



Signal Mirror / Heliograph

Items needed: Tin, pen knife / tin opener, candle & matches.

A heliograph is a device that reflects the sun reflection onto an item of your choice to gain attention, These can also be used to send a message up to miles away by means of Morse Code. We will hopefully show you a method to allow you to create a heliograph of your own and with the additional benefit of being able to use the tin as a container.

Using tin open on pen knife carefully open.



Use reamer on penknife to create a sighting hole.





Looking through the hole sight the location (aircraft/rescue unit).



When the bright aiming spot covers the target, you will be flashing a signal to the target. Very little movement is required to create a flash, normally this occurs simply by attempting to keep the target covered by the spot, but wiggling the mirror very slightly to move the bright aiming spot across the target will provide a more definite flash. With moving targets especially, such as an aircraft moving across the sky, it is best to move the mirror side to side, not up and down.

If no target is in sight, the mirror has sufficient range to make it worth the effort to flash the horizon. Rescues have been made by aircraft occupants noticing mirror flashes beyond visual range. When doing so, flash the mirror on a particular spot on the horizon for two minutes, so that you will more likely generate multiple flashes that are less likely to be disregarded. Then, move your aiming point a few degrees and try again. If you happen to know that aircraft generally fly a track across a particular segment of the horizon or that hikers are likely to cross a particular ridge, concentrate on that area. Use any local knowledge to your advantage.





To ensure that the sun is reflecting off your heliograph onto your target both items should be with a V shape of an out stretched hand, this also allows you to aim the light at the target.



When you get good at sighting and want to expand on it then you can learn Morse Code and transmit it others, for night time use then place candle into your tin and use the lid like a door. Opening and closing/blocking, as deemed fit. Your tin will heat up so it's recommended that you place tin on stable surface with opening towards target.

