

# Overview

## A. The Loss

Over thirty years ago, in February 1974, the modern Hull stern freezer trawler, the Gaul, disappeared some 80 miles north of North Cape, Norway with her entire crew of 36. There was no distress call. The last message from the Gaul was a private telegram sent at about 11.00 on the 8<sup>th</sup> February. But the Gaul did not report on the 16.30 freezer trawler schedule that day or at any time thereafter.

The weather was very bad at the time but not, on the face of it, so serious as to be beyond the capability of a vessel such as the Gaul to cope. Indeed many other similar vessels, including two sister ships of the Gaul, rode out this storm. Some of them sustained damage but they were never in danger or in need of assistance.

Subsequently, a diligent and thorough air and sea search over nearly 180,000 square miles was carried out by Norwegian and British vessels and aircraft. It unearthed no flotsam, oil slick or bodies. It was eventually called off at dusk on the 15<sup>th</sup> February.

There had been some delay in launching the search due to poor communications over the weekend of 9<sup>th</sup> and 10<sup>th</sup> February. These failings were reprehensible but, in the final analysis, they had no impact on the situation because what happened to the Gaul must have been sudden and catastrophic. Indeed, the crew would have succumbed very quickly and well before the outside world could have become aware of the loss.

## **B. The Original Inquiry**

It was the British fishing industry's worst single disaster and loss of life in peacetime. Indeed it was, and remains, the worst disaster involving a freezer trawler since they first appeared in the 1950's. Furthermore, at the time of her disappearance in February 1974, the Gaul was less than two years old. She had been built to the standards of Lloyd's Register of Shipping classification. She complied with all relevant statutory requirements regarding safety. Her crew were experienced and well qualified. Thus her disappearance understandably left many people incredulous.

A formal investigation was promptly ordered. It was held in Hull in September 1974. Prior to this inquiry, the Department had appointed two surveyors who both carried out some preliminary investigations of their own, limited by the fact that they had available neither a wreck, survivors or flotsam, except one lifebuoy recovered in May 1974 some 80 miles from the last known position.

One of the surveyors did express concerns about the condition on the sister vessels of supposedly watertight openings into the factory deck, including the duff and offal chutes. These concerns were not aired at the inquiry because his co-inspector took a different view based in part on a mis-appreciation of the available documentary material and in part on the doubtful proposition that there was no basis for drawing inferences as to the condition of Gaul from the condition of the sister vessels.

Having opened their case on the basis that the loss was probably attributable to the entry of water into the factory deck, the Department modified its view during the course of the original inquiry and accepted that it could have been solely attributable to water on the trawl deck when the vessel was broadside to the sea, the preferred theory of the owners. In the event, the inquiry took the view that there was no direct evidence to suggest that the entry of water into the factory deck was the reason that the vessel sank and decided that the Gaul had capsized and foundered due to being overwhelmed by a succession of heavy seas.

Thus, the lead up to, and content of the original inquiry, was somewhat unsatisfactory. The inspector's concerns about the condition of the other vessels in the fleet were never aired, probably because of the costs implications of pursuing such a line of inquiry.

In addition, tests later undertaken by the National Maritime Institute in 1977 indicated that the loss of stability caused by water on the trawl deck would not be sufficient on its own to capsize the vessel unless there was additional water on the factory deck. Full-scale trials on the sister vessel *Kurd* confirmed this, showing that the *Gaul* should have been capable of weathering the storm on the 8<sup>th</sup> February as long as the factory deck remained watertight. This was, of course, in conflict with the conclusion of the original inquiry that the *Gaul* was simply overwhelmed by a succession of heavy seas. Thus, thereafter, the Department was left in the uncomfortable position of having to express confidence in the outcome of the inquiry that it in fact viewed as doubtful.

### **C. The Rumours**

In any event, it is not surprising that the original inquiry's report did not satisfy the relatives. Against a background of disbelief that the *Gaul*, despite retaining her watertight integrity, had nonetheless been lost suddenly, it was perhaps predictable that rumours developed that the *Gaul* had been engaged in some form of espionage against Russian naval operations in the Barents and White Seas and as a result the vessel had been captured and the crew taken into Russian hands. Lurking behind this theory was the premise that there was a NATO exercise underway in the area when the *Gaul* was lost. (In fact the evidence before us at the re-opened inquiry was that there was no such NATO exercise in the Barents Sea at the time since it had been cancelled.)

It has to be remembered that 1974 was still in the time of the Cold War and, although there were denials by the Government, it was an open secret in Hull, at least in the fishing industry, that fishing vessels were engaged on low level intelligence gathering. Thus the denials simply added support to the rumours.

Furthermore, television programmes broadcast in 1975 expressed the view that the lifebuoy that was recovered in May 1974 had been deliberately planted as some form of decoy. As explained in our report, this conclusion rested on a fragile foundation, based as it was on an inference drawn solely from some limited material relating to the position and condition of the lifebuoy when found. The logical extension of this theory, it was postulated, was that there was no other explanation than that the *Gaul* had been an innocent victim of the cold war and that non-disclosure of the incident was to cover up governmental embarrassment.

