# HOEK DESIGN

Newsletter 2011

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# Introduction



Dear Friends,

This has been an exciting year for all of us at Hoek Design. We will remember 2010 principally for the launching of three sensational supervachts from our boards: The 203-foot schooner Athos, the 180-foot ketch Marie and the 144-foot J Class yacht Lionheart.

The mighty Athos, a Holland Jachtbouw yacht with an incredible range of innovations, is perhaps the most technically advanced project with which we have ever been involved, not to mention a real pleasure to sail. Built by Vitters, Marie is a refined version of the successful ketch Adele, extensively optimised for performance - her composite standing rigging, weight reduction program and increased ballast ratio have all proved highly useful. At up to 12 knots of true wind speed, Marie sails about a knot faster than the wind, even in very light airs.

Lionheart, which also saw the light of day in 2010, gave us the pleasure of sailing onboard a new and completely optimised J Class yacht. This is the first aluminium replica of a super-J to be realised from plans drawn up in the past but never built. Designed and optimised for racing under the J Class Association rules and handicap system, Lionheart was developed after a huge research project which analysed all existing J designs that could realistically be built.

This fundamental research gave us great insight into hull shape differences and the performance of the various available designs, which proved its worth after *Lionheart* was launched and first sailed against her sister vessel *Ranger* in Saint-Tropez. Although both yachts were in cruising mode, Lionheart clearly had the edge, despite towing her dinghy at the time.

2010 was also a year of renewed interest from clients in new projects, and we started working on some exciting designs that are also featured in this newsletter. They include several sailboats - 48 and 58-metre sloops and a 76-metre (over deck) schooner - as well as motoryacht projects, such as the 35-metre **Desperado** and two new vessels of 22 and 30 metres, respectively. We were also very pleased by the confirmation that the 180-foot river cruise vessel **Ceres**, designed by our office, will be built in the United States. We are particularly proud to see this model materialise, having worked on it for several years.

We look forward to new adventures and wish you all happy sailing in 2011!

Andre Hoek & Ruurt Meulemans





### 203 ft schooner "Athos"

Athos was delivered to her owners in late summer of 2010. Designed for a repeat customer who was highly involved in the design and build, the yacht was finished to a truly outstanding level of quality.

With an overall length of 62 metres, a beam of 10.9 metres, and a phenomenal Panamax sail plan, she is the largest privately owned modern two-mast schooner built to date. Her performance was optimised through extensive tank and wind tunnel testing, as well as elaborate Velocity Prediction and Computational Fluid

Dynamics software. *Athos* was purposefully designed with a very shallow draught of 3.50 metres and carries a sail plan within the 62-metre maximum height allowed by the Panama Canal. The complete spar package was supplied by Rondal, while Doyle delivered the sails, and Holland Jachtbouw executed the construction. *Athos* is actually the 25th yacht built to our designs at this renowned Dutch yard.

Our office was responsible for both exterior and interior styling, as well as all naval architecture work. Extreme

## **Recently launched**



attention to detail was given to **Athos'** magnificent joinery work as well as the detailing and execution of her technical installations. Some of the highlights include barrel skylights and an ingenious crew entrance that incorporates the air intake for the engine room. **Athos** is also the first superyacht to be sailing with furling booms and roached main sails - a development requested by the owner.

Built in 5383 aluminium, *Athos* includes a raft of engineering innovations the likes of which have rarely

if ever been seen on a sailing yacht. These include an unprecedented hydraulic system that required over 30 km of wiring and offers 450 kW of power. *Athos* has double redundancy for almost every system and also features dynamic positioning, a fully integrated stern anchor and a hydraulically operated centreboard. The enormous hydraulic capacity means all winches and sailing related equipment can be used simultaneously.





