RIVERSIDE MOUNTAIN RESCUE UNIT

ELT Training Garner Valley

Nov 07, 2020 Garner Valley, San Jacinto Mountains 2020-T11

Written by Vinay Rao.

RMRU is called upon to do many types of rescues (lost hikers, stuck climbers, etc.) and one of the possibilities – thankfully very infrequently - is to respond to a downed aircraft. Should an aircraft crash, most will have an ELT (Emergency Locator Transmitter) that will automatically go off and continue to transmit its location signal. This is different than a "black box". RMRU is equipped with several ELT signal receivers and today's training involved learning how to use them.



Tony by Van briefing Team Members

Team members met at the Lake Hemet Sheriff Office in the morning where Tony briefed the team on the operations of an ELT receiver. Earlier that morning Eric had gone out in Garner Valley and placed a training ELT that the team was going to try and locate. After a full week of nice fall weather, a storm had just moved in and it was cold, raining, and windy so apparently Mother Nature wanted us to train in inclement conditions that we might encounter!



Taking the first bearing in the Rain

We set off from the station and used the receivers to get the best signal direction. Then we used a compass to determine the bearing that the signal was coming from and our GPS units to give us our GPS coordinates. We entered these two pieces of information in a computer program that we use called Sartopo. And it gave a direction that the downed aircraft could be in. As a group we then moved a mile or so down the road and repeated the procedure to begin the process of triangulating the ELT location. Each team member took turns operating the receivers, and mapping the bearing, etc. on the Sartopo program. Things we had to keep in mind while trying to acquire the signal included avoiding things that might interfere such as metal building, power lines, vehicles, etc.

Out in the brush in the rain, just like real missions

The triangulation process was repeated a total of four times at different locations, taking about three hours to do so, before we felt confident that we could now switch to a ground search for the actual ELT which we found quickly. The ELT is the size of a small box but in an actual scenario we would, obviously, be looking for a much larger debris field.



Plotting in the Van on the computer using SarTopo Software.

I can confidently say that all of us at the training could now operate the receivers should we be called up to do so. Good job Tony and Eric in the training!

RMRU Members Involved: Kase Chong, Blake Douglas, James Eckhardt, Eric Holden, Tony Hughes, Beth Jeffery, Shani Pynn, and Vinay Rao.