Does History Ever Repeat Itself? A Look at Two Groundings of Naval Vessels Separated by Over Two Centuries.

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Abstract

This narrative outline of two very similar naval disasters, separated by over two centuries, shows how history can be repeated and for very similar reasons. It demonstrates the frailty of human decision-making, using a brain that has scarcely evolved over the past 10,000 years, and it attempts to explain some of the mental aberrations behind human error. Experience is no



FIGURE 1 ADMIRAL CLOUDESELY SHOVALL. NATIONAL PORTRAIT GALLERY. HTTPS://COMMONS.WIKIMEDIA.ORG/WIKI/FILE:WP_ CLOUDESLEY_SHOVELL.JPG

guarantor of exactitude, and in fact, seasoned leaders are often guilty of recklessness while their juniors, fearful of retribution, take a good deal more care over their decisions¹.

Going home

Whether he's a first tripper or a seasoned tar, no sailor has immunity to that frisson in the gut resulting in heightend mood and a feeling of benevolence towards all, even the cook. The affliction is known as "Channel Fever". The year was 1707 and the battle weary seamen and officers on board the ships of Admiral Sir Cloudesly Shovell's Royal Navy squadron all shared the same reaction, whether they admitted to it or not, as orders were received for the fleet to return to England.

Not quite two months previously, on the 22nd August², they had manned the guns outside the harbor of Toulon, while on shore the Allied armies had attempted to take the town – unsuccessfully as it turned out. But through the sulfurous clouds of gunsmoke, the crews witnessed two French ships burning and sinking. This, in addition to the scuttling of the remaining ships in port, left the French fleet immobilized. For Shovell it was a victory.

On the 8th of October, the men were busy making the ships seaworthy for the voyage home through the Bay of Biscay and the English Channel; seas that were stormy and treacherous at that time of year. The ships got underway two days later on the 10th of October. Sir Cloudesley was on his flagship, the *Association*, under the command of Captain Whitacre³. Sir Cloudesley's Flag Captain Edmund Loades was also on board. The fleet consisted of fifteen ships of the line⁴, five of lesser rank and one yacht.

Anticipating a successful voyage to their home port, the fleet passed through the Straits of Gibraltar and entered the stormy waters of the Atlantic. The weather, as they progressed across the Bay of Biscay, was hazy and choppy, but it gradually got worse as they progressed further north. On the 21st of October, the Admiral made a latitude observation, probably the first he had been able to take for many days. The latitude they calculated was between 48°50' north and 48°57' north. Several of the other ships had also made observations. The next day, having got soundings of 90 fathoms, he brought to and ordered the other ships to heave to. He then summoned the sailing masters of the various ships on board the *Association* and consulted with them as to the fleet's actual position⁵.

All were of the opinion that they were somewhat north of the latitude of Ushant (48° 27' north) on the northwest tip of France, except the sailing master of Sir William Jumper's ship the *Lenox*, who judged they were nearer the Isles of Scilly, (latitude 49°55' north) and that three hours sail would bring them in sight of the Scilly light.⁶ The admiral, going with the majority, decided they were indeed off Ushant and set a course of E x N, which should have taken them up the English Channel.

Subsequent to the meeting, Admiral Shovell ordered three of the ships, *Lenox, La Valeur*, and *Phoenix* to proceed to Falmouth, with orders to take under convoy the merchant vessels waiting there bound eastward. These ships, following the north-easterly course that had been determined on, soon found themselves amongst the myriad rocks and islets which lie to the S.W. of the Scilly Islands, where the *Phoenix* sustained so much damage that her captain and crew only saved the ship and themselves by running her ashore on the sands between Tresco and St. Martin's islands. The *Lenox* and *La Valeur* were fortunately able to beat through to Broad Sound, an anchorage to the west of the principal islands, where they remained until day-break the next morning; they then sailed for Falmouth and arrived there on the 25th, bringing news of wrecks at Scilly, but little knowing or suspecting what vessels were lost.

