

SEASON REVIEW:

A year that saw the boats finally back on the water.



They battled to the final heat in San Diego. J. Michael Kelly in Miss Tri-Cities (left) and Jimmy Shane in Miss HomeStreet.

BY ANDY MUNTZ PHOTOS BY CHRIS DENSLOW

ome may look back and see the 2021 H1 Unlimited Racing Series as a disappointment because the schedule offered just four races. Others might say it was unsatisfying because there weren't more hydroplanes. But, given the circumstance, perhaps it's more accurate to view the season as a glass half full, instead of half empty.

ALSO IN THIS MONTH'S ISSUE:

- 13 A chat with Burns Smith
- **23** Heritage by Craig Fjarlie
- 24 Museum launches Notre Dame
- 25 Remembering Jay Murphy
- **26 HydroFile** by Lon Erickson
- 28 Comments from H1 by Jan Shaw







TOP: The Miss Tri-Cities makes its first appearance. **MIDDLE:** J. Michael Kelly (left) and Darrell Strong, the co-owner of the new Strong Racing Team. **ABOVE:** Dave Villwock testing Miss Beacon Plumbing.

After the COVID-19 pandemic forced the cancellation of the entire 2020 season and continued to still cause strict health restrictions in many places throughout the past summer, it took a fair amount of risk taking by many race organizations and race teams to even compete in 2021. So, in that light, what was the most remarkable thing about this year's Unlimited racing season?

There was one.

And, there was some good racing, too.

The year started with promising news. Vanessa and Darrell Strong, who sponsored the *Miss PayneWest Insurance* entries since 2013, decided they wanted to get more involved in the sport and purchased the U-9 from Lori and Mike Jones, the boat that won the 2018 national title while named *Delta Realtrac*. Two months later they added a second boat by purchasing the U-16 from Erick Ellstrom, a boat built in 2014 that always showed impressive speed and saw action as *Qatar* and *Ellstrom E-Lam Plus*.

They not only had two of the fastest boats in the sport, they landed two experienced drivers: J. Michael Kelly and Corey Peabody. Suddenly, the new Strong Racing Team promised to be one of the best in the business.

Big things were also happening in the shop of Sharon and Kelly Stocklin, who had purchased the former U-21 from the Go Fast Turn Left racing team the year before, making it a teammate to their U-440 *Bucket List Racing*. It became the only Unlimited to actually touch water in 2020, with a test run on the Columbia River near Manson, Washington, on Halloween Day and with Dave Villwock, the sport's all-time most successful driver, handling its controls.

By the time the 2021 contestants gathered for first test runs in the Tri-Cities in early June, 67-year-old Villwock had come out of retirement to drive the boat for the season. The bright Tennessee-orange craft would also carry the name of *Miss Beacon Plumbing*.

Meanwhile, much of the 2021 campaign was still very much up in the air. The groups that put on the races, all nonprofit civic organizations, were feeling the financial effects of not holding any events for over a year and, particularly in Washington and in California, still had to contend with health restrictions.

In April the race organizers in Seattle decided those restrictions made it impossible to hold an event and, for the second year in a row, canceled the Seafair celebration. The Tri-City Water Follies people also canceled the Columbia Cup in May, but a few days later received news that a race would be possible, but with tight limits on the number of people who could attend. The organizers in Madison, Indiana, also were uncertain, but for financial reasons. Much-needed funding from local government finally helped resolve that issue.

As for the annual test session on the Columbia River, it couldn't be publicized for fear that a crowd might show up, but word leaked out anyway and a few fans, desperate to finally watch hydroplanes throw a roostertail into the air, gathered on the shore—access to the pits being highly restricted.

Behind the fencing were seven boats: the two from the Strong Racing Team, the U-8 Miss Tri-Cities and the U-9 Pinnacle Peak Consulting; the two from the Stocklin team, the U-40 Miss Beacon Plumbing and U-440 Bucket List Racing; the U-11 J&D's, and the U-12 Graham Trucking.

The *Graham Trucking* team made the biggest news when they announced the night before that Andrew Tate, the 2018 national champion, would be sitting in their boat's cockpit, replacing Kelly who would now drive *Miss Tri-Cities* for Strong Racing.

Heads were also turned with the arrival of *J&D's* because sitting on the trailer was a different boat than the one they had used in 2019. Owners Shannon and Scott Raney would instead campaign their other hull, a craft built in 1994 as







TOP: Action on the dock before the boats go onto the course. **MIDDLE:** The U-12 *Graham Trucking*. **ABOVE:** Andrew Tate.

4,273 3,199 649 0 2,667 790 Total Pts. Subtotal 1,029 1,900 3,525 0 Bill Muncey Cup San Diego 4th 1080 2nd 1600 1st 1570 9/18-19 3rd 810 50 Columbia Cup 3rd 1925 2nd 1705 4th 1323 **1st** 1388 7/24-25 5th 797 955 790 649 1st 1600 2nd 1500 Gold Cup 5th 1027 4th 469 3rd 975 750 Southern Cup Guntersville 2nd 1100 4th 1329 1st 1580 6/26-27 3rd 295 DNS 925 300 825 Michael Kelly Corey Peabody Dave Villwock Jimmy Shane **Dustin Echols** Jimmy Shane Kelly Stocklin **Andrew Tate** Jamie Nilsen Jeff Bernard Jimmy King Driver 1218 90/0 2111 1218 #OI 90/0 1801 1496 9210 0001 0721 0203 Goodman Real Estate presents Miss HomeStreet Goodman Real Estate presents Miss HomeStreet Griggs presents Miss Ace Hardware 2021 SEASON SUMMARY Pinnacle Peak Consulting Miss Beacon Plumbing **Bucket List Racing Bucket List Racing Graham Trucking** Miss HomeStreet Miss Tri-Cities J&D's Boat **U-440** U-40 **U-11** Num **U-12** 0-8 0 6-0 N-3 U-1

Miss Budweiser and commonly known in hydroplane circles as T-4.

Five of the boats managed to get on the river to make valuable test runs. J&D's never made it off the trailer because of electrical gremlins, but Tate turned a lap of almost 158 mph in Graham Trucking, Villwock's fastest lap of the day aboard Miss Beacon Plumbing was about 154 mph, and Kelly had the day's fastest lap with a run of over 159 mph.

Guntersville

fter the test session, the teams took their boats back to their shops, made final adjustments, then hit the road for the season opener in Guntersville, Alabama, where they met the defending 2019 national champion Miss Madison Racing Team.

That group's prime sponsor, Home-Street Bank, is headquartered in the Seattle area and the Seafair race is extremely important to their advertising investment. Consequently, when the Seattle event was canceled for the second-straight year, the team needed to do some serious discussion about how they would proceed.

They decided they would start the season with their second boat, a craft built in 2007 that has one of the best records of any hydroplane in the sport's history. Painted gold and black, it appeared in Guntersville as *Goodman Real Estate presents Miss HomeStreet* and its driving duties were to be shared by Jimmy Shane and Jeff Bernard.

The race in Guntersville was never a question; it was firmly on the calendar from the beginning. But unknown to the competitors and race fans, a major crisis was narrowly averted just as the boats were arriving in northern Alabama.

A huge four-foot-thick island of twisted reeds and grass had sluffed itself onto Guntersville Lake in a recent rainstorm and had drifted onto the racecourse. Luckily, due to the expertise of the Guntersville race organizers and the help of workers from the Tennessee Valley Authority, the mess was cleared up before the boats were set to hit the water, but the incident was a close call.

It also was a harbinger of things to come later in the season.

The event itself, and the season, started on Friday morning with a gathering of the hydroplanes in Marshall County Park, where a good crowd of local fans and reporters from television stations at nearby Huntsville were there to see the boats up close. Then, the teams formed a parade, crossed a long causeway into town, passed through downtown Guntersville, turned right, and headed to the pit area—immediately on the other side of another causeway on Highway 69.

The past few races at Guntersville were vexed by weather events, but not so this year. Though thunderstorms were forecast, they never appeared while the racing was underway; fans watched under mostly cloudy skies with a bit of humidity and temperatures in the mid-80s.

