



Communications & Single Point Failures: What's Your Back-up Plan?

By Katharine Sweeney

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A Thousand Questions

How well prepared is your company for a natural disaster? How quickly could you get your operations up and running after the storm or other event hits? How about your vendors and suppliers?

Emergency contingency plans (aside from vessel emergencies where oil has entered the water – that merits its own article and won't be covered here) can start with a streamlined communications process. For emergencies ashore, how are you set up to handle business if the office is no longer accessible? Having people work from home can be an effective plan, but have you considered how communications will work? If internet and cell phone service is not available, have you



thought about other ways to communicate with your fleet? How about getting word to the critical vendors you use? How are they set up to handle such a crisis themselves? Have you established a protocol to pass word when the office is back up and running and when operations can return to normal?

When conducting an audit of an office's management system I often ask these questions of the executive staff and of the lower level administrative staff to see how well they are complying with the International Safety Management (ISM) code requirement for emergency preparedness and response. Often, plans account for all sorts of disasters that could occur on the vessels and include check lists and drills. Sometimes however, less thought is given to how well the office will respond to an emergency.

I will normally ask what would happen in the event of a fire. Where does the office staff muster? What if there is an earthquake? These are the same types of questions I ask while on board a vessel. The company obviously expects its crews to hold drills as appropriate, so it should also hold emergency drills in the office. Drills need to test any communication protocol, ensuring phone numbers are correct before an actual emergency occurs. Key people will be assigned duties within a contingency plan. Are they still at the company, and if so, are they still in the same role? All too often, I will find the plan has not been updated since 'so-and-so' got promoted. Testing the contingency plan at least once a year is a good start toward ensuring key information stays up-to-date.

Identifying – and Correcting – Single Point Failures

Emergency communications protocol should focus on removing single point failures. I worked aboard a ship which had duplicate systems for many things, however one critical piece of equipment in the vessel's engine control room relied on a single uninterrupted power supply (UPS). This power supply had no inspection or maintenance requirement in the vessel's planned maintenance program. Had the vessel lost power and this UPS failed, we would have also lost

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the ability to restart equipment using automation. Classification societies are watching closely for this type of single point failure.

Finding single point failures in your plan isn't necessarily rocket science. If your emergency contingency plan relies on mobile phone service, do you address what to do if cell service is unavailable? Do you have a way to power mobile phones if electricity is out, such as a hand crank charger? If your mobile phone is no longer working but you have (minimal) access to a land line, you can call your mobile phone and update the message to indicate the situation and when you expect to be able to answer calls. *(This tip would have been very handy to one crew person I had who ended up in jail. The jailors took his cell phone, but allowed him one call. Unfortunately, all the ship numbers were in his mobile phone. If he had called himself and changed the message to indicate his circumstance, his time in the pokey could have been greatly reduced, but I digress.)*

Communications are Not the Only Thing Requiring Back Up...

I came across another single point failure recently when I was asked to attend a vessel during its initial ISM ABS (external) audit. The vessel's first internal audit went well and the report included an "atta-boy" to the Second Mate for squared away files and recordkeeping. The first question the ABS surveyor asked the Second Mate during the external audit was to explain how the Coast Pilot, Sailing Directions, and similar pubs were kept up to date. The Second Mate explained the great system they had in which all publications were electronic and all were updated automatically each time the vessel received its weekly updates. However, the program to view and apply the updates, and the publications themselves, were stored on only one computer.

Earlier, I had asked the Second Mate if the program was installed on any other computer on the vessel — like the Master's office, for example. The Second Mate replied that you didn't need to do that, as this was navigational information you'd only use on the bridge. Of course, during the external audit, the ABS surveyor asked to see the great system about which the Second Mate spoke. Unfortunately, the computer had crashed and was ashore being repaired. Then, the ABS surveyor asked to see the passage plans for the last voyage and the record of chart corrections. But these were on the broken laptop as well. Needless to say, the ABS was not impressed and the laptop constituted a single point failure.

As more and more vessels go to electronic records, these records must still be maintained and accessible, and backed-up somewhere on the vessel. Sometimes I see inspection records all kept electronically. While I understand the need for less paper, at some point someone needs a list to go around and check off everything they are inspecting. In the case of chart corrections, someone must keep track of the corrections that were completed and the ones left to be done. So, if a piece of paper is used, it must then be scanned, adding another step. Worse, if the paper copy gets transcribed into a computer system (even more time consuming) there is the added bonus of transcription errors.

Increasingly, companies want everything entered into a database viewable from the office. And, if this adds value to the operation, then so much the better. However, I have a hard time understanding why so many deck safety inspections should be transcribed into these databases. I suspect that simply entering the date of the inspection on a monthly spreadsheet attached to the maintenance program would ensure these items were being completed in a timely manner. Let the vessel keep records of the inspection results and deficiencies rectified on board.

Single Point Failures: don't let these problems, ultimately be yours. The audit is coming. A good lawyer never asks a question that he/she does not already know the answer to. Anticipate the questions, eliminate the single point failures and yours will be a more compliant and ultimately a safer vessel.

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MARITIME SAFETY

Inspectors Get Tough on ECDIS

ECDIS ACAT (Annual Competency Assurance Training): the Inspectors training in ECDIS has without doubt increased safety at sea as it highlights that not all is well, regardless of certificates held.

COMMUNICATION

SpeedCast Acquires WINS Limited

Satellite communications and network service provider SpeedCast International Limited announced its acquisition of WINS Limited, a Europe-based provider of broadband

Update: Salvors to Board Grounded Transocean Winner

Final preparations are being made to put a small team of salvors on board the grounded semi-submersible oil rig Transocean Winner off the Isle of Lewis this afternoon.

Javier Swirls Toward Mexico, no Hurricane Seen

Tropical Storm Javier lost a little strength on Monday evening as it traveled towards the southern part of Mexico's Baja California peninsula, the U.S. National Hurricane Center (NHC) said.

Navarino, Inmarsat Inks Fleet Xpress Deal

Navarino has entered into a new agreement with Inmarsat to integrate Fleet Xpress into Navarino's existing service portfolio. Through the agreement, Navarino will bring more than 1,

The 'Paperless' Ship

The cloud is for "device-agnostic young slashers," said Trond Bjorseth, marketing manager, of Oslo-based cloud consultancy, Tieto. His company offers an information



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