Accidental Deselection of Auto DP

WHAT HAPPENED

DP operations were in progress with vessel in full Auto DP. The DPO accidently bumped the surge Axis button while reaching for the Radio and deselected the Surge Axis. There were no alarms from the DP system and the DP system displayed the model position of the vessel in the center of the screen while the vessel was drifting off location.

ROOT CAUSE

Accidentally deselected the surge axis. Ergonomics, and double press of the same button was an ineffective barrier.

POSSIBLE BARRIERS TO THIS FAULT AND WAYS TO DETECT IT

1. Install button covers over Axis controls: see Figure 1: Button Cover installed over DP Control Axis
2. Add an audible alarm when changing DP modes.
3. DP system Watch Circles fixed to a geographical point and remain when switching to Manual Mode.
4. Turn on trace lines (snail trails) on the DP system and Position Reference Systems (PRS) - This will show the vessel drifting.
5. Watch Circles turned on in PRSs with audible Alarms.
   Note: Some of the features above may not be available on all DP systems or PRSs.

POSSIBLE WAY TO ELIMINATE THIS FAULT

1. If available from DP vendor and it will not adversely impact the vessel's Industrial mission, consider installing a confirmation dialog box function: see Figure 2: Confirmation of Mode change “Are you Sure”

COMMENTS

1. This type of incident has occurred multiple times on different types of vessels.
2. Check your Class Society rules before equipment or software changes. If changes are made, update documentation (e.g. DP Operations Manual, FMEA) and drawings and submit to the vessel’s class society for approval. Commission and test the new equipment.
Figure 1: Button Cover installed over DP Control Axis

Figure 2: Confirmation of Mode change “Are you Sure”