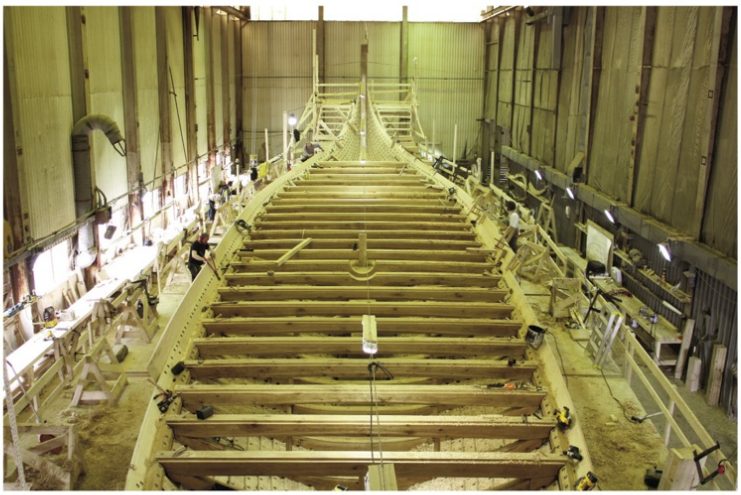
THE VIKINGS ARE COMING!

the Vikings reached shores as distant as today's Istanbul to the east, and Newfoundland on the American continent to the west.

They navigated using their knowledge of trade winds, currents, the flights of birds and the positions of celestial bodies. Last year the Proceedings of the Royal Society published a paper which argued for the use of compass-like "sunstones", mentioned in one Icelandic saga; a squared calcite crystal from Iceland, found in a 16th century shipwreck in the English Channel, was said to be an example. Viking specialists were sceptical. However, Vikings surely had vague conceptions of geographical distances and the positions of land masses, and definitely had a varying blend of adventurousness and audacity, determination and desperation.



Left: May 2011, fitting the 17th strakes

The attack on Lindisfarne marked the start of the Viking age, an era which was, and still is, characterised in people's minds by similar incidents. Nonetheless, it should be said that many Vikings were more civilised in their conduct, travelling the seas of the west and the rivers of the east as peaceful traders and friendly settlers. As they travelled, they dispersed their culture and language, and assimilated new habits, technology and concepts into their own world.

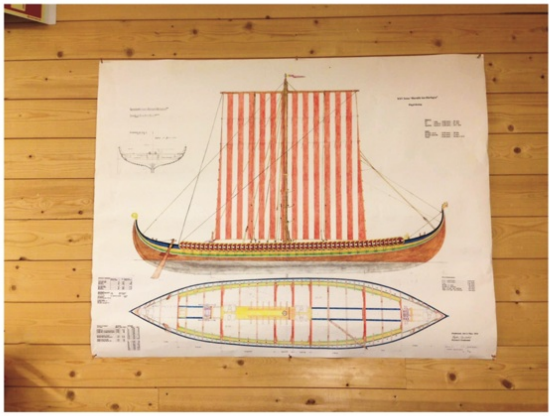
But however we see their behaviour, the Vikings obviously had a better than average knack for seafaring, out-manoeuvring and out-sailing their contemporaries. Their boatmanship and their vessels' unique seaworthiness installed awe and respect in closest kin and fiercest foes.

As we wipe sweat from our foreheads, almost losing hold of our oars in the process, we begin to understand what it must have taken to ply unknown and unpredictable seas over vast distances. In open boats, subjected to the forces of nature with none of the comforts and few of the tools and facilities of modern seafarers,

Heyerdahl spirit

How did they cope, wet, cold, exhausted, and with little idea of when they would finally reach the promised lands? What food did they bring, and how did they store it, prevent it from spoiling, prepare it, eat it? Where and how did they sleep on a boat brim-full with crew, equipment, supplies and possibly passengers, both human and animal? In other words: how did they live and, in some cases, die, on the boat?

These are questions which intrigued the instigators and participants of the Dragon Harald Fairhair Project, which is headed and funded by Sigurd Aase, a Norwegian businessman and entrepreneur. To find some of the answers to the mysteries of the Vikings' feats, the project team decided to build a replica longboat with the qualities of the ideal ship, and sail it in the long-gone wake of the Vikings.



Above: Construction drawing for the Dragon Harald Fairhair

How the boats looked and which materials were used are partly known from archaeological evidence and written sources. Unlike most projects of this kind, however, which rely on evidence for ancient ships, the team decided to start with modern and thriving boat-building traditions that have inherent Viking heritage. Working back in time, designers then kept more than a sideways glance at archaeological finds, old depictions and Norse and other contemporary written sources.

Construction began in March 2010, in an inconspicuous warehouse near the town of Haugesund, on the south-west coast of Norway. Twenty expert

Below: November 2010, the ninth strakes are almost in place, completing the ship's bottom

MARIT SYNNØVE VEA/WIKIPEDIA (2), ASTRID KÅHLER

ASTRID KÄHLER (2), PHIL NAYLOR

shipwrights, sailors, artisans and craftspeople from museums and traditional boatyards and other workshops, had a great, old, industrious time for just under two years.

What began as an abstract idea, materialised in June 2012 at the launch of the largest Viking ship replica ever built in modern times: the Dragon Harald Fairhair, 35m long and 8m wide. Under sail the ship requires a crew of 18–24. Otherwise she has 25 pairs of oars, each powered by two rowers, demanding a crew of at least 100. She is named after the king who is often credited for uniting Norway in the late ninth century, and who vowed in the presence of his would-be wife not to go near a barber until he had done so.

Before, during and after the building phase, experts in traditional trades spent years on extensive planning, research, testing and retesting ship parts. Smaller trial boats were built for experimenting. Oak for the mast was felled in Germany. Silk for the 300sqm sail was woven in China. The builders chose carefully, to work with materials, technology and design that would make a Viking ship capable of riding the waves with the prowess of her ancestors.

Above: The high gunwales and shields mounted on the side limit rowers' views

Right: Chinese silk for the sail

Below: The ship underwent many trials in 2012 and 2013 around the Norwegian coast

The Dragon's raids will start this summer from Haugesund, facing Shetland and Orkney, with a journey across to America. The plan is that in 2015 she will wind her way across the North Sea, making several stops in the British Isles before continuing to the Mediterranean, eventually, if all goes well, ending up in Istanbul.

This is experimental archaeology on a grand scale, in the spirit of Thor Heyerdahl, the Vikings and other explorers of today and the past. Crewed with people from many different countries, the Dragon will evoke

fascination and interest, and strengthen relations between people who share a distant past, and in many cases – as recent studies not surprisingly have revealed (see feature Nov/Dec 2008/103) – a number of genes. Her tall mast and magnificent dragon head mounted on the prow may come to a harbour near you.

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