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The WaveRunner Series Celebrates its 30th Anniversary

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NEWSLETTER FOR YAMAHA MARINE DEALERS

Chantey

In 1986, Yamaha Motor launched its first personal watercraft (PWC), the "WaveRunner 500" ("Marine Jet 500T" in Japan), in the United States. Thirty years have passed since the birth of Yamaha's PWC business, and in this issue, we introduce the beginnings and current course of the WaveRunner series.



WaveRunner 30th Anniversary site: http://global.vamaha-motor.com/business/waverunner/30th/

The Era That Gave Birth to Yamaha's PWC

In the 1970s, there was no licensing system in place for PWCs in Japan. Countless motorboats and sailboats plied the waters of the Miura Peninsula on weekends, and you could frequently see a variety of PWCs slicing through the waves as they threaded in and out between them. The origins of the PWC are said to go back half a century before this to a craft invented in France, after which a variety of types of craft in different shapes and designs were created around the world. But, none of them developed into a widely accepted mainstream category. In the waters of Japan at the time, an array of different watercraft could be found. In response to this trend, the "specialized standards for PWC" were officially introduced in 1980 and the state of the PWC scene in Japan quickly changed. Three years later in 1983, Yamaha began fullfledged development of its first PWC.

From Failure to Acclaim in U.S. Tests

At the start of the R&D project, Yamaha's aim was to build a slim, stand-up type PWC that would have excellent speed and sharp turning performance. The hull had a boardlike shape and the engine was a 25 hp Yamaha unit. The craft had a simple construction and was operated with the handlebars; it could swiftly maneuver through the water like riding on a single ski. This was Yamaha's first prototype: the "Power Ski." The initial tests run on Lake Hamana were positive and those involved were excited at the prospect of a whole new category of watercraft. Subsequent tests were conducted in the U.S. in 1984, but to make a long story short, the U.S. tests were a complete failure. The local test rider was a large man weighing over 100 kg and he had trouble even getting into a standing position on the Power Ski, which had been developed with a Japanese body type in mind. Even once up and running, it lacked the power to perform as the rider wished.

After the utter failure of the first tests in the U.S., Yamaha

made a 180° reversal in its PWC project concept. The painful realization that the American market wanted a stable craft that a wide range of users could enjoy with assurance led to the idea of a sit-down type tandem model. A test session for the revised prototype took place the next year and with the same local test rider. This time, with the new tandem model it was a completely different story. "This is great!" he exclaimed after performing 360° spins one after another. He praised it profusely as a machine with a feeling like no other PWC. It seemed clear that this model required no special riding skills and could be spin-turned by practically anyone; it was exactly what American users were looking for. This test session gave Yamaha confidence that its product concept was right on target and development was accelerated to bring the new business to life.



The "Power Ski'

prototype model (above) tested in

the U.S. in 1984

powered by the

outboard motor.

was a stand-up type

engine from a 25 hp



A new prototype embodying the project's new keywords of "sit-down type" and "tandem model" was immediately developed. Initial R&D was carried out with the prototype mounting an outboard motor.

PWC Market Scale Quadruples in Four Years

The tandem model that had won test

rider praise in the U.S. was released as the WaveRunner 500 in 1986, and the single-seat WaveJammer 500 model joined the lineup the next year. The release of these first two Yamaha models and their vastly different product concepts impacted the PWC market and marine leisure fans in a way that far exceeded Yamaha's initial expectations. Prior to Yamaha's market entry, annual demand for PWCs worldwide stood at approximately 25,000 units. This jumped to 31,000 units in 1987, 57,000 units in 1988, and by 1990, world demand topped 100,000 units. In just four years, these Yamaha models sparked growth that saw the market quadruple in size.

AMAHA

To answer this growth in demand in the U.S., the world's largest market for PWCs, and to deal with fluctuations in the exchange rate, production of Yamaha PWCs began at Yamaha Motor Manufacturing Corporation of America (YMMC) in 1989.



Yamaha's first PWC, the WaveRunner 500 (1986)

The WaveRunner Series Celebrates its 30th Anniversary

The FX Cruiser SVHO flagship model

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A Prime Success Story in Yamaha's "Multi-Axial Business" Policy

After entering the PWC business, Yamaha Motor went on to introduce a number of epoch-making technologies and products. One shining example is the FX140 model launched worldwide by Yamaha in 2002 as the world's first PWC powered by a 4-stroke engine. Yamaha had long been an innovator for environmental friendliness with its outboard motors, and the same stance was apparent in this new 4-stroke PWC engine that brought dramatic improvements to environmental performance with improved fuel economy, reduced emissions, less noise, etc. Furthermore, the 4-stroke power unit was developed based on a high-performance motorcycle engine and gave the FX140 dynamic performance. Yamaha continued to develop its PWC engines and released the Super High Output (SHO) engine in 2008, its first to use a supercharger. Further development with this engine as a base resulted in the Super Vortex High Output (SVHO) engine mounted on models for 2014. The SVHO engine achieves approximately 20% more power than the SHO engine, while changes in



The FX140 (2002) was the world's first 4-stroke PWC and successfully cleared the U.S. Environmental Protection Agency's emissions standards.

the piston assembly and the cooling systems help maintain high reliability despite the greater output.

