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**EVENT PLANNING
TABLE TOP**

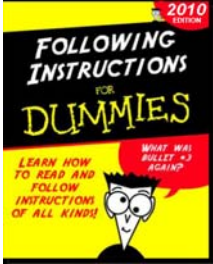


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HOUSEKEEPING

- Introductions
- Pen/pencil & paper
- Cell phones
- Side conversations
- Questions
- Breaks
- Restrooms
- In case of emergency



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LEARNING OBJECTIVES

- At the end of this course, students will be able to:
 - Describe the different types of events
 - Create measurable exercise objectives
 - Describe the planning process and what is different based on the event type
 - Describe how to deal with problems that might be encountered during the planning process
 - Properly complete an ICS-202 Incident Objectives form
 - Explain how to use check lists as a planning aid
 - Create an event plan for a functional area of a drill or public service event
 - Create an After Action Report (AAR)

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AGENDA

- Types of Planning Situations
- Event Specific Considerations
- The Planning Process
- ICS-202 Incident Objectives - Table Top
- After Action Report
- Problems and Pitfalls
- Common Planning Considerations
- Checklist as a Planning Aid
- Table Top Exercise



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WE DEAL WITH MANY DIFFERENT KINDS OF SITUATIONS, INCIDENTS, EXERCISES, DRILLS, ACTIVATIONS, ETC.

FOR THE PURPOSES OF THIS PRESENTATION WE WILL USE THE TERM “EXERCISE” OR “EVENT” INTERCHANGEABLY FOR ALL OF THESE PLANNING SITUATIONS.

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TYPES OF PLANNING SITUATIONS

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DRILLS AND TRAINING EVENTS

- Multi-agency interoperability full scale exercise
- County-Wide Comms Drill – full scale exercise
- CERT support - full scale exercise
- Fox Hunts – functional and full scale exercises
- Interoperability functional exercise
- County Quarterly Drill – functional exercise
- Hospital exercises
- Table top exercises
- Workshops

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DRILLS AND TRAINING EVENTS

- Usually fixed operational period
- Can have long lead time for planning
- Interact with City or County governmental agencies or entities
- Can involve the entire event communications with multi-combinations of communications methods and resources or just a few of these
 - Net Control
 - Field Operations, Rovers, Shadows
 - Packet Operations
 - Shadowing Operations
 - Mesh Networks

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PUBLIC SERVICE EVENTS

- Outdoor venues – Sporting Events, Concerts, Rodeos
- Marathons, Bicycle rides/races, Walks
- Sporting events
- Festival of Lights Parade , Pet Parades, July 4th Parade
- Public Fireworks Displays, Golf Tournaments
- Art and Wine Festivals, Mardi Gras
- Commencement ceremonies
- Preparedness Fairs



DEGREE OF COMPLEXITY

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PUBLIC SERVICE EVENTS

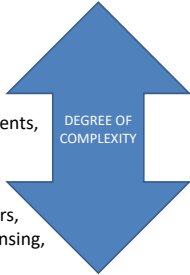
- Usually fixed operational period
- Can have a long lead time in planning
- Interact with City or County governmental agencies or entities
 - PD, CERT, Fire, Red Cross, Salvation Army, Public and Private Partners
- Can be a small area of responsibility or encompass overall event communications
- Attending the lead organization’s planning meetings
- Multiple communications systems or pathways
 - Organizers, Public Works, PD, EMS, Public Health
- Can involve multiple types of communications devices
 - Amateur Radio (voice and/or Packet), Business radios, Phones – Sat and Landline, VOIP, GPS Tracking devices, Encrypted and Trunked Radios, ...



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ACTIVATIONS/INCIDENTS

- Infrastructure Failures
 - Technology, Utilities, Transportation
- Evacuations
 - Fire, Terrorist Threats, Industrial Incidents, Flooding, Earthquakes
- Response and Recovery
 - Warming and Cooling centers, Shelters, Points of Distribution, Points of Dispensing, Epidemics




DEGREE OF COMPLEXITY

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ACTIVATIONS/INCIDENTS


- Have no fixed operational period
- Little to no advanced knowledge
- May need to plan for several operational periods – each having a different set of requirements, plans, and staffing requirements
 - Event + 1 hour
 - 1 - 12 hours
 - 12-72 hours
 - 72+ hours
- Involve multiple Public Safety Disciplines



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ACTIVATIONS/INCIDENTS

- May use any and all available volunteer resources for communications
- Can involve mixing volunteer communication resource types
- May involve the use of non-hams ACS (Auxiliary Communications Service volunteers)
- May involve the use of SUVs (spontaneous unaffiliated volunteers)



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PLANNING

“Why should I develop a plan? It’s just one more thing to go wrong?”