After the *Lenox* and her companion ships had departed, the Admiral gave the signal for sailing to the rest of the fleet about six o'clock. It had been customary for two or three light frigates to precede the fleet, and this office had hitherto been performed by the vessels which had been sent to Falmouth. The Admiral's ship, the *Association*, therefore now led the van, closely followed by the *St. George, Eagle, Rumney, Royal Ann, Torbay, Monmouth*, and the others, steering N x E in the full belief that they had the English Channel open before them. The night was dark, and the wind had increased to a gale with squalls and rain. What passed on board the

Association, Eagle, and Rumney, will never be known. The story can best be told in a few words from one of the log-books of the surviving ships. The following is an extract from the journal of Lieut. Field on the *Torbay*⁷:

Oct 23rd. Hard gales, with hazy weather and rain. At 6 the Genll (Admiral) made the signal to wear, wch we repeated; at 7 the Monmouth made the signal of danger; at ½ past 7 on our weather bow we unexpectedly see ye breakers on the Bishop and Clarks; we immediately wore and made the sigll of danger, wch was very imminent, in wch we had infallible demonstrations of Almighty Providence, first our wearing sooner than usual with main and fore-course, 2ndly when we judg'd ourselves inevitable on ye rocks, yet preserved from ye mighty danger; at 9 ye lights of Scilly bore E. by S. ½ S., about 3 miles; we then steered between ye Wt and ye N.W. till 7 this morning. At 9 sounded and had 60 fathom water, then told 11 sail that followed us; God preserve the rest!

The outcome of this navigational disaster was that the *Association*, the *Eagle*, and the *Rumney* ran up on the rocks of the Scilly Islands and were totally lost, with only one seaman making it ashore alive⁸. The *Firebrand* had struck and foundered, but her captain and seventeen men had been saved in a boat, and five more of her crew had got ashore on pieces of wreck. The *Royal Ann* was saved by the presence of mind of her officers and crew, who managed to weather the rocks and clear them by a ship's length. The *St. George* actually struck on the same ledge with the Admiral's ship, but the next wave lifted the ship over the reef into deeper water. The Journals of many of the other vessels show that their escape was little less than miraculous. The

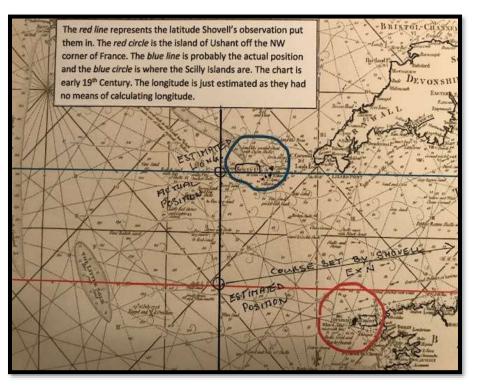
rest of the fleet managed to extricate themselves from the area of reefs and rocks and finally sailed into Portsmouth on the 25th of October.

The following morning, Admiral Shovell's body was discovered by locals on the beach. It was found in a little sandy cove called Porthellick Bay, in St. Mary's island. Close by, the bodies of Sir John Narborough, his brother and Captain Loades, came on shore soon afterwards; also a small Italian greyhound which had been a pet of the Admiral's. As the stern of Sir Cloudesley's barge was thrown on shore in the same place, it was conjectured that he and his companions had endeavored to save themselves in the barge when the *Association* struck. The local residents, who made a living salvaging anything they could from wrecks, and who discovered Sir Cloudesley's body, were an avaricious and merciless crew. They stripped off his shirt and took two rings from his fingers. But when the body was later identified by a friend, he saw the marks of the rings on his fingers. One of these rings was a fine emerald set with diamonds, which is said to have been given to the Admiral by his intimate friend and comrade, James Lord Dursley, who so nearly shared his fate on the St. George.

Many years afterward a dying woman purportedly told a clergyman on St. Mary's island that she had found the Admiral, lying on the shore, cast up by the waves exhausted and faint but still living. She confessed that she had murdered him for the sake of stealing his valuables. She produced the long missing emerald ring, and gave it to the minister, telling him that she'd been afraid to sell it lest it should lead to a discovery of her guilt; the woman added that she could not die in peace until she had made a full confession. The ring was given to Sir Cloudesley's friend Lord Dursley, (who later became Earl of Berkeley in 1710). It then descended to his grandson Sir George Cranfield Berkeley, himself a distinguished naval officer. Finally, it came into the possession of one of his descendants and is still with the family.⁹

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It should be noted that the magnetic compasses on several of the surviving ships were later examined and found very much wanting in their condition. As they were proceeding on Dead Reckoning (DR)¹⁰ since Gibraltar, small errors in the compass would have compounded over the several days of passage between there and the English Channel.



