

4.2 Tracking a Target using WinHorizon:

1. Locate the records that contain your target in the folder of the day the target was recorded
2. Copy the records into a separate folder to make record location easier for Playback and viewing
 - a. This will loop the record files, making tracking and playback easier
 - b. Include multiple records before the track begins to allow time to set up the display (256 colour settings, high resolution, motion removal etc.)
3. Open WinHorizon setup and locate the files in the newly created folder in the Playback: Path and Filename section under the Playback tab
4. Set the display up (256 colour, high resolution, motion removal, etc)
5. Click on the ARPA tab on the top right hand corner of the screen and click on the ACQ TGT (Acquire target) icon (Fig.1)

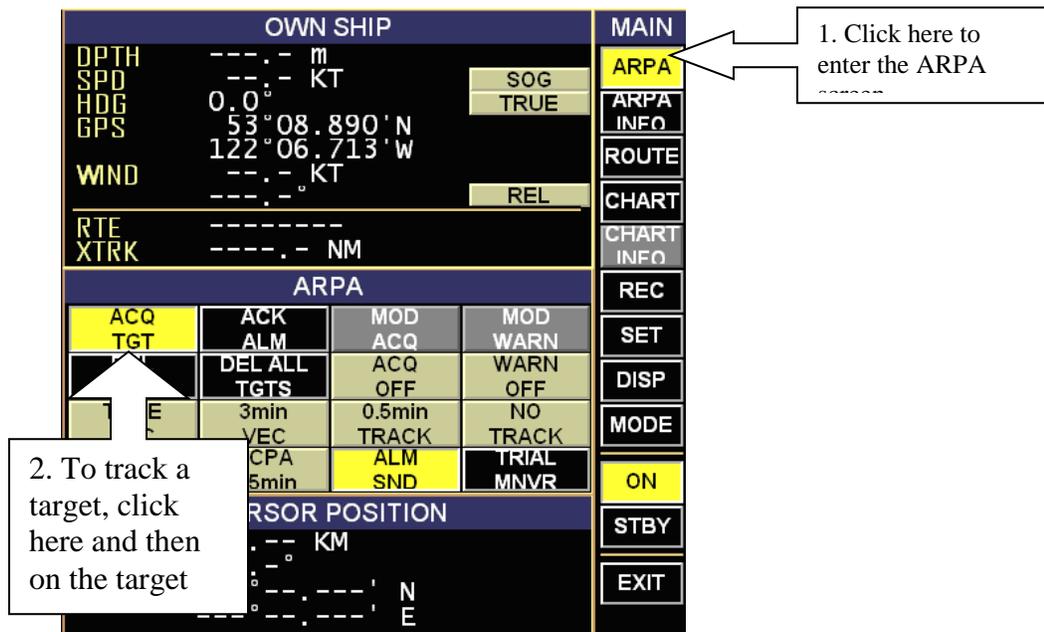


Figure 1. ARPA screen tracking buttons.

6. When the target is seen click on it with your mouse
 - a. The target will have a small pink box with a target number around it and line projecting where WinHorizon thinks the target is heading (Fig.2)
 - b. WinHorizon will begin creating output files
 - c. Record the target number and how many times it hits on the target you want

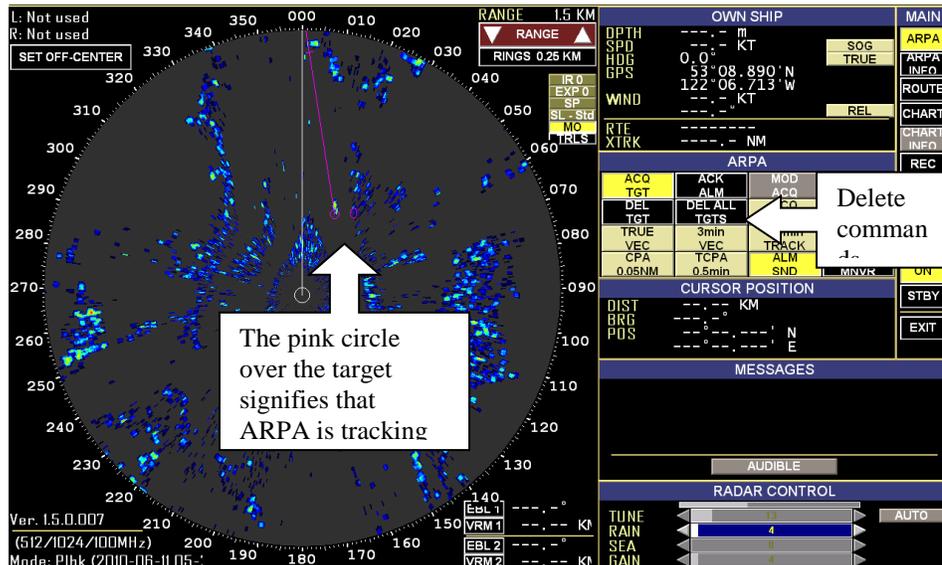


Figure 2. Tracking in ARPA with Motion removal on.

7. If the target marker begins tracking something other than your target:
 - a. Make a note of where the target marker (the pink box) jumped to and what record your target was lost
 - b. Click on your target again if it is still on screen
 - c. Record this new target number and how many times it hits on the target you want
 - d. If you want to delete the incorrect target the tracker jumped to, click on the DEL TGT button below ACQ TGT and click on incorrect target.
 - e. Always keep track of what target number your bird is (Displayed as a pink number beside the target being tracked), and when the tracker jumped off your target (how many correct hits the tracker had for the target you want)
 - f. When target is off-screen, and you can no longer track it, click ON and then STBY to end the output logfile
 - g. View the logfile by opening the file in excel as delimited by commas and spaces, and delete the irrelevant tracks where the tracker jumped off until the file is just a compilation of those hits that you recorded were on your target.
8. If you have tracked the target but are not happy with the file, turn off the radar (Click ON) and turn it back on again to start a new output logfile
9. You may not get a “perfect” track and you may need to exit and enter Winhorizon many times get the best track as possible
10. If you wish to modify the criteria that WinHorizon uses to determine whether or not a blip is tracked, you can open the ARPA configuration file on the computer you are running WinHorizon on
 - a. It is likely located in the directory C:\Remote Radar\RTI WH 1.5.0.012\Radar, under the name “arpa.cfg”
 - b. Generally it is located in the directory where WinHorizon is installed, in the folder “Radar”

- c. Open the “arpa.cfg” file in notepad
 - i. Make changes with caution as the file contents needs to stay in the format it is in, in order for WinHorizon to read it
 - ii. The “#” sign in the beginning of a line in the text file indicates that the line following it is just a note
 - iii. The absence of a “#” sign indicates to WinHorizon the line following is a command for arpa settings
 - iv. Use discretion as to which “PAR”s you change, based on the descriptions preceding each
 1. According to RTI technicians, the two settings which affect WinHorizon’s tracking the most are “PAR2” (Distance the target can vary from estimated positions before being flagged) and “PAR4” (Minimum area in pixels for a return to be considered a target)
 2. The default “PAR2” value is 50, but may be changed to a lower value, such as 25, to improve tracking of small objects
 3. The default “PAR4” value is 10, but it may be changed to 5 to also improve tracking of small objects