

Objectives, Strategies, and Tactics in Search and Rescue

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One of the basic tenets of the Incident Command System (ICS) is *management by objectives*. Loosely speaking, this results in the following sequence of events.

1. The Incident Commander (IC) identifies what they want done in very broad strokes—the incident objectives.
2. The Planning Section Chief (PSC) develops alternative general plans to accomplish these objectives—the strategies.
3. The IC, in consultation with the PSC, the Operations Section Chief (OSC), the Logistics Section Chief (LSC), and the Finance/Administration Section Chief, approves the selected strategies.
4. The OSC, in consultation with the PSC and perhaps the LSC, creates the specific assignments to accomplish the strategies—the tactics.

While the responsibility for accomplishing these steps lies with the designated position, there is much cooperation, consultation, and teamwork between them.

- **Incident Objectives** are the goals that must be accomplished to successfully resolve the incident. What must be done to reach the desired outcome (without identifying how to do them—they are strategies)?
- **Strategies** are the big picture plans that outline how the Objectives are to be accomplished. How are we going to reach the desired outcome (without identifying who, what, where, or when—they are tactics)?
- **Tactics** are the physical and mental tasks that are performed by the incident resources to carry out the Strategies and accomplish the Objectives. Who is going to do it? What are they going to do? Where are they going to do it? When are they going to do it?

An Example of an Objective, Strategy, and Tactic

An Initial Response Incident Objective: Establish and maintain containment by 1500 hours. (**What** to do to reach the desired outcome.)

An Initial Response Strategy to accomplish this Objective: Establish containment at the intersection of the Tank 1 and Tank 2 trails by 1500 hours. (**How** to do it.)

An Initial Response Tactic to carry out this Strategy to accomplish this Objective: Team 1 to proceed on foot up Tank 1 trail to intersection of Tank 2 trail by 1500 hours, looking for sign all the way. Set up trail block at junction. Be prepared to maintain for 24 hours. (**Who, What, Where, When.**)

Identifying Objectives, Strategies, and Tactics sounds simple but it is not. Often the terms “Objectives”, “Strategies”, and “Tactics” are used interchangeably and incorrectly.

The purpose of this article is to clarify their meaning and use with examples from Search and Rescue. It is based heavily on the manual “Find ’Em: A Guide for Planning the Missing Person Incident Response”, which can be downloaded from www.saraz.org under the “Documents” menu item.

*We thank Paul Summerfel for insightful comments on a draft version of this document.

Incident Objectives

The Incident Objectives are determined by the IC, and are not limited to a single operational period but cover the entire incident. The incident objectives should be such that when all of them are accomplished the IC should either have found the lost subject or should seriously consider suspending the mission.

Incident objectives must allow flexibility in strategy so that the OSC has great latitude in deciding the tactics to achieve the objectives over the course of the incident.

The incident objectives are written on an ICS 201 or ICS 202 form.

Good incident objectives should have the following SMART characteristics.

1. **Specific.** The wording must be precise and unambiguous in describing the objective.
2. **Measurable.** The design and statement of the objectives should make it possible to conduct a final accounting as to whether objectives were achieved.
3. **Action Oriented.** The objective must be an action that describes the expected accomplishments.
4. **Realistic.** Objectives must be achievable with the resources that the agency (and assisting agencies) can allocate to the incident, even though it may take several operational periods to accomplish them.
5. **Time Sensitive.** The time-frame should be specified.

Examples of Good Incident Objectives

Here are some examples of good incident objectives that follow the SMART characteristics.

- Provide for the safety of all incident personnel and the public during each operational period.
- Search all likely routes and locations with a high coverage by the end of [operational period].
- When located, assess, treat and immediately evacuate the subject by the most appropriate method.
- Establish containment at the junction of trails [location] and [location] by [time] on [date], and maintain throughout the incident.
- Maintain normal operations on [location] highway throughout the incident.

Examples that are not Incident Objectives

- Any objective that specifies the strategy or tactics to be used during a specific operational period. For example, “Search the Mt Lemmon Trail from top to bottom with a two-man team, starting at the top and working down. Complete assignment by 1600 hours.” This is a tactic.
- Any objective that is not Time Sensitive. For example, “Contain the search area to keep it from growing larger.”

Strategies

As soon as the Incident Objectives are finalized and approved by the IC, the PSC should begin preparing Strategies to accomplish these objectives. The PSC leads this effort, but consults with the IC, with the OSC, with the Investigator, and with others who have expert knowledge of the missing person, the circumstances surrounding the incident, or the search area.

There is no official ICS form to enter Strategies, although the United States Coast Guard has developed a very useful form—the ICS 234-CG, Work Analysis Matrix—for this purpose. See the figure at the end of this document.

Examples of Objectives and Possible Strategies

- **Objective.** With available resources, provide the missing subject the best opportunity possible to be located no later than 1800 hour on Tuesday.

Possible Strategies:

- Strategy 1. Assume missing persons are mobile. Use passive search techniques to draw them to the searchers.
- Strategy 2. Assume missing persons are immobile. Search the high probability areas first, obtaining a high coverage with multiple searches using various resources. Move to other segments as resources and accomplishments allow.

