BBSS: Accessing Sonde Data

I. Purpose:

The purpose of this procedure is to document the process of running the code **GETSHEAR.BAT** to retrieve ASCII files containing sonde data from ADaM and to determine the wind sheer for meteorological data applications.

II. Cautions and Hazards:

None.

III. Requirements:

None.

IV. Procedure:

When a sonde is launched, there is a temporary ASCII file created on ADaM. This ASCII file contains the sonde data and grows as new data comes in from the sonde.

A. Steps:

1. Run **GETSHEAR.BAT** from the observer PC laptop in the E-Van.

2. Execute the run sometime between 10 minutes after a sonde launch and the time the sonde flight is terminated. (The files is deleted from ADaM at the end of the sonde launch.)

3. Log onto the observer laptop computer in the E-Van (brings up Windows NT display).

4. Look for a flag with the word **START** in the lower left corner of the screen.

5. Select **START** by using the mouse to position the cursor over the **START** button and clicking the left mouse button. (This brings up a menu that includes a selection, **PROGRAMS**.)

6. Click on **PROGRAMS**. (This brings up another menu.)

7. Click on **COMMAND PROMPT** in this menu. (This brings up a black rectangular window with a command prompt which looks like: **C:\>.**)

Moving Directory Containing The Program GETSHEAR.BAT

8. Ensure that the command window is active by positioning the cursor anywhere within the black command window and clicking the left mouse button.

9. Move the D drive by typing: **d: <return>**

10. Move the shear directory under twpsst (TWP site science team): **CD\twpsst\shear <return>**

11. Type **getshear <return>** to run **GETSHEAR.BAT**. (This command retrieves a file with a name of the form:

    sonde-TWP-Nauru0yymmddtttt.tmp, where:

    yy = 2-digit year (e.g., 1998> 98)

    mm = 2-digit month

    tttt = 4-digit time (e.g., 9:35 > 0935)

12. View the contents of this file: time since the balloon launch (in minutes and seconds) and the balloon ascent rate, altitude, pressure, temperature, relative humidity, dew point, wind speed, and wind direction.

    (By reading the wind speed at two different altitudes from this file, the vertical wind shear is calculated:

    wind shear = (V2 – V1) / (Z2 – Z1) where V2 and V1 are wind speeds at altitudes Z2 and Z1.

13. If necessary, close the command window by typing: **exit <return>**

B. Viewing Sonde File with" Windows Explorer," the Windows NT File Manager:

1. Bring up **Windows Explorer**.

   First Method

   - View a row of icons across the top of the computer screen.

   - Position the cursor on the icon that looks like a file folder with a magnifying glass on top of it and click the left mouse button.

   - View the Windows Explorer display.

                        OR

   Second Method

   - Move cursor to lower left-hand corner of screen.

   - Look for a flag with the word **START** in the lower left corner of the screen.

   - Select **START** by positioning the mouse cursor over the **START** button and clicking the left mouse button.

   - View menu and click on **PROGRAMS**.

- Click on "folder with magnifying glass" icon with the words **Windows NT Explorer** next to it (about halfway down the **PROGRAMS** menu; this brings up Explorer).

2. Once Windows Explorer starts, view the left half of this display which looks like a series of file folders.

3. If you do not see any folders perform following steps:

   - View an icon that says **MY COMPUTER**, position cursor on it, and double-click with left mouse button (should view the file folder).

   - Scroll up and down this display by clicking on the up or down arrows found at the top and bottom of the right edge of this half of the display).

4. Scroll until you see an icon (picture) next to **D:**

5. Position cursor over **D:** and click the left mouse button.

6. View the right half of the Explorer display of several folders.

7. Position the cursor on the folder labeled **twpasat** and again click the mouse button.

8. Position the cursor on the bolder labeled **shear** and again click the mouse button.

9. View a list of files in the director **d:\twpasst\shear** where you typed the **getshear** command.

10. Look for the file with the date and time corresponding to the desired sonde.

11. Position cursor on the file name and double click the left mouse button (opens the file with the **NOTEPAD** program, a text file viewer).

12. If desired, change the size of the Notepad window by positioning the cursor on one of the four corners of the display, simultaneously click and hold down the left mouse button and drag the corner to increase or decrease the size of the window.

13. If necessary, scroll through the file by clicking the "up" or "down" arrows at the right side of the window or by positioning the cursor on the bar between these arrows and holding down the left mouse button and dragging it up or down.

14. If necessary, close the file by clicking once on the black line found on a button located in the upper right corner of the notepad; click on the square again to restore it to its former size.

15. When necessary, close the file by following the steps below:

- Position the cursor over the word **FILE** located at the top left of the Notepad display.

- Click with the left mouse button to bring up a menu.

- Position the cursor over **EXIT** and click the left mouse button.

- Or, position the cursor on the **X** in the upper right corner of the display and click the left mouse button.

V.   References:

None.

VI.   Attachments:

None.