The wreck of the ’NE 165”, a shipping disaster near Schokland

Spy glass connected with canon-window 3: ‘Zuiderzee, battlefield and fishing well’.

By Leo Kaan

The crew of the ship is doing her very best to get to port, but despite their great efforts, they will never reach it, as the ship will later perish near the southern tip of the island of Schokland. Centuries later, workers will stumble across the wreckage while they are digging ditches. They will even find a skeleton: ‘the skeleton of a human; almost completely there’. A shipwreck found on land. A mystery for those unfamiliar with the history of the Noordoostpolder. How on earth could this ship have ended up here? What kind of story does such a wreck tell us about work and life on such a vessel? Can anything be said about the cause of this disaster?

From freshwater lake to salty sea: Flevomeer (Flevo lake), (the town of) Almere, and the Zuiderzee (southern sea)

Around the start of the western calendar, Roman armies invade Holland. In the west, they find a landscape mainly consisting of peat. Forests, bushes and different kinds of grasses give shape to a proper primeval landscape.

The Flevomeer is still relatively small and rivers like the IJssel and Vecht flow into it via small gullies. The water then clears itself a northbound path towards the
Noordzee (Northern sea), while simultaneously draining the Flevomeer. The constantly moving water from the Flevomeer is slowly carving away the peat shores and the lake is gradually starting to increase in size. In the year 500AD the lake is mentioned in the rare written sources from these areas; the area will be indicated as 'Almere' from then on.³

Paleo-geographical reconstruction of Holland around 800AD.⁴
The first inhabitants have been working hard in order to enable cattle breeding and farming. During the Roman invasion and after it, more and more land north of the major rivers is prepared and used for farming. This process is continued even after the Romans leave (around 400AD). The time from 900 to 1300 AD is also called ‘De grote ontginning’,\(^5\) which loosely translated means: ‘the time in which land was cultivated for agriculture’. This involves a process in which peat surfaces are drained and strongly dehydrated. This is not without hazards and therefore it did have some consequences.\(^6\)

Peat is able to hold large quantities of water due to the remains of plants, from which it consists. When the land is being developed, workers start with a draining system. Ditches are dug in the area concerned, through which the water can be drained; however as a result, the peat beds shrink and the surface level sinks below the water level of the lakes into which the water is drained. Therefore, the ditches have to be deepened and dikes with small sluices are built. The peat will keep on sinking and decreasing in size as long as the water is being drained. This process even continues today. The result of this human intervention is that the land gradually settles below the sea level of the Noordzee.

A second factor, which has contributed to this bedding down of the (peat) land, is the extraction of peat. From Roman times up to the 19\(^{th}\) century, salt has always been indispensable for the conservation of food. Salty peat land is cut and burned, after which workers extract the salt from the ashes. This increasingly leads to excavation and the accidental creation of clear paths for water to go inward.

To make matters worse, huge ice-masses over Scandinavian land melt due to global climate change. As a result of this, rivers have to hold increasing amounts of melt water from the glaciers. Hence, the average sea level of the Noordzee (North Sea) rises. Rivers drain more and more water and the sea level is getting higher and
higher. Add to this the sinking land due to drainage, and the impending disaster is becoming more clear.

In the 12th century the sea strikes mercilessly. Near Marsdiep the beach and dunes collapse and the sea starts to crawl inland. The ditches with which Almere connects to the Noordzee start to erode and inevitably become deeper. Large storms tear apart areas of peat, after which water masses continue the devastation. Storm fronts coming from the Northwest are notorious for their destructive powers because the waves are able to build up over the entire length of the Noordzee and roar onto the shores and onto the disappearing peat lands. After centuries of devastation, the ‘Allerheiligenvloed’ (the high tide of all-hallows) in 1170 finishes this process by destroying the last large areas of peat resulting into the existence of a single large water plain. Later on, storms will complete the Zuiderzee (Southern Sea), which an official document states that it received its name from a Swedish king.8 For the time being, the Zuiderzee is largely fresh water. Salt water is heavier than fresh water; therefore the fresh water ‘floats' on top of the heavier salt water. It has taken the Zuiderzee centuries – with the exception of estuaries – in order to become fully salty. This process of becoming salty was concluded around the year 1600.9 Therefore there have been meters of water over the wreckage site, between 1170 when the Zuiderzee was formed) and 1942 (the reclamation of the land for the Noordoostpolder).