When the boats got on the water on Saturday, the biggest surprise was the performance of Corey Peabody and *Pinnacle Peak Consulting*. He was the fastest qualifier with a run of 158.623 mph then led Heat 1A from beginning to end—finishing ahead of his teammate in *Miss Tri-Cities*. Jeff Bernard won the day's oth-







TOP: Dave Villwock (left) came out of retirement to drive the U-40 *Miss Beacon Plumbing*, which is co-owned by Kelly Stocklin (right). **MIDDLE:** Jamie Nilsen meets some of the Guntersville fans during the event-opening gathering at Marshall County Park. **ABOVE:** J. Michael Kelly drove *Miss Tri-Cities* to victory in Guntersville, Alabama.



ABOVE: Jeff Bernard in Goodman Real Estate presents Miss HomeStreet (left) battles Jamie Nilsen in J&D's during Heat 3A at Guntersville.

RIGHT: Jet ski racers entertained the fans between heats.

FAR RIGHT: Corey Peabody is interviewed by the voice of H1 Unlimited Brad Luce.





er preliminary heat aboard Goodman Real Estate.

Peabody's luck changed on Sunday, at least in early-heat action. During Heat 2B, he was following Andrew Tate in *Graham Trucking* when he was caught in the other's roostertail and went flying. The boat fortunately landed right-side up and continued racing, but was damaged and finished far off the pace. In the third heat he was disqualified when the data recorder showed that he hadn't maintained sufficient speed before the start.

Meanwhile, Kelly won both of his preliminary heats on Sunday while Tate and Bernard won the other two. Bernard's victory came after an exciting deck-to-deck battle with Jamie Nilsen in J&D's that lasted the entire three laps.

Things weren't going well in the Stocklin camp, however. Bucket List Racing blew its gear-

box during qualifying while *Miss Beacon Plumbing* didn't start its first heat because of a failed air regulator in the cockpit, missed its second heat with its own gearbox issue, and was left at the dock when the third heat started because an igniter failed to light the engine.

Much of the final heat was settled before it got underway. Andrew Tate fired up *Graham Trucking* and, instead of turning right and entering the backstretch of the racecourse, made a beeline directly for the official tower way on the far side of the lake. In doing so, he passed right through the Safety Zone in the center of the course and was immediately disqualified. He simply turned around and headed back to the pits—his day finished.

The others started normally, but for the fact

that both Nilsen in J&D's and Bernard in Goodman Real Estate were across the starting line too early and were assessed an extra lap. That left the battle between teammates Kelly and Peabody, as well as Villwock, who started from the trailer-boat position. And, that's how they finished: Kelly first, Peabody second, and Villwock third.

In their very first race, Vanessa and Darrell Strong's new team took both the first- and second-place trophies.

Madison

he race teams packed up their gear and headed north, made a brief stop in Nashville, then continued on to Madison, Indiana, for the 111th running of the APBA Gold Cup the following weekend. There, the weather was different.

Heavy rains had fallen in Ohio, West Virginia, and eastern Kentucky a few days before race weekend, causing the Ohio and Kentucky rivers to rise quickly and drag into their flow an assortment of debris ranging from logs to full trees. That's what was passing Madison as it came time to go racing.

The swollen, muddy-brown Ohio River full of floating hazards forced the cancellation of all action on the race-course for Friday and most of Saturday, which meant there would be no qualifying for the race and that the entire schedule of six preliminary heats and the final would have to be packed into one very active Sunday with a firm completion deadline—when the river needed to be reopened to commercial barge traffic. There would be no time for delays.

Now it was Jimmy Shane's turn to drive *Goodman Real Estate presents Miss HomeStreet*, though he did take the controls for one heat in Guntersville. He enjoyed comfortable victories over Villwock in both Heat 1A and Heat 3B, and started side by side with Kelly in Heat 2B before he crept ahead and then stretched his advance to the finish.

Tate also won each of his three pre-







TOP: The *Graham Trucking* getting hauled into the pit area on the banks of the Ohio River in Madison, Indiana. **MIDDLE:** The crew of *J&D's* meeting the fans during the Fourth of July parade in Madison. **ABOVE:** The boats leave the dock to start a race. From the left, *Pinnacle Peak Consulting*, *Miss Beacon Plumbing*, and *Graham Trucking*.



liminary heats. In Heat 1B, he grabbed the inside lane at the start and took the lead coming out of the first turn. Directly behind him was Kelly in *Miss Tri-Cities*, who got too close to Tate's roostertail and went for a brief ride into the air. Once his boat settled down, the others had moved on and he was left to settle for third.

Tate and *Graham Trucking* took the lead at the start of Heat 2A and held an advantage over Villwock to the end, then won again in Heat 3A. Kelly was behind again that time and fell into a hole in the first turn, where the water was especially rough because a stiff breeze was blowing against the current. *Miss Tri-Cities* suddenly hooked and spun out, knocking Kelly out of the race.

So, the final became a contest between the two unbeaten. But it didn't last long. Shane grabbed the inside lane while Villwock started from lane two and Tate was in lane three. As the fleet rounded the first turn, Villwock moved out on the others like he was a tight end clearing a path for his running back, which left Shane alone and unchallenged the rest of the way on the inside. Villwock was penalized an extra lap for the move and Tate went on to finish second.

The Gold Cup victory, scored in front of his team's hometown crowd, was the fifth in his career, putting him fourth on the list of all-time Gold Cup champions—tied with the legendary Gar Wood.

ABOVE: The Gold Cup winner, Goodman Real Estate presents Miss HomeStreet. RIGHT: Crew chief Mike Hanson (left) and Jimmy Shane celebrate the Gold Cup victory, Shane's fifth.



Tri-Cities

he fleet then headed west, where in three weeks they would gather again on the shore of the Columbia River at Tri-Cities. Here, the weather was blistering hot, which is normal for that desert region in mid-summer. It was bright and sunny, with temperatures in the upper-90s and exceeding 100 degrees by the last day of the event.

The planners at Tri-City Water Follies began to sell tickets to their event with the idea that only a limited number of spectators could attend on either side of the river and would have to be corralled within fenced-off viewing areas. But as race day approached, health officials had lifted much of those restrictions and the tickets were made available to all comers. Still, though the organizers say they didn't lose money, the attendance this year was certainly down from past events.

And, as for that warm weather, it was blamed for another unusual circumstance. An unusually hot stretch during the weeks before the race caused the river level to be lower than normal and the water temperature to be higher, a combination that a waterborne plant called Sago pondweed apparently found appealing.

As the crews were setting up the racecourse on Friday morning, a huge patch of the pondweed the size of a football field was found covering the river's surface leading up to the second turn. Why it hadn't been noticed earlier is anybody's guess, but there it was—a condition that would force the cancellation of yet another event's first day.

All during Friday and into the night, race committee volunteers yanked mounds of the pondweed from the riverbed so that by Saturday the way was clear for hydroplanes to get onto the course. But it meant another day lost—taking with it time for a great deal of needed testing and one of Friday's traditions, the Dash For Cash.







TOP: Volunteers spent Friday removing the Sago pondweed from the Columbia River racecourse. **MIDDLE:** The U-3 *Griggs presents Miss Ace Hardware* with Jimmy King at the wheel. **ABOVE:** Vintage hydroplanes entertain the fans. From the top, *Blue Chip, Miss Wahoo, Miss Bardahl*, and *Pay 'n Pak*.





The Miss Madison Racing Team entered its newest boat in the final two races, the blue and white craft that Jimmy Shane drove to the national title in 2019. Shane toured the course at 163.203 mph during qualifying, the fastest in the field, then won each of its four preliminary heats in U-1 Miss HomeStreet.

The closest race on the first day of action came in Heat 2A when Kelly in Miss Tri-Cities crossed the finish line just ahead of Tate in Graham Trucking and in the process turned in the day's fastest performance—a heat average of nearly 152 mph. In the day's first heat, the two drivers finished in reverse order, with Tate claiming the victory.

