 0915 on April 04, 2017 your squad make entry into a 5 story small apartment complex.

The First story is flooded and 4 deceased victims are found. 2 live victims are found on the 2nd story, The 3rd and 4th floors are clear and 3 additional live victims are found on the 5th floor.

All Victims are evacuated to a shelter and you exit the structure at 1052.

# Module 4

# Search Team Forms

# Learning Objectives

By the End of this module the student will be able to:

■ Prepare an ICS 214 Form

■ Make use of a Search Team Follow up form

# Unit 4.1 – ICS 214

# What is the 214?

- The Activity Log (ICS 214) records details of notable activities at any ICS level, including single resources, equipment, Task Forces, etc. These logs provide basic incident activity documentation, and a reference for any after action report.

- Completed ICS 214s are submitted to supervisors, who forward them to the Documentation Unit. All completed original forms must be given to the Documentation Unit, which maintains a file of all ICS 214s.

- It is recommended that individuals retain a copy for their own records.



TASK FORCE ACTIVITY LOG (TF 214)

# ICS 214 Continued…

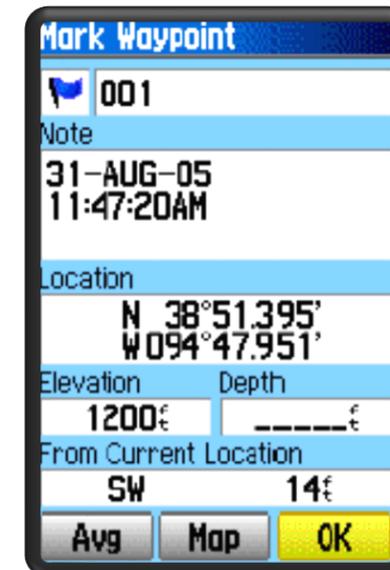| Block Number | Block Title | Instructions |
|---|---|---|
| 1 | **Incident Name** | Enter the name assigned to the incident. |
| 2 | **Operational Period**<br>• Date and Time From<br>• Date and Time To | Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies. |
| 3 | **Name** | Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team). |
| 4 | **ICS Position** | Enter the name and ICS position of the individual in charge of the Unit. |
| 5 | **Home Agency** (and Unit) | Enter the home agency of the individual completing the ICS 214. Enter a unit designator if utilized by the jurisdiction or discipline. |
| 6 | **Resources Assigned** | Enter the following information for resources assigned: |
|  | • Name | Use this section to enter the resource's name. For all individuals, use at least the first initial and last name. Cell phone number for the individual can be added as an option. |
|  | • ICS Position | Use this section to enter the resource's ICS position (e.g., Finance Section Chief). |
|  | • Home Agency (and Unit) | Use this section to enter the resource's home agency and/or unit (e.g., Des Moines Public Works Department, Water Management Unit). |
| 7 | **Activity Log**<br>• Date/Time<br>• Notable Activities | • Enter the time (24-hour clock) and briefly describe individual notable activities. Note the date as well if the operational period covers more than one day.<br>• Activities described may include notable occurrences or events such as task assignments, task completions, injuries, difficulties encountered, etc.<br>• This block can also be used to track personal work habits by adding columns such as "Action Required," "Delegated To," "Status," etc. |
| 8 | **Prepared by**<br>• Name<br>• Position/Title<br>• Signature<br>• Date/Time | Enter the name, ICS position/title, and signature of the person preparing the form. Enter date (month/day/year) and time prepared (24-hour clock). |

# Unit 4.2 – Follow Up Form

# Follow up form documentation

- Select the "Follow up" icon

- Name the waypoint. This is typically a number

- Complete the necessary information in the form

# FEMA Follow up Form

# What do we record?

- Multi Story Buildings

- Multi Occupancy Buildings

- Any Additional information regarding the residents from that location that will not be clarified from the custom waypoints or on an IS 214

# Summary

- Search and Rescue responders must have a working knowledge of how to utilize the ICS 214 form.

- The FEMA follow up form is used to mark any additional information from a location

This completes the general training requirement for GPS Awareness

Click the box below to take a quiz and receive a Certificate of Completion.

*FINAL QUIZ*