

## Hawkeye PT – GPS

GPS devices need current ephemeris and almanac data in order to acquire a GPS fix. Almanac data describes the orbital courses of each of the GPS system satellites, and the ephemeris data tells the GPS receiver where each satellite will be at any given time throughout the day.

Problems arise when the GPS almanac and ephemeris data are downloaded in one location (for example the USA) and then the device is powered down, placed in a box and shipped to another location which is far away (example Iraq). When the device is powered up in Iraq it would still think it was in the USA and it would try to track satellites which are only visible in the sky above the USA, this is one scenario where the device would send bad GPS data to the SkyRouter servers.

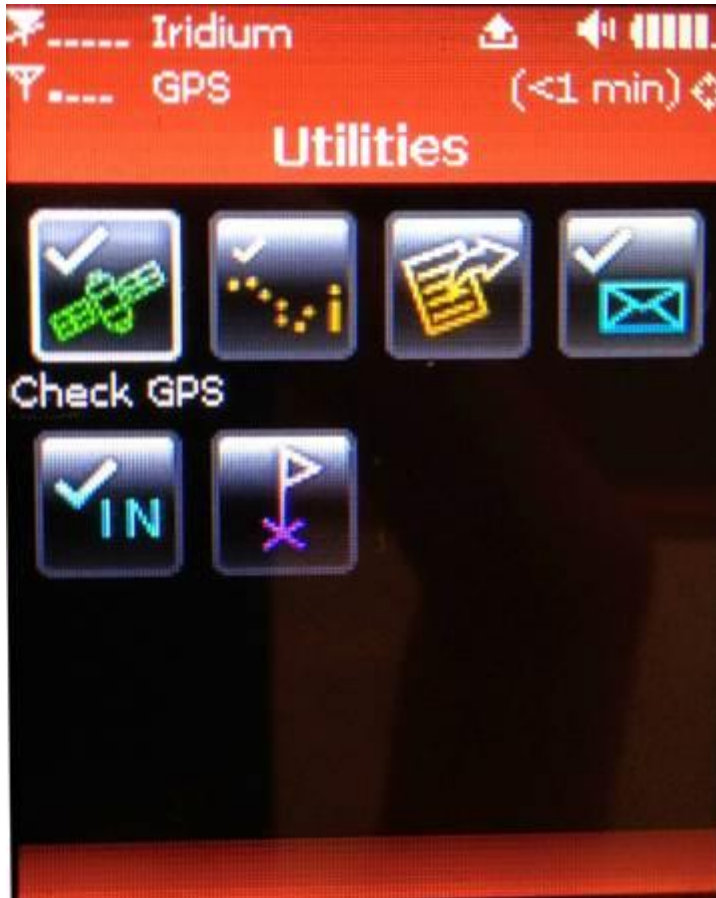
Upon inspection of the position report data that was received by SkyRouter we noticed that there is no valid GPS fix in any position report data, we believe the GPS ephemeris needs to be reset on the device itself.

Please perform the following procedure to reset the GPS ephemeris on the HawkEyePT:

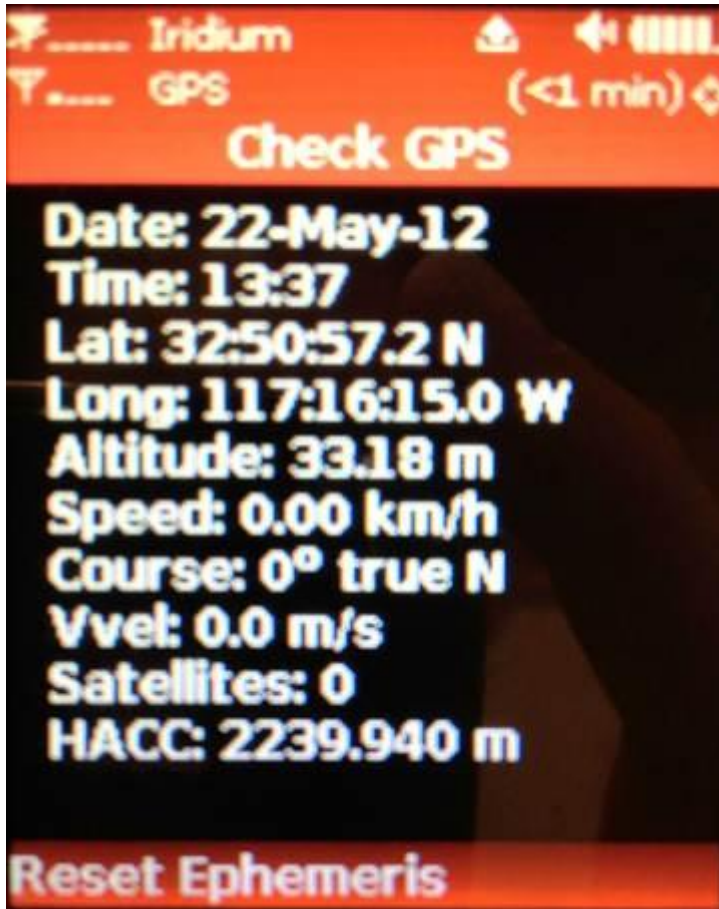
1. From the main menu select “Utilities”:



2. From the Utilities menu select "Check GPS":



3. From the Check GPS menu select "Reset Ephemeris":



Once the ephemeris has been reset:

1. Place the tracker in a space where it will have a completely unrestricted view of the sky, ensure that it is powered on
2. Leave the device in position whilst it downloads the new ephemeris and almanac.
3. When your device has the new ephemeris and almanac it should begin to report to SkyRouter, we can then check SkyRouter to see if we are receiving valid position report data from the device.