## 180 ft ketch "Marie"

As the sixth superyacht built to our designs at Vitters, *Marie* incorporates the joint experience accumulated with the classically styled 180-foot ketch *Adele* and the 175-foot sloop *Erica XII*. The importance of this knowhow is evident not just in the quality of the end result, but also in the remarkably short 24-month build time from first metal cutting to delivery. While *Marie's* hull lines, keel, rudder and sail plan, featured on the front page, are similar to those of *Adele*, a triple award winner launched in 2005, the interior and deck layout



are completely customised. An example is the enlarged main deckhouse which overhangs the main saloon, creating a dramatic feeling of space inside. Marie represents our first collaboration with interior designer David Easton from New York, who carried out the interior styling and decoration. Marie's performance is optimised with a lightweight High Modulus Carbon Southern spars package and Future Fibres standing rigging. An improved righting moment and reduced weight also ensure speed in excess of Adele's.





### J Class "Lionheart"

Lionheart is the crowning achievement of a three-year construction programme initiated through an extensive research project. A specific Velocity Prediction Program was written to predict the performance of a typical J Class hull with a long keel and flap rudder. This software was then calibrated with the tank test and wind tunnel data for a six-metre J hull. All 22 existing J designs were entered into the software for calculations regarding both line honours and handicap under the new J Class Association handicap system. The best five yachts were analysed with so called Computational Fluid Dynamics (CFD) software, in both up and downwind situations. *Lionheart* was shown to be one of the three best designs in this research. She has been extensively optimised to race under the JCA rules and ballast ratios, mast position, sail area, deck layout and spar package all researched and fine-tuned. On the comfort side, she features twin deckhouses and twin cockpits - a concept successfully developed by our office on previous superyachts. Built to MCA, *Lionheart* is an ideal charter yacht built to race against the other J's.





# Under construction

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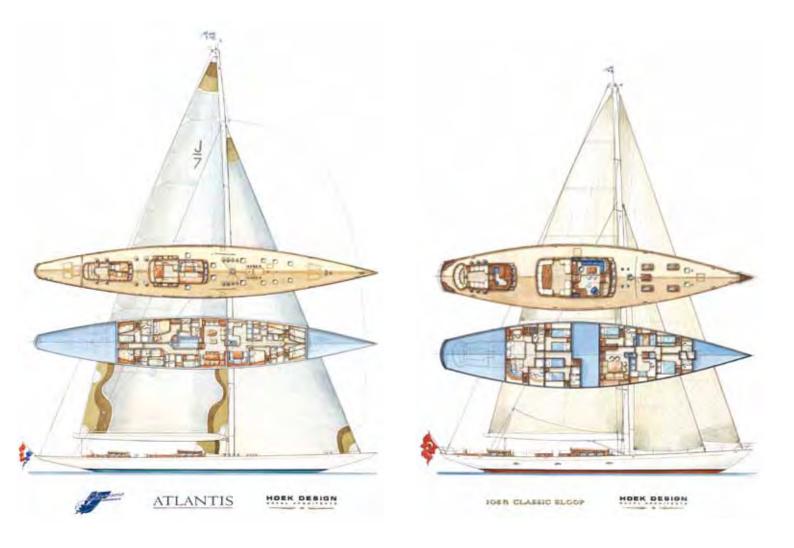
the bard



## 115 ft "Firefly"

One of the most striking designs presently being built is our 115-foot Race Classic *Firefly*, designed to compete in the Spirit of Tradition regattas. Construction started in summer 2010 and the vessel is due for delivery in late spring 2011. Designed as a classic Maxi Racer, *Firefly* is perfectly optimised in terms of performance, making her faster than any of the Js both up and downwind, whether in light or heavy winds. Thanks to her Alaska yellow cedar deck, High Modulus carbon spars by Hall Spars and composite rigging by Smart Rigging, and with a displacement of just 60 tonnes and draught of 5.2 metres, *Firefly* is bound to be one of the most stunning and fastest yachts.

A new class organisation has been set up and the construction of two sister vessels is currently being negotiated. The F Class Association has implemented very simple rules similar to the JCA, with a reasonable degree of flexibility: The yachts are required to be from one set of cutting files and with restrictions in mast height and sails. Lifting keels are allowed as an option.

