

FIRELINE HANDBOOK FOR ARCHEOLOGISTS

The following guidance and advice for Cultural Resource Technical Specialists assigned to wildland fire suppression was prepared by Lisa Hanson, National Park Service.

The following is a quick compilation of the tasks that a Cultural Resource Technical Specialist should do on a wildfire assignment. Although I've included a few comments pertaining to local smaller fires, this document is intended for use on project fires.

The position of Resource Advisor is NOT included in the NWCG 310-1 (Fire Qualification Handbook), which means that each agency has a slightly different expectation for this position. To date, the NPS has no current handbook for this position, and the original handbook did not address cultural resources.

Keep in mind, that to have Cultural Resource Technical Specialist, or Archeologist listed on your red card, you need only have successfully completed S130/190, passed the physical test, *and* convince your approving officer (who signs your card) that you can perform in this function. Since the approving officers (usually local FMOs) have no standards to apply in judging an individual's professional qualifications, this is potentially an arbitrary decision on their part.

The following guidance offers little content regarding survey, site recording, etc. This is professional knowledge that you should bring with you to a fire from your day job. This document focuses on the points of intersection between the CR manager and the fire organization.

Get Ready

The first step toward working as a Cultural Resource Technical Specialist on a wildfire assignment is to take the basic fire courses. Usually these are offered together in a 40 hour training session (S130/190). Check with your nearest fire program assistant for information on where this will be held; if you don't have a fire program assistant, talk to the person charged with initial attack responsibilities on your unit. Chances are that this training will be hosted at a location near you every year. You are also required to attend 8-hour refresher training every year. Refreshers are typically hosted in many locations (probably even locally).

If the physical fitness test is not included in the basic fire fighter training, or if you are past the initial training, and now doing refreshers, make arrangements with your fire program assistant to do the pack test. This test involves carrying a 45-lb. pack three miles, in 45 minutes for an arduous rating; there are adjustments for elevation. This rating gives you the fewest restrictions on a fire. Although you may be able to go to a fire with a moderate rating (25 lb. pack, 2 miles, 30 minutes), you might be restricted to fire camp, or only allowed on the line with an escort. The reality is that if you want to be on the line, especially working in a fairly autonomous capacity (like Cultural Resource Technical Specialist), you should have the physical ability to get yourself out of trouble fast.

Get Set

In order to be called to a fire, the right people have to know that you're available. Availability is governed by your personal wishes, and by those of your supervisor. Check with your fire program assistant (or your local or regional dispatch if you don't have a program assistant) about how he/she wants to receive availability information. If you want to go on subsequent fires after your first assignment, make sure that your supervisor is on board with this; remind your supervisor frequently about your availability status, and inform her or him when you accept an assignment.

If you have a fire on your unit, invite yourself. If the fire is small and/or in the early stages, work through the local Incident Commander, otherwise, contact the Plans Section chief and or Agency Representative

and pitch it to him or her. Working through the system is absolutely necessary if you hope to be invited back for the next fire; it also lends credibility to the position of Cultural Resource Technical Specialist.

Some units of both the Forest Service and the Park Service have archeologists on their local call out lists; it gets the cultural resources folks in at the ground level. In most cases, an archeologist can get to the fire on their unit before heavy equipment, and at the same time or shortly after the arrival of initial attack personnel.

You can be listed as “available” in three different categories: (1) local; (2) regional; or (3) national. In reality, once assigned to a fire, you can be sent anywhere. Dispatchers, home units, and the personnel in the resource order filling system are reluctant to bring on resources that are restricted in their availability. Unless there is a compelling reason to be listed only at the local or regional level, it will improve your chances of a call out to list yourself as available at the national level. Current guidelines call for 14-day assignments, plus travel days on both ends of the assignment.

If you are listed as “available” on the national level and know that there are fires that you *really* want to go to, and you haven’t been called, make some phone calls. Look at the National Situation Report, and call those units that are burning. You may be able to connect with someone who is responsible for local cultural resources. Ask this person to name-request you through the Plans Section of the fire; if the person you talk to is not assigned to the fire, they can still have you requested by working through their Agency Representative who is assigned to the fire. You could also call the coordination centers for the areas that are burning, and let them know that you’re available and interested in participating. Keep your call brief, however, since these folks are very busy.

