To whom it may concern:

Some time ago, I noted a problem in the incident management training within the ASRC. While MSF classes taught our personnel important points on search strategy and tactics, much of the mechanics of mission management—assignment and tracking of tasks, development of shift plans, etc.—were being learned "on-the-job." This was compounded by the obvious fire-oriented nature of ICS, and the subsequent necessity of doing a lot of improvisation to adapt ICS concepts to the reality of search incidents.

Therefore, in December of 1987, I started an outline with three purposes: 1, to set forth in one place the procedures we are actually doing on missions; 2, to fit these procedures into an ICS format; 3, to explain some responsibilities of ICS positions in search terms. As the outline developed, I also added several ICS "duties" we haven't been doing, bastardized for search. Note, however, that no base procedures currently in-use are negated or argued against—only currently used and suggested new procedures are included.

The organization of the outline is similar to that of a FOG. It is not a FOG, of course, but may be a fair starting point for one.

And a few additional points:

It is important to remember that ICS is intended to be a tool, a system which works for us. Base camp policies and procedures should help efforts to find the subject, not hinder them. Too often have we seen a knowledge of ICS substitutes
For a feel for search. Too often have incidents been manipulated to fit the system, rather than the other way around. Similarly, if at any time, these procedures are getting in the way of the primary goal, something's wrong. Maybe the tools are bad, or maybe they aren't being used correctly; a thorough understanding of the tools in advance of their use should avoid both.

There was a time, not too far in the past, when overemphasis on procedures and documentation hindered several of our search efforts. The ASRC responded to this problem, but perhaps it overcompensated. In our efforts to keep team inactivity time to a minimum, we sometimes lose most or all information on what a team was assigned or what it got accomplished. In many searches in the past year, we have seen many TAPS with vague or incomprehensible task assignments, vague or incomprehensible team debriefs, and NO MAP ATTACHED. The tasks might as well never have gone out, and other tasks have had to repeat coverage prematurely/unnecessarily because of a lack of information from other tasks. Since every task dispatched is a commitment of vital resources (men, dogs, etc., and especially time) and since every task dispatched endangers the team somewhat, let's take their efforts seriously. This loss/neglect of information is intolerable. The key to minimizing useless bureaucracy is NOT sacking the documentation — this merely causes other problems. The key, instead, is to know what's important and what isn't, to know how to document efficiently and effectively. More clearly outlining procedures should help this.

Anyway, consider all this, discuss it with others, and let me know what your thoughts are. For your information, the
Recipients of this B.S. and the reasons for their selection are:

+ Al Baker, ASRC IC certified
+ Ricardo Bennett, SWMRG Rep on ASRC Board
+ Dave Carter, ASRC IC certified, CAP Mission Coordinator developer or Virginia GSAR program.
+ Neil Connor, ESAR-616 Rep to ASRC Board
+ Keith Conover, ASRC IC certified, AMRG Rep to ASRC Board
+ Kevin Coyne, ASRC IC certified
+ William Dixon, ASRC IC certified
+ Hugh Dougher, NASAR Project Coordinator on ICS
+ Larick Fox, RSAR Rep to ASRC Board
+ Chris Ingle, ASRC IC certified, BMRG Rep to ASRC Board
+ John Kuhl, AMRG Rep to ASRC Board
+ Bob Koester, ASRC IC certified, BMRG Rep to ASRC Board
+ Todd L’Hersent, RSAR Rep to ASRC Board
+ Gary Machtel, ASRC IC certified, SMRG Rep to ASRC Board
+ Chris Metzler, ASRC IC certified, ASRC Ops Officer, and because I wrote the damn thing & deserve a copy.
+ Sarah Owen, SWMRG Rep to ASRC Board
+ Mark Pennington, ASRC IC certified, CAP Mission Coordinator developer or Virginia GSAR program.
+ Bill Pierce, President of NASAR
+ Al Rasm, ASRC IC certified
+ Greg Shea, ASRC IC certified
+ Cady Soukup, ASRC IC certified, ASRC Chairman
+ Greg Stiles, Shenandoah National Park SAR Officer
+ Paul Torrence, ASRC IC certified
+ Brian Wheeler, ASRC IC certified
+ Ralph Wilfong, ASRC IC certified, Commonwealth of Virginia SAR Programs Office, CAP Mission Coordinator, developer of Virginia ESAR program.
+ Anyone else interested who sends cash (you wouldn't believe how expensive this garbage is to print).

Now that you know who and what you all are, you can talk amongst each other and, hopefully, to me. Hack away and share your ideas real soon.

-- Chris Metzler
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P.S. Several ideas I have on ICS form revisions, as well as some examples of excellent Incident Action Plan elements, have to wait until I have more time.

P.S.S. Sorry about the "informal" appearance of a lot of this.
I. Review of ICS

A. Organization -- Functional Management (Command, Planning, Operations, Logistics, Finance)

B. Functions, not People

ICS teaches everything in a modular fashion. By learning the big structure with lots of people doing lots of things, you can interpolate downward to a smaller incident and trim off what you don't need. Evaluating what of your responsibilities are more and less demanding, or deserve more or less emphasis, comes from experience.

C. Span of Control

"Anytime a subordinate function becomes critical or its complexity increases, it should become a separate functional entity." However, be sure you need to! Command Post staffs which are too large develop inertia, are difficult to control, and often have serious coordination problems. "Everything should be made as simple as possible, but no simpler." = use as light-weight a base structure as you can but don't overwhelm your management in so doing.

II. Command Staff

A. Incident Commander

1) Approves ALL resource requests.
   For our purposes, this means:
   a) Resource requests from ASRC (should go directly to ASRC dispatch);
   b) Requests of organizations not on-scene (should be done through DES; IC should clear with Responsible Agent);
   c) Requests of organizations on-scene (should be made directly to particular organization).