“If you fail to plan, you are planning to fail”

- What is a plan?
 - A plan defines the means to achieve a set of goals and objectives.
- What is planning?
 - Planning is the process by which a plan is formulated and documented
- How detailed does a plan need to be?
 - Must contain sufficient detail that the staff knows what must be done but still follow the KISS principle

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THE PLANNING PROCESS

- Establish Goals and Objectives
- Form an Exercise Planning Team
- Create/Document plans
- Meet and review plans
- Modify Plans – meet and review
- Conduct Exercise
- Conduct Hot Wash (Debrief)
- Produce After Action Report (AAR)
- Implement recommended improvements



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ESTABLISH GOALS & OBJECTIVES

- The goals and objectives of an exercise should be clearly stated in terms of what you are trying to achieve.
 - Planners should create objectives that are **SMART***
 - S**imple/Specific Don't try to cover too broad an area
 - M**easurable Ensure evaluators can determine whether the objective was achieved
 - A**ttainable The objective should not be too difficult to achieve
 - R**ealistic The objective should present a realistic expectation of the situation
 - T**ask-oriented/Time-bound The objective should focus on a behavior or procedure
 - You should limit the number of exercise objectives to enable timely exercise conduct, facilitate reasonable scenario design, and support successful completion of exercise goals.

* Ref. FEMA IS120A, *An Introduction to Exercises Course*

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MEASURABLE OBJECTIVES

- **Difference between Goals and Objectives**
 - Goals relate to your aspirations, where do you want to be.
 - Objectives are your battle-plan, how do you get there.
 - Set as many objectives as you need for success.

GOALS	OBJECTIVES
Broad statements	Detailed statements
Abstract	Specific and concrete
Intangible	Tangible
Difficult to measure	Measurable

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DOCUMENT GOALS & OBJECTIVES

- Define the objectives, problem, outcome, task to be addressed
- Three key ISC forms are used in the planning process
 - ICS-202 – Incident Objectives
 - ICS-201 – Incident Briefing
 - ICS-205 – Communications Plan

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ISC-202 INCIDENT OBJECTIVES

ICS 202 INCIDENT OBJECTIVES SCCo RACES	1. INCIDENT NAME SCCo County-wide RACES/CERT Combined Exercise	2. DATE 10/29/16	3. TIME 22:50
4. OPERATIONAL PERIOD 29-Oct-2016 06:00 – to - 29-Oct-2016 18:00		5. MISSION NUMBER XSC –16-09T	
6. GENERAL CONTROL OBJECTIVE FOR THE INCIDENT (include alternatives)			
Primary Objective: <ul style="list-style-type: none"> • Practice mobilization, deployment and demobilization of amateur radio operations. Work with Santa Clara County CERT teams during a CERT drill to practice providing communications support to field operations. Develop experience with operating according to the standard procedures required for emergency operations. Secondary Objectives: <ul style="list-style-type: none"> • Demonstrate communications capabilities of RACES to support field operations • Provide an environment conducive to non-MACs to aid in training newer operators • Ensure operational environment still allows for MAC evaluations • Distribute planning and operational responsibilities to provide opportunities to satisfy Type 1 MAC qualification requirements 			
7. WEATHER FORECAST FOR PERIOD Sunny. High of 80 degrees. Low of 60 degrees. Rain is possible but not likely.			

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ISC-202 INCIDENT OBJECTIVES

8. GENERAL SAFETY MESSAGE
The activity will take place at Moffett Field, a NASA facility. Careful attention must be paid to the Safety Briefing. It is expected that there will be 140 CERT participants during the drill so care in moving and setting up field equipment is needed. This drill is open to anyone with a County DSW registration. Permanent or Day Only registration available on site. All participants must follow SCCo documentation and performance standards, as well as local/state/federal laws and regulations. No open toed shoes. Long pants required. Bring sufficient hydration for the entire event.

9. ATTACHMENTS (mark if attached)

<input type="checkbox"/> ICS 204 Assignment List (comms)	<input type="checkbox"/> ICS 201 Incident Briefing (RACES)
<input type="checkbox"/> ICS 211A Check In List	<input type="checkbox"/> ICS 205 RACES Radio Communications Plan
<input type="checkbox"/> ICS 214 Unit Log	<input checked="" type="checkbox"/> Other: 2016 County-Wide CERT Exercise Summary

10. ADDITIONAL REMARKS
Consult detailed plans for: Field Operations; Net Control Operations; Packet Operations; and Staging provided by the planning heads for each of those areas.

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ISC-202 INCIDENT OBJECTIVES

Are these SMART Objectives?

- Send all ICS-213 message forms with 100% accuracy within 3 minutes or less per form.
- Complete all required forms with 96% accuracy by end of shift.
- Meet communication needs of served agency during this operational period to satisfaction of the Incident Commander.
- Ensure participants are tracked at all times and no one is lost or missing at the end of the operational period.
- Net control will conduct H&W checks of all staff every 15 minutes and promptly notify IC of any missing persons.
- Provide all first time participants with 30 minutes of Packet experience with a mentor sending and receiving 213 forms.
- Notify Medical staff of all aid requests within 2 minutes of receipt.