In preliminary heats on the second day, Shane continued his winning while Kelly claimed another heat victory and Jamie Nilsen in J&D's captured his first win with a narrow advantage over Peabody and Pinnacle Peak Consulting. Making its first and only appearance of the season, the Allison-powered U-3 Griggs presents Miss Ace Hardware took second-place honors behind Shane in Heat 3A with Jimmy King behind the wheel.

Seven boats started the final heat, the biggest field of the season, but the result was something on the order of a



TOP: Dustin Echols driving U-440 *Bucket List Racing*. **MIDDLE:** The H1 Unlimited rescue team. **ABOVE:** The winner of the HAPO Columbia Cup, Corey Peabody in *Pinnacle Peak Consulting*.



demolition derby. Shane's perfect event ended before the starting gun fired when he was caught behind other boats, had to settle for lane five, and could never catch up.

The start instead belonged to the two teammates from Strong Racing. As *Graham Trucking* pulled off the course with a broken prop and *Griggs Ace Hardware* faltered with engine trouble, Kelly maintained his lead through the first three laps with Peabody lurking close behind.

But the rough water was taking a toll. The horizontal stabilizers on both *Miss Tri-Cities* and *J&D's* started to come apart, then finally collapsed. That gave Peabody the opening he was looking for. He passed Kelly during the fourth lap and collected his first-ever H1 Unlimited victory. Kelly held on to finish second.

San Diego

n a normal year, the boats would next cross the Cascade Mountains for the contest in Seattle, but since that wasn't happening, they instead went back to the shop for an eight-week rest before meeting again in San Diego. Meanwhile, the *Graham Trucking* team discovered extensive damage to the boat's structure that had been caused during that rough final heat in the Tri-Cities, so declared themselves done for the season.

That left only six survivors: the two Strong boats, the two Stocklin boats, *J&D's*, and *Miss HomeStreet*. Yet, with three different winners in three races, the San Diego outcome was far from



certain. Adding to the intrigue as the season was wrapping up, Kelly was holding a slim 210-point lead over Shane in the driver's point standings while the *Miss HomeStreet* team was 819 points ahead of *Miss Tri-Cities* in team points.

Mission Bay featured its usual paradise of white-sand beaches, palm trees, and comfortable weather reaching 80 degrees as the hydroplanes blasted around the salt-water course at impressive speeds. Shane qualified *Miss HomeStreet* at 163.342 mph and Villwock was close behind at 161.016 in *Miss Beacon Plumbing*.

As for Kelly, he had suffered a broken collar bone while riding a bicycle on a family outing two weeks earlier and it was questionable whether he could drive. Kip Brown even took

TOP: The winner of the HomeStreet Bank San Diego Bayfair race, J. Michael Kelly in Miss Tri-Cities.

ABOVE: The crew of the U-11 J&D's working to repair the damage from their blown engine.

a few laps in *Miss Tri-Cities* just in case. But Kelly summoned the strength—and gritted his teeth when the crew reached into the cockpit and cinched-down that five-point harness that was strapped over his broken shoulder bone—and qualified third best. But when the 70 points he earned for that effort were compared with Shane's 100, it meant his lead in the driver's title race was down to 180 points as the event started.

By this time, the field had dropped to five. Kelly Stocklin was on a test run in his *Bucket List Racing* entry when the boat blew its gearbox and was eliminated from the contest. Then, after the first day of competition, it looked like there might be only four. The *J&D*'s propeller shaft broke in the first turn of Heat 1B, which caused the engine to over-rev and blow itself into smithereens.

Kelly and Shane meanwhile each collected two preliminary heats victories. The wins were enough to clinch a second-straight national title for the Miss Madison Racing Team, their 10th in the past 13 seasons, but that the margin between Shane and Kelly for the driver's title remained at 180 points.

On the final day of the 2021 campaign, Kelly's lead was cut to only 80 points going into the final because when



Jimmy Shane won the 2021 team national championship in Miss HomeStreet.

the two met in Heat 3A, Shane came out ahead. After a valiant effort, the *J&D*'s crew also managed to get their boat repaired and launched in time for Heat 3B, only to see it die before the start. That gave Villwock a solo victory.

At the start of the year's final heat, Shane took the inside lane and sped away to a comfortable lead, but then came word that he had started too early and was assessed a one-lap penalty. Villwock followed behind, crossed the finish line, and returned to the pits receiving accolades from his crew as the apparent victor. Shane's early start also meant

that Kelly was celebrating, too, having clinched the driver's title.

Then came the season's final surprise. When the data box on *Miss Beacon Plumbing* was checked in the tech truck after the heat, it was discovered that Villwock had dropped below 80 mph for 5.05 seconds before the start—five-hundredths of a second too long. Villwock was disqualified and Kelly was not only the driver's champion but the winner of the Bill Muncey Trophy.

Before the season got underway, the experts knew that with only four events on the schedule, every start would be critical and the impact of every misstep would be magnified. It would have been a different result, for example, if Shane had driven the entire season or if he hadn't jumped the gun in the final heat at San Diego.

Yet, despite the reduced number of races and the small fields of boats, there was a definite feeling within the sport that it was wonderful to get back on the water after an entire year away. The sport is back up and running again, and can now focus greater attention on making sure there are more races next year, and more boats, so that Unlimited racing is bigger and better than ever in 2022. ❖



Part of the crowd at the San Diego race.

FROM THE UNJ VAULT:

A chat about hydros with Burns Smith.



Burns Smith confers with Al Benson before he took Miss Seattle out for a test run in 1957.

wo months ago in the *Unlimited NewsJournal*, we featured an article written by Dixon Smith about his role in the development of the nitrous oxide system on the Miss Bardahl team. Dixon Smith is part of a family that has a long tradition in the technical side of Unlimited racing. That involvement began with his father, Burns Smith, who worked on some of the most famous boats in racing—a journey that took him from the shoestring budget of *Miss Seattle* in 1956 to the professionalism of *Miss Budweiser*.

Born in Seattle, Burns Smith graduated from Roosevelt High School then attended the University of Washington, where his father was an instructor. Burns worked at a few miscellaneous jobs until finding his niche with IBM. A Navy tour during World War II came next, then it was back to IBM until his retirement in 1975. Meanwhile, his spare hours were spent around fast boats.

The following interview was conducted by Craig Fjarlie and first appeared in the March and April 1977 issues of the *Unlimited NewsJournal*.

UNJ: How did your interest in boat racing develop?

Smith: I built my first boat when I was about 12 years old. It was a sailing canoe. I'd been building boats for myself all my life. Through running outboards, I got acquainted with Jimmy Harland. He passed away a couple of years ago. He had a Mercury shop on Aurora Avenue. He held a lot of world records racing outboards. He and I became good friends. After the *Slo-mo V* did its famous back flip, 10 local men decided to form a nonprofit corporation and run the boat as *Miss Seattle*. Jim was one of them. He asked me if I'd come in and help rebuild the hull. I jumped at the chance.

They got room down at the Bell Street Terminal, about the coldest place I've ever worked in my life. Jim was going to be the crew chief, but he decided he wanted out. So, he left and they asked me if I'd take over and put a crew together. That was certainly a case of the blind leading the blind; none of the crew had ever been around an Unlimited.

How much work was required to repair the Slo-mo-shun V?

Well, when the boat went over, judging from the pictures, it did its backflip, lit a little on its nose, came down flat, and coasted to a stop. It didn't even look like it was hurt. They proceeded to get a boat on it and tow it up the lake. They had flotation in it, big Styrofoam blocks in the hull, so it didn't sink.

When the boat started over, I don't know if the rudder was cocked or what, but anyway, about two-thirds of the tran-

som tore out and it took three or four feet of the right engine stringer with it. Just pulled it right out of the boat. When the boat came back in, it ran into its own rudder, which hadn't had a chance to sink. There was a big, deep cut in the bow from the rudder. About six feet of the right non-trip side was torn off. And year. it came down so hard, all the deck frames collapsed from the transom to the aft end of the engine well. Just about every single gusset within the hull broke. That boat had very little metal in it. It was oak and plywood, and it was glued and nailed together with what they call ring nails. There was very little molding in the boat, practically no aluminum. In contrast, the Slo-mo IV was screwed together.