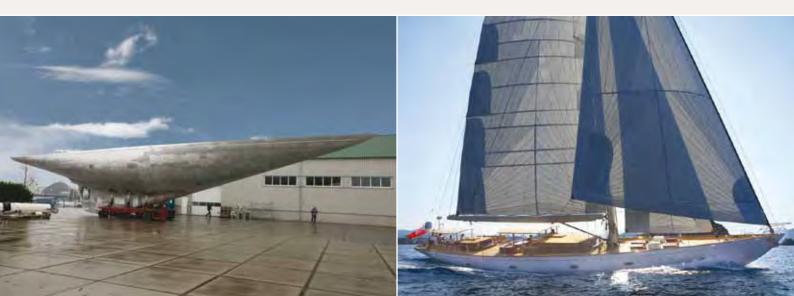


### J-Class "Atlantis"

The aluminium hull of the J Class yacht *Atlantis* was built by Freddie Bloemsma's specialised hull construction yard, based on a super-J design by Frank C. Paine, the genius behind the J Yankee. Like *Lionheart*, *Atlantis* is one of the three most promising designs to come out of our research programme. She has the longest waterline length, smallest wetted surface and highest keel aspect ratio. *Atlantis'* owners are planning to participate in the J Class regatta's that will be held in 2012 in Falmouth and Cowes prior to the Olympic Games.

### 105 ft Sloop "Simba"

A contract was recently signed to build a sister vessel to the highly successful 105-foot classic yacht *Jazz Junior*. The new yacht is being built in the same cold moulded hull construction method and will be almost identical in terms of interior and deck layout and styling. She will have an aft owner's stateroom, three guest cabins and separate crew quarters with a galley. The yacht will incorporate a series of improvements learned from the operation of *Jazz Junior* and is slated for delivery in the spring of 2012.





#### 101 ft cruiser / racer

Female moulds for the carbon epoxy composite structure of this superyacht have been produced. Our velocity prediction software allowed the design to be extensively optimised for performance. The yacht features a planing knuckle in the aft part of the hull similar to the Volvo 70s, while a carbon hull, deck, spars, rudder and keel fin have allowed a displacement of just 78 tonnes. The model will be built in semi-series allowing the crew and owner/guest areas to be either forward or aft.

#### Truly Classic 90-3 and 90-4

Based on the successful TC90-1 *Kealoha* and TC90-2 *Atalante*, the hull of TC90-3 is presently being outfitted at Claasen Jachtbouw, while hull number four is under construction at Bloemsma Aluminiumbouw, both in the Netherlands. While alternative interior layouts have been developed for these two yachts, the main deck layout is identical to the previous two vessels. For more information on acquiring a yacht from the Truly Classic series, contact our brokerage department via www. hoekbrokerage.com







### 85 ft "Windhunter II"

Windhunter II's naval architecture, exterior and interior design were all executed by our office, and she is the fifth 'Hoek' design to be built at Aluboot in the Netherlands. Her plumb bow, reminiscent of the famous British Pilot Cutters, gives her a long waterline.

Windhunter II's aluminium hull, carbon spars package and lifting keel will ensure that she makes a powerful impression on the race course in the Spirit of Tradition class and when cruising. The yacht is being built for a Turkish client and will be launched in the spring of 2011.

### 74 ft sloop "La Niña"

This exceptional yacht is presently under construction at Metur Yachts in Bodrum, Turkey. Made fully in composites, she is being built over a male mould with a PVC foam cored hull and deck, using a combination of epoxy glass and carbon. *La Niña's* hull is reminiscent of the Volvo 70s and she is equipped with a lifting keel that reduces the draught from 4.4 to 2.9 metres. The superstructure was developed in close cooperation with the owner, and the interior is based on a luxury cruising concept for two couples and a separate crew cabin.





#### 66 ft Pilot Classic

This stunning Pilot Classic, is also being built at Metur in Bodrum, Turkey. Her sailing systems are designed for single handed cruising with a Park Avenue boom and self tacking jib on a bowsprit. With a cold moulded hull, 21-tonne displacement and three-metre fixed keel, she will be very competitive in the Spirit of Tradition regattas. The interior layout and styling is designed in close cooperation with the client and our office.