**Land becomes island: Schokland, 1170-1942**

Within these newly formed waters, three bumps can be seen above the water: Urk, Nagele and Schokland. Urk and Schokland are able to maintain themselves. Nagele disappears below sea level around 1375 after yet another destructive storm.10 Schokland quickly takes up a special position within the Zuiderzee area. The water is an ideal link between the different trading centres and it yields tremendous amounts of fish. The population of Schokland make good use of this by exploiting not only agriculture and cattle breeding, but also by fishing. In addition, Schokland also takes advantage of her favourable position within the trade flows of the Zuiderzee. A lot of shipping goes from Amsterdam via the deeper channels along the west of Schokland to the north, towards Texel. When the wind increases from southwest to northwest, the island of Schokland forms a valuable natural barrier against the dangers of the sea: the waves are becoming higher and higher by the increasing wind force and when the wind blows from the north-west there is also ample room for the waves to build. The east side of the island then becomes a safe haven, where people can take refuge and wait for the storm to
abate. When the storm is over, the anchor is raised, and if necessary, some supplies are stocked up on in Schokland and people set sail again. Unfortunately, not all ships succeeded in reaching that safe haven.

View of the southern tip of Schokland as seen from the north around the year 1800.

**The location of the ‘NE 165’ then and now**

The name of the wreck is derived from the spot where it was found: plot NE 165 in the Noordoostpolder. The wreck was found west of Schokland, fifty metres north of the bicycle path that goes from the Palenweg to the southern tip of Schokland. The bow of the ship was pointing in the direction of the southern tip of Schokland. The entire leeboard was still attached to the portside of the ship. Hardly anything was found of the mast, sails or deck. The wreck was dated around 1800 based on objects found near the ship and the overall construction of the ship. The finds, including the skeleton are kept in the depot of the Government Department for Cultural Heritage in Lelystad. The wreck itself was destroyed after extensive notes had been taken and measurements were carried out.
The last journey: a reconstruction

Autumn 1800, the ‘NE 165’ with two crew members leaves the harbour of Enkhuizen. The ship sets sail to Amsterdam. A large load of dried cod is carried on board and is meant for the seagoing ships set for a longer journey, to the Baltic Sea for instance. The wind is blowing from the southwest and it seems to become an easy journey, but a depression is approaching and the sky is slowly turning dark. The wind freshens and the waves are becoming higher and higher. It takes the crew more and more effort to keep the ship going and the captain decides to temporarily interrupt the journey to Amsterdam and try to reach the safe haven of Schokland, so he changes his destination to Schokland.

A sailing vessel can sail straight against the wind, even diagonally, but in this course, the vessel is being pushed against its side too heavily. Leeboards can partly decrease the amount of pressure being put on the ship by the wind, but can never fully stop it from pushing. The leeboard on port side is now standing straight up. The captain sails close to the west coast of Schokland. He and the seamen must
have heard the roar of breaking waves on the shore. The air is filled with foam and the ship creaks because of wind and sea.

Diagram of an ‘Overijssels barge’.¹³

When the southern point of the island is reached, the ship is in a safe haven: on starboard side they are out of the wind, the waves are much lower here and the island and its buildings break the power of the wind. A huge breaker becomes the ship’s end. The wave elevates itself on the rising bottom of the Zuiderzee and towers meters above the ship. It comes crashing down and tons and tons of water press down on the wooden deck hatches, which crack open under this huge amount of pressure. The mast breaks and the ship sinks so incredibly fast, that at least one passenger wasn’t able to rescue himself. He was found as late as 154 years later, in 1954, as ‘the skeleton of a human, almost complete’.¹⁴
From Schokland no help was possible during such a dreadful storm. Later, rocks were dumped to protect the coast of Schokland during which the wreck was accidentally filled up. Apparently no one knew of the existence of the wreck.
Wreck, ship and shipbuilding

The ‘NE 165’ is designated as a barge-like keelboat. There is even a possibility that it was an “Overijssels pram” (a keelboat which originates from the province of Overijssel). The diagram gives us an impression of the ship in her full glory, but it only shows the outside of it. The wreck itself shows the ship in the state in which it was built, the outside as well as the inside.