About the only things that didn't sustain damage were the sponsons. They were light and made up of many little pieces all screwed together. But we spent five or six months getting the boat back together.

You ran an Allison engine that first vear.

Yes. Through Hank Reverman we got a hold of a fellow named Bob Rowe, who was an aircraft engine instructor at Edison Vocational. He put a couple of Allisons together and we went boat racing. Basically, none of us knew what we were doing.

When the boat started out as *Slo-mo V*, it had an Allison. Then they swapped over to Rolls. When we got it, the boat



The Miss Seattle during a test run on Lake Washington.

eorge Carkone



Burns Smith in the cockpit of Miss Seattle with his wife, Marg.

had two sets of plumbing: one for Allison, one for Rolls. Well, when we purchased the boat, one stock Allison-113 came with it, and the loan of a Western gearbox. Then we bought a couple -89 Allisons, which are the real early model. They are basically the same as the later model, except they have lighter rods, a lighter crank, and waffle pistons.

The Miss Seattle went to a race in '56 not many people know about, the Copper Cup on Flathead Lake, Montana. Bob Gilliam was there with his Miss B&I.

Oh, yeah, he won the race and he's never forgotten. We were on our way to Detroit. We'd had the race here and had done very successfully. There were 19 boats here at Seattle and they only allowed 12 to run. We were the 12th boat. We couldn't beat anybody, but could outlast 'em. We ended up with third place money: \$6,000. We bought a half-way decent pickup truck to tow the boat with and paid the crew's air fare to Detroit. The Copper Cup was along the way, so we decided we might as well go.

They had no aircraft gas up there; it was a case of bringing your own. We took a couple of barrels with us. It was very crude conditions, as you might expect.

When it came time for the race, it was the B&I, some limited stuff, and us. Norm Evans was driving the Seattle, and he got a real good start. The B&I was quite a ways back. Norm was throwing a pretty good roostertail. He went by a couple of limiteds, they just took one look at that thing going by and all that roostertail and roaring, and they just turned into the infield and sat there. Then Norm slowed down to make it look like some kind of race between the two Unlimiteds.

We had no problems with the first heat. For the next heat we'd refueled. From the pits it was about a mile to the starting line. About the time he got to the line, the thing started belching smoke and backfiring. It wouldn't run, so the *B&I* won the race.

What had happened, we had taken two fuel barrels, but one was for scrap. It was full of solvent, grease, gasoline, oil, and sludge. That's what we dumped into the boat. We finally got the thing cleaned out. We went to the local gas station and had the boat running later in the afternoon on just ethyl gasoline. I think we learned our lesson that time—anytime we're going to use an empty barrel for junk, we mark it in some manner so we know what we have. I've heard it happen to other camps, too.

In '57 *Miss Seattle* switched over to Rolls power. Why the change?

Jim Ausland saw an ad for two Rolls engines for a pretty fair price. He bought 'em sight unseen. They came complete with birds' nests, cracked eggs, and everything else. They'd been in a farmer's barn. But they turned out to be two brand-new -300 British-built Rolls. The -300 is the same as the -9, which we use, except it has the -7 supercharger gear ratio in it, which is a slower-turning supercharger. We didn't know anything about



Burns Smith was the crew chief of Miss Seattle from 1956 through 1958.

it. We got no manuals, nothing.

The crew wanted to stay with Allison one more year to give us a chance to work our way into Rolls more slowly. But it didn't work out that way. I think we blew about 13 engines that first year.

We had the original Rolls gearbox that Lou Fageol had fabricated out of boiler plate. That was something else. It was a hybrid thing. It used part of the nose gears out of a Rolls-Royce, and part of it was manufactured gears. The thing was built out of quarter-inch steel plate, welded together. The boat had no fire wall or anything. You sat with the propeller shaft open, going between your legs. You could look right into the gearbox. As you got going, you'd see that gearbox start to work and weave, and start to weep oil. It leaked oil right through the metal, I think! At 140 miles an hour, that thing would leak oil like vou wouldn't believe.

Miss Seattle later had a 620 Rolls engine in it. Around '58...

Oh, yeah, that was another disaster. They got two 620s. They were the first ones ever seen in this country, I think. They were built after the war for commercial usage in the DC-4s. They were used mainly in Canada. They put one engine in the *Miss Pay 'n Save* and one in the *Miss Seattle*.

Then they immediately started running into problems because the 620 has fuel density instead of a carburetor. That is a different-style metering unit that looks at manifold pressure, manifold temperature, and oil pressure. We found out it got up to 72 inches of manifold pressure and then chopped off the fuel. Of course, we run 125 to 130 inches.

Well, we didn't get that solved, but on Saturday night before the Gold Cup here, the *Pay 'n Save* was out at the shop in the north end and the *Seattle* was down in the pits. I went to the pits with a couple other guys. We pulled the front end, the scrolls, off the engine and adapted a -9 front end on the thing so we could put a carburetor on it. We didn't know enough to check clearances or anything



In 1959, Smith joined the crew of Hawaii Ka'i III after it was purchased by Joe Mascari.

in those days—if the engine will turn over, it's fine. So anyway, they both took off the next day with the 620s in them. The drivers weren't too familiar with them and they both threw rods. That was the end of that.

What boat did you work on after the Miss Seattle?

I left the *Miss Seattle*. There was just too much doing at home and work. It got to be too much of a good thing. I was out for just a short period of time and I got a call from Ray Morey. Joe Mascari had just purchased the *Hawaii Ka'i* from Kaiser, and Ray asked me if I'd go to work on the crew. It was a real strange thing, because the same day I got a call from *Thriftway* wanting to know if I'd go to work for them. That was quite a decision to make. I knew Ray better, so I decided to go with the *Ka'i*. That boat always fascinated me, anyway.

We had Brien Wygle for one race, and he hurt his back pretty bad and retired, so we got Ronnie Musson. Ron lived back east. Mascari tended to have very deep pockets and very short arms. He wouldn't come across with any money for Ron to come out to do any testing. So, I was fortunate enough to be able to do most of the test driving on the *Ka'i* for a couple of years.

That was a beautiful-handling boat.

You could go down the lake at 160 miles an hour and just fold your arms and sit back and relax. That thing would just run straight as a string. Of course, compared with the boats now, it wouldn't have a chance. But for its style, it was a beautifully set up boat.

So, Mascari ran the *Ka'i* for a couple of years, then he decided to get out. He took the boat and equipment east. When that folded up, I was asked to go with the *Seattle Too*, which started out as the *Pay 'n Save*. I stayed with the *Seattle Too* until Dallas Sartz went on his head and the boat was destroyed.

So that left you without a boat. Where did you work next?

Ron Musson, who I knew from the *Ka'i* days, had asked me before if I'd go to work on the *Bardahl*. I said, "Yes, under one stipulation, and that is my kids are welcome around there." Right from the start, my boys had always been around the boats. Out at *Bardahl*, they said, "No way." Then, after the *Seattle Too* folded up, Ron figured they needed more help, so he asked me again. So again I said, "If the kids can be around." They very reluctantly said, "Yes."

Well, it turned out within a couple of months, they came to me and asked if it would be alright if my oldest boy, Dixon, went east for the year. He was 14 or 15 at the time, but he knew Rolls and he was a good mechanic. A year or two later, he took his younger brother, David, along as his guest, to ride in the truck. They no more than got back east and they had a lot of boat damage.

The crew was pretty well stuck working on engines. David is an extremely good mechanic and a good carpenter and he repaired the boat. Well, that put him on the crew. Those two kids finished up high school and all through the University of Washington working on the *Bardahl* to help pay their way through school.

Anyway, I went to work on the *Bardahl*. I was with 'em about six months and decided I was too busy at home and I'd better bag it for a while. I was out of it for five months. But we lived up on Beacon Hill and every time I'd hear one of the boats fire up, I was right down at the lake. I just couldn't stay away.