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TABLE TOP GROUP ACTIVITY

- Develop and document Incident Objectives for the following Event.

GOAL:

Provide communications support for the Mockingbird Heights Mummy Race which takes place from 2000 to 2400 on Halloween. Ensure all participants are safe and tracked, request any necessary medical aid when needed, provide race officials with situational awareness.

There are 4 checkpoints, a start and finish line, two medical locations, and 7 key race officials.

- Determine who the IC/Planning Leader is, they will present your teams objectives to the rest of the class. (It is suggested it should be someone with experience working events of various types).
- Remember you're only completing the ICS-202 Incident Objectives form at this point, not planning the entire event.
- Your finished product will be an ICS-202.

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GROUP BREAKOUT DISCUSSION

- What are your objectives? Are they SMART?
- What did you note for Safety?
- Other thoughts/comments?



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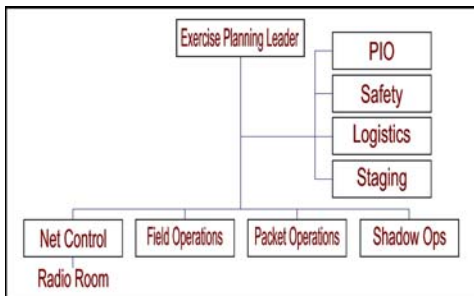
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FORM A PLANNING TEAM

- A planning team can consist of multiple team members in the case of a complex situation such as a major exercise activity, or it can be just one person in a less complex situation or activity.
 - In an activation for the first few hours it may be just you!
- The planning team may or may not be responsible for conducting the exercise.
- Assign task/roles for each area planner

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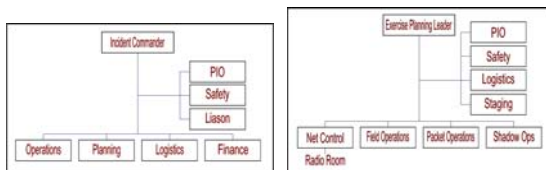
PLANNING TEAM ORG CHART



Can be modified to fit event needs

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PLANNING TEAM ORG CHART



ICS Org Chart


Drill Planning Org Chart

- ICS is used for real incidents
- We practice as we would operate for the real thing
- For exercises, Operations is broken out to distribute the workload and offer additional planning opportunities

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PLANNING CONSIDERATIONS

- Things to think about while developing the plan (not all inclusive)
 - Purpose of the workshop/table-top/functional exercise/full scale exercise/activation
 - Scenario
 - Goals and Objectives
 - Capabilities you can provide
 - Communications needs (voice, packet, shadows)
 - Staff
 - Logistics - Tools/Equipment
 - Safety Requirements/considerations
 - Participant Guidelines/Artificialities
 - Participant Instructions/Briefing
 - Simulation Guidelines
 - Hot Wash
 - After Action Report



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CREATE & DOCUMENT A PLAN

- Create a written plan for each aspect/functional area of the exercise
- Make sure your plan addresses the overall Goals and Objectives
- Review previous plans for similar events
- Review previous AARs for lessons learned
- Determine and document staffing and equipment needs
- All planners should coordinate their plan with other area planners

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PLANNING MEETINGS

- The planning meetings should include discussions on:
 - Assigned roles and responsibilities – Ensure the exercise team members understand their roles and responsibilities and are equipped to complete them successfully.
 - Documentation preparation – Write the documentation that is required for a successful exercise and define the participant packages.
 - Coordination of logistics – Make arrangements for the physical requirements of the exercise, location, field reservations, room setup, equipment, and personnel support (food, facilities, etc.)
 - Scheduling of several mid-term meetings (as needed) – to integrate and verify that compatibility exist between all the exercise components, timelines, and schedules.
 - Final Planning Meeting – final review of all plans and components of the entire exercise for all staff.

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CONDUCT THE EXERCISE

- Introduce the exercise to the assembled participants.
 - Set up at exercise site
 - Distribute participant materials and hold briefings
 - Conduct the exercise as planned according to your timeline
 - Mitigate (and document) any problems that occur during the exercise

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HOT WASH / EVALUATION

- An Exercise Debrief session is conducted that is open to players and evaluators to collect feedback and relevant data.
- At the conclusion of the exercise and exercise debrief, compile all pertinent notes, observations, and hard copy documentation. These notes should include the observations voiced by exercise participants during exercise play and the debrief discussion, as well as other observations.
- Have a meeting with Planning Staff to discuss the exercise
 - What worked
 - What needs changed/improved

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AFTER ACTION REPORT

- AAR includes
 - Description of exercise and its goals and objectives
 - Results achieved
 - Problems and concerns
 - Observations and feedback
 - Lessons learned
 - Improvement ideas for future events
 - Appendices & Attachments
 - Copies of all drill planning documents
 - Copies of all drill paperwork, forms, notes, etc.
 - A scenario discussion summary that includes any identified interoperable communications gaps and their respective recommendations that can be traced back to comments at the exercise.