The length of this sailing vessel is approximately 19.5 meters (21.3 yards or 63.9 foot), and the width is a uniform 4.3 meters (4.7 yards or 14.1 foot). The front and backsides of the bowel of the ship have a very steep upward curve, almost as if it were a corner. This box-like shape provides for a lot of storage-room. Additionally, the sides of the ship, the so-called hems or collars, rise in an almost right angle from the keel of the ship. The ship was therefore designated as a keelboat (“praamachtig” (barge-like) in Dutch). A sailing ship has to withstand a lot of forces. As a way to strengthen the transverse power, we can see a lot of interrelations: the trusses (on top of the keel-beam) and rafters (on the sides). The rafters were attached to the trusses. At the base of the mast, among other places, several struts were placed to ensure structural integrity.
In the center is the keel-beam; perpendicular to it, the trusses and rafters; on the right side is the bow and on the left the stern.\(^\text{17}\)

The builder of this ship has consciously taken measures to prevent the wood from decaying from the inside. All the trusses had grooves on the inside of the ship. Water would then flow through these grooves towards two bilge pumps. These would then dispose of the water, keeping the base of the mast safe from damage through wood rot. The skin, both on the in- and outside of the ship, as well as the keel-beam give the ship its lengthwise strength. The keel-beam is not very high, only 7 centimeters. This kind of bowel is very nifty in the shallow waters, which are commonplace in Holland.

A remarkable building feature is the use of unequal components. All the rafters are different in size and no piece of wooden board is identical. These differences are characteristic for a very artisanal-style of building. The artisan (i.e. the shipbuilder) would use all the available wood, model it into the desired shapes and sizes and then assemble it to the rest of the build. Gaps between the wood-board would be filled with special filler (for example old rope). This is a manner of building, which was used for ages: even up to the 19\(^{\text{th}}\) century. The wreck of NE165 fits into a long tradition of shipbuilding.

The outside skin of the ship.\(^\text{18}\)
**NE 165’s cargo**

The ship’s cargo consisted of a thick layer of fish bones and other bones of big fish. No traces of jaws or heads were found. Because of the lack of fish heads, it was assumed the fish had been cleaned before transport.

![Discoveries of the NE 165: cod rests](https://example.com/image)

We are talking about stock fish or kelpfish. The fish, which was hard as rock, was difficult to eat like, so they smashed the fish into pieces before consuming it. According to a 1681-dictionary there was a better way to prepare the stock fish for consumption: stock fish could be left to soak in a mill, which was also used to mangle linen. By using this technique, the fish became less crumbled. In those times stock fish could be kept without artificial cooling, which was a godsend. It was eaten on land, and of course, it was also packed as food supplies on overseas travels. The cargo might also give us some extra information about the time of perishing. Since cod was caught off the coast of Norway and the English fleet guarded the coast of Holland during the several wars with Napoleon, this is an extra clue to date the wreck of ‘NE 165’ before 1810.

**Life on board**

For a ship like the Overijssels barge, a crew of two is enough. They are responsible for transporting the cargo and also for loading and offloading the cargo at its
destination. The skipper often owns the ship. He can use his ship in multiple ways: he can travel regularly between two different ports, the so-called barge service, but he can also operate as skipper-merchant who travels anywhere to get cargo. When the cargo has been loaded, the ship is set free from the quay. When departing from Amsterdam, for instance, the ship will wait until the tide is low, as the current then flows in a northerly direction.

![Elger (tool to process eel) found on lot NE 165.]

The sails are hoisted manually and when everything is ready, the ship sets course to her destination. The skipper takes control of the rudder and stands or sits on deck the entire journey. His helper does small maintenance jobs, pumping water out of the ship, for example, and helps with sailing. If the weather is not too bad and if there are not too many waves, food can be prepared by using a simple square-shaped stone hot plate. Food is on board and the crew has the opportunity to catch fish while sailing. When there’s no wind, the ship can be moved using a bargepole, a long pole with a fork-like construction at the end, which prevents the bargepole from getting stuck in the bottom of the sea.

At the bow, the helper pushes the bargepole into the bottom of the sea at an angle and he then pushes the ship forward past the bargepole. After the stern is reached, the helper pulls the bargepole out of the ground and pushes it back in at the bow. This process can only be done if the water is not too deep. If the water is too deep, the helper gets into a smaller boat, which is attached to the ship with a rope, and starts rowing, thus pulling the ship. When the destination is reached, the sails are lowered and the cargo is unloaded using the sprit (a long stick attached to the
mast). As soon as the cargo is unloaded, the skipper hopefully has already found cargo for the return journey. If not, he and his helper set sail for another port in the hope of getting a load there.

