



Event Type: Communication Between Ground and Aircraft

Using Signal Panels with Arrows to Communicate with Aircraft

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This is a simple and effective communication tool for you that fosters additional dialogue on sharing lessons and learning—not when we have near-misses or accidents, but more frequently with best practices and tools.

The communication between aircraft and ground resources is one of the most important and challenging tactical elements of wildland firefighting. Crowded radio channels, confusing perspectives from very different views of the same terrain and same fire, as well as compressed time frames, all contribute to this communication difficulty.

This RLS is a simple best practice to share—and hopefully begin a dialogue—on this communication issue.

During my time on Interagency Hotshot Crews, I realized that some ideas such as this one were shared between crews at drop points and lookout points. Now, in my current role, I thought it would be worthwhile to share this with a wider audience.

Simple Steps to Provide Better Target Identification

The mirror, signal panel and strobe light can help to mark and make clear who a helicopter or other aircraft are talking to over the radio.

[An aircraft signal panel is a high-visibility, dual-sided fabric marker—typically fluorescent orange and pink or cerise—used by ground personnel to signal, identify positions, or communicate visually with overhead aircraft.]

Rather than the constant confusion of: “Your right or my left?” or “I’m in a yellow shirt and waving my tool at you”—using the following tools replaces the dependence on similar unclear and confusing questions and descriptions. Most importantly, they provide better target identification.

Many of us have a length of this aircraft signal panel rolled-up in our line gear. As we know, they work great to mark a ground position or target for the aircraft.

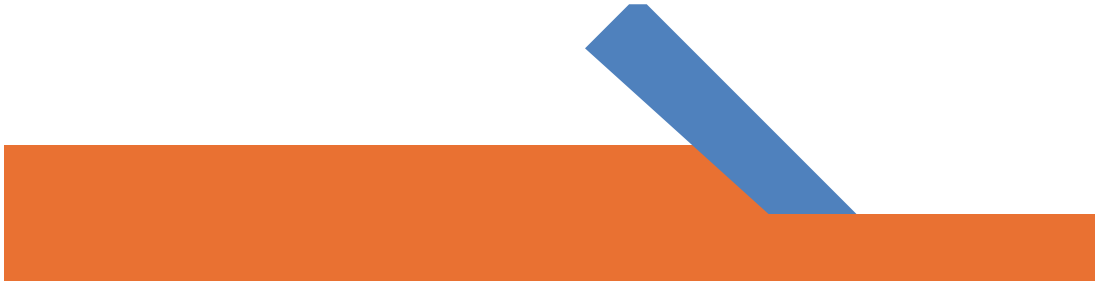
However, a very simple cut and fold to a rectangular signal panel creates an even better version of this tool.

By running a cut about halfway across the short axis of the rectangle for a few feet of length, you create two “legs” on the panel. These can then be folded back at 45-degree angles to create an arrow. (See Steps below.)

An arrow is much better for pointing out a target and communicating your intent to the pilot above.



Step 1 – Unroll a 10-foot-long signal panel and cut on the line shown above.



Step 2 – Fold the cut “leg” back at a 45-degree angle.



Step 3 – Fold the second “leg” at a 45-degree angle and orient at target. Pin down with rocks for rotor-wash or bucket drops.

Final Thoughts

Now, instead of saying: *“Try to put the drop uphill of the panel”* or *“Drop east to west”*—you can simplify your communication by saying: *“Arrow is pointed at the target”* or *“Drop in the direction of the arrow.”*

I’ve found that oftentimes pilots will acknowledge the arrow and simply ask if the arrow is aimed at the target drop.

Of course, by not folding back the “legs,” you will still have the standard rectangle. It might just mean a few more rocks are necessary to hold down the different corners of the legs due to rotor-wash and winds.

Important Note: There are limits to this creativity. I’d advise not using it in all situations, especially around landing zones or sling sites. Different panel configurations can mean different things and the arrow “drop here” message may not convey your intent for a logistical mission. The standard panels are much more useful for those assignments.

Hopefully, this is a simple and effective communication tool for you that fosters additional dialogue on sharing lessons and learning—not when we have near-misses or accidents, but more frequently with best practices and tools.

This RLS was submitted by:

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