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**CONTINUOUS IMPROVEMENT
(IMPROVEMENT PLANNING)**

- The continuous improvement process focuses on using the information generated by the exercise to implement improvements.
- The lessons, observations, and insights gleaned during the exercise must be translated into actions that result in capability improvements and documented in the AAR
- An After Action Conference should be held, in which the exercise planning team, exercise implementation team (if different), and others gather to review and refine the AAR.
- Make changes to training, procedures, documentation and equipment to address any issues noted.

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**CONSIDERATIONS
PROBLEMS AND PITFALLS
(AKA: THINGS TO KEEP IN MIND)**

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PROBLEMS AND PITFALLS DURING EXERCISES

- Confusion about when to ID, and how to use tactical and team calls.
- Decide in advance of the exercise what your tactical calls will be; they should be obvious, like "Xanadu EOC" or "Station 88"
- Not knowing how to program radio
- Not knowing how to exchange formal traffic
- Not using phonetics, or using non-ITU phonetics
- Not using "This is a drill" when passing emergency sounding traffic during a drill
- Not keeping a dedicated radio on the team's primary frequency
- Not advising repeater owner or control op before commandeering a repeater
- Staff didn't show up or is late
- Equipment malfunction
- Weather issues

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**PLANNING CONSIDERATIONS
COMMON TO MOST ACTIVITIES**

- Frequency Selection
- Fundamental Overload
- Intermod
- Antenna Placement
- Transmit Power Selection
- Physical Space, Equipment, Documentation and Staffing

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FREQUENCY SELECTION

- Repeater vs. Simplex
 - Use simplex for smaller events with people in close proximity
 - Use repeaters when wider coverage is needed
 - Repeater users can often use less power than they would if they used simplex
 - Repeater users don't work well if users are close to each other – desense
- Band Selection
 - Use 2m and 70cm where dependent on field volunteers
 - Just about any HT works on 2m; MACs have dual-band HTs
 - Use 1.25m for packet comms when possible
 - Many EOCs have 220 packet radios
 - Use different bands when close proximity is required
- Frequency Selection
 - Space across the band if possible; perform intermod calculations
 - Identify backup frequencies in advance
 - You're not the only one on the air: other individuals, events, jammers

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FUNDAMENTAL OVERLOAD

FOR MORE DETAIL, CONSULT THE ANTENNAS COURSE

- What is fundamental overload?
 - 1) The effect of a signal at the receiver input that is too strong for the receiver circuits to process properly
 - 2) Overload of a radio receiver due to the strength of a transmitted signal's fundamental or intended component
 - Ham radios w/ wide filters are more susceptible than commercial radios
 - Most cases of interference are due to fundamental overload
- Remedies:
 - Reduce the power of the transmitter
 - Separate the antennas (power is reduced by square of the distance)
 - Point antenna(s) in a different direction (if not omnidirectional)
 - Select a frequency that is as far away as possible from offending signal
 - Select a frequency in another band
 - Ferrite beads at antenna feedpoint
 - Ferrite beads on all cables entering and leaving the radio
 - Power cable, serial cable, coax ...

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INTERMODULATION DISTORTION

FOR MORE DETAIL, CONSULT THE ANTENNAS COURSE

- Commonly called "intermod" or "IMD"
- What is intermodulation distortion?
 - Two signals combining in such a way as to create intermodulation products – signals at various combinations of the two original frequencies
 - IMD can be generated inside a transmitter or receiver or externally by signals mixing together in non-linear junctions or connections (also called passive intermod or "PIM")
 - Loose connections, rusty bolts, dissimilar metals, etc.
 - May be a combination of fundamental and harmonic frequencies
- Remedies:
 - Avoid 3rd order intermod frequency relationships
 - $2 * f1 - f2$, $2 * f2 - f1$, $f1 + f2 - f3$, $f1 - f2 + f3$, ...
 - Reduce power
 - Use directional antennas

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ANTENNA PLACEMENT


FOR MORE DETAIL, CONSULT THE ANTENNAS COURSE



Vertical Dipole


- Reduce interference with proper antenna placement
- Typical vertical antenna pattern
 - Most energy is directed horizontally
 - Very little energy is directed vertically
- Vertical separation is best for confined areas
 - i.e. collinear, 10-20 ft vertical separation; with no horizontal offset
 - Combine vertical and horizontal separation when necessary
- Example (vertical 1/2 wave dipole):
 - 10 ft vertical separation is approx. = 50 ft horizontal (36 dB)
 - 20 ft vertical separation is approx. = 225 ft horizontal (48 dB)
 - Source: <http://www.repeater-builder.com/antenna/separation.html>
- If possible, locate different net controls at different places
 - Alleviates constraints on frequency selection, antenna placement
 - Resource Net is very flexible – three repeaters to choose from