#### Truly Classic 51

A third project underway at Metur deploys all the experience gained in seven sister vessels. A coldmoulded hull with composite deck and cockpit is topped by a magnificent teak deck and superb joinery. The yacht has a number of features normally only seen on much larger yachts, including an advanced interior layout, deep keel and tall sail plan with spreader angled spars. She will be for sale via Hoek Brokerage after delivery in the spring of 2011.





### 74 ft Pilot Classic "Albatross"

This 74-foot Pilot Classic design is being developed for an experienced yacht owner in the Netherlands along similar lines as the 85-foot Pilot Classic *Windhunter II*, but with a more voluminous hull and wider beam and freeboard that allow for extra interior volume. The robust result will feature a vast aft cockpit, a deckhouse with a lounge area and an open plan galley/dining concept in the lower saloon.

A full beam aft owners' stateroom, double guest cabins and separate crew quarters will result in a vessel that is both easy to handle for a shorthanded crew and can be operated by an enthusiastic family. Construction on the aluminium hull will probably have commenced by the time this newsletter goes to press. Our office was responsible for the exterior and interior styling on *Albatross*, including all naval architecture as well as the structural design work.

#### Truly Classic 120

This design, currently under development at our office, represents a further improvement on the successful 90-foot Truly Classic series. The design was originally realised for an experienced yacht owner who previously had a smaller Truly Classic, and integrated his and our latest ideas into this ingenious concept. The yacht will be built in 5383 aluminium, with the possible addition of an optional lifting keel.

Other notable features include a private owners' deckhouse and cockpit, a central social cockpit with dining tables and helm stations, and a main deckhouse with a formal dining area and navigation station. The interior layout is flexible and includes the option to place the two guest cabins either aft or forward of the main deckhouse. In the "standard design", the saloon is between the owners' and main deckhouse in a way that completely reserves half the boat for the owners when on board without guests. We look forward to developing this design further within the successful Truly Classic series.

# On the boards

### J-class "SVEA"

The intellectual property rights regarding the plans for **Svea** were recently bought by one of our clients. This renowned design was completed in 1937 by Tore Holm, a famous meter class designer from the 1930s. His J never saw the light of day at the time despite much speculation in the years that followed. Nonetheless, **Svea** is one of the most stunning J Class yachts both from an aesthetical point of view and as a potential racer. Everything possible has been done to optimise performance.

A two-metre long aluminium model was built to assess her lines and extensive research carried out on her aluminium structure using finite element 3D modelling. CFD and VPP software was deployed to analyse **Svea** and make comparisons with the existing Js, and her hull proved to be one of the fastest upwind. The designs are made in two versions, one with a flush deck layout without deckhouses and racing interior and a second with deckhouses and cruising interior, in such a way that the flush deck version can be converted later. Construction will most probably start at Claasen Jachtbouw in the middle of 2011.





#### 157 ft sloop Project "Charlie"

The design of *Charlie* is loosely inspired by the successful 175-foot sloop *Erica XII*. The project has since proceeded in close cooperation with the owner and his captain. For this project, performance will be extensively optimised with Velocity Prediction and CFD software, and her sail plan will include carbon spars, a Park Avenue boom and composite rigging.

She will be designed with an aluminium hull, a fixed keel plus a rudder with a fixed skeg. The spectacular interior design will be completed in close cooperation between Hoek Design and Rhoades Young, the first time we have worked together with this London-based team. Rhoades Young is in charge of the interior styling and decoration, while our office is taking care of all naval architecture and interior drawing work. *Charlie* promises to be an impressive yacht in every respect.



#### 192 ft Pilot Classic

This fascinating project presently under development is based upon an aluminium hull, lifting keel, and carbon spars and rudder. An extensive weight and performance optimisation project is being carried out in order to ensure her competitiveness in the Spirit of Tradition races. The hull, keel and rudder design will be highly optimised with CFD software. The sail plan exceeds Panamax height, while a lifting keel that expands her draught from 4.5 to 8.5 metres will make an extremely powerful yacht, especially upwind. She will be built to MCA (short range) for charter purposes but performance remains the key priority in the design brief. There will be dedicated storage for a 22-foot tender completely below decks and a separate crew cockpit similar to that seen on *Erica XII*. The wealth of experience gained with designing and sailing yachts of a similar size - such as *Adele*, *Erica XII*, *Marie* and *Athos* - will be very helpful in the creation of this exhilarating yacht. As this newsletter went to press a bid package was being sent out to various yards around the world.

