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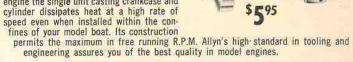
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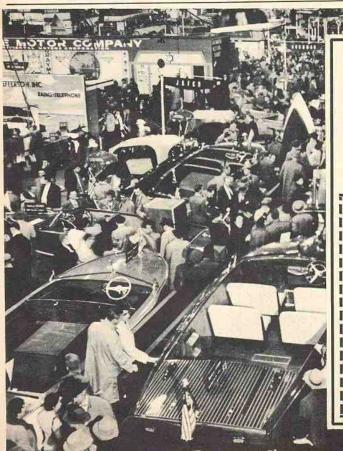
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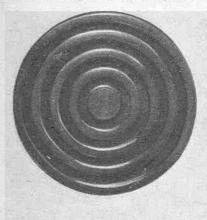
CITY

ONE STA

IT'S NEWS

NO-VIBE CLAMP COVER

No-Vibe, a new product of the Marine Division of Worthington Products. fits on all size clamps of outboard motors and reduces vibration and noise up to 70 per cent. No-Vibe is made of Du Pont Neoprene with a Nylon liner





-is gasoline, salt water and weather resistant and has over 10 inches of cushioned bearing surface. The ridged back of No-Vibe forms a vacuum on the boat transom reducing marring and scuffing and preventing clamp loosening and motor loss. No-Vibe sells for only \$3.00 a pair.

SPORTSMAN IMPERIAL

The 16' Sportsman Imperial, the newest model of The Henry Boat Works, Waldo, Ohio, has a modified newest model of The Henry Boat Vee-bottom, is built of cedar planking, has a full length keel, with a forward deck length of 54" and a beam of 64". Weight is 340 pounds. Under seat braces, full spray rails, hinged back



amidship, sea and mahogany deck are all standard equipment.

(Continued on Page 33)

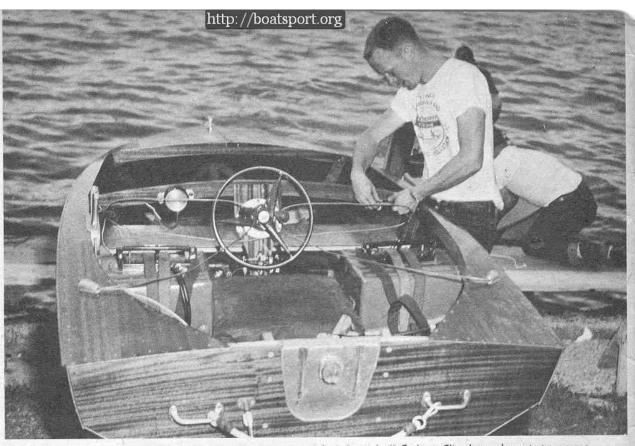
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(Above) Gene Hawthorne, Thousand Islands Marathon Bu winner. Hydraulic jack projects from transom plate of his Sid-Craft.

(Below) Bruce L. Hoff, Iowa City, Iowa, demonstrates proper engine angle & transom height in Mercury powered Speedliner.



THOUGH THE PROBLEM of transom heights and engine angles is of greatest importance to the racing driver, the pleasure boat operator is not as unconcerned as he may think with this same problem—at least if he wants to get the most efficient performance out of his boat and motor combination.

Just how important are these two factors? Well, conservatively speaking, 50% of the closed course racing flips are caused by improperly mounted motors. Sure, the best of the drivers flip, but even some of their flips can be attributed to trying to ride them just a little too lightly for conditions at hand. By riding too lightly, I mean

having the engine mounted overly high on the transom and angle of attack such that the boat is riding on the very minimum of planing surface at the stern. Only an extremely skilled driver is able to get away with this.

Gil Peterman, Malverne, New York, unquestionably owes at least a mile an hour of his consistently high top speed to his exceptional ability to handle a boat that is set up in the most delicate of light handling fashions.

First, let's understand a bit of what you are up against. If you take a standard, factory-built racing hydroplane and drop your alky burning motor down flush on the transom, you'll

probably never win races no matter how hot your iron is, at least not in fast company. But with the proper engine angle, and the motor dropped down, your boat will very probably be less flip-prone than your competitors'. For the beginner in the sport, just out to get the feel of racing, it's safer to mount your motor this way for you'll have greater stability although your rig won't approach its speed potential by a couple of m.p.h.