So ended the sad tale of Sir Cloudesley Shovell. In those days, navigators could determine latitude, probably with some accuracy if the conditions were suitable¹¹; but the stormy and hazy

FIGURE 2 AUTHOR'S ESTIMATE OF NAVIGATIONAL ERROR THAT CAUSED THE DISASTER. Storing and hazy weather, with the ships rolling heavily, probably did not provide a suitable platform and horizon for a sun-sight. The determination of Longitude was an impossible conundrum for early 18th century seafarers. This disaster spurred the British Government to bring out the Longitude Act of 1714 which offered a huge prize to anyone who could solve the problem of determining longitude at sea; the outcome of this was the invention of the Harrison Chronometer¹².

Moving ahead 216 years to 1923.

On the morning of 8th September 1923, the fourteen ships of Destroyer Squadron 11 (DESRON 11) were underway on a south-south-easterly course from San Francisco Bay towards San Diego. The squadron was led by Commodore Edward H. Watson on the flagship destroyer USS *Delphy*.

Kentucky-born Captain Watson was an experienced career naval officer. While in command of the USS *Alabama* during World War 1 he was awarded the Navy Cross. In 1919 he became U.S. Naval Attache to Japan, at which post he remained until 1922, when he was given command of Destroyer Squadron 11.

All the ships were *Clemson*-class destroyers, less than five years old. They had been taking part in an exercise in the Puget Sound and were returning to their home port in San Diego, having stopped off at San Francisco. The return trip was considered part of the exercise, and the ships were following USS *Delphy* in line.

In the post war period, naval cutbacks had limited the ship's speed to 15 knots to save on fuel. However, at a meeting of all the captains with the destroyer squadron's commander, Rear-Admiral Sumner Kittelle, they were informed that they could increase their speed to 20 knots, and should do so on the trip south to give the cruising turbines a work-out.

On the 8th, despite worsening weather, the ships continued holding their speed of 20 knots. Late in the day, they approached a course alteration off Point Arguello. The new track would take them through the Santa Barbara Channel, north of the islands¹³. The speed was maintained, despite the fact they were navigating in poor visibility. The navigators had been fixing positions using dead reckoning combining the ship's log speed with compass course and making allowance for estimated leeway and current. None of the modern-day navigational aids such as Radar, Loran or echosounder had been invented and in the absence of terrestrial or celestial fixes, dead-reckoning was the only, if somewhat doubtful, method of position fixing in an area of variable currents.

The Bellini-Tosi direction finder was just coming into service. It consisted of two fixed loops, similar to modern day DF antennas and would give a bearing of a radio signal transmitted from a known position. Such a signal was obtained from the naval station at Point Arguello. Unfortunately, the navigators on the *Delphy* didn't trust the equipment, having little experience in its use; a not unusual attitude, as people tend to rely more on tried and tested methods¹⁴.

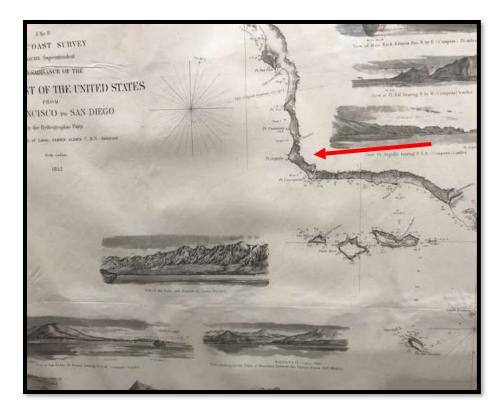


FIGURE 3. TAKEN FROM AN 1852 CHART OF THE CALIFORNIA COAST. POINT ARGUELLO IS SHOWN BY THE RED ARROW. THE CHANNEL ISLANDS CAN BE SEEN TO THE SOUTH EAST.

Instead, they relied on dead-reckoning, which in the navigators' experience was the only other methodology in the absence of celestial or terrestrial fixes. This showed them south of Point Arguello and at the course alteration to turn into the Santa Barbara Channel. However, the DF bearing of the naval signal station on Arguello showed them still north of the point; but the *Delphy's* captain decided to ignore it. At 21:00 the *Delphy* turned east to course 095, followed by the other ships, who all seemed to agree with the position. This track would lead them

supposedly into the Santa Barbara Channel, though as they passed into thick fog, there was no way to verify this. The thirteen other ships¹⁵ followed in close line astern. They were three miles off the rocks and doing 20 knots. Within minutes the *Delphy* ground to an immediate stop, hard on the rocks.