Unfortunately, it was only much later that this speculation was overtaken by the subsequent discovery of the wreck. In the meantime it did much to fortify the relatives' suspicions.

In fact, evidence given to the re-opened inquiry established that neither the Gaul nor her crew was engaged in spying. In any event, even if suspected of spying, it was obviously not a practical proposition in the prevailing weather and sea conditions for the vessel or its crew to have been arrested or detained. Furthermore, in our judgment, such extreme action was not conceivable as a facet of the Cold War, let alone with the outcome being thereafter kept secret by all parties.

#### **D. The Wreck**

From 1975 reports of a new obstruction to trawling in the Barents Sea began to be received from trawlers. By 1977 it had become apparent that this obstruction was more than probably the Gaul. Throughout this period, relatives demanded that an under-water search should be undertaken. However, the Department took the decision not to conduct one. This decision, taken in the context of the primitive equipment and the narrow window of time available for the search, was based partly on cost and partly on the proposition that, at best, nothing would be learned beyond confirming that the obstruction was indeed the wreck of the Gaul.

It is clear that the decision was solely directed to balancing the interests of those immediately affected by the loss with the wider public interest. In our view, the Department made its decision in good faith and for the reasons publicly expressed at the time. Nevertheless, the unhappy side effect was that it fuelled the belief that the Government had something to hide.

The years passed. There was a form of stand off between the Gaul families and the Department, punctuated by a series of strongly worded letters to Ministers, officials and even the Prime Ministers of the day. However in 1997, the situation changed dramatically when the wreck of the Gaul was successfully located and videoed on the seabed in the very position that had been assumed to be her last resting place.

## **E. The New Investigation**

This video was not adequate to determine how the Gaul was lost. The new Maritime Accident Investigation Branch of the Department conducted its own survey in 1998. It was potentially significant that this survey demonstrated that, whilst the wreck was in one piece, the two fish loading hatches were open and the weathertight door from the trawl deck to the factory deck was open and secured in position. This was effectively the start of this re-opened formal investigation.

It is true to say that no marine casualty involving a fishing vessel has been afforded such a thorough and expensive analysis. In particular, a sophisticated sub-sea survey was carried out in 2002 with the use of new state-of-the-art mini unmanned submarines. The most significant new find in 2002 was that the duff and offal chutes on the factory deck were in the open position. This meant the factory deck had no watertight integrity at the time of her loss.

Thereafter, all the previous evidence was reviewed, consultancy contracts were placed with leading experts in the field of oceanography, naval architecture and engineering and new model tests were undertaken at MARIN in Holland.

## **F. The Rejected Explanations**

The outcome of this re-opened inquiry can be summarized shortly. There can be no doubt that the wreck on the seabed is that of the Gaul and that it has laid there since its disappearance in February 1974. The wreck is in an intact condition. It has been possible to eliminate all those scenarios posed as possible causes of the loss that have been canvassed over the years save one.

First, it has been possible to rule out seizure by the Russians (or any other hostile force), scuttling either by third parties or by the crew, fire, explosion, icing, cargo shift, structural failure, grounding, machinery failure and knock down by large breaking waves.

Second, it has also been possible to exclude collision, in particular collision with a submarine as promoted by various television programmes. Such a collision, resulting in a sinking, would have caused extensive structural damage. Even though part of the external hull on the

starboard side was concealed by silt, there are no signs of structural damage throughout the wreck, save for some damage caused by hydrostatic pressure. In any event, in order for such a collision to lead to the sinking of the vessel, there would have had to be penetration of the bottom plating and consequent escape of oil into the hull. No such oil was observed.

Third, although it was suggested that the vessel may have been fishing at the time of her loss and that the loss was attributable to snagging some obstruction on the bottom, it is clear that the Gaul was not fishing. At the relevant time the Gaul was simply laid and dodging. The weather was severe and, although by no means exceptional for this region in winter, it was clearly too severe for trawling. In any event, both trawl winches were found to have a full warp on the drum with both doors attached to the relevant warp and each door at or near the stern of the vessel.

Fourth, equally there are no valid grounds for concluding there was a telecommunications or SOSUS cable in the vicinity of the wreck. Such was put forward as a suggestion by some TV commentators as being associated with the loss. Further, not only could no fouling of such a cable have been accomplished unless the Gaul was fishing at the relevant time but also there is no viable explanation of how the fact of fouling such a cable could have led to the loss of the vessel.

Fifth, a later suggestion that the Gaul had been dragged astern and sunk after having its nets become entangled with a Polaris submarine can also be rejected. Once again there is no substance in the suggestion that the Gaul was fishing at the time of her loss. No Polaris submarine was within 1,000 miles of the position of the wreck. Further, in the event of a submarine having become entangled with the trawl, it would not have imperiled the Gaul but simply have parted the trawl wire.