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TRANSMIT POWER SELECTION 

- 10-50 watts will de-sense anything nearby
- If using repeaters
 - Minimize local de-sense by minimizing power
 - Repeaters usually have very good “ears”; can hear you with less power
- If using simplex
 - De-sense isn’t as much a problem on the same channel
 - Could still cause a problem on adjacent channels
- Use the minimum power required
- Reducing power can help with both fundamental overload and intermodulation distortion

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PHYSICAL SPACE, EQUIPMENT, DOCUMENTATION, STAFFING 

- Tables, chairs, forms control, paper weights
- Shelter from: rain, wind, noise, sun light, crowds
- Lighting if working after dark
- What quantity and type of message traffic is expected
- Schedule of operators
 - Pre-scheduled or On-demand
 - Limitations on number of participants at any one time
- Briefing documents for participants
 - Purpose/objectives of exercise
 - Schedule
 - How paperwork will be handled
 - Any procedures specific to this event or served agency
 - ICS Forms (205, 211, 213, 214, 309) - people will forget to bring


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CHECKLISTS AS A PLANNING AID

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TYPES OF CHECKLISTS

- Overall event planning - Incident Commander (IC)
- Net Control
- Packet
- Field Operations
- Shadow
- Logistics (materials)
- Safety
- Staging
- Public Information Officer (PIO)
- Others?



Samples provided as part of class handouts

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USE OF CHECKLIST

- What does a checklist do?
 - It supplies a set of checks to ensure the obvious but critical stuff is not overlooked.
 - It ensures that people talk, coordinate and accept responsibility while being left the power to manage the nuances and “unpredictabilities”
 - It reminds us of the minimum necessary steps and makes them explicit.
- Why is a checklist necessary?
 - It mitigates faulty memory and distractions

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**COMMON TO ALL AREAS
(EXCEPT SHADOWS)**

- Power requirements
 - AC power available
 - AC Power Supplies
 - Generators / Batteries
 - Power Distribution
- Tables, chairs, forms control, paper weights
- Forms, T-cards, clipboards, pens, maps
- Shelter from: rain, wind, noise, sun light, crowds
- Lighting if working after dark


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**INCIDENT COMMANDER
OVERALL EVENT PLANNING**

- The IC is responsible for the overall event plan. He/she develops a framework for the exercise and determines the following initial planning considerations:
 - What do I want to get out of the exercise? Goals, Objectives
 - How complex do I want it to be?
 - How long will it go?
 - What do I want to evaluate?
 - What is the scenario?
 - Who do I need to help me plan the exercise?
 - Forms a Planning Staff and conducts planning meetings
 - Simulation Cell considerations if required

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**NET CONTROL
PLANNING FOR AN EVENT**



- Components of a net control plan
 - Net types / quantity
 - Frequency selection
 - Power level selection
 - Antenna placement
 - Schedule
 - Personnel requirements/assignments
 - Net control script
 - Net control briefing

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**NET CONTROL
NET TYPE AND QUANTITY CONSIDERATIONS**

- Resource Net
 - Directed net
 - Common for county exercises and many city exercises
 - Required for activation under DSW and mutual aid
 - For smaller events, consider an informal “talk in” frequency
 - Larger nets will probably need an experienced NCO, scribe
 - If possible arrange event so everyone doesn’t need to be on travelling at the same time

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NET CONTROL
NET TYPE AND QUANTITY CONSIDERATIONS

- Message Net / Field team nets
 - Directed net
 - Formal traffic: shelters, schools, fire stations, ...
 - How many teams? Messages per team? Time/message? Operator quality?
 - Usually about 4 teams max per net
 - All informal: parades, bike races, checkpoints, rovers
 - How long to gather principle data (crowd size, etc.), health & welfare?
 - Usually no more than 15-20 per net
 - Mixture
 - Think through traffic types, quantity of messages per team, quantity of teams, health & welfare checks, capability of likely net control operators, availability of net control operators
 - Larger nets will need a scribe

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NET CONTROL
NET TYPE AND QUANTITY CONSIDERATIONS

- Shadow Nets
 - Usually works best as an open net with a liaison instead of NCO
 - Most shadows need to talk to another shadow, not to net control
 - Traffic is almost always informal (usually no forms-based traffic)
 - Try to stay with one shadow net whenever possible
 - Shadows are highly mobile/portable
 - Radio is in pouch, backpack, vest, etc.; difficult to switch frequencies
 - HT output is mono; difficult to tell which frequency is in use
 - Working two frequencies usually only possible with 2 HTs; 2 earbuds
 - Open net performance is dependent on everyone on net
 - Consider: who the operators will be; how "chatty" the principals are; number of shadows; number of expected messages per shadow; ...
 - If you need more than one net, divide according to traffic clusters
 - Geography, functional area, etc.