2) Identify liaisons/representatives from other agencies.

3) With Information Officer, plan media procedures for find based on status of subject.

4) Constantly be available to Incident Staff.

5) Work to maintain high morale and confidence.

6) Work to create an environment for staff to work in, get things done.

7) Drive the mission -- Identify problem areas, influence overall direction of incident.

8) Verify that all on Incident Staff are being kept up-to-date.

9) Meet with family/friends (at least) once each shift.

10) Briefing with media once-each-shift so they feel like they're getting it from the horse's mouth.

11) Feel free to move around, talk to ALL personnel, get many perspectives on how search is progressing.

12) Brief EOC on a regular basis.

13) Consider giving end-of-mission debrief to ALL personnel.
   a) Talk about find -- when, where, by whom.
   b) Talk about subject -- condition, what's going on now.
c) Talk about operations -- # people involved, # tasks and type, area covered, etc.
d) Give credit to all agencies involved by name.
e) Lots of thanks.
14) Debrief with EOC at end of mission.
   a) Info on find -- when, where, by whom.
   b) Info on subject-- condition, what's going on now.
   c) Talk about operations -- # people involved, # tasks and type, area covered, etc.
   d) Estimate time before Command Post closed.
15) Write post-mission documentation.
   a) Va SAR Council Mission Report (as summary).
   b) ASRC Mission Narrative.
   c) Sign-In Sheets
   d) Medical Call Sheets
B. Family Liaison
   1) Needs to be kept up-to-date on the status of the search.
      This is difficult to do if spending lots of time with the family at a place away from the Command Post. On the other hand, staying with family and away from Command Post is important, too.
   2) Keeps family up-to-date on search activities
   3) Introduces family to: Incident Commander, Investigation members, law enforcement personnel, etc.
   4) Work with investigator during sessions (can usually read body language better).
   5) Keep Investigation Unit up-to-date on anything learned which may be pertinent to investigation.
C. Liaisons with/Representatives from other agencies
   1) Provide information on agency members' capabilities and limitations.
   2) Should be kept up-to-date on particulars of incident, given plenty of opportunity to voice suggestions, thoughts, opinions.
   3) Can, usually should, participate in each Mattson Consensus.
D. Safety Officer
   1) Identify potentially unsafe situations.
      a) In types of tasks going out;
      b) In air operations;
      c) In fatigue levels of personnel;
      d) any other.
   2) Approve Med/Evac Plan.
E. Public Information Officer
   If you don't keep this man VERY informed, you'll have real problems.
   1) Keep public information displays up-to-date.
      Contains:
      a) Searcher Briefing Sheet (collection of searching data specific to mission, prepared by Plans/Investigator);
      b) ASRC Searcher Information Sheet;
      c) Map of search area showing areas covered each shift or day (Prepared by Situation Unit; Areas Covered Cumulative
instead for small searches); 
d) Shift objectives (from Plans Unit/Incident Action Plan); 
e) Map of base camp facilities (prepared by Facilities Unit); 
f) Reminder to sign in/sign out; 
g) Any other important parts of Incident Action Plan or any other information as decided by Informaiton Officer and Incident Commander. 

2) Keeps media briefed. 
a) In some cases, appropriate for you to initiate media involvement in incident. By starting out with friendly relationship, things will go more smoothly. Should clear with IC and Responsible Agent. 
b) Be a facilitator. Help media get the story and at same time keep them from hindering rescue operations. Provide information to media and they won’t have to go digging for it. 
c) Try to provide a center for media to work from, close to but not at Command Post. 
d) Properly identify members of media -- ask for press IDs. 
e) Don’t censor -- you’re not an aribiter of good taste. 
f) NEVER LIE!

3) With Incident Commander, plan procedures on how to handle media if find is made -- what to say when, how, etc. Should be based on status of subject. 

4) Keep a Unit Log (ICS-213). 

III. Operations Section 
A. Ops Section Chief 

1) Brief operations personnel: field teams, division/branch heads, etc. 

2) Determine immediate needs for operational resources and initiate resource requests. 

3) Maintain a Unit Log -- VITAL! 
a) Contains entry for each team dispatched by keeper of log: 
1> task number 
2> team identifier 
3> time dispatched 
4> Other information, such as FTL name, type of task (dog, hasty, etc), and basic idea of task description, also very useful to include as time permits. 
b) Contains entry for major events: 
1> clue found 
2> team redeployed or assignment changed 
3> finds 
4> important decisions, etc. 
c) Contains entry for team returning: 
1> task number 
2> team identifier 
3> time out-of-field. 
d) New log each shift. 

4) Supervise current shift’s operations 
a) Assign and dispatch tasks; brief teams; use TAFs and Status Map as appropriate.
1> Task Assignment Forms (TAFs).
   TAFs can be neglected early on, but be sure to keep an excellent Unit Log so that TAFs can be reconstructed while team is out. TAF eventually necessary for: keeping track of incident status; later analysis of shift (what didn’t get hit); as place to put team debrief.

2> Status Map -- Put route of task on map with task number. Use correct colors and symbols.

b) Direct teams in field; modify Status Map as appropriate.

c) Debrief teams as they return from the field (more later).

d) Change operational aspects of current shift’s plan as appropriate.

e) Guide activities of subordinates, performing their duties if so minimal that no one is assigned to them.

1> Staging Area Manager
   a) get briefed by Operations Section Chief.
   b) Establish staging area layout. Determine any needs for equipment, food, sanitation, parking, etc.
   c) Establish check-in function if appropriate; make sure a way for personnel information to make it to Resources Unit and Operations Section.
   d) Respond to requests for resources from Operations Section Chief, branches, or divisions.
   e) Maintain a Unit Log. Contains major events -- team/FTL available, dispatched, etc.