# Daysailers





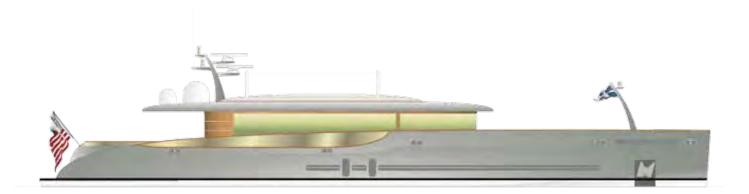
#### 33 ft

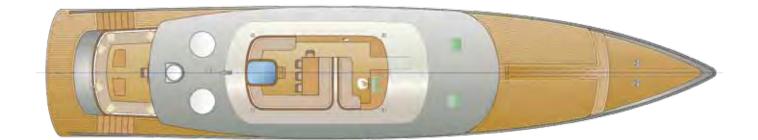
Designed to be built in a series, the first four of these beautifully styled boats are about to go into production using vinyl ester in a female mould. An open daysailer with a very large cockpit and expansive sunbathing area, this model still provides space in the interior for several bunks and a toilet. Thanks to Mastervolt electric propulsion, a carbon mast and a Park Avenue boom, this 33-foot yacht truly offers excellent value.

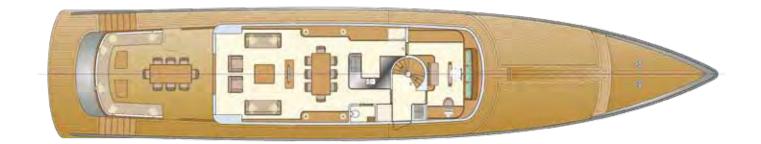
### 37 ft

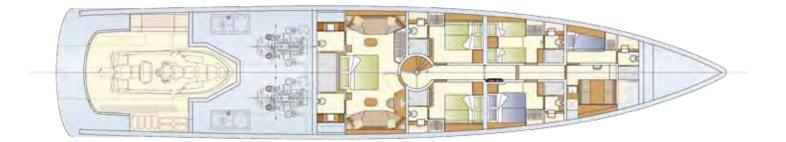
This design was developed for a repeat client who wanted to use the yacht for weekend sailing and holidays. She is designed with a light displacement in cold moulded composite construction with a relative high stability. The first yacht is being built in the Netherlands and negotiations are presently underway with other clients looking to build this design with a slightly different interior layout. With a beam of 3.1 metres, displacement of five tonnes and draft of two metres, she will sail exceptionally well. Shallower or deeper drafts are possible.