- Strategy 3. Assume missing persons are responsive. Search segments by sound search using limited resources.
- Strategy 4. Locate LKP, determine direction of travel and follow the tracks until the missing persons are found.
- **Objective.** Provide for searcher and public safety throughout the search.
Possible Strategies:
 - Strategy 1. Use only highly trained and skilled resources in the search.
 - Strategy 2. Close the search area to the public for the duration of the incident.
 - Strategy 3. Provide safety orientation to all search resources before they are sent to the field.
 - Strategy 4. Use only air search in the hazardous terrain areas. Do not apply ground resources unless clues or the subjects are spotted in those hazardous areas.
- **Objective.** Contain the search area by 1600 hours Tuesday to keep it from growing larger.
Possible Strategies:
 - Strategy 1. Contain the entire perimeter of the search area.
 - Strategy 2. Contain the search area at those locations where the missing persons are likely to exit it, considering that 46% of hikers follow a trail and all travel aids intersect a trail at some point in the area.
 - Strategy 3. Contain the search area at those locations the missing persons are likely to exit with trail blocks while confining the remainder of the perimeter with patrols and by helicopter.
 - Strategy 4. Use attraction at selected locations along with containment.
- **Objective.** Search the defined search area with an 90% CPOD by 1800 hours on Tuesday.
Possible Strategies:
 - Strategy 1. Use binary search to eliminate lower probability areas, and then use multiple ground and air resources on those areas with the higher POA.
 - Strategy 2. Use multiple resources with high predicted PODs in individual segments to achieve required CPOD, targeting those areas with the highest POAs.
 - Strategy 3. Use resources and applications that can reach 90% CPOD in a single pass in each segment.
- **Objective.** When found, assess, stabilize, treat and evacuate the missing persons.
Possible Strategies:
 - Strategy 1. If mobile, treat injuries and walk them out to the trailhead.
 - Strategy 2. If immobile, treat injuries and carry them out to the trailhead.
 - Strategy 3. If immobile, treat injuries and transport by helicopter.

Tactics

The OSC develops the general tactics for each strategy and the resources required to implement those tactics. These tactics are entered (from the ICS 234-CG, if used) onto the ICS 215 under the “Work Assignment” column, ultimately to be transferred to ICS 204s and perhaps amplified. The ICS 204s become part of the Incident Action Plan (IAP).



Examples of Strategies and Possible Tactics

- **Strategy.** Use attraction at selected locations along with containment.
Possible Tactics:
 - Tactic 1. SFD 1. Patrol Lowell Creek trail head to Treeline. Patrol Japanese Creek to Treeline. Use sound at intervals. Stop and LISTEN!
 - Tactic 2. NPS 14. Block Race trail head at Jefferson St. Block Jeep Road trail head at Monroe Street. Use lights for attraction at trail heads.
 - Tactic 3. NPS 15. Block mouth of Scheffler Creek at Chiswell St. Block Japanese Creek at Diamond Drive. Cut for sign on roadside east side of Diamond Drive.

- Tactic 4. SFD 1. Patrol First Avenue and Second Avenue from Jefferson St to Dairy Hills Lane. Contact all residents and businesses.

Litmus Test

Once incident objectives are determined and written down on an ICS 201 or ICS 202 it is helpful to do a “litmus test” using those objectives to ensure that resources in the field are working toward accomplishing an objective or to determine that an additional objective may need to be added. This is especially important during the initial response where many resources may have responded to an incident and are conducting operations. Once the initial incident objectives are written down on the ICS 201 and the “litmus test” is performed it may become clear that there are resources conducting operations that are not leading toward the accomplishment of an objective and those resources may need to be redirected. The test should be conducted by the Planning Section and the Operations Section.

A convenient way to conduct the “litmus test” is to identify each objective with a number or letter and then review the resources operating in the field and match them to an objective by writing the number/letter of the objective next to the resource. Resources that do not have a number/letter next to them at the end of the test are resources that are conducting operations that do not necessarily match up with an identified incident objective.

In an operational period with a written IAP the “litmus test” can be used to verify that the tasks identified on the ICS 215 and transferred to the ICS 204s are also meeting an established incident objective.

The “litmus test” concept was taught at the TEEX Enhanced Incident Management/Unified Command Course, <https://teex.org/Pages/Class.aspx?course=MGT314&courseTitle=Enhanced+All-Hazards+Incident+Management/Unified+Command>.

Work Analysis Matrix Form—ICS 234-CG

WORK ANALYSIS MATRIX FORM INSTRUCTIONS (ICS FORM 234-CG) Rev. 8/05		
<p>Purpose. The Work Analysis Matrix is designed to help select the best strategies and tactics to achieve the operational objectives. This optional form assists staff in carrying out incident objectives by outlining the who, what, where, when, and how of the response. The tactics from this form carry forward to the “Work Assignment” on the ICS-215. Another purpose of the ICS-234 is that it presents alternative (or what-if) strategies and tactics to respond to bad weather, sudden changes in operational conditions, etc. This form is simply a formalized version of how most OSCs tend to think in order to turn objectives into tactical field work.</p>		
<p>Preparation. The Work Analysis Matrix, if used, is usually completed by the Operations Section Chief and Planning Section Chief prior to the Tactics Meeting.</p>		
<p>Distribution. All completed original forms must be submitted to the Documentation Unit.</p>		
Item #	Item Title	Instructions
1.	Incident Name	Enter the name of the incident
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Operational Objectives	Enter the relevant Operational Objectives from the ICS 202, with numbers
4.	Operational Strategies	Enter all strategies that could be used to meet the objective (“how”)
5.	Tactics/Work Assignments	Enter details, including as much as possible, who, what, where, and when, of work assignments to carry out Operational Strategies
6.	Prepared By	Enter the name and position of the person preparing the form
7.	Date/Time	Enter the date and time (24-hour format) the form was prepared

ICS 234-CG Instructions

		WORK ANALYSIS MATRIX ICS 234-CG	
1. Incident Name		2. Operational Period From: _____ To: _____	
3. Operation's Objectives DESIRED OUTCOME	4. Optional Strategies HOW	5. Tactics/Work Assignments WHO, WHAT, WHERE, WHEN	
6. Prepared by: (Operations Section Chief)		7. Date/Time:	