I knew Rex Manchester, so I went down and saw him and said I'd like to go to work on the *Notre Dame*. Unfortunately, I started out in 1966 and that was the year Rex, Ron Musson, and Don Wilson were all killed at Washington. But I was with *Notre Dame* for three years, and then there were some major changes in management. Very frankly, we didn't get along at all. So, I'm part of an elite club known as "Notre Dame Rejects." There's quite a few of us around.

The following day at work, I happened to mention to Nelson Kinney of the *Budweiser* that I'd just separated from the *Notre Dame*. I think it was

the following day he came to me and said, "How would you like to go to work on the *Bud*?" I was absorbed right away into the *Bud* camp.

There have been a number of significant advances in recent years, especially with the Rolls engine. Perhaps we can explore some of those advances? How was the use of nitrous oxide developed?

Nitrous oxide developed basically two places at once. One was in the *Exide* camp. Bernie Van Cleave, a very intelligent, inquisitive mechanic, got involved with it. They tried it out in Bill Brow's 7-litre then they put it into the *Exide*.

At about that time, it was also being developed in the *Bardahl* camp. My eldest son, Dixon, had access to the engineering lab at the U of W. He was a physics and math major and got to snooping in World War II German manuals. Both camps, *Exide* and *Bardahl*, came up with nitrous very close to the same time. Of course, it has been developed quite a bit over the years.

How is it different now than it was 15 years ago?

The amount they're using. The size of the opening. The stuff is in a liquid form at about 750 pounds pressure in the tanks. As soon as the pressure is off, it goes into a gaseous state. Then you get a tremendous temperature drop—the old refrigeration principle.

As it comes off the tank, you pick it off the bottom where it's a liquid. At the top, any space that isn't filled with liquid will form a gas. But it

"It was a real strange thing, because the same day I got a call from **Thriftway** wanting to know if I'd go to work for them. That was quite a decision to make. I knew Ray better, so I decided to go with the Ka'i. That boat always fascinated me, anyway."

Burns Smith was on the crew of *Miss Seattle Too* until the boat was destroyed in an accident at the 1962 Gold Cup in Seattle.



Hydroplane and Raceboat Museum

keeps the pressure up, so you're under the 750 pounds with a full tank or until it's empty.

You don't have control over the amount going into the engine other than the size of the opening. Most of us use what is called a Barksdale valve. It is very positive on and off. When it's on, there's a big flow, which you need. We've also found that you want to keep the lines from the tanks to the engine as short as possible. You also want it to go around general corners. It tends to get a little confused going around sharp corners and tries to turn into a gas.

Nitrous is high in oxygen, that's why you want it in there. But if you inject just nitrous, you're going to run too lean. So, you have to inject additional fuel at the same time.

We've found out the engines will live much longer than we realized. The original concept was if the driver stayed on the nitrous more than about 10 seconds, he'd lose an engine. Well, now they're flowing much heavier and it's not at all uncommon for a driver to come in with all his tanks empty. Where they're really running hard, they'll be on the nitrous all the way down the chutes. Even if they



After the Seattle Too accident, Smith joined the crew of the "Green Dragon" Miss Bardahl.

don't need it for straight power. Mickey [Remund] will use it coming off the corners. He says he "tickles" it.

One of the most significant advances was the solution to the quill-shaft problem. What were the developments there?

One year we were doing very well out here running the Gold Cup when we broke a quill shaft. Another fellow on the *Miss Seattle* crew, Del Miesbach, and I were pretty disgusted about it. Instead of going to the Gold Cup banquet, he and I

went out to the shop that night and started pulling the front of the engine pieces off. We'd known it was the quill shaft. We got the quill shaft out, sat down, and started looking at everything.

We knew that a solid quill shaft could be made. A couple of days later, we got hold of Mantel Gearworks. They came out one evening. We showed them what we had, told them what we wanted. They said, "Yes, we can make it, but it's going to cost you a hundred dollars." They didn't know what they were getting into, either, because the British gears and splines are not like American. Their pressure angles are different, we found out later. But the owners said, "No way. It's too much money." And, that dropped the whole thing.

Then, quite a few years later, the *Exide* guys got a hold of somebody who had worked for Rolls-Royce. He was an Englishman or Scotsman, and he had a friend still there. Through these guys, the *Exide* crew got a set of engineering drawings of a quill shaft, which gave all the data on splines and gears. They went ahead and had one made, and it worked. Of course, in short order, the word got out. There were some other things done in the meantime, but the solid quill made the big difference.

What were some of the early attempts at solving the quill shaft prob-



Smith was on the *Notre Dame* crew when this boat was destroyed in an accident that took the life of driver Rex Manchester in 1966.



Smith joined the Budweiser crew in 1969 when the team raced this Ed Karelsen-designed boat.

lem? What did some people do?

Well, the original quill shaft in the engine is made up of a shaft that's about three-quarters of an inch in diameter and eight inches long. It's splined on the ends. There are some tubes that go around it that are splined together with some slop in the splines. The idea is, in the airplane, that if there's any shock or loading, the quill shaft can twist about six degrees before it's taken up with these outer collars to stop it from going any farther.

In the airplane it worked fine, running constant rpm, running a great big prop. But in the boats, it just didn't work that way. Through this combination of shaft and tubing, oil is fed through into the crankshaft to oil the engine. So, we started increasing the size of the inner shaft. Well, that helped, but it didn't fix it. Then, when I was with the *Ka'i*, we decided to go ahead and change the splines on the tubes so there's no place for the thing to twist. It's all going to take up at one time. Well, that helped.

Then we started breaking up the inside of the ends of the crankshaft. The end of the crankshaft is splined. There's a coupling that goes inside of that with snap rings and so forth. All this quill shaft stuff fits inside of that. Well, we started breaking up this coupling inside the quill shaft. Then the *Bardahl* made a solid quill shaft, but it was made out of

two pieces splined together. Apparently, they couldn't figure out how to get it in and out otherwise. They failed at that point.

Then they came up with a solid quill. They took this coupling out of the end of the crankshaft as we do now and drive directly out of the main end of the crankshaft right into this big, husky quill shaft that's worth \$450 to \$500.

When I was with the *Notre Dame*, we broke a couple of them because they had oil holes going through them, to lead oil through the crankshaft. So, we did

away with the oil holes. We did a lot of external drilling and plumbing to oil the crankshaft in a different manner. Some of the boats are still running with these oil holes drilled in the quill. They do tend to crack, and they run 'em cracked. They only go so far and stop. But it's a minor problem, now. Of course, you fix that, and the problem moves farther on. They get into problems with the gear housing breaking up. You chase your trouble back and forth.

Another big development was the use of water-alcohol [commonly known as ADI], in place of the after-cooler. Who developed that?

Bill Newman. Bill worked on the *Tahoe* and he worked some for Waggoner. He was a B-29 pilot during the war. Bill was a great innovator. He started the ADI system on *Maverick*. Later Bill went with the *Notre Dame* and they went with ADI.

One day, they had everything all set and went out on Lake Washington, out of Rainier Beach. Bill rode with Rex Manchester. They went out and ran, and it ran beautifully. They came back in, kind of floating to the dock. Bill walked up to look at things. All of a sudden, he fell down, slid into the water. Rex went in



Rich Ornbre

In 1970, Miss Budweiser sank during the Atomic Cup in the Tri-Cities (above) but was repaired in time to win the Seafair Trophy in Seattle three weeks later.



Smith was on the Budweiser team when Bernie Little purchased this unused hull in 1976. It's shown here during a test run before the 1977 season, a year when it won the national title. after him, but he was dead. He'd had a heart attack run cooler and does away with the after-cooler. right on the boat.

That was just shortly before I went with Notre Dame. It was my first introduction to ADI. Bill left some tracks, but not too many, so there was a bunch of experimenting to do.

ADI is the injection of water-alcohol into the system. It has to be controlled on quantity. It does a couple of things. It cools down the compressed charge of air-fuel, so you don't have a chance of detonating or exploding in the intake manifolds. When it gets into the cylinders, it kind of slows down and smooths out the flame front so you don't get the detonation. It also carries off a tremendous amount of heat. Of course, your alcohol is burning also, which you can run to as much as 22-to-1 compression ratio without detonating.