You should have your “red bag” packed and ready (this is covered in S130/190), and when you go to a project fire as a Cultural Resource Technical Specialist, you should also have a pack with your field equipment. This will probably be very similar to the collection of equipment that you take out on survey, including compass, graph paper, pencils, ruler, camera, GPS unit, etc. The things that you should try to get from the fire are local topographic maps (and maybe orthophoto quad sheets), flagging tape (in the color designated for CR use on that fire), site record forms, and maps with known sites and the site records, and previous surveys.

Go!

When you accept an assignment to a type II or type I wildfire, your fire program assistant or coordination center will let you know the logistical specifics. One word of advice; if you can drive, do it. Fires always seem to be short on vehicles, and having your own ride will help you accomplish your job since you may work relatively independently. When you arrive at the fire, go directly to status check in; this gets you in the system and on the board of resources committed to this fire. Just about everyone will develop a strong dislike for your actions if you fail to check in. Also remember not to leave the fire without getting demobilization orders. This keeps you accounted for at all times.

When you check in, find out who the Plans Section Chief is. This person is your contact within the IC system. You will either be working for the Plans Section Chief or the Agency Representative (this person is assigned to represent specific concerns and conduct liaison work on behalf of the unit hosting the fire). Identify your supervisor on this assignment. If you’re headed to a smaller local fire, with no team assigned, ask dispatch who your contact is on the line.

Next, find out if you are the only one assigned to do CR work on the fire. If you are on your own, and it’s not your home unit, try to make contact with the local archeologist to let them know what you’re doing, and to get maps of site locations and previous survey, and site forms. This is a good time to discuss what the home unit’s specific concerns are, and what the local resources include. Be sure to route these

requests through your supervisor or at least ask them how you can get these items. This contact is really critical, since there is no substitute for local familiarity and knowledge of the resources.

If maps will take a while to arrive, or if you have other archeologists working with you on the incident, look into the possibility of getting out to look at the ground. Since you've probably arrived in the middle of an operational period, you won't get the real scoop until the next briefing; but you can still get some work accomplished. If there are any new dozer lines being constructed, try to make contact with the dozer boss (who is routing/guiding the equipment on the ground), and walk with that person, surveying the route. If you can wait for maps, they'll help considerably in this process; don't ask the dozer boss to hold up line construction for archeology (they wouldn't do it anyway, and asking really lessens your credibility). This is an emergency situation, and the overriding goal is to suppress the fire.

Walking in front of the dozer is a potentially dangerous assignment; let the dozer boss and operator know what you are trying to do. If you can route the equipment around a site, you've earned your pay. Remember that the dozer boss had the final say on what the equipment does & that person is responsible for the safety of the equipment and operator. If the dozer will have to compromise safety to avoid the site, don't ask them to do it; human resources are more important than material remains of the past.

Don't attempt to walk in front of a dozer at night, or if you feel unsafe (like direct attack or in a very smoky situation). Keep in mind, that to complete pedestrian survey, you have to be able to see the ground. A note on safety; you need to have a certain familiarity with working around heavy equipment. One way to get this familiarity is to volunteer for those ever-popular monitoring assignments during construction projects on your home unit.

If more than one dozer is operating, lots of new line construction will take place, or you're finding lots of cultural resources, ask for another/more archeologists to be assigned. The goal is to survey before initial line construction and other ground disturbance; there are many additional opportunities to further impact a site after the initial line is cut (line improvement, mop up, and rehab), so survey as soon as you can.

After new line construction has been completed, the dozers and crews will usually be put to work improving the line (breaking up slash piles, widening the line, etc). Now is the time to get out and walk those lines, helispots, camp locations, etc. that you couldn't survey before initial impact. Do this as soon as possible. The point in doing this is to avoid additional impact to sites that were hit during initial impacts, either from improvements, mop up, or rehab. If there are sites that have been hit, or are close to the line, flag them heavily. Be sure to use the color designated for CR use on this fire. It can't be stressed enough that between line improvement, mop up, and rehab, there are many opportunities for additional impacts to sites. After you've looked at the dozer lines, look at the hand constructed fire lines. Although the potential for damage is less on hand lines, it does exist, and the impacts should be surveyed.