2> Branch Director/Division Supervisor
   a) Implement assigned portion of Incident Action Plan
   b) Review assignments to branch/division and request more resources/release resources (with approval of superior) as appropriate.
   c) Assign tasks to: division supervisors if branch with divisions underneath; teams if division supervisor or branch director with no divisions underneath.
   d) Report to superior when: Plan must be modified; additional resources needed; surplus resources avail; resource statuses change (team goes on task, returns from task, etc.); hazardous situations or significant events occur.
   e) Send regular total situation and resource status updates to superior.
   f) Maintain a Unit Log -- contents similar to those of Operations Section Chief’s Log.

3> Air Ops Director
   a) Sideline: Helicopter Use
      1: Operations/Planning Section people get a view of area they’re searching
      2: Searching
      3: Team transport
   b) Monitor air safety
c) Request declaration or cancellation of restricted air space (with Incident Commander approval). Take reports of restricted airspace violations.
   1: RA will probably need to clear
   2: Can be taken care of through SARDO at DES.

d) Implement this shift's Air Ops plan.
   -- If search is large enough, actual task assignment/tactical control of helos may be designated to an Air Attack Supervisor.
   1: Supervise deployment, redeployment of air resources.
      Briefing:
      a: Operation objective, operational history;
      b: Search area, clues to look for.
      c: Search pattern
         I. Contour -- start at top & work down
         II. Route
         III. Expanding square or circle
         IV. Sector
      d: Altitude -- in fairly open terrain, must be below 300' AGL to be thorough.
      e: Chain of command -- who they need to talk to, who's relevant.
      f: Map/Grid system used.
      g: Communications -- call numbers, frequencies, availability of radios.
      h: Signal devices subject or teams may have.
      i: Safety rules
      j: Terrain conditions, weather forecast.
      k: Checking in and out.
      l: Press procedures
      m: Food and rest facilities, fuel, special stuff.
   2: Dealing with situation regarding air resources on-tasks.
   3: Debrief air resources.

e) Assign observers
   Sideline: Observing in helicopters.
   1: Sounds glamorous, but quickly gets to be boring. Use highly motivated people.
   2: Despite well-defined clues, look for anything unusual.
   3: Previous flight experience, knowledge of terrain helpful.
   4: Food/drink should be avail.
   5: Sunglasses a must
   6: Binoculars for running down clues only -- don't scan with them.
   7: Position in aircraft should be shifted often.

f) Keep Operations Section Chief up-to-date on air ops progress and results. Make ground tactical recommendations to Ops Section Chief.

g) Coordinate subunits.
   1: LZ marshall
a: Keep log of all helo takeoffs/landings
b: Watch LZ safety.

h> Arrange logistical support for helos as needed.
  1: Make sure arrangements are made for helos' refuelling, operational LZs, etc.
i> Determine coordination procedures with Communications Unit -- how air resources will coordinate with Command Post, field teams. With Communications Unit, establish & maintain commo with aerial resources.

j> Advise Planning Section on Air Ops portion of next shift's Incident Action Plan
  1: Deciding what helicopters are going to search where, when.
  2: Search roughest terrain in early AM before rough air sets in.
  3: Consider night search -- 20-30 min search in high prob areas, especially if subject may signal or may have fire lit.

k> ICS-220
  1: How to fill out.

5) Provide input to next shift's operational plan
   a) Advise Planning Section on what won't get done this shift.
   b) Advise Planning Section on things you feel need to be done.
   c) Advise Planning Section on the resources necessary to accomplish some things, feasibility of specialty plans, etc.

6) Take the time to update the Family Liaison and the Information Officer.

7) Report information on special occurrences to Incident Commander.

B. Ops forms:
   1) Generates:
      a) ICS-213 General Message -- a piece of paper will do as well. Be familiar with form, though, for large ICS incidents.
      b) ICS-214 Unit Log
      c) ICS-220 Air Operations Summary -- planning/briefing sheet for Air Operations.
      d) TAF
   2) Works off of:
      a) ICS-202 Incident Objectives -- tells Ops the general objectives to accomplish
      b) Detailed Operational Plan -- gives Ops tasks to choose from to accomplish objectives
      c) ICS-204 Division Assignment List -- tells Ops the resources expected to be available to use.

C. Maps:
   1) Status Map
      Kept on acetate, this map tracks the current status of the search. It shows the FLS and any LKPs, the Incident Command Post, map alterations, containment routes, and (most importantly) routes of all tasks currently in the field. Each route should be marked in a color pertinent to
the type of task (GSAR, Air/Scent Dog, etc.) and a short hash-mark put through the route indicating where the team is along the route at this time. The route should also be marked with the Task Number and Team Identifier.

2) Covered This Shift Map
   Kept on paper, this map shows the tasks completed during the current shift. It is updated after each team debriefing or field reassignment. Like the Status Map, this map should also use proper colors and have Task Numbers/Team Identifiers clearly outlined.

3) Clue/Alert Map
   Kept on paper, this map shows the locations of ALL clues, dog alerts, etc., turned up in the search. It is accompanied by a paper log describing each map entry. Clues are marked on the map by a circled "C," alerts by a circled "A" with an arrow off of the circle pointing to WHERE THE WIND WAS COMING FROM. All map entries should have the date and time the clue/alert was detected written next to them, as well as a number (#4, #5, #6). The number allows one to look at the accompanying writeup and read about the nature of the clue/alert. Clue/alert writeups should also include the location, date, time, and task number so that the Clue/Alert map is reconstructable. Usually entries will come from radio traffic, then are elaborated on in team debriefs.