FIGURE 4 COMMODORE EDWARD H. WATSON. COURTESY OF THE NAVAL HISTORY AND HERITAGE COMMAND.

The shock can be felt from Captain Watson's own description of the grounding:

"I was starting for the bridge when I felt a slight trembling," the captain told a court of inquiry. "I dropped everything and went on the run. I reached the bridge in time to be sprawled by a terrific knock. I thought we'd been rammed¹⁶."

At the court martial of Commodore Watson, Lt.Cdr. Hunter, and nine other officers, Lt. Cdr. Hunter, navigator of the *Delphy*, testified;

"I think there is also a possibility that abnormal currents caused by the Japanese earthquake might have been another contributory cause, or magnetic disturbances connected with

the solar eclipse affected the compass — but of these I cannot, of course, speak with any first-hand knowledge¹⁷."

On September 1, 1923, seven days before the disaster, the Great Kantō earthquake had occurred in Japan. Unusually large swells and strong currents arose off the coast of California and remained for a number of days.^[8] Before Destroyer Squadron Eleven even reached Honda Point, a number of ships had encountered navigational problems as a result of unusual currents¹⁸.

Just after turning, *Delphy* struck the rocks at 2105, plowing ashore at 20 knots. She was followed by *S.P. Lee*, which hit and swung broadside against the bluffs. *Young* piled up adjacent to *Delphy* and capsized, trapping many of her fire and engine room crew below. While *Woodbury*, *Nicholas* and *Fuller* struck reefs and ran aground offshore, *Chauncey* ran in close aboard *Young*. Alarm sirens slowed *Somers* and *Farragut* enough, so they just touched ground before backing off while the five other destroyers steered completely clear.

Although seven destroyers were eventually wrecked by the pounding surf, the slow, cumulative damage gave most of the crewmen time to escape. Rescue parties were organized, small boats and local fishing boats picked up swimmers, and life-lines strung to shore allowed the rest to wade to safety. Despite delays--the last sailors were not rescued until the afternoon of 9 September. Twenty-three men lost their lives, twenty in the *Young* and three in *Delphy*.

The ships were navigating by dead-reckoning. No soundings of water depth were taken. At 20 knots, a lead line would have been impractical and the first commercial echo sounder didn't appear until the following year. To take soundings the ships would have had to slow down, and this did not gel with the commodore's orders.

Ultimately, a Navy Court ruled that the disaster was the fault of the Commodore and the ship's navigators. They also assigned blame to the Captain of each ship, following the tradition that a captain's first responsibility is to his own ship, even when it is part of a formation.

Did history repeat itself?

Although Captain Watson and his navigators probably never heard of Admiral Shovell, they did have the dubious distinction of repeating the Admiral's disaster. There are several interesting parallels in both disasters. Both disasters took place in mid-fall, when weather conditions were rough and foggy. Human error in the form of flawed decision-making played a considerable part in the fateful actions that lead the two squadrons onto deadly reefs. Visibility was poor in both cases, and there should have been an element of doubt which would have called for navigating with some degree of caution. In Shovell's case, waiting until daylight, and Watson should have put the exercise to one side, slowing down to a safe speed suited to the visibility conditions. This is by no means a hindsight judgement. It's what they should have done. However, the objective in discussing these accidents is not to judge, but to highlight how other factors take over from rational thinking.

Human decision-making is often highjacked by mental techniques known as Heuristics¹⁹; best described as "mental shortcuts that ease the cognitive load of making a decision."²⁰ People make hundreds of decisions every day. To weigh the pros and cons of each decision would take an enormous amount of time and brain power, and the brain has evolved to be very sparing with energy usage. Fortunately, it has devised shortcuts, based on experience, which allow us to circumvent the ponderous thinking required to look at all angles before deciding on what flavor ice-cream to buy, or what outfit to wear. By and large, this works very well on a day to day basis, but when a critical decision has to be made, more information needs to be examined. The problem is this; people often rely on heuristics to make these decisions too. The first and most obvious heuristic²¹ is known as "Groupthink". This phenomenon is described as:

"...when a group of well-intentioned people make irrational or non-optimal decisions spurred by the urge to conform or the discouragement of dissent. This problematic or premature consensus may be fueled by a particular agenda or simply because group members value harmony and coherence above rational thinking. There is often a lone dissenter, but they are overridden by the majority."²²

