Single Vessel / Multiple Vessels Dilemma

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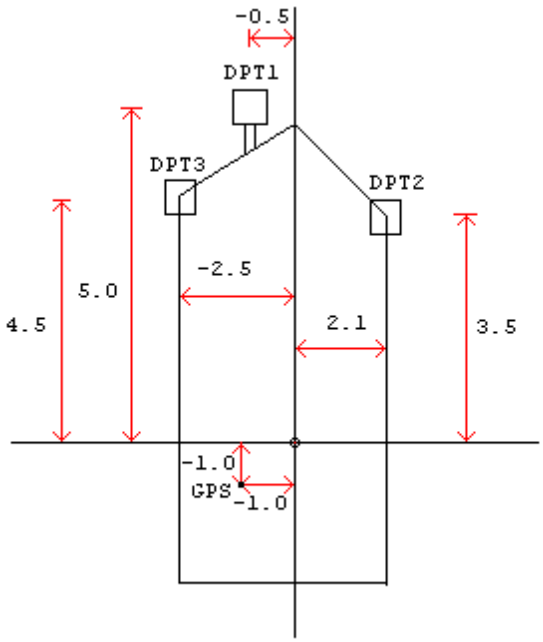
Let us assume that we are running SURVEY with three different depth devices and one positioning device. The device placement is displayed in Figure 1. The question is how to configure the project.

FIGURE 1. *Device Offset Diagram*



GPS: stbd -1, fwd -1

DPT1: stbd -0.5, fwd 5

DPT2: stbd 2.1, fwd 3.5

DPT3: stbd -2.5, fwd 4

The simplest solution is to provide one vessel and set offsets according to the diagram. It can not be any simpler, but what if we want to see track line attached to each depth device? In this case, we have to use multiple vessels. Each vessel requires its own positioning device. We have two choices.

THE SINGLE VESSEL SOLUTION

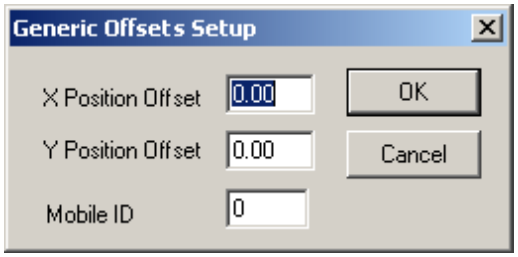
The Genoffset driver (Genoffset.dll) is a simple position device driver that allows you to set a new position relative to the origin of the main vessel.

In our case, we will add three additional vessels. On each vessel, we will install the genoffset driver for position and one depth device.

We enter the depth device offset in the genoffset driver setup dialog (Figure 2). When we configure the depth device for each vessel, we will set depth device offsets to 0.

Note: Bear in mind that the genoffset.dll is a *relative* positioning device and you have to select a reference mobile ID.

FIGURE 2. GenOffsets Driver Setup Dialog



THE MULTIPLE VESSEL SOLUTION

The other solution is to split the position signal. (Do not worry! You do not need additional cables or COM ports. HYPACK® device drivers can share same COM port/netport.) The only thing you have to do is to install the same position device driver on each additional vessel as you would on the main vessel. The tricky part is to set the offsets properly.

The offsets of each additional vessel are equal to the GPS location relative to the depth device position.

GPS1: stbd -0.5, fwd -6

GPS2: stbd -3.1, fwd -4.5

GPS3: stbd 1.5, fwd -5.5

Needless to say, the depth device offsets should be equal to 0.