D. Folders:
   1) Tasks Not Assigned (contains tasks thought up by Planning Section or Ops but not yet sent out),
   2) Tasks In Progress (should agree with Status Map),
   3) Tasks Completed This Shift (should agree with Covered This Shift Map)

E. Briefing and Debriefing
   1) Briefing teams
      a) Done within Operations, not Planning Section
      b) Subject Briefing (Sheet)
      c) ASRC Searcher Information Sheet (where appropriate)
      d) TAF
         1> Make sure important parts are filled out.
            a> Date
            b> Dispatch Time and Mode
            c> Task Number
            d> Team Identifier
            e> Good, informative description of task.
            f> Personnel on task.
            g> Good description of communications procedures.
      e) Be upbeat with teams, thank them for their time. They're volunteers too, doing hard work. Keep their morale and interest up.
      f) Remember Briefing Skills from MSF — Searching Data

   2) Debriefing teams
      a) Done within Operations, not Planning Section
      b) Debriefing Skills
         1> PODs on hasty tasks are almost useless.
         2> Remember Debriefing Skills from MSF.

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3) Thank teams for effort.
c) Make sure important parts of TAF filled out.
d) Attach Team’s Map -- showing task assignment AND what was actually done in distinguishable (different) colors -- to TAF of task completed after debrief and before the TAF is put in the Tasks Completed Current Shift folder.
   -- you’ll need a stapler.
e) Task goes in Tasks Completed This Shift folder.
f) Course task took goes on Covered This Shift map.
g) Any clues/alerts on Clue/Alert Map.
h) Verify team put as returned in Ops Unit Log.
i) Verify task is off of Status Map.
j) Verify Communications Unit knows team is in.
k) Verify operational superiors advised of juicy items in debrief.

IV. Planning Section
A. Planning forms:
1) ICS-201 Incident Briefing
2) ICS-202 Incident Objectives
3) ICS-203 Organization Assignment List
4) ICS-204 Division Assignment List
5) ICS-207 Incident Organization Chart
6) ICS-209 Incident Status Summary
7) ICS-213 General Message
8) ICS-214 Unit Log
9) ICS-215 Operational Planning Worksheet
10) ICS-219 Resource Status Card (T-Card 1-8)
11) ICS-221 Demobilization Checklist
12) VaSARCo Lost Person Report/Checklist
13) Projected Personnel Availability Summary
14) Sign-In Record
15) Task Assignment Form

B. Planning Section Chief
1) Responsible for evaluation of search area.
   a) MOST IMPORTANT PART OF SEARCH PLAN.
   b) Four methods for deciding area
      1> Theoretical -- Plot on "Plans Map" -- acetate map.
      2> Statistical -- Plot on "Plans Map"
      3> Subjective -- geographical and other limiting factors -- Plot on "Plans Map"
         a> Natural barriers
         b> Artificial barriers being or to-be constructed. (Containment)
         c> Physical clues saying subject has been in this area
         d> Historical data -- what has subject done before? What have people in this area done before?
         e> Gut Feeling -- Don’t plot on map
         f> Physical and mental limitations of subject
      4> Deductive -- Don’t plot on map
Where would I go were I the subject?

What can you deduce from the information you have available?

2) Sectors search area and assigns/tracks POAs

a) Sectoring

As taught in MSF, Sectoring is the division of the defined search area into smaller units, called sectors. Sectoring allows search managers to assign Probabilities of Area to individual sectors; tasks can then be assigned under the criteria of first searching high-probability areas. The search area should be sectored shortly after it is defined so that a Mattson consensus can be taken and initial POAs can be assigned to parts of the search area.

When breaking the area into sectors, natural boundaries should be used as much as possible. Sectors should be small enough to allow the differing POAs to actually tell you something; big enough to prevent so many sectors that the POAs are all very small.

In ICS, when operations are being performed with operational divisions, some suggest sectoring by division. This creates, for Division Alpha, sectors A1, A2, A3, etc.; for Division Bravo, sectors B1, B2, B3, B4, etc.

b) Mattson decides POA at beginning, after significant events.

1> First Mattson held as soon as sufficient information. Incident Commander, General Staff, RA, Agency Representatives should take part. Other participants decided on by Incident Commander.

2> New Mattsons are held after significant events such as a new PLS or LKP. Participation should include Incident Commander, General Staff, others listed above as available; any others decided on by Incident Commander.

c) Shifting probabilities decide POA in search after no significant events.

1> Planning Section Chief needs to make sure that's done. Could be done by Documentation Unit or Situation Unit.

2> (include Shea's simplified method here)

3) Coordinates development of next shift's Incident Action Plan. Info on preparation of Plan under Sect. VII.

Usual contents:

a) Objectives for next shift -- distributed to Command and General Staff; available to public at display.

b) Briefing on search at present (Forms 201, 209ICS can be used) -- distributed to Command and General Staff; available to public at display.

c) Resource allocation (Forms 203, 204, and 207ICS can be used) -- distributed to Command and General Staff; available to public at display.

d) In-depth Operational Plan. (Note Paper, Maps, and TAFs should be used) -- distributed to Operations Section Chief.

e) Searcher Briefing -- distributed to anyone.

f) In-depth Subject Profile -- distributed to COMMAND AND GENERAL STAFF ONLY!

g) Specialty Plans -- distributed to Command and General
4) Staff; some others may be briefed on elements of some plans, such as briefing FTLs on the Med/Evac Plan.

h) Timetable -- distributed to Command and General Staff; available to public at display after distilled down to pertinent information only.

i) Media Procedures for find -- distribute to COMMAND and GENERAL Staff ONLY!

j) Traffic Plan and Facilities Map -- distribute to anyone.

k) Anything else as approved by Incident Commander.

4) Make sure Information Officer has information for public display, media briefings. Keep Information Officer up-to-date.

5) Keep Family Liaison up-to-date.

6) Collect and disseminate weather information.

7) Advise Medical Unit on Med/Evac plan.

8) Advise Communications Unit on Communications Plan.

9) Advise Ground Support Unit on Traffic Plan.

10) Coordinate briefings at shift changes, agency meetings, etc.

