

Collision Investigations: What I Learned, Part I

Part 1 of 3

In 2012 it was my privilege and responsibility to lead the Judge Advocate General investigation of the collision between USS Porter (DDG-78) and a commercial freighter near the Strait of Hormuz, under circumstances similar in many ways to the recent collision involving the USS Fitzgerald (DDG-62). The following narrative is intended to convey the complexity of such a task and the fact that the process takes a huge amount of time and effort—in the case of the Porter it consumed the full focus of myself, a senior captain at the time, two experienced JAG officers, a yeoman for transcription of recorded interviews, and a team of experts from the Aegis Training Center in Dahlgren, Virginia, and shiphandling experts from the Surface Warfare Officer's School in Newport, Rhode Island. It took six weeks after our return to the states to produce a first draft—several hundred pages—and some of the reconstruction efforts took many months to complete. This story does not attempt to discuss details of the Porter event—which is well documented, including several Proceedings articles—or to draw any parallels with current events, but to describe one approach to solving a unique and challenging puzzle—how did this happen?

First came the interviews with everyone on the bridge, starting with the officer of the deck (OOD), who is responsible to the captain for the safe navigation of the ship; and the conning officer, who translates the desires of the OOD into succinct formal orders to the helm, steers the ship and the Lee helm, and conveys orders to the ship's engines. A junior officer of the deck monitors radar and communications. The bridge watch team also includes the quartermasters who plot the ship's course, and the lookouts, who are typically stationed outside and report lights, other ships, and anything unusual to the watch team. Several decks below, connected by internal communications and usually a phone talker, the Combat Information Center consists of a separate team tasked to correlate radar and other information into a coherent surface picture and relay recommendations to the bridge. Of course, the captain and executive officer, other watches, and others were interviewed. In all, the team investigating the Porter collision interviewed, recorded, and validated the stories of more than two dozen individuals, a task which took several days.

As with many traumatic events, memories and impressions differ. The team must correlate times, places, and impressions into a single story. Radar pictures, written logs, and electronic navigation and radar records are reviewed in parallel to find gaps and correlations. Using a page from the TV detective shows, a white board with timelines for each location, ship, and information source, developed by the team in the wardroom, got us closer to "ground truth," but not all the way there. The wardroom table, with its expansive blue vinyl tablecloth, became a background for small cardboard ships and strips of masking tape as land, as we

tried to recreate the picture and visualize what happened. The next tool was PowerPoint, with a set of slides representing the passage of time akin to a flip book—the key factor being relative motion between the two ships and others in the vicinity.

But even after bringing in key crew members to look at the timelines and graphics, the picture was fuzzy. Several days into the investigation we had not resolved the key questions: who knew what when, and how did the final minutes play out? Retired Navy Captain Kevin Eyer's recent article in Proceedings Today described in detail the challenge of keeping a clear picture of the events on and around a ship transiting a crowded channel at night; imagine the task of recreating such a complex storyboard. The discovery of the other ship track on the internet (in the Porter case, no other ship had reported a collision; the team had to figure it out) added a new dimension to the story; a 360 degree turn, starting about the time and place of the collision as reported by the U.S. ship, pointed us to the other party.

But still, there was more to the story. Part two coming tomorrow.