

# Hospital on the High Seas


Bumps, bruises, and third-degree burns—just like their colleagues on dry land, **NAVAL PHYSICIANS** have to be ready for anything.

**T**he patient—a crew member—was suffering from a high fever, shivering, and an intense headache. His mouth was dry as dust, his muscles aching. As if that weren't enough, he also had diarrhea and nausea—both much more pronounced than would have been the case for a normal dose of influenza. Ship's doctor Dr. Axel Haber was in-

formed, and found he had his first suspected case of swine flu to report.

The case occurred last year, the symptoms of the disease first presenting themselves three days after the frigate *Sachsen* had cast off from the port of Halifax in Canada. Due to the danger of a global pandemic, Haber and his colleagues had to take strict precautions: The sailor was quar-

antined and all the crew members were treated with the influenza drug Tamiflu. "Fortunately, we were at sea for so long that by the time we entered Liverpool on the other side of the Atlantic, the patient was already cured and the other crew members were beyond the incubation period. So, we were sure that the none of the other sailors would be infected," Haber recalls.



The Task Force Support Ship *Frankfurt am Main*, a Berlin-class supply vessel, cruises the world's oceans.



It looks almost like a regular hospital below deck, if a little cramped. Dr. Axel Haber (right) has access to a fully equipped operating room (left) and can also consult land-based specialists via satellite communications.

His workplace, the Task Force Support Ship *Frankfurt am Main*, is a double-hulled steel colossus with a length of almost 174 meters, a beam of 24 meters, and a draft of 7.4 meters – making it the largest craft in the German Navy. It is powered by two diesel engines that deliver a combined output of 14,500 horsepower (5.28 megawatts each) and propel the 20,000-ton vessel to a maximum speed of 20 knots (approximately 37 kilometers per hour). The job of these Berlin-class vessels is to provide logistical support to German naval units on missions abroad – including provisions, fuel, spare parts, and also medical care.

For the latter purpose, the vessel is equipped with a mobile naval hospital. This consists of fixed onboard installations as well as a two-story assembly of 26 special shipping containers – 20 and 30 feet in length – mounted on the upper deck. The containers, which are painted gray, contain a variety of treatment and diagnostic facilities, including two operating rooms, an intensive care unit, an X-ray unit, various labs, and even a dental unit. They can accommodate up to three medical teams working at the same time. “If we don’t have a dentist on board, I’ll handle the drill myself,” says the Hamburg-born Haber, whose general medical knowledge must encompass a number of disciplines.

### Cruise liners are different

The kinds of cases that Haber encounters can range from bumps and bruises to crush injuries caused by bulkhead doors – all the vessel’s cabins are pressur-

ized – to severe burns, resuscitations, and even, on one occasion, an ectopic pregnancy on the part of a female sailor.

“As a rule, medical emergencies on naval vessels generally involve trauma, while those on other vessels such as cruise ships tend to involve internal complaints,” Haber explains. There are, however, some basic similarities. In both cases, the ship’s doctor is responsible for all aspects of the patient’s wellbeing – as used to be the case with all doctors, before specialization fragmented the medical profession on land. For example, they treat even small wounds right up until the healing process is completed.

The advantage of treating patients onboard ship is that they can’t disappear. “I can take a close look at my patients every day,” says Haber. And should there be anything out of the ordinary, he’s already on the spot to take direct action. At most, a call to the bridge is required, and then the distance to the patient is no further than in a normal hospital ward.

### Support from specialists on land

Every vessel in the German Navy has its own ship’s doctor. The sick bay team on a frigate, for example, can comprise up to five people: a ship’s doctor, an assistant ship’s doctor, two medical NCOs, and an enlisted man. On a task force support ship, there are eight more crew members, including two medical technicians. Should this prove insufficient, onboard medical teams can also request support from doctors in Germany – via the German navy’s own Medical Institute. “We have a workstation on board

from which we can send diagnoses, X-rays, ultrasound images, and video sequences from anywhere in the world back to Germany for consultation with specialists,” says Haber.

And how would he deal with a case of psychosis? Haber explains that this has been known to occur and that it is one of the few reasons for removing a sailor from the ship, for example if a patient threatens to jump overboard. The crucial thing is to recognize any psychological changes on the part of personnel as early as possible. For difficult cases, there is also a military chaplain available. Things don’t usually get to that stage, though. “After we’ve been on board for a few weeks, I often know the sailors so well that I’m able to judge how resilient they are,” says the ship’s doctor. One factor that makes this possible is the relatively small crew on board – around 200 sailors compared to the 4,000 or so stationed in a garrison. If need be, the doctor can provide individual care for every sailor on board.

Haber has just gotten to know a new crew. In January, the *Frankfurt am Main* left its home port of Kiel in northern Germany for a five-month voyage to South Africa as part of a naval task force and training unit. During the course of this voyage, more than 200 cadets will complete onboard training. It is the trainee officers’ second voyage, following a sailing course last fall on board the training ship *Gorch Fock*.

Haber himself has obviously been to sea many more times than that. Five years from now, his 17 years of naval service will come to an end.

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