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NET CONTROL
NET TYPES AND QUANTITY CONSIDERATIONS

- Command Net
 - For event staff to communicate with each other
 - Large events can benefit greatly; some medium events, too
 - Typically operated as an open net (may or may not have NCO)
- Packet Nets
 - May use existing county BBS frequencies
 - May use separate training BBS and non-SCCo frequencies
 - Can greatly reduce the traffic level on message nets
 - Encourage use, especially when formal message traffic is needed
- Staging nets and other tactical nets
 - Where and when needed
 - Can be quite large, but relatively simple – check-in/out; H&W
- Create the communications plan

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NET CONTROL ICS 205 – COMMUNICATIONS PLAN

ICS 205 RACES COMMUNICATIONS PLAN		1. INCIDENT NAME XSC-10-01T Advanced Communications Drill	2. DATES/TIME PREPARED 11-Mar-2010 19:21	3. OPERATIONAL PERIOD 13-Mar-2010 06:00 - 14:00
4. COMMUNICATIONS RESOURCE UTILIZATION				
TYPE USED (check)	FREQUENCY/PL	FUNCTION	ASSIGNMENT	REMARKS
<input checked="" type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER	146.115 (+) 100.0 145.270 (-) 100.0 444.625 (-) 110.9	Resource Net	Track travelers to/from drill	Link repeaters by 06:30
<input checked="" type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER	146.595 no PL	Staging Net	Track resources when NOT on assignment	Locate staging NCO in staging area for access to T-cards
<input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV				

- Type Used – usually “Amateur Radio” for voice
- Frequency/PL – if linked, list all
- Function – primary function
- Assignment – brief description of how used
- Remarks – important comments for implementation
- Plan for backup frequencies in case of failure, jamming, overload, ...

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NET CONTROL SCHEDULING CONSIDERATIONS



- Resource Net
 - Beginning of event
 - Start net from home; hand-off net to on-site operator as soon as net control station is up and running at event
 - During event
 - May run as open net; may have peak usage during shift changes
 - End of event
 - Start net from event; hand off to off-site operator as soon as possible so you can pack up and leave the event location
- Staging Net (or event tactical net)
 - Ready to go prior to arrival of first participants
 - Runs until last participant leaves
- Field nets; shadow nets
 - Ready to go prior to first assignment
 - Runs until last assignment is completed

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NET CONTROL SCHEDULING CONSIDERATIONS



- Operator capability
 - Drills are an excellent time to learn, but you can frustrate people and discourage participation if the nets aren't run efficiently
 - Public service events are a chance to showcase our talents; you can create a public image problem if nets aren't run well
 - Consider pairing experienced with inexperienced for “elmering”
- Shift overlap
 - Typically plan for 30 minute overlap in shifts
 - Usually covers relief briefings, snags at staging, paperwork, etc.
- Expect things to go wrong
 - It's an unfortunate reality that not everyone will honor their commitment to be there on time (or even be there at all!)

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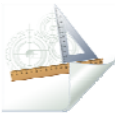
**NET CONTROL
SCHEDULING CONSIDERATIONS**



- For training events such as drills
 - Rotate staff on a regular basis
 - Shorter shifts can accommodate more training/eval opportunities
 - Minimum shift recommendation: 1 hr
 - Create net control schedule for the whole event, including Resource Net before and after the event
 - Make all other schedules subservient to the net control schedule
 - No one can miss their net control assignment or else all activities for that net are impacted
- Demobilization
 - Allow for possibility of event running faster/slower than expected


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**NET CONTROL
FINALIZING THE PLAN**



- Personnel requirements/assignments
 - Net control and scribe for each shift
 - Back-up/waiting list in case of no-shows
 - Pre-assign first and last shift – pre-assign all shifts if possible.
- Net control script contents
 - Introduction, check-ins, instructions, regular announcements/ID, health and welfare, check-out/hand-off, closing
- Briefing
 - Purpose/objectives of net
 - Schedule
 - Net control script
 - How paperwork will be handled
 - Any procedures specific to this net or event or served agency

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It's not rocket science, but it does take some effort

PLANNING FOR PACKET OPS

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**PACKET SPECIFIC
FREQUENCY AND POWER LEVEL SELECTION**


- Frequency Selection
 - BBS network has both 144 and 220 frequencies
 - 144 - most common
 - 220 - less chance of interfering with voice.
 - Driven by most accessible BBS node
 - Have a backup frequency plan and define conditions for switching
 - There will be intermod!
- Power Selection
 - You need to have a strong signal so others can hear you
 - But 25-50 watts will de-sense anything near by
 - Co-ordination with voice nets is needed



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PLANNING A PACKET NET


- What type of packet communications will be needed
- Equipment
 - BBS Utilization - remote or local BBS
 - Radios
 - TNCs
 - Antennas
 - Coax and connectors
 - Printer for printing messages
 - Paper
 - Ink/Toner
 - Special power needs
- Power requirements
 - Is AC power available
 - AC Power Supplies
 - Generators / Batteries
 - Power Distribution



