

## More Offset Tracking Point Changes

By John Marinuzzi

In the past few *Sounding Better!* newsletters, I have written about a new feature in SURVEY that we were calling "Multiple Offsets" (<u>November 2013</u>). We are now referring to them as Tracking Points because "Offsets" became a bit confusing with device offsets. The original implementation of Tracking Points only gave you the ability to specify these points on the main vessel. That is no longer the case. You can now specify multiple tracking points *for all mobiles*.



|             | 💑 Tracking Points -                                 |        |          |          |          |             |            | ×      |  |
|-------------|---|--------|----------|----------|----------|-------------|------------|--------|--|
| Boat Mobile |   |        |          |          |          |             |            |        |  |
| Ļ           | Main  | Name   | X Offset | Y Offset | Z Offset | ×           | Y          | Z      |  |
| l           | <b>N</b>  | Origin | 0.00     | 0.00     | 0.00     | 12121669.03 | 3478824.35 | 171.53 |  |
|             | Г   | TP1    | 5.00     | 8.00     | 2.00     | 12121678.10 | 3478826.95 | 169.53 |  |
|             | Г   | TP2    | -3.00    | 5.00     | 3.00     | 12121670.15 | 3478830.08 | 168.53 |  |
|             |   |        |          |          |          |             |            |        |  |
| l           |   |        |          |          |          |             |            |        |  |
|             |   |        |          |          |          |             |            |        |  |
| ľ           |   |        |          |          |          |             |            |        |  |
|             | Configure Options New Target Window Start Averaging |        |          |          |          |             |            |        |  |

FIGURE 2. Tracking Points for mobile

| ő           |        |          | Trac     | cking Poi | nts         |            |      | × |
|-------------|--------|----------|----------|-----------|-------------|------------|------|---|
| Boat Mobile |        |          |          |           |             |            |      |   |
| Main        | Name   | × Offset | Y Offset | Z Offset  | X           | Y          | Z    |   |
| <u>ন</u>    | Origin | 0.00     | 0.00     | 0.00      | 12121635.58 | 3478787.20 | 0.00 |   |
| Г           | Hello  | -3.01    | 5.20     | -3.00     | 12121636.82 | 3478793.07 | 3.00 |   |
|             |        |          |          |           |             |            |      |   |
|             |        |          |          |           |             |            |      |   |

Figure 1 and Figure 2 show the new Tracking Point window. As you can see in the highlighted area, there is now a tab with the mobile name for each mobile you have specified in the project. The active tab shows the Tracking Points for that mobile. Figure 3 is how it looks on the map screen in SURVEY. The "Active" tracking point is drawn with a red outline.



FIGURE 3. Multiple Tracking Points in SURVEY

Changes to tracking points also meant there would have to be changes to the Tracking Point to Target windows (formerly Offset to Target, written about in <u>January 2014</u>). Now, when creating a new Tracking Point-to-Target window, you get a list of all available Tracking Points on all mobiles. Below is the configuration screen and display screen for the new Tracking Point to Target windows.

**FIGURE 4.** Configuration Screen (left) and Display Screen (right) for the New Tracking Point-to-Target Windows

| 瞬   | Options | - 🗆 🗙 |   |
|---|---------|-------|---|
| Target  |         |       |   |
| Portsmouth #1   |         |       | 1 |
| Tracking Point  |         |       |   |
| 1   |         | •     | - |
| Boat: Origin<br>Boat: TP1<br>Boat: TP2<br>Mobile: Origin<br>Mobile: Hello |         |       |   |
| Bearing DX DY DZ  |         |       | Ī |
|   | Cancel  | ОК    |   |

| 0              | Target (5) 🗕 🗆 🗙 |
|----------------|------------------|
| Target:        | Portsmouth #2    |
| Tracking Point | Mobile: Origin   |
| Distance:      | 82.485 ft        |
| Bearing:       | 81.46°           |
| DX:            | 66.67 ft         |
| DY:            | 10.01 ft         |
| DZ:            | -47.52 ft        |

## A THIRD DIMENSION

Another new feature with the Tracking Point-to-Target windows is the addition of the DZ component. You can now get the difference in the z values (depth/elevation) of the tracking point and target. Also, the calculated Distance seen in the display window (Figure 4) is the 3-dimensional distance.