Mixing bowl of glazed, red earthenware with decoration, found at lot E165.22

The crossing from Amsterdam to Lemmer can be made in just one day. That is why people did not permanently reside aboard these ships. Most of the skippers owned a house ashore. Especially skippers who carried out regular barge services as they were guaranteed regular earnings. Skippers who had to find their cargo themselves often had a very unstable income. It is generally assumed that until 1800, shipping cargo ensured a reasonable income for most skippers. The finds near NE 165 indicate that life on board was modest. Paintbrushes and a heavy axe point to maintenance, a clay saucepan to daily life. Box beds weren’t found but people could sleep under the rear lower deck, where there was a wooden floor. A pickaxe shows us a tool that is also used on board nowadays, just as some bow shackles. The 59 buttons that were found near the skeleton and the boots were made of natural material.
All this doesn’t necessarily mean that the skipper was poor. These finds don’t tell us anything about his belongings ashore. Just like nowadays, people took older stuff
with them that could stand rough handling and which wouldn’t be a huge loss if it were lost. Finding the skeleton is a unique occurrence. Usually crew members saved themselves by clinging onto a piece of wood or by using the additional boat. That’s the reason that additional ships, just like skeletons, are hardly ever found close to a wreck.

Leather shoe with buckle, found on site E165.

Weather forecasts didn’t exist yet. And every skipper decided for himself on the basis of experience and expectation whether he’d set sail or not. All the bad weather that might be hidden behind the horizon couldn’t be taken into consideration. After all no shipping meant no earnings. Sailing is easy when the weather is good, but it can be very uncomfortable and even dangerous when the weather is bad. All sailing work is done outside. During harsh wind and rain everyone was soaked to the bone and ship and crew were put to their ultimate limits. Dangers also threaten from unexpected sides. Wood can rot, especially on the dividing line between water and air and that rotting process isn’t always visible from the outside. Sails are made of flax or hemp and are also susceptible to rotting.
When the ship doesn’t have enough speed, it will drift sideways to the dangerous lee shore and will be wrecked by the raging force of nature. The existence of sailor and skipper surely had its alluring sides but it shouldn’t be romanticized.

Conclusion

The conclusion of the research is as follows: “According to the excavations of a ship which was found on the south-west coast of the island of Schokland, this ship sank round about the start of the XIX century (19th). The ship was a keelboat, filled with cleaned codfish or codling. The keelboat had a length of about 19.5 meters (19.5 meters (21.3 yards/ 63.9 foot); a width of a uniform 4.3 meters (4.7-yards/14.1 foot) and several remarkable constructions, which have been drawn and described for extra clarity”.  

Like many ships, the 'NE 165' tried to reach the safety of the port on the island of Schokland. Unfortunately it did not make it. In this respect this ship is an example of the many disasters, which took place around the island. 'NE 165' is a characteristic example of the shipping vessels that sailed the Zuiderzee around the 1800s. This wreck gives us an insight in the construction of those ships. A
lot of knowledge about the bowels and insides of ships was gained through excavation. Details like the measures taken to prevent wood-rot at the base of the mast would otherwise not be known.

This wreck also gives us a unique insight into living on board vessels from this era. From finds like these, we learn that it was a strenuous life: working outside was very heavy. The remains that were found, point to a simple life.

The great importance of the 'NE 165' is due to the cohesion between all that was found. Such a snapshot of living and working in the past is rarely found. This makes the 'NE 165' a precious historical source of knowledge.

**Final words**

This entire article shows the revival of one of the many shipwrecks. It also shows that the Zuiderzee can be seen as a sort of traffic-artery of that time. In the province of Flevoland, a total of 435 shipwrecks were localized, dating from the 13th up to and including the 19th centuries.

About 160 wrecks were unearthed in the Noordoostpolder alone. The first of these wrecks was the wreck of a medieval cog. While digging ditches during the war in 1944 for drainage pipes, workers unearthed a wreck between Blokzijl and Kuinre (two small Zuiderzee towns), and many such findings would follow. Sometimes it is claimed that the flourishing of the 'Golden Age' was also the result of the possibility of in- and outgoing seafaring traffic across the Zuiderzee.

Red markers, in the shape of a ship on top of a pole, have been placed at sites where wrecks were found, in order to increase people’s awareness about the maritime history of our country and our area. In this way we can nowadays stand still and wonder about a special part of our history, especially in the area where we live.
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Translation

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A map of all the shipwrecks found in the Noordoostpolder (this map was made in the 50s).
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