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In both cases, the navigators of the various vessels in the squadron agreed with their leader, with only one dissenting. The natural tendency is to go with the majority, especially if that includes the commander of the squadron. In Admiral Shovell's case, the dissenter was the sailing master of Sir William Jumper's ship, the Lenox. That gentleman did have the vindication of knowing he was right, as their ship managed to escape the rocks. They had been ordered on to Falmouth by the Admiral. On the *Delphy*, the captain, Lieutenant Commander Hunter, was acting as navigator, and chose to adhere to the dead-reckoning position and ignore the radio bearings read out by his subordinate, Lieut. Blodgett using the RDF. This is the Representative Heuristic, which is described as: "making a decision by comparing the present situation to the most representative mental prototype (in this case using the DR position)."

Why didn't the *Delphy*'s captain pay more attention to the Radio Direction Finder? A modern navigator most certainly would. But one must remember that the DF had only been recently introduced. To get a bearing the navigator listens to the signal, comparing the relative strength as he turns the dial of a compass until the signal vanishes and then strengthens again as the dial is turned further. This "null point" is the bearing of the source. It wasn't precise, though the signal was probably quite strong, considering how close they were to Point Arguello. But the captain had been trained all through his career to use DR when a terrestrial or celestial sight can't be taken. The next heuristic comes in here, and it is an aversion to adopting new technology, which we all experience every time with new updates to technology. Commander Hunter experienced this same disinclination to rely on the RDF bearing. Another heuristic known as "Confirmation Bias" may have played a part in both decisions. This is a tendency to interpret information in a way that confirms one's preexisting beliefs. When a person wants information

or an idea to conform with what they believe to be the case, they end up believing it. Wishful thinking.

In a hierarchical command structure such as exists on ships, there is a great tendency to give orders to junior officers, but not to listen to them. In this respect, Commander Hunter disregarded the RDF operator's warning that the bearing showed them further north than the DR position. On modern ships, Bridge Resource Management is commonly practiced preventing this bias occurring. In the 18th century Royal Navy and even in the 1923 U.S. Navy, this was unheard of.

There are many heuristics that people use in making decisions and evaluating situations. When one examines accident reports, one or more of these mental shortcuts will usually be evident.

Some people are very risk adverse, while others will readily expose themselves and others to great danger²³. Certain professions tend to attract individuals who handle risk better than others²⁴. By and large, they perform well, but under some circumstances, such as fatigue, stress and other physical conditions, their decision-making may be sub-par. It is also worth noting that in the case of both groundings, the ships were in bad visibility and their commanders could not see the danger they were in.

With modern technology, this will never happen again.

Now that we have the ultimate in navigational aids, GPS, groundings should never happen again. It's basically idiot proof. All one has to do is read off the latitude and longitude and plot them on the chart. With electronic charts it's shown as a continuous plot showing the navigator where the ship is with unheard of precision. Or does it? Sad to say, that is not always the case. On the 10th of June 1995 the cruise liner *Royal Majesty* ran aground on Nantucket Shoal, in what has come to be known as a 'GPS assisted grounding'. Whereas Commodore Watson and his navigators didn't really trust the new-fangled Radio Direction Finder, the navigators of the cruise ship placed too much trust in the GPS. This is another heuristic known as "automation bias", where the operator has an unfounded and complete faith in the automated system. This goes against basic training where they are taught to use different methods of position fixing to confirm each other. If a GPS navigation system is not receiving signals, it will default to giving positions based on our old friend, Dead Reckoning. Not realizing that the GPS antenna had become disconnected, and the instrument was giving them dead-reckoning positions the officers complacently allowed the GPS to con the ship. The GPS of course didn't consider the currents and wind that ultimately pushed the Great ship onto the Rose and Crown shoal.

They failed to honor the most important piece of advice issued to all young navigation officers; "use all possible means to find your position". It would appear that as long as humans are driving ships, there will always be cases where the ship ends up parked on a reef.

