Meteorological Observations from Antarctic Traverse Parties DRAFT INSTRUCTIONS

The World Meteorological Organisation has requested that, if possible, all Antarctic traverse parties should make meteorological observations and transmit them promptly to regional or national centres for distribution on the GTS. The key elements required for forecasting are pressure and temperature together with the measurement location and height. Because winds can be affected by local topography, they are not normally required. Other elements of a standard weather report can be included if a competent observer is present, but are not covered here. Observations should be made within a few minutes of one of the main hours: 00, 06, 12 or 18 UT. Observations can either be coded up into the MOBIL code, or sent in plain language. The MOBIL code is quite complex and most operators are likely to prefer the plain language option.

Notes:

GPS measurements should give a height to within a metre, provided sufficient satellites are used for the fix. On occasion they may be of lower accuracy. The height reported is that of the pressure sensor.

Temperature must be measured in the shade in order to be representative of the true air temperature.

Plain language report

Date of observation, eg 2007 11 23 Time of observation to nearest UT hour, eg 12 Latitude, eg -85.3 Longitude (east longitude is negative), eg 27.5 Height in metres and accuracy, eg 2345/10 Observed pressure in hPa, eg 789.5 Observed temperature in °C, eg -45.3

This can be emailed to ?? with a subject line of POLAR observation as:

To: ?? Subject: POLAR observation 2007 11 23 12 -85.3 27.5 2345/10 789.5 -45.3

MOBIL code

OOXX AAANT <YY><GG>3 99<Lat> <Q><Long> <MMM><UU> <hhhh><im> 43/// ///// 11<TTT> 3<PPPP>= Where <YY> is the month <GG> is the day <Lat> is the latitude, eg 853 <Q> is the quadrant, 3 for east longitude, 5 for west longitude <Long> is the longitude, eg 0275 <MMM> is the Marsden square [See code book] <UU> are the units digits of the latitude and longitude <hhhh> is the height, eg 2345 $\langle im \rangle$ is an indicator of the accuracy of the height, 1 = better than 3m, 2 = better than 10m, 3 = better than 20m, 4 = worse than 20m<TTT> is the temperature (assumed to be negative), eg 453 <PPPP> is the pressure, eg 7895

Which can be emailed as: To: ?? Subject: POLAR observation OOXX AAANT 11233 99853 50275 59057 23452 43/// //// 11453 37895=