11) Coordinate and assist Planning Units, performing their duties when no one assigned:

a) Resources Unit
   1> Sign-In resources and determine availability
      a> Check-In recorder
         1: Post signs so people can find you
         2: record information -- get availabilities on a PPAS used for scratch.
         3: Make sure information gets to Resources Unit/Operations
      b> PPAS
         1: Use as scratch sheet to keep track of current (total) personnel availabilities. Write names and use AVAIL and REMARKS columns for when they become available and how long they are available. This gives a convenient place to keep this information.
         2: Use as report sheet to show availabilities for future shifts. Have particular future shift labelled at top of sheet, then list personnel and use AVAIL and REMARKS columns for when they become available during the shift and how long they stay available. This helps identify future resource needs.

   2> Assign and track resources on-scene
      a> Organization Assignment List (ICS-203) -- Use as final form showing overhead for a shift; can be used as scratch sheet to plan out OHT.
      b> Division Assignment List (ICS-204) -- Use as final form showing FTLs, dog handlers, etc., available to a branch/division or to Operations; can be used as scratch sheet to plan out which divisions get which FTLs, dog handlers, etc.
      c> Organization Chart (ICS-207) -- Use as graphic display of overhead structure; for use at public
d > Have resource information available for Incident Commander, Information Officer, Operations and Planning Sections,
1 > Such as availabilities
2 > Current and expected field resources.
3 > Track resources en-route to search.
4 > Determine Resources Needed
   (from objectives for this and next shift, feeling of where search is going vs. PPAS information)

b) Situation Unit
1 > Review TAF debriefs during (if not in way) and at end of operational shift. Verify that the Shift Coverage Map and the Clue/Alert maps are correct.
2 > Maintains maps of:
   a > Cumulative areas covered
   b > Cumulative PODs
3 > Shifting probabilities

c) Documentation Unit
1 > Make DAMN SURE you're getting originals for EVERYTHING.
2 > Assemble each shift's documentation.
   a > Copy of each shift's FULL IAP
   b > All maps and TAFs.
   c > Used-up Sign In/Out sheets.
3 > POS work
4 > Arrange for a duplication system/provide duplication services.
5 > Incident Maps -- Master Map Folder, Grid Overlay use. Get corrections to Master Maps.
6 > Evaluate terrain, collect information on map changes.
   a > Use local experts
   b > Get additional information from what Operations has learned and from debriefs.
   c > Make sure Operations is aware of all map modifications and all maps (acetate, masters) are updated.

d) Demobilization Unit
1 > With Logistics Chief, write demobilization plan.
   Considerations:
   a > Withdrawal of resources from field -- order/priority
   b > Release of resources from the incident -- order/priority
   c > Break-down of incident facilities
   d > Final debrief of all resources.
   e > Assign responsibilities for elements of demobilization.
2 > Coordinate demobilization.

e) Investigation Unit
1 > Keep Incident Commander, Planning Section Chief up-to-date on status of Investigation.
2 > Lost Person Report/Checklist
   a > Get them from more than one person
   b > But interview separately
3 > Searcher Briefing Sheets. Make sure Operations, Planning Sections, Information Officer, Incident Commander have.
4) In-depth subject profile for Incident Staff
5) Work on investigation goals
6) Work with family liaison
7) Coordinate bastard search.
8) Make time to work with Planning personnel on deductive reasoning -- where would I be...?

C. Maps: Plans Map, Cumulative Coverage Map, Cumulative POD Map. Also verifies/uses Covered This Shift and Clue/Alert maps.

V. Logistics Section
A. Logistics Forms:
1) ICS-205 Incident Radio Communications Plan -- Used by the Communications Unit to outline commo net, frequency purposes.
2) ICS-206 Medical Plan -- Used by the Medical Unit to list medical resources to be utilized if a medical emergency develops.
3) ICS-213 General Message
4) ICS-214 Unit Log
5) ICS-216 Radio Requirements Worksheet
6) ICS-217 Radio Frequency Assignment Worksheet
7) ICS-218 Support Vehicle Inventory -- Used by the Ground Support Unit to keep information on available vehicles & their assignment.
8) Commo Equipment Log (Sign In/Out) -- Used to keep track of radio equipment assignments on-scene.
9) Commo battery records -- Used by the Communications Unit to keep track of battery charging/discharging on-scene.
10) Point-to-Point Log sheets -- Used by the Communications Unit to log all radio traffic.

B. Logistics Section Chief
1) Coordinate and assist Logistics Units, performing their responsibilities when no one assigned:
a) Communications Unit
   1) Write Incident Radio Communications Plan; get advice/information from Planning Section.
   2) Establish some type of telephone service.
   3) Assess and resolve problems with:
      a) Adequacy of amount and types of commo equipment on-scene
      b) Geographic limitations of current commo net.
      c) Anticipated future commo problems.
   4) Supervise Commo Center operations
      a) Supervise commo gear assignment and maintenance.
b) Brief radio operators on:
   1) Commo procedures;
   2) Frequencies/Nets in use;
      a) Command Net, Tactical Nets, Support Net, Ground to Air Net, Air to Air Net, Med/Evac Net;
   3) Equipment status, capabilities, limitations, and restrictions;
   4) Locations of repeaters;
   5) Procedures for flow of information around base camp (to Operations, Incident Commander, etc).
Brief team radio operators on procedures.

b) Medical Unit
1> Set up a medical capability at Base for search personnel.
2> Preparations/Planning
   a> Arrange for equipped Med/Evac vehicles to be on stand-by.
   b> Write Med/Evac plans; get advice/information from Planning Section (more detail under Section VII, D.1).
3> Respond to medical-oriented requests.

c) Food Unit
1> Ensure potable water avail for all resources.
2> Determine method of feeding resources.
3> Procure food, equip, personnel for feeding resources.