Conclusion

The answer to the thesis of this article is that history is destined to repeat itself, as long as leaders continue to commit the errors mentioned above. Hubris is one of the problems faced when making critical decisions and is an intrinsic human trait of varying degree. Those in senior decision-making positions must be capable of overcoming this. Bridge (or Cockpit) Resource Management has become mandatory for senior merchant marine officers, marine pilots and aircraft pilots. This trains individuals in communicating better with other team members, and paying attention to their input, even when they are very junior in rank. This has undoubtedly reduced the rate of accidents caused by human error. Finally, personnel operating sea-going vessels, aircraft, power stations and so on do generally receive specific training in leadership including decision-making, which mitigates the problem. Unfortunately, politicians, and many leaders of business and other groups don't. This is a sure recipe for on-going repetitions of historical mistakes.

Endnotes

¹ McCann, D. A Study of Irrational Decisions by Experienced Personnel While Working Under Time Constraint. MBS Thesis. 2009.

² This was by the old Julian Calendar. The modern Gregorian Calendar was not adopted by Great Britain until 1752. To correct the dates in this article to the Gregorian calendar, 10 must be added on.

³ URL <u>http://www.hmssurprise.org/shipwreck-sir-cloudesley-shovell#15a</u>, which includes *The Shipwreck of Sir Cloudesley Shovell on the Scilly Isles in 1707*; from original and contemporary documents hitherto unpublished. (Read at a meeting of the Society of Antiquaries, London, February 1st 1883.) Mr. James Herbert Cooke. FSA

⁴ Association, Torbay, St. George, Somerset, Monmouth, Eagle, Lenox, Swiftsure, Oreford, Rumney, Panther, Rye, La Valeur, Cruiser. Fireships; Phoenix, Firebrand, Vulcan, Griffin, Weazel and the yacht Isabella.

⁵ This is not verified. The weather would not have been conducive to launching boats and transporting the sailing masters to HMS Association. Nonetheless, some form of consultation did take place.

⁶ Cooke. Extracts from letters concerning the wreck.

⁷ Ibid.

⁸ It is estimated that over 2,000 men died.

⁹ This has not been verified, but in the letters mentioned by Cooke, two rings were stolen off the admiral, along with his shirt and vest.

¹⁰ Dead Reckoning is the calculation of a position of a craft using an initial known position and the craft's speed (through the water) and true course. Estimated position is the DR position adjusted for current, wind and other external effects.

¹¹ The octant was in common use in 1707. The author is in possession of an octant from around that date. In a trial, celestial altitudes taken simultaneously with the octant and a modern sextant were within a few minutes of each other. However, with the ships rolling in the large swells common to that area, and the hazy

conditions, the readings would be very uncertain, but it is a little surprising that they would be nearly a full degree of latitude in error.

 $^{\rm 12}\,$ One of the better accounts of this disaster is given in;

https://en.wikipedia.org/wiki/Scilly_naval_disaster_of_1707

¹³ San Miguel, Santa Rosa, Santa Cruz, Anacapa and Santa Barbara.

¹⁴ The author can recall being very skeptical about using an electronic calculator back in 1970, when he was mate on an oil tanker. Having become very adept at using a mechanical calculator, he was quite reluctant to entrust the cargo calculations to a new-fangled state of the art electronic calculator!

¹⁵ The ships following were: *S.P.Lee, Young, Woodbury, Nicholas, Fuller, Chauncey, Farragut, Somers, Percival, Kennedy, Paul Hamilton, Stoddart, Thompson.* The five latter ships slowed down on hearing the sirens of the grounded ships and avoided the rocks.

¹⁶ Scott Harrison. Los Angeles Times. Sept.6 2019. From the Archives: 23 Sailors Killed When US Navy Destroyers Run Aground at Honda Point. <u>https://www.latimes.com/california/story/2019-09-05/from-the-archives-23-sailors-killed-when-u-s-navy-destroyers-run-aground-at-honda-point</u>

¹⁷ <u>https://en.wikipedia.org/wiki/Honda Point disaster</u>

¹⁸ From article in LA Times 7 October 2003

¹⁹ A good reference to explain Heuristics is: <u>https://www.verywellmind.com/what-is-a-heuristic-2795235</u>

²⁰ Myres, David G. (2010). Social Psychology (Tenth ed.) New York, McGraw-Hill.

²¹ Groupthink was first coined by Irving Janis in his 1972 study *Victims of Groupthink:* a Psychological study of Foreign-Policy decisions and Fiascos.

²² Psychology Today;

https://www.psychologytoday.com/us/basics/groupthinkhttps://www.verywellmind.com/what-is-aheuristic-2795235

²³ The 2012 Costa Concordia grounding is one such case. A good example of hubris.

²⁴ McCann, D. 2009