

RA androps

Robert Allan Ltd. Information & News

Issue 16

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ROBERT ALLAN LTD.
NAVAL ARCHITECTS AND MARINE ENGINEERS



The Mini Tugs

by Hans Muhlert, P.Eng.
Senior Project Director

Our office is so used to working with 20 to 40 metre tugboats that designs under 18 metres seem tiny. Tugs of this size did not seem so small 30 to 40 years ago and today there is a growing industry trend towards smaller, higher powered designs as reflected in the latest crop of Robert Allan Ltd. mini tugs including the *BRAtt* and *RAScal* series as well as an *RT 10-15* for Rotortug® BV, as seen on the covers.

These tugs are useful harbour and shipyard workhorses, acting as line boats, ship assist tugs, and performing miscellaneous barge towing. They are also excellent trainers for aspiring

helmsmen of the larger, high-powered escort and ship assist tugs due to their similar machinery layouts, hull performance, and wheelhouse arrangements. Taking a big tug out of service for crew training is uneconomical as well.

Although small, these mini tugs are not toys. They perform heavy-duty work with generous power and bollard pull, rugged construction, and similar fendering as the big tugs. They often have more power for their weight than the big ones, and for their length, they can be much heavier. For example, a high-powered 32 metre tug can have a displacement to length ratio of 900 whereas some of the mini tugs are up to 1,700! Similarly, whereas the big tugs can have as much as 7 kilowatt of power per ton of displacement the mini tugs can be up to 10 kW per ton.





Some mini tugs have conventional twin-screw propulsion but there are also twin azimuthing drives, triple azimuthing drives, and single steering nozzles. Due to the high power and weight, they are usually quite beamy in order to be stable and safe. They comply with the same towline heel standards as the big tugs and can be fitted with a bow winch and/or stern winch or can tow from a hook. Although usually operated as shift boats, some do have overnight accommodations for as many as four crew. In some jurisdictions, simpler and more economical rules apply if the length is under a certain size.

Mini tugs might look cute but they can do some serious work and because the initial cost is much lower, be a profitable investment for an owner. 🚢

Regional Contract Managers

Listening to and understanding customers while progressively developing the customer experience is a fundamental precondition for the success of our business. Customers are our best asset and a word-of-mouth recommendation is still the best reference we can get. Furthermore, it is completely free.

The importance of customer engagement has indeed increased over the last few years and our priority as Contract Managers at Robert Allan Ltd. is to maximize customer engagement by understanding our existing and future customers while providing them with beneficial and convenient services towards the market needs in specific regions.

The famous approach of “going global by thinking local” guides us for better market penetration and towards new ideas, and at the same time being able to enhance cooperation with local customers in global market by designing and resolving new strategies. 🚢