d) Supply Unit
1> Determine supplies needed and arrange for obtaining as needed.
2> Maintain inventories of equipment

e) Facilities Unit
1> Provide facilities for Command Post, investigation, sleeping, showering, parking, sanitation, staging areas, etc. Coordinate layout of such facilities.
2> Assign individual area managers as appropriate.
3> Work to insure security around incident facilities.
4> Work with other staff members to determine requirements of all facilities (ie. layout requirements of Command Post, etc.)
5> Prepare "facilities maps," for display and distribution, showing where facilities are located.
6> Advise Ground Support Unit on Incident Traffic Plan

f) Ground Support Unit
1> With advice from Facilities Unit and Planning Section, write Incident Traffic Plan
   a> Parking
   b> Vehicle access to everything
   c> Team transport parking/staging
   d> Med/Evac resources' parking and response (make sure response route out is clear at all times).
2> Transportation
   a> Implement traffic plan
   b> Coordinate transportation of personnel, supplies, food, equipment, etc.
   c> Coordinate fuel/service needs of transportation equipment.
   d> Maintain inventory of vehicles available and keep track of status.

2) Assist Demobilization Unit in preparation of Demobilization Plan.

3) Other

VI. Miscellaneous Stuff
A. Get good scent articles early. Cannot have been washed or touched by anyone else. Ziploc-type or paper bags. NO PLASTIC TRASH BAGS.
B. Resource requests.
1) Operations/Planning Sections resource requests originate from Operations, Planning Section, or Logistics.
2) Logistics-type resource requests originate from Logistics.
3) Once again, ALL resource requests approved by Incident Commander.
4) Requests of agencies not already involved in incident usually should be cleared with Responsible Agent.
5) Minors authorized by Incident Commander after clearing with Responsible Agent.

C. Containment boundaries
1) Not possible in all cases
2) Ideas -- Road Block, Trail Block, Camp-Ins, Look-outs, Track Traps, String Lines

D. Maps
1) Ops keeps:
   a) acetate map of current situation (Status Map);
   b) Covered This Shift Map.
   c) Cumulative Clue/Alert Map.
2) Planning Section keeps:
   a) Plans Map -- acetate map showing search area, including theoretical lines, statistical lines, containment boundaries (natural and enforced), boundaries of search area, Mattson sectors, current PODs;
   b) Cumulative Areas Covered/Cumulative POD maps.
      1> Areas Covered map can be a separate map with acetate overlays for each day so can see how search has progressed from day to day by progressively laying down the overlays.
3) Planning Section verifies:
   a) Covered This Shift Map after shift is over
   b) Cumulative Clue/Alert map.
4) ICS Map Symbols -- attached.

E. Command Post/Incident Base vs. Mission Base
For many years, we have been referring to an ICS "Command Post" as "Mission Base." An "Incident Base," in ICS, is a logistical center. So long as everyone knows what we're talking about, no big deal. However, on large incidents with resources more used to formal ICS, problems may develop. Consider referring to Mission Base as CP.

F. T-Cards
Have not been addressed here because too much work to be done. Usual problems with keeping volunteer teams intact over time...

VII. Development of Incident Action Plan (Shift Plan).
-- following written from perspective of Plans Section Chief
A. Decide upon Shift Objectives, outline on an ICS-202, have OK'd by Incident Commander. Use these as guide.
   1) Objectives should be attainable. Should be based on
resources you expect to have available. If ANY are questionable, contingency plans should be around. Will be revised many times as current shift progresses and more information available.

2) Should have multiple sets so IC can choose among alternatives.

3) General Objectives
   a) Such as change in OHT structure -- branches/divisions.
      1> Divisions vs Branches -- When to use which -- Many deciding concerns logistical
         a> What will get area searched better?
         b> What will improve communications?
         c> What will make resource flow easier?
         d> What will preserve a good span-of-control?
      b) Such as instituting of timetable.
      c) Safety objectives.

4) Planning Objectives
   Things for Planning Section to accomplish next shift.
   a) Such as revisions of specialty plans (Med/Evac, Demob), etc.
   b) With Investigation Unit, set objectives for investigation
      (write on ICS-202 the ones that are OK to publish).
   c) Documentation Objectives
   d) Resource Objectives

5) Operational objectives
   a) should be based on what happened last shift, what’s happened so far in current shift and what you can expect to happen for rest of current shift.
   b) They should be based on current POAs.
   c) Should dictate areas to be searched and PODs to be attained in general terms.
   d) Can refer to specific areas to be searched if the areas are of top-priority (absolutely MUST be searched right away).

6) Logistical Objectives
   a) Improvement of Food/Water
   b) Sleeping Facilities
   c) Communications Changes
   d) Actual logistical accomplishments to be performed.

B. Determine additional resources (equip & personnel) necessary to accomplish the objectives. Go over with Incident Commander. Initiate first resource requests for 6pm/am shift (these should be started by about 10 am/pm, or 8 hours before in other words).

C. Allocate resources. Plan next shift’s OHT, FTLs/DHs, etc.

D. Write/revise specialty plans as necessary.
   1) Help Medical Unit get Med/Evac plans written. If no Logistics section yet, write it yourself.
      a) ICS-206 very inadequate.
      b) Ops should review, Safety Officer/Incident Commander must OK.
      c) Rescue stages: Notification, Size-Up, Planning, Doing It, Critique
         LOTS of GOOD STUFF in MSF book.
      d) Concerns:
1> Emphasize time UNIMPORTANCE -- if subject has been out there for a while, taking five minutes when the report comes in to stop, think, and do it right may save lots of problems later and is certainly justified.

2> SAFETY -- Most important deciding factor.

3> Who will do the evac?
   a> Team at base
   b> Teams in field
      1: Nearest teams respond directly?
      2: Teams further out? How will they get there?
   c> Who's in charge?

4> How will you alert everybody?

5> What will you evac with? Who will get the gear there?

6> How will you get teams in? Overland routes, transportation, aerial insertion, etc.