Look around for other impacts from the fire suppression activities. A few examples are camp and spike locations, helipads/spots, water source (portable tanks) locations, staging areas, and areas that might contain resources particularly sensitive to smoke (like rock art). Other possible impacts are new roads or dozer lines to access the fire. All ground disturbance needs to be accounted for in the report.

At some point, you'll have to get into the "triage" mode, and prioritize the survey work that needs to be done. Always try to get to the areas that are about to be impacted first, and then to the impacts that have already occurred, realizing that there are often subsequent phases of impact (especially lines, but camp, air ops, and portable water tank locations, etc too). After a few assignments, you'll get a feel for what impacts are associated with specific activities; this will help you set priorities.

The report that you prepare is critical documentation for this incident, and it will be used by the unit

managers, as well as by the ESR/BAER team. Professional judgment comes into play here; there is no set format or template for this report. It is better to include more information than less in this report (within reason). Include areas surveyed on maps, and dimensions and acres. If sites were located, identify them on a map, and include completed site forms (the reason that I include completed site forms, is that not all fires get ESR/BAER money for CR work) and site maps in the report. Identify and differentiate areas surveyed before impacts and those surveyed after impacts.

It's helpful to include suggestions for rehabilitation in this report; ideally, the ESR/BAER team will take care of this, but that transition can be drawn out, providing an opportunity for site protection to fall through the cracks. Be as specific as possible on this; for example, if they need to stay out of areas for water barring, but seeding is OK, write it in the report. If at all possible, meet with the ESR/BAER team to discuss your concerns and recommendations; show-me trips can cut out a considerable amount of confusion.

Finally, give copies of the report to the following: documentation unit leader, the Plans Section Chief (usually this person will only want a copy in the Doc unit), the Agency Representative, the BAR leader, and the unit archeologist. In theory, the doc unit will provide copies to the other folks, but there could be a time delay. Finish this before you demobilize from the fire.

A Few Additional Comments

- Safety is the overriding theme on any fire. Think about everything that you do, as the consequences of a mistake are magnified to a potentially fatal level. Be mentally prepared for this assignment.
- The majority of fires are Type 5, 4, or 3 fires, which are handled at the local level. It's important to stress the need for cultural resource managers to be on those local call-out lists.
- Go to the morning briefing every day, and evening briefings when you can make it. Morning briefings are where you will hear the plans for the day; where equipment is working, crew assignments, air operations, etc. There is no substitute for being there! Resource protection is usually one of the objectives, so if there are CR concerns, ask the Plans Section chief to address them (or let you address them) at the morning briefing.
- When you get to the line, let the division supervisor of the division you'll be working on know that you're there, what you're doing, and what your schedule is. It helps to meet with the division supervisor at the am briefing; once on the line, they have a lot to juggle. The division supervisor may want you to check in with him/her on a regular basis to keep tabs on you; if things are blowing and going, you will probably want to attach yourself to another resource, like a dozer boss, or a crew.
- When you leave a division to go back to camp or to a new division, let the division supervisor(s). This will allow everyone to avoid considerable frustration when someone is looking for you. Personal accountability is critical.
- On the communication note, don't even think about walking the line without a radio. As a single resource, you must have a radio for personal safety and accountability. You can use your home unit radio on large fires, but be sure to see the communication unit folks to have it programmed for the frequencies on that particular fire. On larger incidents, you may be able to check out a radio from the communication unit. Get a copy of the communications plan (usually in the shift plan that you can get at the morning briefing), so that you know who is using what channels.

- Think about the assignment before you accept it. Are you really available (mentally and physically) to be out for 14 days? Are you generally familiar with the resource types in that geographic area? If you can't make a complete commitment, don't accept the assignment (just an aside, dispatchers really don't like to hear that you can't accept an assignment if you are listed as "available").
- When you have the general idea of what kind of resources you're dealing with, consider your ability to deal with them. If you need a CR Technical Specialist who can deal with a specific class of resources (for example, cultural landscapes), consider ordering one.
- See the big picture: keep in mind that you are part of a team, and the goal of the team is to suppress the fire in a safe manner, with the least amount of resource damage. If you see yourself as part of this team with this goal, your contributions are more likely to be valued by others on the team.
- If you are the archeologist responsible for resources on your home unit, consider developing a briefing package as part of your pre-suppression efforts; this would be a package of info given to incoming archeologists that identifies your concerns, and familiarizes that archeologist with local resources.