

## APPENDIX F: Getting Started with the TH-D7A

### Instructions for FLIGHT radio:

- 1) Attach the power supply and antenna, then push the power button
- 2) Select the desired frequency by using either the knob located on the top of the unit or by pressing the ENT key followed by the numbers on the keypad indicating the frequency desired
  - If, for example, you are using the 70cm band, you must select the frequency on the lower of the two frequency bands available. To easily see this, press the DUAL key, and both will show up. Then press the A/B key to move the triangular cursor to either the lower or upper frequency band. The upper selector will allow you to select the 2m band, and the lower either the 2m band or the 70cm band
- 3) Select the desired output power level (H, L, EL) by pressing the F key, followed by the MENU key.
- 4) Press the MENU key:
  - a) By using the knob located on the top of the unit and the OK button, select menu 1-2-1, and turn APO (Auto power off) to OFF
  - b) Menu 1-4-1, and select which band you wish to be the data band
  - c) Menu 2-1, and enter the call-sign that will be flying in the balloon
  - d) Menu 2-2, and select NMEA for the GPS unit if using the Garmin GPS25-LVC
  - e) Menu 2-D, and select the desired interval between packets sent
- 5) Plug the GPS unit into the GPS port on the TH-D7A. The GPS unit should be powered on before doing so, and the antenna on the GPS unit should be attached. The TH-D7A will take a few seconds to recognize the new data coming from the GPS unit. Once it beeps, you can hit the POS key to see if the radio is in fact receiving current GPS information. If it is, the degrees symbol as well as the period in-between the minutes numbers will be blinking. If they are not blinking, then either the connection is faulty, the NMEA setting in menu 2-2 wasn't set, or the GPS is not powered on.
- 6) Press the TNC button. A large D should appear next to the data band that was selected in menu 1-4-1. Located at the top of the display should be a bar with TNC written in it. If there is also a PACKET written across the top, press the TNC button twice, as this is the PACKET mode that is used to communicate with a computer.
- 7) Next press the BCON button, and a BCON indicator should appear at the top of the screen.
- 8) If everything else is set and ready to fly, depress and hold (for approx one second) the F button. A symbol that resembles a key should appear at the top right corner of the display. This ensures that the rest of the keypad is locked for flight, should the radio be bumped by some other device during a bit of turbulence.
- 9) Your radio is now ready to fly!