7> How will you keep communications running OK?
   a> Radio contact with all teams

8> How will evac come out?
   a> Plot possible routes out of certain areas acknowledging that field resources have final say.
   b> What if pt can't tolerate carry? What if pt can't tolerate wait?
   c> LZs -- several scattered among search area.

9> Weather -- what if it's good or bad?

10> Hazards -- of terrain, of air evac, of team safety.

11> Criteria for hoist opns?

12> Time subject has been out in field, how much more time can tolerate, etc.

13> What to do with non-involved field resources

2) Demobilization Unit (w/ help of Logistics Section) writes Demob Plan (more info under Demobilization Unit).

E. Work with Commo on Communications Plan.

F. Work with Logistics units on Traffic and Facilities Plans.

G. As more information about success/failure of current shift comes in, objectives will be modified. This will in turn modify resource requirements and may necessitate changes in resource requests.

H. As more resource information comes in, may need to change assignments, objectives, etc.

I. Write/revise Incident Timetable.
   1) One way -- teams change 6-6; OHT goes 12-12.
   2) Another way -- teams get rest when needed, become available when they become available. OHT changes at 6 except plans at 8.
      a) 0400 -- Day shift plan presented to Incident Commander by plans for approval. Any modifications Incident Commander requires made by 0500. Day shift awakened.
      b) 0500 -- Day shift briefed on night shift results, day shift plan.
      c) 0600 -- Night shift off; day shift on
      d) 0600-0800 Night plans briefs day plans, finishes assembling documentation of night shift, gets day
shift going on the day plan written by night plans.
e) 0800 -- Night plans off; day plans on
f) 1000 -- Need to be able to start ordering resources for night shift...meaning day plans has 2 hours to get an idea of night shift resource requirements.
g) 1600 -- Night shift plan presented to Incident Commander by plans for approval. Any modifications Incident Commander requires made by 1700. Night shift awakened.
h) 1700 -- Night shift briefed on day shift results, night shift plan.
i) 1800 -- Day shift off; night shift on
j) 1800-2000 Day plans briefs night plans, finishes assembling documentation of day shift, gets night shift going on the night plan written by day plans
k) 2000 -- Day plans off; night plans on.
l) 2200 -- Need to be able to start ordering resources for day shift...meaning night plans has about two hours to get an idea of resources needed for day shift.

J. Late in shift, write an incident briefing.
1) ICS-201 Incident Briefing
2) ICS-209 Incident Status Summary

K. Late in shift, do detailed operational planning.
1) Done to fulfill Operational Objectives
2) Consists of actual tasks for Ops to pick and choose from to complete objectives.
a) Paper list of tasks -- reference number (#1, #2, etc. -- not to be confused w/ Task Number), type (hasty, dog hasty, dog grid, etc.) and route/area.
b) Master maps showing all tasks (can be located by ref number).
c) TAFs for each individual task with attached map showing task (DON'T FILL OUT TASK NUMBER).

L. Around 0400/1600 -- Assemble Incident Objectives (ICS-202), Incident Briefing (ICS-201), Incident Status Summary (ICS-209), resource allocation (ICS-203 and 204s), Searcher Briefing (from Investigation Unit), Subject Profile (from Investigation Unit), Operational Plan, specialty plans (ICS-205, 206, Med/Evac), timetable, media procedures, traffic plan, etc., and present to Incident Commander.

M. By 0500/1700, make suggested changes, obtain IC authorization, and prepare copies of plan for IS briefing.

VIII. Shift Briefings -- How to do 'em.
A. Command and General Staff attends.
B. Make sure everybody knows each other, who has responsibility for what during current shift, who has responsibility for what in oncoming shift. (Incident Commander leads)
C. Review of what incident is (if necessary) -- Who, what, where, when, why, how. (Planning Section Chief leads)
D. Quick summary of all activity before current (ending)
shift. (Planning Section Chief leads)

E. Current shift summary from each Section Chief and Command Staff member / others dep. on situation.

F. Current POAs. (Planning Section Chief leads)

G. New shift objectives -- elaborate on each. (Planning Section Chief leads)

H. Go over specialty plans (new/changes). (from Planning Section Chief/Incident Commander)

I. Anything else -- discussion. (Incident Commander leads)

IX. Early Evolution of an incident

Hopefully incident concludes before all these things done. But this gives example of how organization can develop.

A. Initial actions
   1) Incident Commander briefed —> get true situation.
   2) What’s been done
   3) What resources available
   4) Determine reps of agencies involved
   5) Meet with responsible agent
   6) Pass improved directions on to ASRC dispatch, EOC, etc.
   7) ASAP — determine if minors can respond.
   8) Early Ops
      a) Tactics
         1) Binary Search (sign cutting)
         2) Tracking (human and dog)
            a) Get good scent articles early. Cannot have been washed or touched by anyone else. Ziploc or paper bags. NO TRASH BAGS.
         3) Hasty search (Human and Dog)
         4) Containment
         5) Aerial sweeps — quick, low POD on large area.
         6) Attraction
         7) Investigation
         8) DF to localize area
         9) Other passive techniques
         10) Bastard Search (actually coord by investigator)
      b) Resources
         1) Human Trackers and Sign Cutters
         2) Air-Scent and Ground-Scent dogs
         3) Clue-conscious hasty teams
         4) Containment resources
         5) Aircraft
         6) Investigators
         7) DF teams
      9) Early Planning
         a) Consider what resources needed to do next 12 hours of operations right
         b) Start investigation — get LPR/C taken.
         c) Locate some kind of duplication service and get maps made up.
         d) Define initial search area
         e) Consider development of search and OHT
         f) Rough media procedures — who are they going to
talk to when they show up (preferrably not I.C.).

