Tips for Hobson Electronics Moonraker 2022

This year DMC are running their Moonraker Navigation Rally with a change of approach versus how night navigation rallies have been run since 1984. The change involves a shift away from tricky route instructions to delay competitors at the start of regularity sections, towards an emphasis on precise management of time and distance along the route. Below are some tips which crews should pay attention to.

Distance Measurement

The entire route has been planned and measured using a Terratrip 202 using GPS Probe. The route has been driven several times and it has proven 100% repeatable to the 0.01 of a mile, so that's good news. It is therefore important that competitors calibrate their own tripmeters so they match the organisers'.

One way to do this is to use a road car SatNav in advance to measure a stretch of road (most have a trip function), or a smart phone app such as Rally Tripmeter, and then adjust the rally vehicle tripmeter to match. This should be done over a reasonably long distance, say 5 or 10 miles, and not try to do it just over a mile. It is worth keeping on mind that at 30mph, 0.1 mile is 12 seconds in time, so even 0.1 mile error could be important at intermediate time checks. You can do this at your leisure before the rally so you are fully ready on the night.

A second way is to wait until the night of the event, and use the first road section run-out to the first regularity. This will be a "calibration run" (or preferably a confirmation run) with tulip diagrams giving distances to multiple landmarks, and then you can make the needed adjustment to your trip meter just before starting the regularity. Leaving it to this last minute isn't perhaps the best approach, and better to use the calibration run as a confirmation run.

Most tripmeters have the ability to adjust the reading as you go along; that is to jog the reading forward or back by some amount. It would be important that you know how to do this. In the route instructions for the regularities the distance at the via points will be given, and this enables competitors to adjust their tripmeter display if they are not exactly on the distance at those points. Just remember to note these mileages on your map as you plot the route!

Time Management

Just as important as distance travelled, is time taken. Again there are two approaches. The first is to work with "time-of-day" and rely on mental arithmetic to calculate the minutes for how the time and distance is being managed. You take the start time of the section and then check it as you pass each 0.25 (on the 30 seconds) 0.5 (on the minute) 0.75 (on the 30 seconds) 1.0 (on the minute). You do have to check that you are on the right minute so adding on to your start time for the section is an additional mental burden. The main advantage of doing this is that "time of day is always time of day".

The second approach is to use a stopwatch. Here, you start the watch as you start the regularity, and 0.00 miles is at 00.00 minutes and seconds. Again you check your time at quarter mile intervals and the times and distances are easy to compare; 0.25 mile is 30 second, 0.5 mile is 1.00 minute, 1.0 mile 2.00 minutes etc. Easy to keep track of.

On this event, all regularities will be set at 30 mph throughout, (no changes of average speed mid-section), so this may well turn out to be the best approach for this year. The risk here is if you inadvertently stop or zero the watch along the way, and then have to revert to calculating from the time of day you started the section.

Following the Route

Don't forget to order maps 13 and 19 in time, and make sure you have a Romer to help you plot.