*by Oben Naki
Contracts Manager (Turkey)*

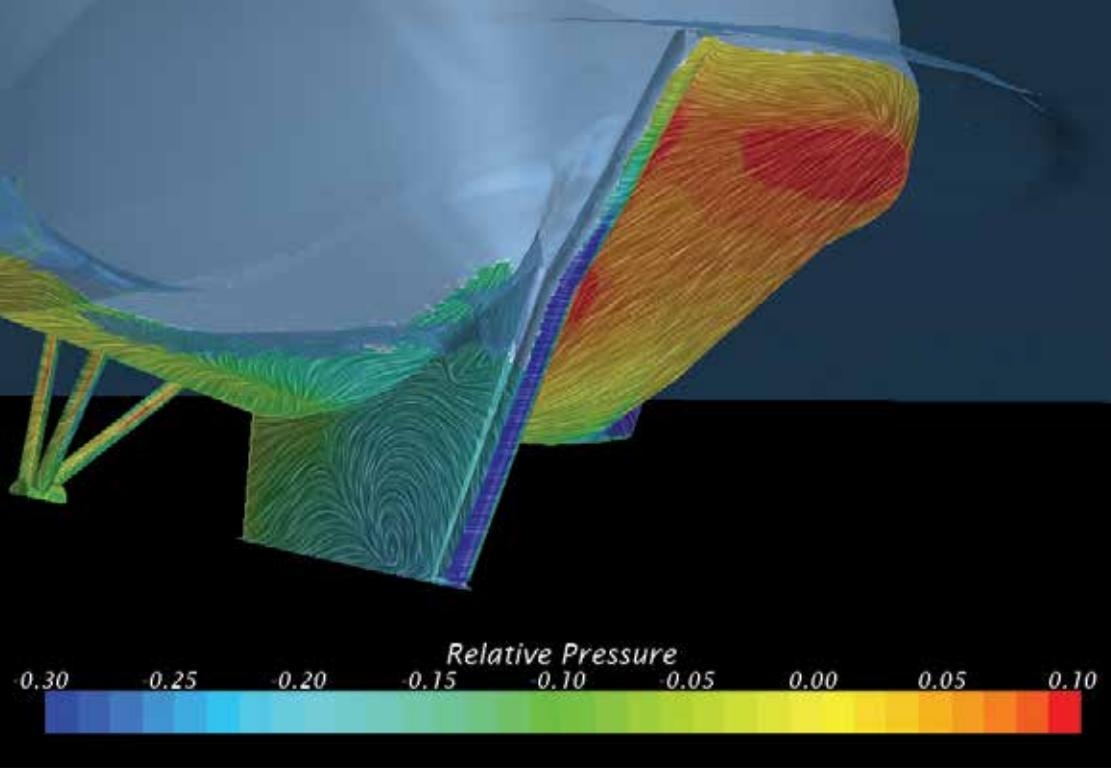
A Contracts Manager’s role can be described as a merger between the roles of an Accounts Manager and of a Business Development Manager. One in such position is expected to maintain the good relationship with Clients, to understand specific technical requirements as means to provide tailored designs; as well as for identifying and creating new opportunities in the market. That involves a clear understanding of political-economic movements, which may dictate demand for new assets; and specific requirements of the various ship owners around the globe, which often goes beyond pure ship design. He can be seen as a bridge between the Company and the outside world. 🚢

*by Pedro Ventura
Contracts Manager (South America)*

I am a 3rd generation shipbuilder out of Turku, Finland. I graduated in 1996 with a BSc. degree in Naval Architecture. I have spent a major part of my career at Rolls-Royce Finland in various positions ranging from running a school of thrusters to product sales and marketing. For 3.5 years I was involved in factory integration in Coquitlam, BC. The time spent in BC was a start of my relationship with Robert Allan Ltd. and I am proud to be representing this great company in my new role as a contracts/customer relations manager in Europe. 🚢

*by Sami Uotinen
Contracts Manager (Europe)*





HEEDFULLY HANDLING A COLOSSAL CRUDE CARRIER

Newly Enhanced Z-Tech® Tug Design

by Xuhui (Bill) Hu, P.Eng.
Project Director/Senior Naval Architect

Since the first Z-Tech® tug entered service in 2004, the concept has been widely accepted around the world with more than 80 Z-Tech® tugs built or under construction.

Robert Allan Ltd. initially developed the Z-Tech® concept to combine the best attributes of both modern ASD and tractor tugs. A major feature of the concept is its forward (working) deck with low, flat sheer. While this configuration provides crew with a safe and comfortable working area, especially when the tug handles big ships with great flare, it also provides excellent potential for escort capability because of its low tow point together with an optimized staple location and skeg design.

