



## Fellow sailors!

A lot has been written about our beautiful boat, but this article which appeared in a book by yacht designer and sailing connoisseur Jaap Kramer is definitely worth a glance. In 1963 Jaap Kramer spoke to FD-inventor Conrad Gülcher and published this in his book *Watersport* (1964), one of the canonical works in Dutch sailing history.

The same publisher, Uitgeverij Hollandia, also published the book written by our well-known fellow FD-man Paul de Schipper: *The Flying Dutchman, the story of a wonder boat* (2001), a work no sailing library can do without!

## The Flying Dutchman blasts around the world

Promotor Coen Gülcher tells Jan Kramer how the FD came into birth and has gained ever more speed along the way.

The 1951 European Championships in Loosdrecht showed that the newly designed Tornado has not been a success. After this I asked engineer Loeff: “Can’t we design a new hull under the same sailing plan?” This wasn’t so easy, because the Tornado had just been accepted as new international class. Eventually engineer Loeff said: “Very well, it’s now half way in August. The International Yacht Racing Union meeting starts at November 1st. If you, before that date, manage to create a design, test it and prove that it’s a fine ship faster than the Tornado I’m willing to support the new design at the meeting.”

“This was no small feat!”

No, but we went to it right away and created a preliminary design first. This was done by the beginning of September. We sent this to the thirty best helmsmen I knew – not designers, because they won’t give up their secrets anyway – with the request to give it their comments. Within fourteen days seventeen replies came in. These included some rather valuable ones, especially from England, that showed us mistakes we had made and gave us some ideas that hadn’t been invented yet.

“Who made that preliminary design?”

Uus van Essen, then working as measurer in service of the Dutch Yacht Federation. The mission I’d set myself was this: find the boats that run the fastest and find out why they do this. So we just went past all the boat types in magazines and race reports. Some boats appeared to be extremely fast. Besides this we also wondered: “What results do boats of the same size achieve?” You can find this out by studying the times they clocked.

“So this involved quite some research?”

Yes, a lot of research went into this. Actually, already stemming from the time people were talking about the Tornado. Ever since then I’d decided to study this, all the time asking myself: “What are the variables you have to choose?” When the Tornado emerged I was already in the final stages of my work and only needed some finishing touches.

“How did this evolve itself?”

Using the received advices and criticism we created a new design in a week, whereupon we managed to make a mould and a hull in less than one.

“That was done in moulded ply-wood?”

Yes, Van de Brink in Stompwijk made it. He was well acquainted with jobs like this.

“The materials used were both light and strong, allowing for relative freedom on the part of the designer.”

Exactly. A light weight was one of the main points in the design. All this, by the way, was done under supervision of engineer Loeff.

“You had a very valuable combination there: a young, progressive designer, tips on the latest techniques from all

over the world and a relative conservative expert like engineer Loeff to provide all this with his critical view. Sounds ideal.”

Yes, because at first we were thinking along the lines of, for example, a ‘Scow’. Next to catamarans scows are the fastest boats around. Engineer Loeff, however, didn’t like this idea at all.

“He wanted a real ship?”

A real ship that was fast at the same time. That’s why the new design received the stern of a scow and a normal front.

“And when were you able to sail it?”

Well, in a week we had created the hull, inserted a centreboard case and fitted it with Tornado rigging. The whole thing eventually sailed on November 1st.

“So you created a new hull to put under the Tornado rig?”

This had absolutely been the starting idea, but gradually we altered the Tornado rigging piece by piece. The mast and jib got a little higher and the boom a little shorter. We provided it with a better spinnaker and a bigger genoa. And a trapeze!!

“The trapeze was just coming into use at that time, right?”

Well, no one used it yet. As early as 1928 Peter Scott sailed a race in Canada using a trapeze. And won! It resulted in the immediate prohibition of the use of the trapeze. But when we were discussing the new boat Peter Scott said: “Give her a trapeze, that’s powerful stuff!” So that’s how the trapeze got into the story. It was gradually perfected and came into popularity in other classes as well.

“How did the FD become a class boat?”

We immediately organised a whole series of trials. First in Holland, in 1952, because us Dutchmen had come up with the idea. Thirty different boats coming from eight different nations participated; every type had one boat representing them and every nation wanted to send their best boat, making it a gathering of the best the world had to offer. And the FD won! Upon this she was declared International class for the mid-European countries. But England and France were not satisfied.

“Why not?”

They argued that such a low, straight boat couldn’t sail on the sea. And the French were afraid her big length would make manoeuvring on rivers too hard. Because of this they decided to develop a shorter boat themselves. It resulted in the 505.

“Does the FD have such bad manoeuvrability?”

Of course a boat of six meters is less manoeuvrable than one of five. And the 505 was especially designed for quick-tacks. In fact, the Flying Junior of four meters can tack even quicker. But the FD has very long-stretched water lines.

“Because the speed is largely dependent on the length of the water line?”