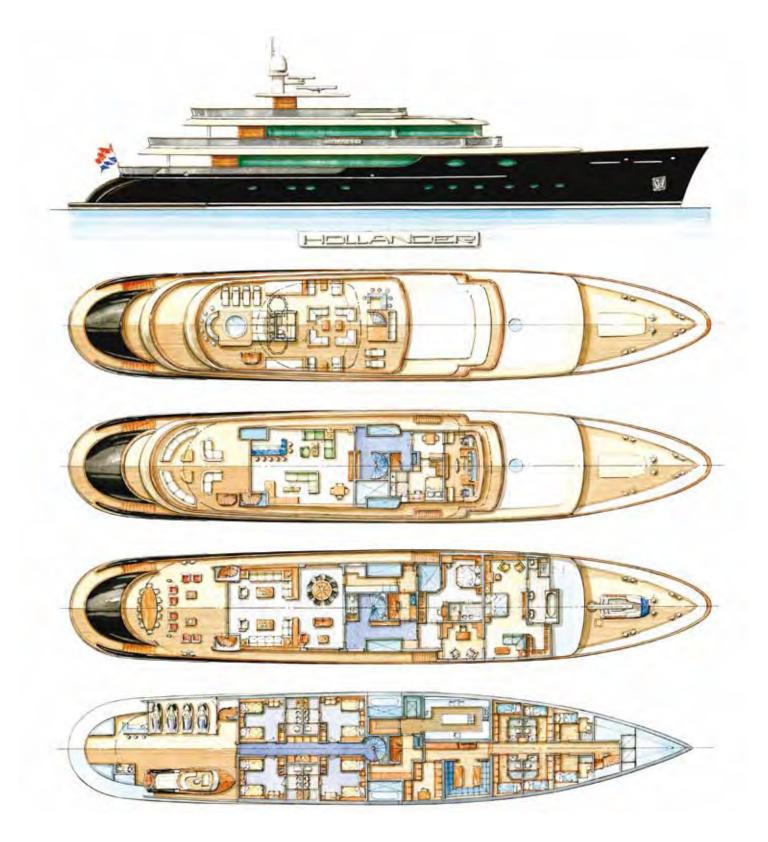




# Motor yachts

## 35 m "Desperado"

The founders of an environmental engineering company in the United States asked us to design a modern eco-friendly exploration vessel that would have minimal impact on the environment. This exciting project is under development to be built in a composite construction, and bids for the 'Desperado' project were coming in from various yards as this newsletter went to press. Ease and safety of operation as well as a minimal crew for a vessel of this size were some of the key parameters in the design brief. The medium displacement yacht is intended to be used for expeditions to areas where interesting diving scenery can be found. She will be equipped with controllable pitch propellers with a cruising speed of 12 knots and a maximum speed of 18 knots. The shape of the hull is developed in such a way that the yacht could also be powered with bigger engines with planing speeds up to 35 knots. 'Desperado' will have a timeless interior layout and twin Caterpillar C18 engines - we look forward to seeing her materialise.



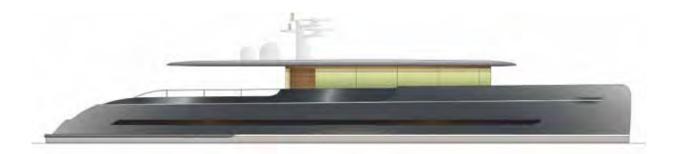
## 56 m "Hollander"

The design of *Hollander* was carried out by our office with naval architecture by Azure Naval Architects, while Holland Jachtbouw initiated the project and Fraser Yachts is involved in the marketing and sales. Typifying the innovative pedigree of the Dutch yachting industry, the project is ideal for a new generation of owners looking for a powerboat that is unique and challenging without having an unfeasibly futuristic design. Modern materials and a lightweight construction are synthesised in a high-tech gentleman's yacht full of innovations, including an ingenious system that takes full account of the total onboard power consumption. The *Hollander* 56 has been designed with a steel hull and aluminium superstructure, as well as a diesel-electric propulsion set-up that makes her exceptionally eco-friendly. The interior can be completely customised. This particular model was designed as a wide body where the owners' accommodation spans the full beam of the yacht. A smaller 52-metre low-profile design is also available with optional walkaround gangways and an aluminium hull.



## 50 m "Proteksan"

We are presently developing the exterior and interior styling for a 50-metre motoryacht concept for the Proteksan-Turquoise yard in Istanbul. Various alternative profiles have been developed, both in a classic and more modern style on the basis of an underwater configuration previously developed by Proteksan.



## 30 m **"Claasen"**

This motoryacht project is presently under development for a repeat customer. The yacht will be used as a mother vessel to a classically styled racing sailing yacht. While being used for storage of sails as well as crew quarters for the sailing yacht, the open aft deck with a large bar and lounge area will also be a great area for relaxing and partying. The yacht will be powered by three Volvo engines and IPS propellers, giving her a top speed of around 30 knots and a cruising speed of around 20 knots. She will be built in aluminium at Claasen Jachtbouw and Bloemsma Aluminiumbouw in the Netherlands.