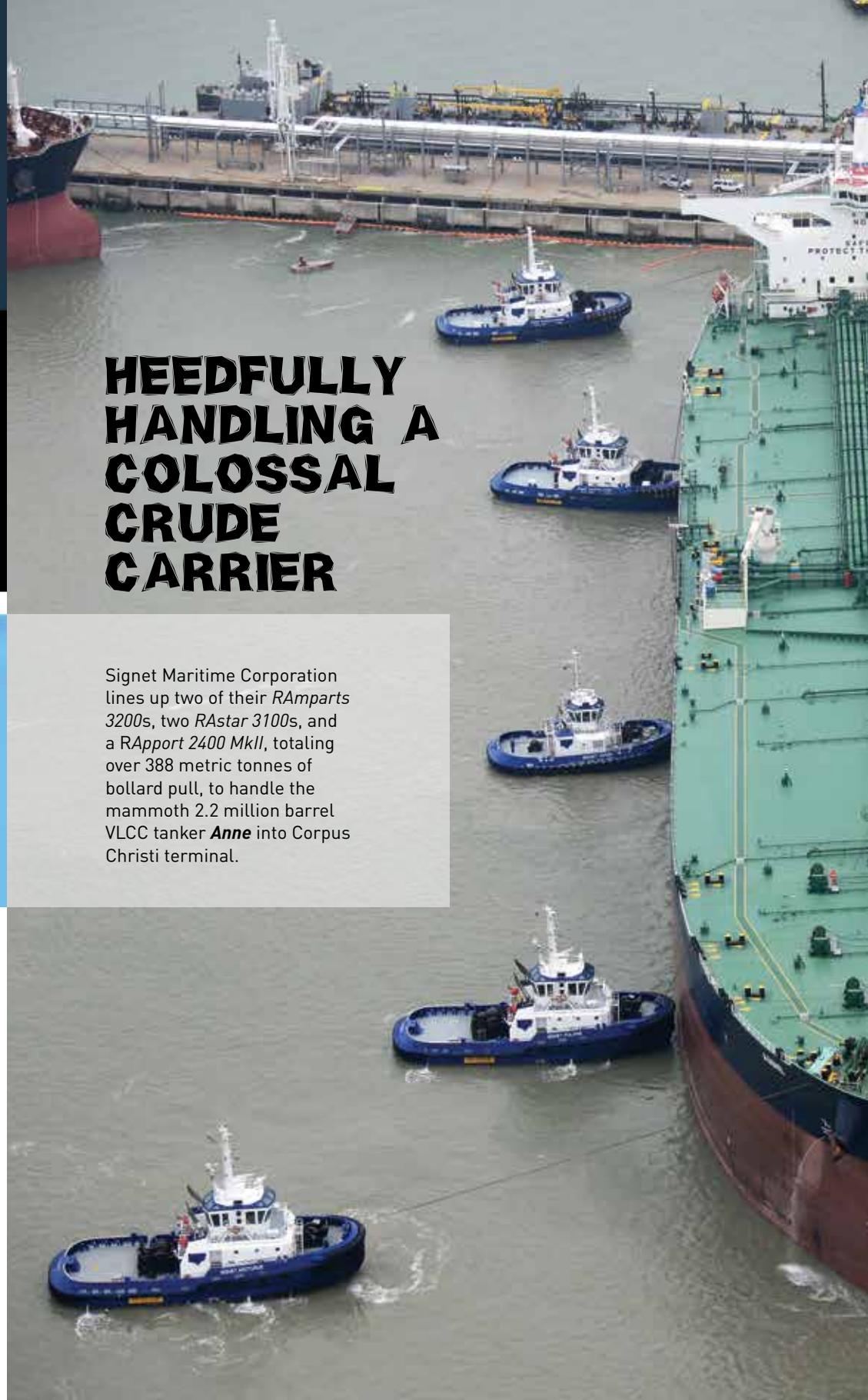
G & H Towing Company of Houston, Texas have provided escort services to its clients with their Z-Tech® 30-75 and Z-Tech® 24-60 tugs for more than 10 years. Although these tugs have fulfilled opera-



tional requirements, the client expressed a desire to enhance the escort capability of planned new designs further for new and demanding projects.

In response, Robert Allan Ltd. has incorporated the sponsoned hull form (developed for the RAstar series of high performance escort tugs) into the Z-Tech® configuration. CFD simulations indicate a 15% increase in steering force. The results of the analysis were promising enough to convince the client to order eight of the new enhanced Z-Tech® 30-80s, which are currently under construction at Gulf Island Shipyards in Jennings, Louisiana. 🚢

Signet Maritime Corporation lines up two of their RAmparts 3200s, two RAstar 3100s, and a RAport 2400 MkII, totaling over 388 metric tonnes of bollard pull, to handle the mammoth 2.2 million barrel VLCC tanker **Anne** into Corpus Christi terminal.