10) Early Logistics
   a) Communications between field teams and Incident Staff
   b) Command Post/Base location and organization

B. Development of Organization

1) Usually upon immediate arrival of a two person OHT:
   a) IC also doing Plans, Command Staff
   b) Other person doing Ops and Commo
   c) Locals providing Logistics (except Commo)

2) Addtl OHT needs to maintain good span-of-control. Actual assignments vary depending upon incident, but early assignments are often:
   a) Radio Operator (relieving Ops somewhat)
   b) Investigator/Family Liaison (doing both at first but split these roles up when possible)
   c) Deputy Ops (gets teams together while Ops draws up tasks and assigns them to teams)
   d) Sign-In Recorder (makes sure sign-in done correctly and important info recorded)
   e) Planning Section Chief (coord. Investigator and Sign-In, takes planning burden off of IC).

C. Transition to first normal shift

By the beginning of the first full shift, things need to be well-enough organized for the shift to proceed fairly smoothly.

1) Overhead Team -- Resources need to be known well enough to plan at least the development of the OHT over the course of the shift, if not what the OHT will be from beginning to end.

2) POA
   a) Well-defined search area
   b) Good sectoring and Mattson before shift.

3) Shift Plan
   a) At least a rudimentary shift plan, with objectives and resource allocation (OHT, FTLs, DHs, and searchers).

D. Rescue/Evac

1) If no Med/Evac Plan available, IC needs to assert w/o angering local resources. Emphasize time unimportance and make sure things are done right. Whatever else, insure good communications.

2) If Med/Evac plan available, STICK TO IT unless woefully inadequate. IC should have done legwork in advance to ensure cooperation.

3) If air evac, someone goes with helo who knows what medically has been done unless flight crew says no.

4) Notify EOC, ASRC dispatch of find.
RESOURCES UNIT FUNCTIONS AND INTERACTIONS

OBTAINS INFORMATION FROM

- AGENCY REPRESENTATIVES AND LIASIONS
- AGENCY DISPATCHES
- TEAMS EN-ROUTE
- INCIDENT COMMUNICATIONS CENTER
- INCIDENT BRIEFING
- PLANNING MEETINGS
- DIRECTIVES FROM SUPERIORS
- INCIDENT ACTION PLAN
- CHECK-IN LOCATIONS
- ALL RESOURCE REQUESTS

CONFIRMS EVALUATES PROCESSES DISPLAYS ASSIGNS

PREPARES INFORMATION FOR

- PROTECTED PERSONNEL AVAILABILITY SUMMARIES
- INCIDENT ORGANIZATION CHART DISPLAY (ICS-207)
- ORGANIZATION ASSIGNMENT LIST (ICS-208)
- DIVISION ASSIGNMENT LISTS (ICS-209)
- INCIDENT STATUS SUMMARY (ICS-210)
- T-CARD RESOURCE DISPLAY (ICS-218)
- RESOURCE REQUESTS
- AGENCY REPRESENTATIVES AND LIASIONS
- AGENCY DISPATCHES
SITUATION UNIT FUNCTIONS AND INTERACTIONS

OBTAINS INFORMATION FROM

- TAFCOMPLETED
  AND TEAM
  DEBRIEFS

- COVERED
  THIS
  SHIFT
  MAPS/OVERLAYS

- CUMULATIVE
  AREAS
  COVERED
  MAPS/OVERLAYS

- CLUE/MEET
  MAP/OVERLAYS

- CUMULATIVE
  POD
  MAP

- PLANS
  MAP
  POAS

- OPERATIONS
  STATUS
  MAP

- PLANNING
  MEETINGS

- CURRENT
  SHIFT
  PLAN

VERIFIES/FRAMES/EVALUATES
CALCULATES
PROCESSES/DEPLOYS

PREPARES INFORMATION FOR

- PUBLIC
  INFORMATION
  DISPLAY

- COMMAND
  POST
  SITUATION
  DISPLAY

- COVERED
  THIS
  SHIFT
  MAPS/OVERLAYS

- CUMULATIVE
  AREAS
  COVERED
  MAPS/OVERLAYS

- CLUE/MEET
  MAP/OVERLAYS

- CUMULATIVE
  POD
  MAP

- PLANS
  MAP
  POAS

- PLANNING
  MEETINGS

- NEXT
  SHIFT
  PLAN
ALL MAPS

ICS SAR MAP DISPLAY SYMBOLS

BLACK

Modifications/Alterations/Updates to Map Features

- Travel Barriers

- Point Last Seen
  - 10 Aug 1430
  - 12 Aug 0915

- Incident Command Post
- Incident Base
- Staging Area
- Repeater/Relay
- Telephone
- Helibase, Helispot, LZ

BLUE

Theoretical Search Area

- Statistical Search Area (in this case, 75%)

- Search Area Boundary
- Sector Boundary
- Sector Number

GREEN - Sector POAs
STATUS MAP, COVERED THIS SHIFT MAP/OVERLAY

GREEN - Field Teams (Foot, Horse)
BROWN - Air/Scent Dog
RED - Special (Mantrackers, Tracking Dogs, Helicopters, TWD, Containment Vehicles)

Hasty Search
(Hash Mark indicates position)

Area Search (incl. 6th Contour)

FIRST COVERAGE
SECOND COVERAGE
THIRD COVERAGE
FOURTH COVERAGE

INTENT IS TO ALLOW USE OF COVERED THIS SHIFT OVERLAYS FROM SEVERAL SHIFTS TO INDICATE DEGREE OF COVERAGE.

BLUE - PODS (on Covered This Shift Map/Overlay)

CLUE/ALERT MAP

BLUE

*7 [C] 11 Aug 0945
Clue (Time and Date Clue Found Included; Number on Clue/Alert List Included)

*3 [A] 10 Aug 1995
Alert (Time and Date Alert Occurred Included; Number on Clue/Alert List Included; Direction Wind Was Coming From Included)

(Credit is due to Jim Rooney for much of the original work on these map symbols)