The after-cooler on the Rolls engine is a big, bulky box affair. There's a big radiator in there, running water through one side and the compressed air-fuel mixture through the other. The one problem is that it's almost impossible to get a hold of decent radiators. They're left from World War II and they're all rotten.

Also, we've always felt that it's not too good an idea to take that compressed charge, bring it into a big radiator, and expand it, and then compress it back down again. You form droplets in your fuel. So, ADI replaces the after-cooler with a smooth tube. You're better off going through that.

The after-cooler is heavy, it weighs around 90 pounds full of water. It's a real pain to try to work around. So, your water-alcohol makes an engine

ADI is set up so it comes on when you get a certain manifold pressure. Rex Manchester said the water system reminded him of laying a blanket across the engine. Everything would smooth out. He could tell when it came on every time.

The water system goes back to Bill Newman. He's the guy who developed it and got it working. The same components and the same flows are being used that Bill came up with.

Unlimited hulls have changed considerably in the last decade. Do you think Ron Jones was going in the right direction with the cabover Miss Bardahl of 1966?

Well, part of it, yes. He wanted to go to the wide afterplane, get the engine farther back, keep more air under the boat, and so forth. That's great. But personally, I don't like the cabovers. It was a forerunner, to some extent, of the present boats. Ron is an innovator, just like his father. And, man, if you don't have somebody who will try something, you're not going to get ahead in any respect.

You say you don't like cabovers?

Well, I saw Ron Musson get killed and I've seen some other guys go on their heads in limiteds. If a boat ever stuffs the front end with the driver up front, he just hasn't got a chance. A wall of water is coming in on him and the whole boat's coming in on him from behind. He's squashed in between the two things. With the picklefork boats now, they're much safer. You don't have that big bow sticking out there to get caught.

The next builder to gain prominence was Ed

"None of the boats have been the difference between a Model T Ford and the modern 280Z or anything like that. It's just been slow development over the years. **Improvements** have come slowly."

Karelsen. How do you feel about his design now?

Well, if you want to measure up the bottom of those boats and the bottom of the Green Dragon *Bardahl*, you'll find they're identical. It was a copy, and all they did was flatten the deck and increase the non-trips. The hulls, with modifications, ran fairly well. Both *Bardahl* and *Budweiser* built good, strong engines. That's what made 'em go.

Were the Karelsen boats harder to push? Did they require a lot of power?

After they once got 'em set up right, sponsons and all that, they weren't any worse than the rest. They turned a little better because they had a lot of nontrip on them. Talk about easy pushing boats, you get back to the *Slo-mos*, the *Shanty*, *Maverick*, *Miss Spokane*, *Wahoo*. Real light boats. They really pushed easy. But, of course, you couldn't turn the things.

None of the boats have been the difference between a Model T Ford and the modern 280Z or anything like that. It's just been slow development over the years. Improvements have come slowly. The biggest change has been the Jones pickleforks with the wide transom and full-length air traps on them. Most of 'em have needed a fair amount of reworking of sponson angles and so forth. The cg [center of gravity] is getting farther and farther back in the boats now, too. They're flying the boats more. They're lighter on their feet on the water.

Also, the boats over the years have gotten heavier. The old *Miss Seattle*, with engine and fuel, came in right at 5,000 pounds. And now, if you're 6,500, that's real good. They'll come in over 7,000. Of course, the name of the game is horse-power-to-weight ratio.

Your acceleration is tied to your horsepower and the amount of weight it's trying to accelerate. If they could get one of these modern, picklefork boats in the water, wet, ready to run, at under 5,000 pounds, and if it didn't immediately try to fly, nobody would touch it.

How do you feel about wings?

I think they ought to outlaw the wing. I think it's a very dangerous thing. If a driver gets thrown out or has to bail out of a boat, he's got enough problems just with the tail and struts back there, without a big wing. Just imagine a guy getting thrown out at high speed and his parachute getting caught in that wing, the boat taking a couple of leaps, going down and taking him with it. Either that or getting cut in half as the wing goes through him.

How would you compare working on a professional crew, like the *Miss Budweiser*, to the early sportsman/amateur crews like *Miss Seattle* had?

Well, for one thing, you've got enough money to do the job right. When I first started on *Miss Seattle*, we were working practically every night and all day Saturday and Sunday. I figured it was costing me \$500 to \$1,000 a year just for transportation back and forth and buying a few meals out.

But you don't get that much done. If you can get a couple engines together and get the hull patched up during the winter, you're doing pretty well, because nobody has the time.

The professional crews are work-

ing a minimum of 40 hours a week and sometimes a lot more. You can get to a machine shop during the day where you can talk to the guy and tell him exactly what you want. You've got the time to do the job right. To compete in the boats these days, it's got to be a professional crew. The thing that wins boat races is cubic bucks. If the money isn't there, you're not going to win races. It takes a lot of money, and the crewmen have to be professional-type people

In 1970, the Karelsen-built *Budweiser* dumped at Tri-Cities. The repairs following the accident are now sort of a legend in *Budweiser* history. How do you recall that event?

Well, nobody knows for sure what caused the accident. I was talking to the skin divers, and they say the bottom there, when you come out of the down-river turn, is extremely rough. It's hills and dales that at one time was dry land until they put the dam in. You see the boats, when they come out of there, are always hopping and jumping.

The boat basically stuffed its nose and stood on end. As it stood on end, it did a 180 and came down right side up. It twisted the whole nose out of the thing



Sandy Ross

As fans watch, the Budweiser crew works on one of their many engines.

and it pegged Dean Chenoweth. Dean was, of course, shook up and he pulled his right arm pretty bad. He pinched nerves. He basically had no use of his right arm for some time afterwards. Here in Seattle, he was driving mainly one handed because his arm was almost useless.

Of course, the boat sank. Had a real bad time finding it. Finally, we got two boats with a cable between them and started dragging the river until we snagged something. Then we sent a diver down. It's about the only time I know of a boat sinking that ended on the bottom right side up. They always go upside down, I guess because of the weight of the engine. It was easy to get the slings on the thing and get it over to shallow water by the pits. We got it out. We took a couple of Skil saws and sawed the aluminum off the bottom. It was in the way of the trailer.

You could walk right down through the center of the boat, clear to the oil tank. There wasn't anything there. The two sponsons were sticking out, but it wiped out the whole center section. The only thing that saved us was that the main stringers weren't broken. They were just sitting there like a couple of tongs on a fork.

We had our crew plus Ed Karelsen and a couple of other guys. It was kind of a case where anybody who wanted to work could. They worked as many hours as they wanted. We just built this whole front end of the boat back in.

We finally got it back together and got it down there to the Seafair Race, and the boat didn't run very well. There was still water in the systems. But we apparently were running better than anybody else because we won the race. That was one of the biggest surprises to anybody including the crew. We were just as surprised as anybody else. That was a real pleasure to win that race. That just tickled me no end, after what we'd been through.



The Budweiser team in 1975. That's Burns Smith standing second from the right between driver Mickey Remund and team owner Bernie Little

a crew member, who did you learn the most from? Who did you look up to?

I've worked with many darn good mechanics, and I've learned from every one of 'em. Every time you do an engine there's something more that you learn. Probably for just all-around aircraft engine work, I learned as much from Ken Larsen as anybody. He was really exceptional. Ken was killed in an airplane accident up in Alaska.

Do you feel there were any genuine geniuses?

Bill Newman. He was one. Ricky Iglesias did some pretty neat stuff. About the best administrator that I've ever seen for a boat crew was Mike Welsch. He's very exceptional. I don't trust Mike's safety wiring, but as an administrator running a boat camp, you couldn't beat him. Another really great crew chief was Frank Cech, Jr., known as Junie Cech, who ran the Wahoo.

