Best's Insurance Law Podcast

How New Technology is Changing Marine Loss Claims - Episode #181

Posted: Tues., July 6, 2021

Hosted by: John Czuba, Managing Editor
Guest Experts: John Gow and Craig Sylvester of Jensen Hughes
Qualified Member in *Best's Insurance Professional Resources*
since: 2020

John Czuba: Welcome to "Best's Insurance Law Podcast," the broadcast about timely and important legal issues affecting the insurance industry. I'm John Czuba, Managing Editor of *Best's Insurance Professional Resources.*

Today we're speaking with John Gow and Craig Sylvester from Qualified Member expert service provider Jensen Hughes. John Gow is a highly experienced fire investigator, which includes marine fire and explosion. A skilled author of reports, he has undertaken marine investigations on behalf of underwriters, charterers, and cargo interests.

His experience includes cruise ships, container ships, RoPax, tankers, and bulk carriers. As a former fire officer, he also taught STCW-certified courses in marine firefighting, and command and control to ships crews and officers utilizing a live-fire environment. John was fully involved in the development of Strathclyde's full-time fire investigation unit and its modus operandi, the first full-time unit in Scotland.

He has represented both Strathclyde Fire and Rescue Service and CFOAs at national forums on the development of fire investigation and crime scene standards. John has provided expert testimony in fatal accident inquiry, criminal, and civil court. His work has seen him accepted as an expert in the US.

Craig Sylvester is a former US Navy Mustang officer with a unique background in electronics, mechanical systems, marine operations, naval architecture, savage diving, personal security, aerospace manufacturing, and technical team leadership.

Craig is a licensed mechanical engineer with over 20 years' experience operating and maintaining complex equipment systems on ships, submarines, dive support barges, and at industrial facilities supporting ship repair and aircraft manufacturing.

Combining this extensive technical background and earned trust as a forensic engineer, Craig performs mishap investigations, product liability casework, personal injury litigation support, and expert testimony for law firms, insurance companies, and industry clients. Gentlemen, we're very pleased to have you both with us today.

John Gow: Thank you, John. It's good to be here.

Craig Sylvester: Same here. Thanks, John. I'm glad I could make it.

John Czuba: Today's podcast is marine losses. For our first question, John, I'll start with you, what challenges do you see for the marine industry?

John Gow: This past year has seen significant challenges for the world in terms of the COVID pandemic, but this has affected crew across the world, with crew being unable to be repatriated and significant impact on their health and well-being.

It's also had an impact on our ability to support our clients in terms of marine casualty investigations. The consequential transport restrictions have required us to adapt to meet those needs by using technology and remote inspections.

John Czuba: Craig, do you have some additional commentary to add?

Craig: I do. I would agree with John that many of the delays that we're seeing this year as a result of all the challenges are going to force the world as they have in other areas to look to technology to do their jobs out there on the water.

This actually is quite exciting to me to see that some of these technologies that have been around for a while and that the marine industries has not really embraced are starting to show up out there on the vessels, so that has been a very positive outcome of this past year. .

John Czuba: Thanks, Craig. John, what emerging risks do you see overall?

Craig: That's a very positive outcome of this past year.

John Gow: There are a number facing the maritime industry, but one of the risks that has the potential to impact on safety is the challenging target of meeting a 50 percent reduction in greenhouse gas emissions.

As the industry introduces alternative fuel sources such as ammonia, hydrogen, and electricity, the potential for additional hazards to be introduced to the crew and the ship are there.

It's important that measures are put in place to mitigate against these new hazards and to ensure that crew response training and equipment is adapted to meet the needs so that crew can respond effectively to any onboard emergency.

John Czuba: Craig, how are modern navigation and chart tools used today to help forensic engineers perform vessel accident reconstructions?

Craig: The commercial industry has long since used vessel management softwares and tracking softwares that enable forensic engineers to take a look at vessel conditions leading up to an accident and during an accident. Those same tools are available in the commercial industry.

Software such as Garmin and other chart plotting software's enable forensic engineers to just like a motor vehicle, allow forensic engineers to go back and download and take a look at vessel speed, vessel track, and other important aspects of a vessel, commercial and private, that will help us and do help us during our accident investigations.

John Czuba: Craig, how are drone deployed LIDAR systems used today to inspect and document vessel damage above the waterline?

Craig: This is one tool, and you could probably tell from my introduction, that I'm quite excited to see now being utilized in the marine industry. I've used this tool personally on a number of cases. This LIDAR system, or light detection and ranging, is nothing more than a laser essentially that you deploy by drone.

This helps forensic engineers, myself included, when we need to get to a scene, whether it's a vessel that's perhaps grounded or a vessel that we just can't get to. It allows us to get up and take some images, some very high-resolution images.

Not just pictures, but these are point cloud images data allows us to build models, allows us to determine the extent of damage, whole damage above the waterline. This tool is an important part now of what we're seeing, and that is those challenges to get out to accident sites. I'm very excited to see this tool in use.

John Czuba: John and Craig, if you'd both address this next question for us. John, we'll start with you. What does the future hold for the maritime industry and forensic support?

John Gow: As the industry has a slow return to normal and routes open up, there's no doubt the potential for an increase in ship fires is there. The other thing to consider with the marine industry is that ships are becoming larger. Already, there are some observers predicting the first billion-dollar loss.

Now as forensic investigators, we need to ensure that we have the tools to meet the needs of the investigation. Craig has referred to some of the tools that could be deployed to meet that challenge.

I do think that there's some light ahead. The 103rd session of the IMO safety committee has agreed to put together an expert group to look at the challenges of containership fire safety. I'm pleased to say that as part of that group, I will be looking forward to making a contribution that will hopefully achieve those aims.

John Czuba: Craig, any additional commentary?

Craig: I was thinking about the cargo ships that I've seen anchor out here in the Puget Sound in holding pattern. I think we're going to continue to see challenges with delays where vessels are forced to anchor out.

It goes back to my comments on remote support that some of these technologies can provide and can help us with. I believe that it's going to be part of the future in the maritime industry and the forensic work that we do.

John Czuba: For our final question today, Craig, can you address what new technology will be available to assist in the investigation of marine losses?

Craig: Yes, I'd like to mention another technology that I've seen emerging in the marine world, and that's the use of underwater lasers. Similar to the drone deployed LIDAR systems, these underwater lasers also allow us to assess conditions below the waterline.

This could be simply an inspection, this could be an assessment of some damage that has occurred. The challenge that has always been there with these underwater lasers is the light conditions and getting accurate data from these lasers. They've evolved over the years since the early 2000s. Their development has led to some pretty incredible capabilities for inspectors to deploy these.

These can be deployed remotely through ROV, they can be deployed by a diver even. The end result is a data that allows us to build a model and to assess damage down to the sub-millimeter level, which is pretty incredible when you think about it underwater.

John Czuba: Gentlemen, thank you both so much for joining us today.

John Gow: Thank you.

Craig: Thank you.

John Czuba: You've just listened to John Gow and Craig Sylvester from Qualified Member expert service provider, Jensen Hughes. Special thanks to today's producer, Frank Vowinkel. Thank you all for joining us for "Best's Insurance Law Podcasts."

To subscribe to this audio program, go to our web page, www.ambest.com/claimsresource. If you have any suggestions for a future topic regarding an insurance law case or issue, please email us at lawpodcast@ambest.com.

I'm John Czuba, and now this message.

Transcription by CastingWords

To find out more about becoming a Qualified Member in *Best's Insurance Professional Resources*, contact claimsresource@ambest.com or visit our Learn More page to start the application process.