ART 80-32
built by Damen



Ramparts 3200
built by Italthai Marine



2x RAstar 3200-W
built by Rosetti Marino Spa



Ramparts 2700
built by MTG-Dolphin



Ramparts 2400
built by Diversified Marine



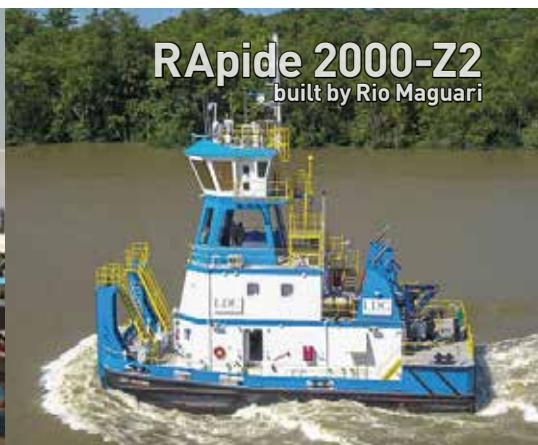
2x RApport 2400
built by INACE Shipyard



3x RAstar 4000-DF
built by Astilleros Gondán S.A.



4x RAstar 3400
built by Triyards SSY



RAPide 2000-Z2
built by Rio Maguari



Problem Solver at Large

by Dave Christopher, IEng IMarEng, MIMarEST, MNI
Project Director/Senior Marine Engineer/Manager, QA

One service that Robert Allan Ltd. offers as part of our complete design package is additional Professional Services. This may cover a multitude of things, but one element that is particularly close to my heart, is Tests and Trials Support.

As a professional seafarer (first and foremost) and a Chief Engineer, providing support for dock and sea trials always peaks my interest and I wait expectantly for a client to accept this service. Our worldwide client base mean shooting off to some far-flung corner of the globe, be it Europe, Asia, South America or beyond.

Guiding a vessel through its first “passage”, testing the equipment to its max, and pushing the vessel to the limits of performance, does not always go smoothly, and although the yard personnel and owner may have their own teams,

they may not be collectively familiar with all aspects of the task. Experience is invariably the answer in optimising vessel performance; these days within the marine industry, there is a distinct lack of “old world tricks of the trade”.

After delivery of the vessel and the regular crew get the chance to work the boat, there are invariably hiccups in equipment, systems, and fine-tuning is required to optimise the operation. There is no such thing as the “perfect ship”. There may be work around solutions, or long-term modifications, but in either case being in a position to assist the client down the road is something that Robert Allan Ltd. has the capability to offer.

Maintaining a good working relationship with our clients is essential, and being able to offer solutions to problems and issues outside of Robert Allan Ltd.’s normal scope of design services; e.g. during construction, during trials, or when operating, is something that Robert Allan Ltd. strives to enforce. 🙌

Rob Allan Sets Sail to Retirement

In the summer of 2017, at the well-seasoned age of 70, Robert G. Allan formally announced his retirement from Robert Allan Ltd. While looking to spend more time pursuing personal interests, Rob will continue to serve on the Board of Directors and as part of our SAGE team. You may even find him at the occasional conference as an “Ambassador at Large”.

The following are excerpts from a message to staff:

This is a big change for me, but I take leave of my daily duties with absolutely no regrets, knowing the organization is in the most capable of hands. Robert Allan Ltd. has grown beyond my wildest dreams and has achieved international success, which is the envy of many in our field. That success is entirely the result of a team effort and each of you should be extremely proud of your individual contributions.

I want to thank each and every one of you for your commitment to this company and to the important work we do here. Many of you I have worked with for more than 20 years, and several of you much more than that. I am immeasurably proud of the team we have built here and the way in which we have brought such a diverse group of men and women together with the common goal of doing good work.

Every one of us at Robert Allan Ltd. wishes Rob and his wife Enneke all the best in their golden years, whether they are relaxing at their quiet summer home on Bowyer Island or on one of several planned global adventures.

Photo courtesy of the Vancouver Maritime Museum taken at Evening At The Museum 2017. 🙌

RAindrops

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On the cover are parallel plan renderings of the mini rotortug RT Borkum, built by Padmos Shipyard for Rotortug B.V.

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