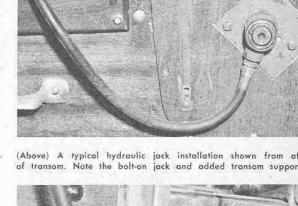
There have been a number of patent gimmicks on the market designed to hoist your motor higher than the standard transom height and to give

(Continued on Page 6)

BOAT SPORT



(Above) Neat, efficient cockpit of veteran marathoner Fred R. Snyder's Raveau hull. Bicycle grip under wheel operates the transom angle lift.



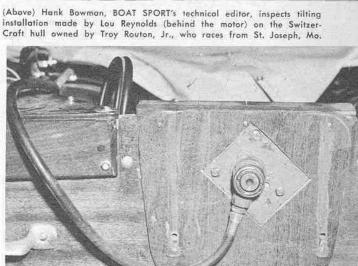
(Above) A typical hydraulic jack installation shown from after side of transom. Note the bolt-on jack and added transom support board.

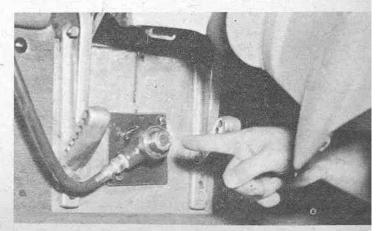
TRANSOM HEIGHTS AND **ENGINE ANGLES**

BY HANK WIEAND BOWMAN

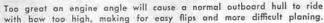
(Right, top) The engine is on the transom but has been lifted to show the hydraulic jack in lowered position. Note that the engine has been bolted securely to the transom against pounding of long-distance runs.

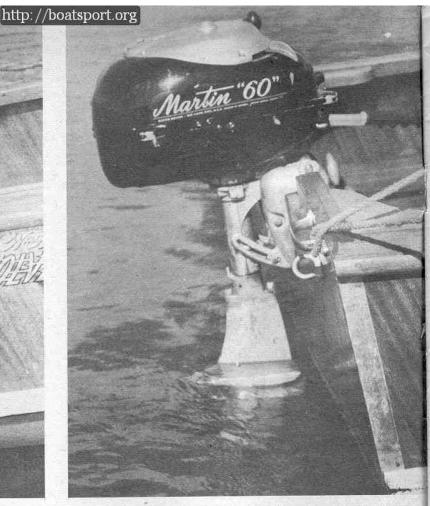
(Right, bottom) Here the hydraulic jack is shown in a fully extended position, which would alter the engine's tilt angle by as much as 21/2".











An engine mounted too close to the transom often causes a boat to be nose heavy, making it tend to fish tail and be very hard to control.

TRANSOM HEIGHTS AND ENGINE ANGLES

(Continued from Page 5)

this adjustment while underway. For the most part, these gimmicks have been unsatisfactory, largely due to extra weight and because they relocate the motor aft of its original transom location. Most racing drivers, particularly in closed course events, prefer to keep over-all boat weights as close to the minimum as possible. And since these boat and driver minimum weights are not designed for the average man (who in 1952 weighed 165 pounds) but rather for boat jockeys of considerably less avoirdupois, only the smaller fry would consider adding three or four pounds if there were a lighter and a nearly as acceptable approach.

The almost standard means to increase transom height used since the beginning of outboard racing, back in the late twenties, has been to add varying thicknesses of wooden shims between the top of the transom and the motor saddle.

Check the tool box of almost any of the savvier shingle veterans and you will find a collection of transom-width sticks, varying from 1/32'' to $\frac{1}{2}''$ in thickness. How many shims should you

use? Only experimentation is going to give you the final perfect result for your own boat, your own weight, your own motor and propeller combination. But a knowledge of how shims will effect you should serve as a shortcut to these experiments.

A rule on shimming an engine that was followed by the late Mully Scull when he was active in outboard hydro events was to jack up his motor to its maximum speed before each regatta on the then-prevailing water conditions and then pull one shim so that the final setting was 1/16" below the peak point for the day's water. This 1/16" was Mul's concession to the increased choppiness of the water that he could expect to encounter under competition conditions. A 1/16" reduction from peak was probably fairly safe for Mul as he was usually running well out in front of the pack where smoother water is found. But if you are not a front-rank runner, then I would suggest a more generous compensation as a margin of safety.

