



APPROACHES TO TECHNOLOGY IN PILOTAGE: ITS POSSIBILITIES AND LIMITS

Remarks by

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Good afternoon.

I am here both to praise technology and to raise a word of caution about its application to pilotage.

Technology has always played an important role in the safe navigation of marine traffic. Today, that role is more sophisticated and more important than ever; it has also expanded. Technology has become indispensable, not only for the actual navigation of vessels, but also for the training of all mariners, including pilots.

One example of technology as a training tool is the simulator, which allows for the realistic simulation of navigation in the most difficult maritime conditions, without putting masters, pilots, ships or their crews at risk.

Without simulation, training pilots for the wide range of possibilities that might occur during their assignments, would be far less comprehensive and far less effective.

Just as technology helps to prepare pilots for their job, it is also invaluable when they are actually piloting the vessel.

The list of technology-driven tools that pilots have at their disposal includes everything from radar, which has been around for nearly a century, to Automatic Identification Systems, which are just now coming into common use.

Technology that is designed to help prevent marine accidents cannot do all the heavy lifting. Unless it is used wisely, and unless it is seen as a tool that supplements and complements the skill, local knowledge, and judgement of pilots, technology alone will never be able to ensure safe passage of marine vessels in difficult waters and in challenging conditions.

Pilots welcome any technology that can contribute to the safe navigation of a vessel, and we will continue to embrace new technologies that can improve our ability to do our job. But this must never be confused with the mistaken notion that technology can actually **do** our job.

Exaggerating or over-rating the promise of technology is an error committed not only by ship owners and others who want to diminish the role of pilotage, but also by pilots themselves!

(Roll Video)

To illustrate this point, I have a video which the Pilot Simulator and Resource Centre in Québec City helped me put together. My thanks to the Lower St. Lawrence Pilot Corporation!

(James Cameron and Mike Burgess: two boys from the same neighborhood; one went to Hollywood, the other went to Québec City!)

What you're seeing on the screen is a simulation of a 30,000 dwt vessel, down-bound on the Lower end of the Detroit River.

The electronic chart display chart system is visible in the lower left-hand corner, while the rudder angle indicator and the gyro repeater are on the lower right. Above them, is the view from the wheel house.

The vessel is steering 164 degrees in the Ballards Reef Channel. The channel width is 400 feet and visibility is about two cables, or 1,200 feet.

(end of video)

You must have noticed there was no recording of dialogue or communication from the bridge after the tanker was sighted. I removed the audio out of respect for those here with delicate ears, since the vocabulary that was being used was more than a little rough!

From what we have seen on the video there are two heroes of this little drama. The first is the radar – not very different in form or function from those many decades ago. The second is the pilot, who (finally!) had the good sense to use his own judgement and **all** the tools available to him in order to ascertain what the real situation was.

The lesson is obvious. While technology is an amazing tool, don't be a fool! Over-reliance on it can be disastrous.

This video will form part of an exercise that we will use as a teaching lesson for all our apprentices on the Great Lakes.

But the lesson isn't just for apprentices. We all have to remember that the basis of good pilotage is our own experience and training, which includes not only the use of all available navigational aids, but also the exercise of our best judgement.