## 22 m "Metur"

A 22-metre project for one of the clients of Metur in Bodrum, Turkey, this impressive motoryacht will be built in hightech epoxy composites and will be used as a dayboat for cruising around the Mediterranean islands. A top speed of 45 knots will be achieved by two Rolls Royce waterjets and MAN main engines. A large on-deck living area is created with the galley at deck level and below decks accommodation for an owners' suite, guest cabin and two crew cabins. Construction will start in the beginning of 2011 and delivery is slated for 2012.



## 180 ft "Ceres 2"

At the time of writing, negotiations were being finalised by the owner with Fincantieri in the United States regarding the construction of this 180-foot vessel for Chicago Line Cruises. The design was developed in close cooperation with our client, while Azure Naval Architects were responsible for the naval architecture aspect. The design and engineering of **Ceres** has been taken to an advanced level over the past year and the Fincantieri yard will incorporate all design and engineering work by Hoek Design and Azure into workshop drawings. Thanks to an enormous battery installation developed in partnership with Imtech, the vessel can run for up to eight hours without emissions. This will enable **Ceres** to operate on the waterways of downtown Chicago. The battery pack itself is charged with green energy, enhancing her eco-friendliness. It will be very rewarding to finally see construction begin on this project in the spring of 2011 and she is sure to look stunning when finally cruising along the Chicago River.



## 100 ft "Sea Dragon"

Formerly known as *Sapphire*, this highly successful 100-foot sloop was in need of some renovation after many years of service, and was recently refitted at the Hinckley yard in the United States. She is the second boat to a Hoek design to be owned by the client and we gave considerable support to the overall refit project.

Her teak decks, cap rails and all exterior woodwork were replaced; the spars were taken out, checked and repainted; the interior was completely upgraded; the main saloon and deckhouse were stripped back to bare wood; and a new interior paint job, exterior paint job and 3DL Marathon sails have given her a fresh appearance to suit her new name. Re-launched in the spring of 2010, *Sea Dragon* will be taking part in the St. Barth's Bucket in the coming spring.

# Refit



## 78 ft "Drumfire"

Working on *Drumfire* since 2007, I have enjoyed and continue to enjoy every day of sailing this beautiful yacht. The boat is set up for shorthanded sailing, and we can easily handle her with just one other crew member when cruising with guests. Before I became captain of *Drumfire*, I did a season of classic sailing regattas all over the Mediterranean and I remember thinking that it would be nice to see *Drumfire* participate.

After some serious talks with the owner, we eventually entered the boat into the Superyacht Cup in Palma de Mallorca. Although we did not win this race, we did very well and the owner fell in love with racing, which he felt gave the yacht a second purpose. He asked me to enter *Drumfire* in the classic regattas in Cannes and the Voiles de Saint-Tropez as well, and we decided to make a few modifications to the yacht, including fitting her with a set of 3DL racing sails.

The Cannes regatta was a beautiful experience, with loads of classic yachts, some more than 100 years old. *Drumfire* performed very well throughout. At the last regatta of the season, the amazing Voiles de Saint-Tropez, *Drumfire* took to the start line with 40 other boats in a breeze of 25 knots, with the topsides of the yachts only 50 cm apart - it made for a breathtaking view!

Although it was always going to be difficult to reach the award podium - we were racing against a lot of small boats that can easily plane when going downwind in strong winds - *Drumfire* did very well considering her rating. For me and, more importantly, for the owner, this was an unforgettable experience.

The plan now is to do three or four regattas every summer. It would be fun if more Hoek designed boats similar to *Drumfire* would also join some of the regattas - it would give the racing a bit more of a competitive edge!

Kind regards, Tim van der Weide Captain S.Y Drumfire

# loek Brokerage

#### Dear Friends,

I hope that you have enjoyed reading this 2011 newsletter and taking in all the fascinating developments regarding new designs, models under construction and completed yachts. For the brokerage team, one of the year's highlights was taking *Lionheart* to the 2010 Monaco Yacht Show. This fabulous J attracted a great deal of interest.

In addition to elegant, sleek lines and a clean and robustly built interior, she provides unsurpassed efficiency during sailing and handling. This impressed a number of highly reputable yachting journalists who tested *Lionheart* during trials off the coast of Mallorca.