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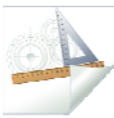
**PACKET
OTHER CONSIDERATIONS**

- Try to balance packet message load among the BBS nodes
 - May want to add a backup node (W5XSC-1) for practice
- Have a clear understanding of the message flow between packet stations
- Have a clear understanding of the paper flow for each packet station
- Packet operators will also be on a voice net for H&W
 - Select a voice net and alternative for all packet operators



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**PACKET
OTHER CONSIDERATIONS**



- Personnel requirements/assignments
 - Packet Operator for each shift
 - Back-up/waiting list in case of no-shows
 - Pre-assign first and last shift
- Predetermined message contents
 - Introduction, check-ins, instructions, regular announcements/ID, health and welfare, check-out/hand-off, closing
 - Event Bulletins

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**FIELD OPERATIONS
PLANNING**



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**FIELD OPERATIONS
PLANNING**

- What type of field communications will be needed
 - Fixed location
 - Mobile in vehicle
 - Mobile on foot or bicycle
- How many Nets – coordinate with Net Control Planner
 - What quantity and nature of message traffic is expected
 - Messages per hour
 - Informal vs Formal messages
 - How many people assigned per net based on traffic levels
- Weather Considerations
- Equipment – provided by operators or pre-staged?
 - Radios
 - Headset & audio splitters
 - Antennas, masts, cables
 - Coax and connectors


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**FIELD OPERATIONS
PLANNING**

- Schedule of operators
 - Pre-scheduled
 - On demand
 - Limitations on number of participants at any one time
- Briefing documents for participants
 - Purpose/objectives of event
 - Schedule
 - Any procedures specific to this event or served agency

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**SHADOW
PLANNING**



- What is expected shift length
- Who can use or might need a Shadow
- Determine potential traffic levels for Principals
- Determine how mobile the Principal will be (fixed vs highly mobile)
- Environment/Weather considerations
- Determine staffing needs
 - Assign Shadows to Principals based on expected traffic levels and the Shadows ability/experience/fitness
 - Shadow Equipment
 - Power requirements for shift
 - Is the demeanor/personality of shadow and principal a good match
 - Are the duties of the Principal compatible with the Shadow (dressing rooms, medical issues, etc.)

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**SHADOW
PLANNING**

- Frequency selection – coordinate with IC and other event planners
 - Simplex or Repeater
 - Is a Crossband repeater needed
- Plans to deal with Stuck Mic or Jammers
- Publish list of Tactical Calls for all Shadows (IE: Pete's Shadow, IC's Shadow, Police Liaison, etc.)
 - Include Principals name and assigned Tactical Call
- Create Briefing Document for Shadows
- Determine if MAC Evaluations will be needed/offered
 - Assign Shadows being evaluated to appropriate traffic level positions
 - Coordinate with MAC Evaluator
- Conduct briefing, answer any questions
- Plan for relief operators

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LOGISTICS PLANNING

- Determine equipment needs from each planner and IC
- Develop list of what is available and who will supply it even if a planner will provide it for their own area of responsibility
- Seek out items still needed and arrange to borrow/obtain them prior to the event
- Use Spread Sheet to document all equipment needs and who will provide each item
- Share list with IC and all planners

Logistics - Equipment - Name Of Exercise

	A	B	C	D
1				
2	Staging			
3	Equipment	Qty	Provided By	Notes
4	Pop-Up	1	name	
5	Table	2	name	
6	Chairs	2	name	
7	Clip Boards	2	name	
8	Signs identifying stations	3	name	
9	T-Cards	25	Trailer	Record assignment of participants to Teams
10	IRTs	1 each	All Staff	Maintain contact on Command Net
11				
12				
13	Location 1 -Evaluators			
14	Equipment	Qty	Provided By	Notes
15	Pop-Up	1	Evaluators	
16	Table	1	Evaluators	
17	Chairs	2	Evaluators	
18	Dual Band Radio for evaluations	3	Evaluators	
19	Clip Boards	2	Evaluators	
20	Sign identifying evaluators	1	Evaluators	
21	Evaluation forms and documents		Evaluators	
22				
23				
24	Location 1			
25	Equipment	Qty	Provided By	Notes
26	List of equipment here	4	name	3 for exercise
27	Traffic Cone	2	name	
28				
29				
30	Location 2			
31	Equipment	Qty	Provided By	Notes
32	Pop-Up	1	name	
33	Table	1	name	
34	Chairs			

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SAFETY PLANNING

- Prepare Safety Briefing to be included in participant packet at Staging
- Obtain or verify supplies
 - Caution Tape and Flagging Tape
 - Traffic Cones
 - First Aid Kit
 - Fire Extinguisher for each generator
 - Safety Plan
 - Map of venue showing key locations
- Identify Safety Issues and mark
 - Trip hazards – cones at end of tripod legs and end of guy lines/ropes
 - Overhead and eye level obstructions – tie caution tape flags
 - RF fields
 - Power distribution/electrocution