If you want to get around to an allaround mechanic on both Allison and Rolls, which you seldom find, Bob Espland is one. Bob and I are working together now. He's a real world of knowledge. When you were first starting out as One guy who's about as good as anybody on Rolls is my eldest son, Dixon. He's highly respected in the trade for being a real sharp guy on Rolls. Oh, there have been a lot of guys. Bernie Van Cleave. I never worked with him too much, but he was really good.

Bill Cantrell did a lot of innovating. And Freddie Alter has done a great deal as a mechanic. Warner Gardner was a one-man crew, truck driver, and boat driver. Unbelievable guy. Jack Regas in his heyday; he always carried a batch of tools with him. I've seen when he's blown an engine, by the time they get the boat to the dock it's ready to lift out. He's got everything disconnected, ready to lift one engine out and drop another one in.

In summary of your career, has it been worth it?

I wouldn't have missed it for anything. *

HERITAGE

Historical Perspective by Craig Fjarlie



The Circuit Game

ast month, I highlighted the variation in the number of boats that participated in races since the end of World War II. It became apparent that there has been a great deal of fluctuation in boat count over the years. Now, in what is something of a follow-up, we'll look at the number of sanctioned races during the same time period.

Before we dive into the numbers, a couple of definitions are necessary. One-heat free-for-alls will be omitted from the tally. The sanction had to call for at least two heats and no fewer than three Unlimited or Gold Cup-class boats participated.

Racing resumed in 1946, and that was a rebuilding year. Only two regattas met the criteria described above. The number of races increased over the next few years. There were five races in 1947, and by 1949 the number had jumped to 10 regattas. The schedule was full throughout the 1950s, although some races had a majority of entries from certain regions of the country, as few teams made the arduous journey to distant events, especially in the early years of the decade.

Changes took place in 1961, when there were eight races. Chelan, Buffalo, St. Clair, and Las Vegas were dropped from the schedule. That was the last season when regattas were conducted by yacht clubs. In 1962, the Unlimited Racing Commission made its initial move to make the sport a professional organization. Only six races were on the calendar that year.

In 1963, there were seven events when Guntersville held its first Unlimited race. The count grew to 10 the follow-

ing year, when San Diego and New Town, North Dakota, were added, and the Gold Cup in Detroit included a semi-feature for boats that were unable to qualify for the main event.

There were nine races in 1965. The President's Cup was dropped, but Ogden, Utah, had a regatta. The President's Cup returned to the calendar in 1966, but Guntersville was off.

The calendar had eight races in 1967. Missing were Coeur d'Alene and the President's Cup. Both came back in 1968, when there were 10 races. In 1969, the count fell to seven races, when Madison, Wisconsin; Coeur d'Alene; Phoenix; and Washington, D.C. were dropped. Owensboro, Kentucky, was the one new site

The number of races fluctuated during the next few years. The 1970 season had eight races. Tampa was back on the schedule—the boats had last raced there in 1967. In 1971, Miami replaced Tampa as the first race of the season, and new sites at Eugene, Oregon, and Dallas brought the total to nine events.

To describe 1972 as a down year would be an understatement. There were seven races after Eugene and Dallas dropped out. The season ended with Seafair. Things started to go up the next year when Toledo, Ohio, and a second race in Detroit took place. There were 11 races in 1974. San Diego, which had been missing from the calendar, returned.

Skipping ahead, there were nine races in 1979. Owensboro dropped off, but Evansville was a welcome addition. The 1981 season had eight races, including the fateful one-time event in Acapulco. There were nine races in 1982 and 10 in 1986. Oklahoma City was new in '85, but

dropped off the schedule in '86. Philadelphia and Las Vegas came on board in '86. The 1989 season had 10 races, including Clear Lake in Houston.

Counting the number of regattas in 1990 is a bit tricky. The American Power Boat Association figures its season for all classes runs from November 1 through October 31. Milwaukee and Kansas City were new venues, but Houston was gone. Honolulu was another new site, but because it was scheduled in November, it was counted as the first race of 1991.

There were eight races in 1991, with a late October date for Honolulu. Miami was off the schedule that year, but came back in '92 when there were nine races. The race count dropped to eight in 1994 when Miami again was dropped. The Marine Stadium facility is in disrepair and no longer suitable for boat racing. The race count rose to 10 in 1995 and there were 11 events in 1997.

The new century has had several seasons with a relatively small number of races. Honolulu was dropped in 2002, leaving six regattas, and 2003 also had six events. Evansville departed the Unlimited calendar in 2010.

Recent years have had only about a half-dozen races. Guntersville returned in 2018, but that was the last year the Unlimiteds ran in Detroit. There were only five regattas in 2019, then the Covid pandemic forced the cancellation of the entire season in 2020.

If Seattle had been able to hold its Seafair race in 2021, there would have been five events, but Covid resulted in cancellation again so there were only four races.

Looking ahead to 2022, if Seattle is back on the schedule, there should be five races. The future of Unlimiteds racing in Detroit remains uncertain. There may be an exhibition at a potential new site, but no new venues are firmly on the calendar as of this writing.

The looming question is, what can H1 do to build up its show and introduce it to new cities or return it to former sites?

The first action is to review former venues and find out why they opted out of continuing with Unlimited racing. Then, what can be done to make an Unlimited race more appealing to spectators, sponsors, and local public officials.

Some events failed to draw enough fans to cover the cost of the regatta. Other places were totally inappropriate for Unlimiteds (Firebird Lake, for example). In other cases, the body of water was too far from major population centers. In other locations, development caused the site to be converted to other uses or abandoned (Miami Marine Stadium comes to mind).

Finally, H1 needs someone to pursue new sites. The individual or committee charged with that responsibility must be thoroughly versed in marketing, sponsorship recruitment, and working with local government agencies and law enforcement. There's no quick fix, but there's no time to delay, either.

Until the hard work is actually producing constructive results, I can only add a few lines, with apologies to Joni Mitchell:

And the hydros, they go 'round and 'round,

The roostertails go up and down,

They're captive on the racing dates each time.

They can't return, they can only look,

Behind from where they came,

And go 'round and 'round and 'round,

In the circuit game.

Museum launches Notre Dame.

break in the weather on a blustery November day in Seattle allowed for the launching of one of the most recent projects by the Hydroplane and Raceboat Museum in Kent, Washington. The star of the show was a boat restored as the 1962 version of Notre Dame.

Being the first time the museum could have boats on the water for more than two years, the event also provided an opportunity to give a few rides to deserving contributors and volunteers aboard Miss Wahoo.

Despite persistent rain in the morning and a forecast of a storm approaching, conditions cleared just long enough for both boats to make a few runs off Stan Sayres Pits. An impressive crowd also was there, obviously anxious to once again hear the sound of an Unlimited hydroplane on Lake Washington.

The boat with the blue and white colors of Notre Dame is owned by Thunder Valley Hydroplanes, was actually built in 1961 as Miss Lumberville, and spent most of its career as Savair's Mist. It also starred as "Miss Madison" in the movie Madison. Ironically, the real 1962 Notre Dame also is a part of the museum's collection, now restored as the 1974 Oh Boy! Oberto. *





TOP: Notre Dame motors onto Lake Washington. **ABOVE:** The museum's *Miss Wahoo* was also there as part of the celebration.

Remembering Jay Murphy

BY CRAIG FJARLIE

When Fred Alter passed away on February 9 of this year, it was assumed he was the last driver from the "Golden Era" of Unlimited racing. A few people wondered if Jay Murphy of the Breathless team was still alive. That question can now be answered. Murphy died on August 28, 2020, at age 88.

Jay Philip Murphy was born on August 11, 1932. His father, J. Philip Murphy, operated a civil engineering firm, Pacific Murphy Company. The senior Murphy, who knew Edgar Kaiser, became interested in hydroplane racing and his new hobby soon was a family activity. His sons Jay and Roger drove the boats, as did Floyd Ciochon and Red Loomis. The boats included the 7-Litre Galloping Gael and the Allison-powered Unlimiteds Breathless, Breathless II, and Muvalong. The latter was the former Such Crust V.

Jay drove Breathless in 1954, '55, and '56. He also handled Muvalong in 1956. His best years were 1957 through 1959 in Breathless II. Among his top finishes were second place in the '58 President's Cup and the '58 Roger's Memorial.