Yamaha doesn't only develop powerful engines like the SVHO engine; we are also working on creating other compact, lightweight PWC engines like the TR-1.

At the same time, Yamaha continues to be a leader in hull construction technology with our exclusive NanoXcel and NanoXcel2 ultra-lightweight hull materials, and in the electronics field with the innovative RiDE (Reverse with Intuitive Deceleration Electronics) dual throttle handlebar control system, and more.

> The TR-1 high output 3-cylinder marine engine



One-point Service Advice

Checking and Changing the Oil on a PWC

This time, we'll introduce the proper methods for checking and changing the oil on a WaveRunner personal watercraft. The methods explained here are specifically for a WaveRunner engine, so for other Yamaha products, be sure to refer to and use the proper methods shown in the service manuals, etc.

Most Yamaha PWCs use 4-stroke engines and there are basically three types: the 1.0-liter 3-cylinder (TR-1), the 1.1-liter 4-cylinder and the 1.8-liter 4-cylinder. Also, the shape of the oil pans for these engines can be essentially divided into two types: the dry sump type and wet sump type.

Checking the Oil Level

The methods for checking oil level are different for the dry sump engines (1.0-liter, 1.1-liter) and wet sump engines (1.8-liter).

Dry Sump Engines

With the dry sump engines, be sure to run the engine to warm it up before measuring the oil level. This is to return any oil in the crankcase to the oil tank in order to get a proper measurement.

After warming up the engine for about six minutes, remove the oil filler cap on top of the oil tank. The oil filler cap has a built-in oil dipstick for measuring the oil level.

Wipe the dipstick clean with a clean rag, etc.

After that, screw the oil filler cap back on until it is firmly closed and then remove it again to check the oil level on the dipstick.

After checking the oil level, screw the oil filler cap back on until it is tightly closed.

Wet Sump Engines

With a wet sump engine, you should measure the oil level with the engine cold. If the engine has been in use until just prior to the check, stop the engine and let it sit for about five minutes for the oil to settle before measuring.

Pull out the oil level gauge and wipe it clean once with a clean rag, etc.

Then, insert the oil level gauge all the way until it stops, pull it out again and check the oil level.

After checking the oil level, insert the oil level gauge all the way in again.

Oil Changes

The places for draining the old oil and putting in new oil are different with each engine type.

To make draining the old oil easier, warm up the engine before starting to work.

Draining Out the Old Oil

With a 1.1-liter engine, first remove the oil tank filler cap on top of the oil tank and then drain the old oil via the oil filler hole. With a 1.8-liter engine, first remove the oil level gauge and

then drain the old oil via the oil level gauge pipe. **With a 1.0-liter engine**, the old oil is drained from two points. One is from the oil tank filler hole on top of the tank, from which the oil is drained after removing the filler cap. The other is the oil extraction hose attached to the engine hanger at the rear end of the cylinder head. Detach the end of the hose that is attached to the engine hanger and use the hose to drain the old oil from the crankcase.



The two points (1, 2) where oil is drained from a 1.0-liter 3-cylinder TR-1 engine

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Adding New Oil

With a 1.1-liter engine, add the new oil through the oil filler hole on top of the oil tank.

With a 1.8-liter engine, add the new oil through the oil filler hole on top of the cylinder head cover.

With a 1.0-liter engine, the new oil is added at two points. Add half of the new oil through the oil filler hole on top of the cylinder head cover. Add the other half through the oil filler hole on top of the oil tank.



The two points (2, 3) where oil is added for a 1.0-liter 3-cylinder TR-1 engine

Since the methods for checking and changing the oil are different for the three types of engines, be sure to use the correct methods for each engine.

Refer to the service manual for each model for more details about the proper methods for oil level checks and oil changes.

A WaveBlaster Travels 10,000 km to Return Home

On February 3, Yamaha Motor put a rather special WaveRunner personal watercraft on display at the Communication Plaza at YMC headquarters.