SAFETY PLANNING

- Other Site Issues
 - Vehicles / Trailers: Wheels chocked
 - Storage bins/supplies: Keep out of public walkways
 - Maintain clear walkways for public
 - Antennas away from power lines
- Personal Safety – *Make part of safety briefing*
 - Stay hydrated (Note: Coffee is not a substitute for water)
 - Use sun protection
 - Weather related issues - hypothermia, heat exhaustion, etc.
 - Participants wearing specified Safety Vests
 - Report any unsafe condition or activity to IC or Safety Officer
 - Procedures for reporting a real emergency

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STAGING PLANNING

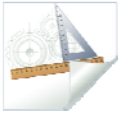
- Documentation
 - DSW List
 - Event Sign-up/position lists
 - Event planning documents as appropriate
 - Participant packet (one for each participant including staff)
 - ICS-205
 - Safety Briefing (2 copies, one copy to be signed and returned to Staging)
 - Map of event location/facilities if appropriate
 - Any briefing documents based on scenario ICS-201, ICS-202
- Forms/supplies
 - ICS-211
 - ICS-214 (In case participants forget to bring one)
 - T-Cards
 - Clipboards & pens
 - File Folders
 - Paper weights
- Equipment
 - Tables and chairs
 - Pop-up or other shelter
 - Radio, antenna, power, headphone, etc. if the staging net will be run from the Staging location
 - Signage to identify Staging Location

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DOCUMENTING THE PLAN

- We use the following to document our plans
 - ICS-202 Incident Objectives
 - ICS-201 Incident Briefing
 - ICS 205 Communications Plan
- For the large county drills, typically:
 - The Incident Commander for the drill documents the staff
 - The head of each function (field, net control, shadow, packet, staging, logistics, etc.) documents the details of each function
 - This distributes the workload; gives everyone some experience



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MAC TYPE 1 QUALIFICATIONS
N1, F1, P1, S1

- Operator skill: Plan, design, and set-up information flow and communications support for an approved county drill, event or incident.
- Give it a try – join the staff for the next big county drill!

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TABLE TOP EXERCISE
THE PLANNING MEETING

- Return to previous teams and select planners for each key planning area
 - Net Control
 - Packet
 - Field Ops
 - Shadow
 - Staging
 - Logistics
 - Safety
- IC: Review ICS-202 Incident Objectives with the planning team
- Planners: (15 minutes) Create an overview for your planning area to include staff and equipment needs and summarize your initial thoughts
- Planners should work together to coordinate plans (overview only)
- IC: Complete an ICS 201 as if you were preparing for a participant briefing
- IC: Answer questions and provide guidance to your planning team
- IC: Conduct a planning meeting (25 minutes) to share ideas/plans with the planning team and discuss. Rework ideas/plans based on meeting.
- IC: Be prepared to summarize the teams plans/discussions with entire class

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GROUP BREAKOUT DISCUSSION
ANSWER THE FOLLOWING

1. What type and quantity of staff do you need? Explain your reasoning.
2. What are your equipment considerations/needs?
3. How many nets and what type of nets do you need?
4. What safety concerns were raised?
5. What other major issues/concerns were noted?
6. Other comments.



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AFTER ACTION REPORT

- Create an After Action Report for today's class/tabletop exercise.
- Use the AAR template provided.
- Complete all fields as if this class were an exercise.
- Include all relevant fields
 - Description of exercise and its goals and objectives
 - Results achieved
 - Problems and concerns
 - Observations and feedback
 - Lessons learned
 - Improvement ideas for future classes/tabletop exercises
- Make it legible – someone else needs to read it. This will be your class evaluation.

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IN SUMMARY

- Keep your goals and objectives measurable and attainable in the allotted time.
- Don't over complicate your planning.
- The best laid plans can go sideways in an instant.
- Nothing ever goes as planned.
- You will have challenges that you need to address on the fly
- Gather feedback at the end of an exercise or incident.
- Make sure you do an AAR.
- Make the corrections and improvements as soon as possible.
- Your follow-on exercise should proof your changes and improvements, and build on the skill levels of your participants.
- Be open to ALL creative solutions and resources (staffing and equipment) that present themselves.


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REVIEW LEARNING OBJECTIVES

- At the end of this course, students will be able to:
 - Describe the different types of events
 - Create measurable exercise objectives
 - Describe the planning process and what is different based on the event type
 - Describe how to deal with problems that might be encountered during the planning process
 - Properly complete an ICS-202 Incident Objectives form
 - Explain how to use check lists as a planning aid
 - Create an event plan for a functional area of a drill or public service event
 - Create an After Action Report (AAR)

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QUESTIONS



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AFTER ACTION REPORT

- Please turn in your After Action Report
- This will be your course evaluation
- Leave it on the table near the ICS-211 when you sign out

Go Forth and Plan

If you would like to help plan the next County Drill Talk with Logan

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