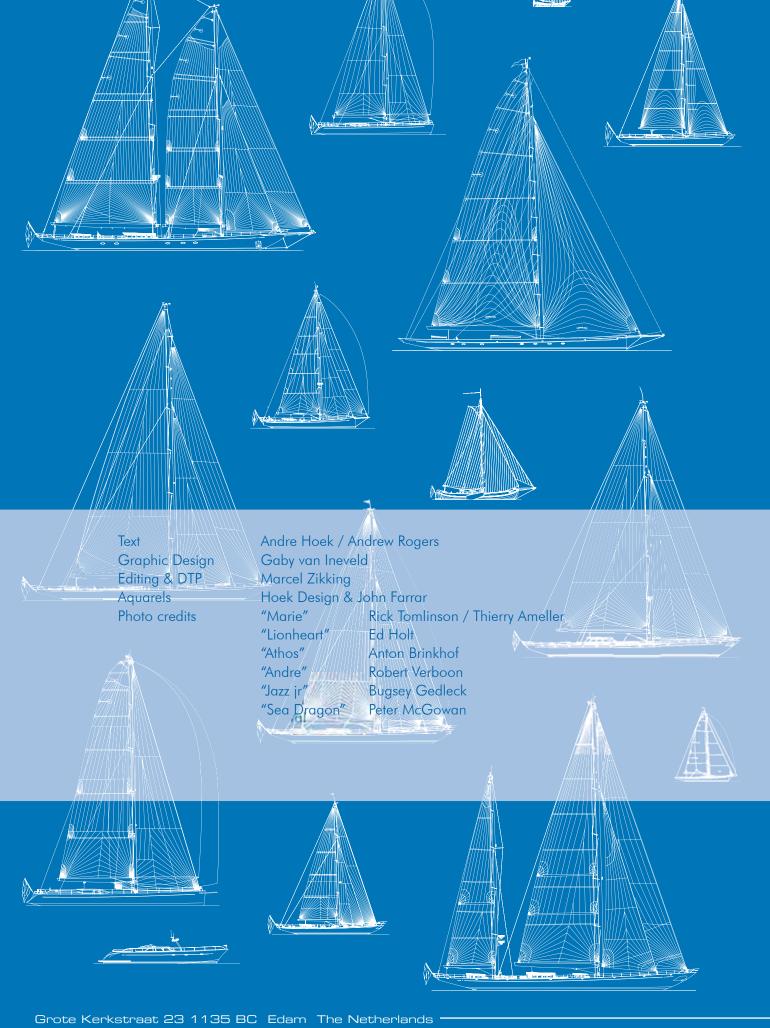
Recent sales at Hoek Brokerage include the 125 ft schooner *Skylge*, the TC 78 *Hartbeat* and the TC 65 *Windrose*. *Skylge* is also available through our charter division under her new name *This Is Us*.

During the airspace closure resulting from the volcanic eruption on Iceland, a sailing enthusiast stuck at JFK airport contacted us with a clear message: "Design me a daysailer with the appearance of a J Class, but smaller and faster..." The result is a 115 ft daysailer of exceptional beauty, currently under construction and marketed by Hoek Brokerage under the F Class series. On a smaller scale, we are also presenting the daysailer designs of the DS 33, and the weekender Pilot Classic 37. The core of our brokerage activities continues to be the existing yachts designed by Hoek that are being offered for sale and/or charter, as well as representation of the Truly Classics ranging from 51 ft to 120 ft. New in the charter listings are the 180-foot ketch *Marie* and the 203 ft schooner *Athos*, both launched in 2010.

I would like to take this opportunity to congratulate the 108 ft *Shamoun*, the 108 ft *Jazz Junior*, the 104 ft *Irelanda* (formerly *Happy Four*) and the TC 78 *Drumfire* and welcome the TC 78 *Hartbeat* for their keen participation in various regattas such as St Barth's, Palma, Corsica, Cannes and Saint-Tropez. They are all a wonderful testimony to their owners' vision.

Last but not least, we welcome any enquiries you might have, and invite you to take part in the vibrant atmosphere at our offices in Edam.

Yours truly, Pieter van der Weide CEO, Hoek Brokerage



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