This Yamaha WaveBlaster (Japanese market name: MJ-700TZ) was washed offshore from the town of Okuma in Fukushima Prefecture by the tsunami that struck Japan's eastern seaboard in March 2011, caused by the Great East Japan Earthquake. It was discovered some three years later in May 2014 around 5,000 km away on Johnston Atoll in the middle of the Pacific Ocean (about 1,500 km west of Hawaii) by members of the United States Fish and Wildlife Service during a survey of the uninhabited island.

The Japan Environmental Action Network (JEAN), an NPO involved in issues related to floatage and marine litter, was contacted by Chris Woolaway, a Hawaii-based coordinator of projects similar to those conducted by the NPO. After receiving word of the WaveBlaster's arrival in Honolulu, he asked JEAN if it would be possible to search for and identify the WaveRunner's owner to whom the PWC could be returned. It was later found that the owner was a man living in Fukushima Prefecture named Tomomune Matsunaga. Finding out that the *Fukushima Maru* training vessel of Fukushima Prefectural Iwaki Kaisei High School was scheduled to dock at Honolulu, the high school and the ship's captain were contacted to see if they could take the WaveBlaster back with them. A reply was received that they would gladly do all that they could; the PWC belonged to a fellow lover of the sea that was also from the same hometown.

When the WaveBlaster arrived back at Onahama port in Japan, most of the upper parts of the hull, including the handlebars and seat, had been torn away, the engine was exposed to the elements and the paint had disappeared.

"At first, I felt I had a responsibility to properly dispose of the craft so I asked for its return," said Matsunaga-san. "But when I actually saw the pictures of it and learned that it had survived for years adrift without sinking to eventually wash ashore on



many good memories and I'm so happy it made it back thanks to the help of so many people." On top of that, Matsunaga-san saw his recovered WaveBlaster on his birthday.

After the PWC was sent to Yamaha Motor, it was restored to running condition by a team of volunteer Yamaha engineers under what was called "The Bonds of Goodwill Project." The restored WaveBlaster was returned to Matsunaga-san on December 20, 2015, but was put on display at the Communication Plaza until this spring thanks to the kind wishes of its owner.

After Yamaha received a call from Matsunaga-san, the Bonds of Goodwill Project was started in the hope that it could help bring

some remote island far off in the Pacific, I was so surprised and incredibly moved. I thought it might be useful for research and development, so I contacted Yamaha."

Matsunaga-san originally bought the WaveBlaster in 2005 and had been thoroughly enjoying it himself, as well as giving rides to his family and relatives on Fukushima's rivers and coastline.

"Around the time in 2011, I hadn't been riding it as much as before, but I was always in the garage redoing the paint, buffing the body and making sure it stayed clean and shiny," he recalls. "After the tsunami, we lost everything; all that was left of our house were the foundation and a couple stones from the garden. The only thing that came back was my WaveBlaster. It gave us so courage to the people living in the tsunami-ravaged area that are still struggling on the long road to recovery.



News Round-up Activities from distributors around the world, and more

Go Beyond Service Caravan Held in Mauritania

Since 2015, YMC's Overseas Market Development Operation Business Unit (OMDO) has adopted a slogan of "Go Beyond – Let's take it to the next level." Conducting 3S reinforcement campaigns throughout the various markets is one part of this commitment. One example of these efforts is the "Go Beyond Service Caravan" held in Mauritania for commercial-use outboard motors over the four days of November 23 to 26, 2015. Mauritania is blessed with abundant coastal fishing waters and is widely known as an exporter of octopus to Japan but many boats from neighboring Senegal make their way to the same seas to fish for herring. Yamaha's leading E15D, E40G and E60H models comprise 85% of Mauritania's outboard market share, but other manufacturers have recently entered the market and are advertising the durability and fuel efficiency of their own outboard offerings. This makes Yamaha's approach of focusing on not just offering high quality products but also providing top-notch customer support in order to boost the quality of Yamaha's market presence and offer even more value all the more important. To that end, we believe this is the method we need to keep our rivals out of the market.

The main goal of the Caravan was to provide free outboard motor inspections at the workshops of the private mechanics that service our regular customers. By having the customers purchase replacement parts through the mechanics who do repairs for them, we brought benefits to the mechanics, our parts sales business (wholesalers) and the end customers. This also kept us from being limited to the campaign venue area and



allowed us to make entire fishing villages part of a "Yamaha Fair."

At the specially set up Caravan venue area, we made sure our parts sales staff, who regularly work to support the region's fishermen, and the private mechanics who service the customers' outboards could have discussions face-to-face. At the same time, we prepared special "Go Beyond Service Caravan" tents and banners, and showed product videos on a large TV screen and more to explain the advantages of Yamaha outboards, Yamaha Genuine parts and Yamalube oil. The fourday event drew many visitors and caused much excitement.