Yes, we were thinking about a remark from England: “When you go to a certain length, make the boat as fast as possible, because trials are won by speed!” That’s why we made the front-inclination short and the stern straight and low; all to make the water line as short as possible.

“Didn’t this affect the FD’s seaworthiness?”

Oh no, she proved herself to be quite seaworthy. Dipping into waves is prevented by the broadening shape of the frame.

“Wouldn’t a bigger freeboard make sailing on the open water easier?”

That’s no problem at all; we have the self bailers and the double bottom, so the water that comes in will run out just as easily. To allow for dry sailing the board would have to be a lot higher. This would make her both heavier and a bigger object for the wind; in short, slower.

“So, instead of keeping the water outside your train of thought was: make the water disappear on instance. Upon which one could ask himself: Aren’t those big holes in the transom an open goal for big waves?”

When waves are big enough to reach her stern, she will necessarily be gliding on them and won’t be open to water from that side.

“But what if you’re lying still for a moment or the wind drops on sea while the waves are still rolling?”

Well, yes, some water could come into the boat then. But this is no problem, because the water will stay above the double bottom and run out again in no time.

“As a ship builder it is naturally a little offending to me, a ship into which water can run in and out of at any moment, but from a speed point of view I do see the huge practical value.”

Oh, but the ship isn't unpleasant for normal sailing at all.

“If you are wearing boots, I suppose?”

The upper part of your body receives as much water as the lower part. Just yesterday I sailed a double bottom boat; really, you can sit in it with a light wind without getting wet. Only when the water is bumpy under a light wind a small wave will enter now and then. At such an occasion, some people put a small panel over the transom so they don't wet their feet every time.

“And when did the FD show herself to be no Junior on the sea?”

That was in 1953, when the French and English organised a trial at La Baule. It was there that Wim van Duyl and Jaap Helder proved that the FD is among the fastest ships, even when sailing the sea. When in that same year the “lakes” restriction was lifted, we really became an international class. In 1957 the I.Y.R.U. decided to appoint the FD as one of the classes for the 1960 Olympic Games in Rome. It was the first time a Dutch design ever got so far. It gave the spreading of the FD a big boost, because all nations who wanted to participate in the Olympic Games had to train a special corps of FD-sailors out of which they could choose their Olympic teams. International spreading rapidly followed this event.

“And then the class organisation was formed?”

No, that was formed right away, because I had been experienced in this from my Tornado days. It was a one-man-organisation at first, but we immediately started to publish FD-bulletins, bearing in mind the Star and Snipe classes. This way of organising a class was new in Europe at that time, so I had a head start on the others. Nowadays every class has its own organisation.

“How many FD's are around at this moment?”

About three thousand, but I don't know the exact number. However, far more important than the number of boats is the number of nations that are participating. Which, at this time, is thirty-eight.

“Even though it's a boat meant for very good sailors?”

Yes, for the best racing teams actually. A lot of champions from other classes tend to change to the FD after a while. They don't realise, however, that in the FD they are surrounded by champions and their results will usually be lower than in their former classes.

“Do many people leave the FD to venture on sea-sailing?”

No, but some people do both. However, luring people into different national teams is a very attractive business. FD-sailors really have formed a separate clan, including a lot of older guys over forty.

“And those guys are still in such good shape to keep this up?”

For being a helmsman in the FD you don't have to be extremely athletic, you can easily do that until you're sixty. The crew, however, has a heavier job. He really should be in excellent shape.

“How much time should you spend on training, practise races and so forth?”

If you want to be a more-than-average racer the weekends should do. But if you really want to reach the top, you have to put in more effort.

“But if I understand you correctly the crew has to be in constant training in order to be in proper shape by summer?”

Most important is general fitness and for a helmsman also mental fitness. You should be free to focus on sailing without feeling burdened by all sorts of business problems. People attending a difficult business meeting on Friday night can't be fit at the starting line Saturday morning. The difference is easy to tell.

“Who are the best FD-sailors here in Holland?”

We have a leading group, regrettably far ahead of the others, consisting of Ben Verhagen, Ulrich Jager and Jan Schoonevelt.

“Do you think the FD will be an Olympic class for a long time?”

The I.Y.R.U. is known for letting classes participate at least three times; or the whole world has to constantly change types. This isn't a definitive rule however.

“How many wharves are constructing FD's in Holland at this moment?”

Three are building them regularly; one working with plastic, two with wood.

“Are the winning boats generally constructed by polyester or ply-wood?”

You can't tell that easily. Most sailors tend to say ply-wood is faster. But only recently a lot of championships have been won by polyester boats.

“Maybe ply-wood is a little stiffer than polyester?”

In popular theory, yes. But that doesn't answer the question whether a stiff boat is faster than a weaker boat of course. We like to make the FD as stiff as possible, because the big length and light construction make her weak enough as it is. But we don't really know for sure. In a light breeze polyester is probably better or at least comparable; in a strong breeze the others go faster.

“What are your thoughts on the FD's future?”

Every year sees more boats entering competition than the former. Thus more FD's are flying around the world, forming strong wakes in the waters of all the continents.