Sixth, we are aware that a further theory has been promulgated to the effect that a man made wave struck and sank the Gaul, a wave created, so the startling theory suggests, by a nuclear explosion. For the record we should say that there was no evidence before us of any such explosion or the radioactivity that would inevitably be associated with it. More to the point, the suggestion that a huge wave of whatever origin was responsible for the loss is simply inconsistent with the evidence put before the inquiry. The earlier suggestion by MAIB that the Gaul had been struck by a large wave was based on an interpretation of the 1998 underwater video that was conclusively demonstrated to be wrong by the new and better evidence obtained in 2002. It is clear that there is no impact

damage visible on the wreck, particularly in way of the vulnerable parts such as the bulwarks, the funnels and the bridge windows.

### **G. The Cause of the Loss**

We have come to the firm conclusion that the cause of the loss has been clearly established. Our task has been simplified by the data from the wreck and by the MARIN tests. In particular, we have had the benefit of computer simulations using the FREDYN computer programme which were able to test the hypothesis of factory deck flooding in a truly realistic fashion.

The last comment from anybody on board Gaul as to their intentions was to the effect that “we are going to dodge more into land”. The state of the weather, the prognosis that it would remain poor for some time, the inability to fish and the availability of shelter in relatively close proximity, all gives support to the good sense of the proposed course of action and the likelihood that it was implemented.

In the result, we have concluded that it is probable that the Gaul was steering a southerly course from about 10.30 on 8<sup>th</sup> February 1974 and that she was lost some time after 11.09 when the last private telegram was sent and before 16.30 which was the next skipper’s schedule.

Model tests have demonstrated that down flooding through the duff and offal chutes during straight course runs is strongest in stern quartering seas. With the vessel seeking shelter on a southerly course, the vessel would have been vulnerable to substantial rates of down flooding. It is probable that water ingressed into the factory deck through the open duff and offal chutes. It is also possible, but unlikely, that there was additionally some water from the machinery in the factory deck. Personnel would have had no occasion to enter the factory deck after about 09.15 and the tank tests demonstrate that there would be no material changes in roll motion during the accumulation of water on the factory deck so that it would very likely have gone unnoticed by those on board.

At some point the officer of the watch may have realised that there was water on the factory deck or that for some other reason the ship was in some danger with the seas on her port side. He did what every skipper or officer in charge would do and attempted to bring her into wind and sea by applying full port rudder and full power on the engine. Unfortunately

the centrifugal forces from the turn came into play heeling the vessel further to starboard and with the surge of water on the factory deck capsizing of the Gaul was inevitable. In short, she never completed the turn. The crew would have been rapidly disabled and therefore unable to send a distress call.

We have not forgotten that sister vessels of the Gaul survived this storm. There is a range of possibilities as to why that is so. Firstly, the duff and offal chute covers may have been secured or their non-return flaps operating properly. Secondly, the headings of the relevant vessels may not have been critical even if the chutes were open. Thirdly, their Turo pumps may have been switched on.

It is clear that the duff and chutes on board the Gaul were seized in the open position. This reflects on the maintenance repair work performed by the owners and their staff. The basic problem was that such work was dependant on problems being reported by the crew. There was no system for independent inspection and remedial action by the shore staff.

## **H. The Final Word**

We recognize that some people will find it difficult to accept this stark description of the last few minutes of the Gaul. However she was not the first to be lost in this way nor was she the last. As part of the investigation, we ordered a review of the known losses of factory trawlers in which flooding of a factory deck was a contributory factor. We found no less than 10 such cases throughout the world in which there was enough evidence for us to make comparisons.

The first of these was the German factory trawler Munchen that was almost the same size as the Gaul and was lost off Greenland in June 1963 in moderate weather. The factory deck flooded probably through a blockage of a wastewater scupper. In spite of valiant efforts by the crew of the Munchen the factory deck flooded and she heeled to starboard and sank with the loss of 27 lives. In this case there were 15 survivors from which it was possible to learn in some detail what had happened.

The most recent casualty was the American trawler Arctic Rose which was capsized and sank off Alaska in April 2001 with the loss of the entire crew of 15 in a freak squall. The US Coastguard carried out underwater surveys of the wreck very similar to those that were made of the Gaul. The official USCG Report concluded that the vessel was lost through progressive and rapid flooding of the factory deck through a door from the trawl deck.

The total loss of life in these 10 incidents was 150 fishermen to which must be added the 36 men onboard the Gaul. Such loss of life is wholly unacceptable and we hope that the intensive and far reaching investigations that have been carried out as part of the Gaul inquiry will help to make fishing a lot safer so that we will not see this type of tragedy again.

We also hope that the crew of the Gaul can now continue to rest in peace, memories of them no longer disturbed by the sort of speculation that was perhaps inevitably created by their dramatic and apparently inexplicable disappearance.

The Hon. Mr Justice David Steel

17<sup>th</sup> December 2004

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