Under our mottos of (1) not letting our commitments end with an event and (2) making our "everyday" mean doing things right every time, all the time, we aim to further strengthen our network of support (parts sales and mechanics) through our distributors in order to establish a safe and secure environment for fishery. From Katsuhiko Nagaoka, OMDO

Malaita Hosts 2015 Service Campaign

Solomon Islands Yamaha distributor Y. Sato Marine conducts their annual Service Campaign during November for a week, concentrating on one region among its 900 islands. For 2015, the northeastern island of Malaita was chosen in order to strengthen the Yamaha brand in more remote parts of the island.

Tropical, mountainous and populated by around 140,000 people, more than a third of the inhabitants live either on the coast or in the mountains. Transport of goods by sea is still the main supply route as wheeled vehicles and roads are still rare due to the difficult terrain.

Four service clinics were conducted and were well received by the local communities, with a constant line of outboards and generators receiving attention well into the night on every stop. The coastal areas of Malaita provinces rely heavily on Yamaha's Enduro range of 2-stroke outboards, although there is a large portion of the community that still uses the traditional timber "Dugout" with paddle power.

Y. Sato Marine also conducts an annual Honiara service clinic near its headquarters during the month of July. *From Ryan Zell, OMDO*





Miami International Boat Show 2016

From February 11 to 15, the 2016 Miami International Boat Show was held. For its 75th holding, the site of the show was changed to Miami Marine Stadium Park & Basin in Virginia Key, allowing for both a floating exhibit and indoor exhibit at the same venue. Several large temporary buildings were set up at the waterfront to create an indoor display area where a wealth of marine products was exhibited, ranging from under-36 ft. class boats to marine engines and accessories. Complementing the indoor exhibits were over 150 boats docked out on the piers.

The event was blessed by good weather throughout its duration, bringing more visitors than last year; more than 100,000 people from all over the world made the journey to this year's show.

Yamaha displayed its outboard motors, WaveRunners and boats as well as propellers and rigging equipment, making a strong showing as a comprehensive marine manufacturer and supplier with a wide-ranging lineup. At the WaveRunner area, the all-new TR-I engine equipped on the VX and VI Series (except the VX Cruiser HO, VXR and VXS) WaveRunners was on display. It was praised for its advantages of achieving greater power together with significant reductions in weight and size, and was bestowed the 2016 Innovation Award in the personal watercraft category by the National Marine Manufacturers' Association (NMMA). *From Yukiya Akahori, 1st Marketing Div.*



"Sailing around Maldives in 23 Days" Event

The Ministry of Tourism in Maldives organized and ran a major event – "Sailing around Maldives in 23 Days." Abdul Gafoor, also known as "Gabbe," is a young marine sports enthusiast and started his journey on January 29, 2016 on his sailing catamaran. Maldives Yamaha distributor Alia Investments Pvt. Ltd. was the main sponsor and helped in organizing the event. A team from Alia Investments also accompanied Gabbe during the major stretches of the journey.

The major objective of Alia sponsoring the event was to create awareness among the island community about marine recreation and to draw attention to it and sailing among youth. Alau Ali, Managing Director of Alia Investments, was accompanying Gabbe when they reached and crossed the Equator on February 9^{th} , a dream Ali had had for some time. Ali made the crossing on a ten year old limited-edition FX Cruiser, which was released during Yamaha's 50^{th} anniversary celebrations.

The historical crossing was colorfully celebrated by Alia Investments; a team had constructed a float to be placed on the Equator line with the date and coordinates to signify the moment. Alia is committed to organizing and participating in activities that encourage youth to participate in marine sports and stimulate the overall development of the marine business. From Ahmed Asyl, Alia Investments Pvt. Ltd.





Hello everybody!

My name is Toshihiro Shimizu and I will be taking over from Nomoto-san as the editor of *Chantey*. We will be doing our best to make *Chantey* an effective tool for you to use in your business. I hope to work together with you all to create our coming issues, so please feel free to send me articles you would like published and any opinions you may have. This issue's Special was about the 30th anniversary of our WaveRunners and in our News Round-up section, we included the heartwarming story of a WaveBlaster's journey back to Japan. In my more than 20 years of working at Yamaha, I've seen countless customers hop off with a smile after riding a WaveRunner, and I hope you will share the new world on the water that WaveRunners offer with your customers.

YAMAHA OUTBOARDS WEBSITE	http://global.yamaha-motor.com/business/outboards/index.html
WAVERUNNER WEBSITE	http://global.yamaha-motor.com/business/waverunner/
Yamaha Outboards Channel on YouTube	
View waterside scenes and scenes of Yamaha outboards in use around the world	
Yamaha Outboards Channel	http://www.voutube.com/user/Yamahaouthoardmotors