Jay graduated from Santa Clara University in 1957 with a Bachelor of Science degree in civil engineering. Eventually, he took over the family business and did

mond-San Rafael, Benicia-Martinez, and ego. Jay Murphy is survived by his wife, San Mateo-Hayward bridges in the Bay Louise, and their five daughters. ❖

construction projects such as the Richard, and the Coronado bridge in San Di-

JAY MURPHY'S CAREER RECORD

		RACE RESULTS					HEAT RESULTS						
YEAR	BOAT	RACES	1st	2nd	3rd	DNQ	START	DNS	FINISH	1st	Pct.	Top 3	Pct.
1954	Breathless	2	0	0	0	0	3	3	1	0	0.000	1	1.000
1955	Breathless	4	0	0	0	0	10	0	9	0	0.000	2	0.222
1956	Breathless	2	0	0	0	1	1	0	0	0	0.000	0	0.000
	Muvalong	4	0	0	0	1	4	1	3	0	0.000	1	0.333
1957	Breathless II	6	0	0	0	0	15	1	13	0	0.000	8	0.615
1958	Breathless II	5	0	2	0	0	10	1	7	1	0.143	7	1.000
1959	Breathless II	1	0	0	0	0	1	1	0	0	0.000	0	0.000
	TOTALS	24	0	2	0	2	44	7	33	1	0.030	19	0.576



George Carkoner



TOP: Jay Murphy in the cockpit of *Breathless* in 1956. **ABOVE:** *Breathless II* in 1958

HYDROFILERace Team News by Lon Erickson



Ed Cooper's "Turbinator" has the shop all to itself for the first time in years. As winter maintenance work got underway on the Go3 hull and its V-12 Allisons, Cooper moved another Unlimited out. The '86 Staudacher ATA Unlimited hull (below) that at one time was planned to be a Cooper Racing display hull has been sold to a new owner and is headed to Michigan.



U-8/U-9 Strong Racing

Off-season hull repair work is being done on the U-9's bottom (below) by Ken Warren, Jeff Campbell, and Jason "Monkey" Elhard. Lots of changes and prep are ongoing at the Strong Racing shop during the off-season.





U-11 Unlimited Racing Group

Winter work continues at the U-11 J&D's shop. After weighing the boat and putting back on all the parts that were removed for travel, the boat was put on the scales to verify the boat's weight and balance. Now that the boat has been weighed, the team is taking off all the hardware parts that are bolted onto the boat. Parts are thoroughly cleaned and visually inspected, then set aside and made ready to be magnafluxed. If a part needs repairs or modification, it gets set aside for the work to be done this winter by the U-11 crew







notos by Strong Racing Tear

U-27 Wiggins Racing

Work is progressing on the rebuild of the U-27 at Charley Wiggins's Alabama race shop. Wiggins reports, "We've hung the right airtrap and sponson." They recently mocked up the left airtrap and sponson and are in the process of hanging the left side (right). Next to be done is the installation of the framework. Adam Bratvold is also getting the team's turbine ready for the dyno (below). The hull is a complete rebuild from the former U-27 hull; only the cockpit section remains of the hull that was purchased from Nate Brown's Our Gang Racing in 2015.







Please consider a donation to the NewsJournal

The good news is that the costs to produce the Unlimited NewsJournal online are low, especially when contrasted to expenses when it used to be printed and mailed each month. We subscribe to a website-builder program and platform, which is our largest expense. Also, we purchase some website security features and pay fees to retain our URL. Sometimes, our website-building program also requires upgrades that cost additional money. Our UNJ staff utilizes their own personal technology and software, at no cost to the UNJ, to produce each issue. So, every few years, as our bank balance declines, we reach out to our readers and ask for donations. This is one of those times. The UNJ is current on all of its financial obligations, but with some renewal expenses coming up in 2022, we will need to increase our bank balance to fund them. Please consider sending a small donation to the Unlimited NewsJournal. Thank you! Any amount is fine, but we have a few levels to suggest:

\$10 Lap-Winner Level

\$20 Heat-Winner Level

\$30 Race-Winner Level

\$50 Champion Level

Contributions can be sent to our treasurer:

Unlimited NewsJournal c/o Lon Erickson

1312 164th Pl. NE

Bellevue, WA 98008

Fran Muncey inducted into **Motorsports Hall of Fame.**

Former Unlimited owner Fran Muncey was among nine members of the Class of 2021 to be inducted into the Motorsports Hall of Fame of America. Other inductees were Davey Allison (NASCAR), John Cobb (Historic), Larry Dixon, Jr. (Drag Racing), Janet Guthrie (Open Wheel),



Nickey Hayden (Motorcycles), Robin Miller (Media), Ray Nichels (Historic), and Judy Stropus (Sports Cars).

Muncey assumed ownership of a race team when her husband, Bill Muncey, was killed in 1981. As an owner for seven seasons, she won three national titles and 24 races, including seven Gold Cups. Her driver for most of that time was Chip Hanauer (pictured with her above), who spoke at the ceremony and is also a Hall of Fame member.

COMMENTS FROM H1

Jan Shaw, Director of Operations



As we plan for the future, one of the most important things we are doing is getting input from as many people as possible about the season that just ended. We've done two surveys to collect comments from our fans and from people within the sport to hear their opinions about the good things that happened in 2021, what they felt could have been done better, and what advice they would give for the sport's future.

Thanks to those who participated in the surveys. The fan survey, for example, had about 1,000 responses. Your comments were honest and have provided the H1 board with valuable information that will help in planning the future direction of Unlimited hydroplane racing.

The fan survey also included a large

number of questions that will help us H1 team and with better understand who you are. It's been a very long time since the sport has conducted any demographic research to determine the makeup of its audience knowledge that is critical to effectively approach potential sponsors and new race sites.

We now have a better idea, for example, of how long you have been following this sport, what appeals to you about hydroplane racing, and how you follow the race action when you can't be there in person. We can now present a potential sponsor with data about how old our fans are, where they live, how much education they've had, what their household income is, and a little about their buying habits.

Another part of improving what we do is an effort to analyze in more detail what happened last year so we can improve for next year. The H1 board recently had a meeting with all of the boat owners to review the 2021 season and to discuss some new ideas. Other meetings will be held soon with key people on the

representatives from the race sites.

Meanwhile, the rules are getting their annual review. Last year, the board broke the rule book into separate sections, adopted both racing rules and technical rules, and made updates to the general rules. This year, in addition to reviewing rules just mentioned, the board will adopt race-site requirements and medical and rescue guidelines.

Registration for next season is also underway and we already have five boats committed to the 2022 season, including a boat that did not appear last year. We expect that there will be as many as 10 boats participating in the H1 Unlimited Racing Series next year.

Finally, be sure to attend the annual H1 banquet, which is scheduled for Saturday, January 8, 2022, at the Angel of the Winds Casino Resort near Arlington, Washington. Help us celebrate a successful 2021 season and get ready for 2022. To purchase tickets, go to the H1 website at H1unlimited.com. ❖

EDITOR: Andy Muntz ASSOCIATE EDITORS: Craig Fjarlie, Chris Tracy, Dick Sanders HYDROFILE EDITOR/WEBMASTER: Lon Erickson HISTORIAN: Bob Greenhow EDITORIAL BOARD: Clint Newman II, Bob Senior

The Unlimited NewsJournal, established in 1973, is published by Unlimiteds Unanimous, an enthusiast club interested in promoting and documenting the sport of unlimited hydroplane racing. Copyright © 2021, Unlimited NewsJournal, Reproduction or transmission in whole or in part is not permitted without written approval of the Unlimited NewsJournal. WEBSITE: unlimitednewsjournal.net

> EDITOR: Unlimited NewsJournal, 14313 Beverly Park Road, Edmonds, WA 98026 Email: ajmuntz@icloud.com Letters are welcome, but may be edited for clarity and space.

PLEASE JOIN US AT THE NEXT MEETING OF UNLIMITEDS UNANIMOUS

Check our website for more information.