

# Inland navigation radar simulator



The skipper is approaching downstream the Pannerdense Kop with his inland navigation ship. In the distance, a six barge lighter push tow appears, and on the Pannerden canal a ship is approaching from ahead. It seems as if the ships are going to meet one another at the confluence. The motor yacht in front of the bow, which has been keeping close to the starboard bank for some time, seems to hesitate. Right at that moment, visibility fades due to a heavy shower of rain. Somebody calls out something over the VHF, but it is not clear who or what. The skipper starts sweating. All the theory he had to learn crosses his mind. He glances back and forth between the radar image and the VHF. He must act!

The STC-Group has developed the course 'Radar Rhine and Inland Navigation' (the radar patent) for skippers with a navigation licence (large or small watercraft licence). They need the compulsory radar patent to

navigate in poor visibility. The STC-Group uses the simulator to perform various practical exercises with radar in a safe and relatively cheap manner. The great advantage is that the learner does not have to depend on the real situation on the river to gain experience of specific actions. Every conceivable situation can be programmed into the simulator. The STC-Group itself has designed the programs and exercises. If the learner in the above-mentioned simulator practice takes the right decisions, it will give him satisfaction and self-confidence. If he makes a mistake, it will not cause any damage but it will provide material for an effective analysis of the situation.

## Example

The instruction to navigate from Lobith to Nijmegen is an imaginary exercise on the simulator. Every feature on the river can be pre-programmed on this advanced simulator: the wind, the current velocity, the depth,



the water level, the traffic view or ships that do not react to warnings and maintain a course that may cause a collision. The degree of difficulty gradually increases during the course. During the exam, the learner gets one hour to show that he is able to take a 110-metre long ship safely from A to B with the aid of radar.

### **various training courses**

One of the more advanced courses presented by the STC-Group on the inland navigation simulator is Bridge Resource Management. Industries that want to have skilled personnel send their employees to this course. Various situations are practised, such as a calamity on board a ship. How does the captain deal with it? All aspects involved, from talking to the press to informing the head office and briefing of personnel are dealt with in a manner that is as close to reality as possible. Furthermore, the simulator is used for the application course 'Radar Fast Ships'. All police members of the National Police Services Agency have followed this course. They work on fast boats which requires extra practice. In calamities, they play a unique, special role. During the course, communication with other services is practised during a calamity on water, for example an accident with a leaking tanker. The learner is instructed – while taking safety into account – to reach the tanker as quickly as possible and on his way establish contact in the prescribed manner with the relevant services.

### **Tailor-made features**

On the request of the client, the STC-Group also provides tailor-made features on the simulator. Scenarios that an industry often encounters are also imitated. Think of a complex stretch of a river. A new skipper with little experience on this particular stretch can practise to negotiate a narrow bend well.

### **Innovation**

The STC-Group follows innovations on real ships closely and employs the latest developments in the field of radar and naval electronics in its courses. Recently a bridge provided with an outside view that closely resembles

reality has been introduced. The bridge is equipped with an ECDIS with a radar overlay. ECDIS is an innovation in the field of the river information services (RIS), a new application in the field of providing information for inland navigation. In the courses, working with the RIS and the electronic map can be included. The STC-Group has a great expertise in working with the simulator for inland navigation. It is the only institute in the Netherlands that builds its own simulators by using real bridge instruments. Experienced lecturers can quickly move from standard to tailor-made features. An international course has been planned for.

### **Further information**

For further information about this and other simulators, you can contact STC B.V. STC B.V. is a subsidiary division of the STC-Group and responsible for non-subsidised activities. STC B.V. provides standard courses as well as courses that are tailor-made for your industry. Included in STC B.V. are the contract education division of the Shipping and Transport College, Maritime Simulation Rotterdam B.V. (MSR), Dynamar Consultancy B.V. and the International Maritime Transport Academy (IMTA).

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