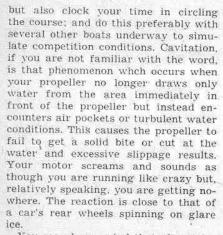
Don't expect to arrive at the perfect engine height after one, two or even a half dozen trys. The driver who wins consistently, practices and experiments endlessly. He and his pit crew must have infinite patience. He records his results so he can make use of his knowledge gained when in actual racing he is faced with water conditions that match those that existed during his tests. With the alky burning racing motor, these jacking experiments will be continued until, with a given propeller and engine angle, maximum straightaway speed is recorded by water speedometer or stop watch tests. Remember you are interested in peak speed, not maximum r.p.m.'s.

However, another big consideration comes into play. And that is cavitation. It won't do you a bit of good to build up a lot of straightaway speed if you are going to lose it on the turns. For this consideration the driver's judgment must come into play. On a large circular or a wide oval course in which mild corners do not perceptibly bog down your engine's r.p.m.'s, cavitation is no great problem if your prop and motor height are correct. But if you are driving a short course and you find that your engine height causes cavitation, then you better watch not only your straightaway peak speed





For average operation, a location between the two extreme angles is best. Anti-cavitation plate is parallel to boat's fore and aft plane.



You may have noted that almost invariably several miles per hour separate one-mile straightaway records from the five-mile competition records. The reason for this is not that the record holding driver is forced to slow down or encounters trouble moving up through the pack or loses so much speed on the turns. Records are seldom set in competition by boats that don't hit starting gun on the button (Continued on Page 24)



(Above) An engine tilted too far out causes a well-designed hull to mush down in the stern and point bow skyward in inefficient fashion.



(Above) When motor is mounted at proper angle, the fore half of any well-designed runabout will plane nicely and boat will handle well.

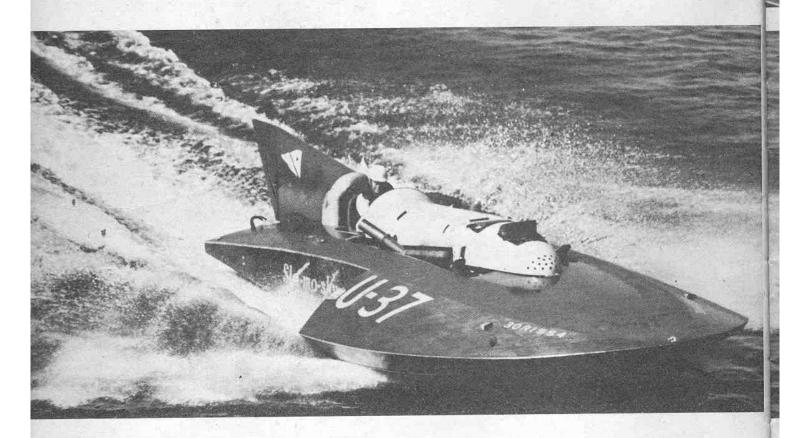


Prop riding on outboard calls for plenty of savvy on engine angles and transom heights. Smarter drivers have taken advantage of this phase of racing for a long time. Here veteran Homer Kincaid from Carbon Cliff, Ill., shows his knowledge of it with an Evinrude C during the races held at the Chicago World's Fair, back in 1933.

SLO-MO-SHUN V COPS CUP

Text and photos by Carver and Swanson

(Right) Lou Fageol flashes his well-deserved victory smile after sweep of all three heats.



(Above) "Slo-mo-shun V" (for victory) shows the style that won the 47th running of the Gold Cup Races—"World's Series" of speedboating.

IT BEGINS TO look as though Stanley Sayres plans to keep the Gold Cup in Seattle on a permanent basis. When one "Slo-mo" isn't in there, up front, the other one is. In the 47th running of the Gold Cup Regatta, held on Lake Washington, it was "Slo-mo-shun V" all the way—and there was no question but that the "V" stood for "victory!" Sporting a new Rolls Royce engine, she set a new qualifying record of

99.784 mph average for the ninety miles.

The Rolls engine showed up nicely, with beautiful acceleration, and never once faltered. In the first heat, the "V" was the third legal boat across the line and was in the lead at the end of each lap. She followed her sistership across the line in the second heat and took over first place on the fourth lap, holding it from then on. She started last

in the third heat, almost being cut off by "Wha' Hoppen Too" coming out of the pits, and took over the lead on the fifth lap, to ride on to victory.

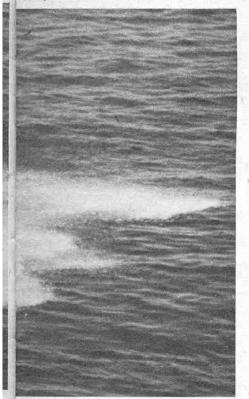
Winning driver Lou Fageol again announced his retirement from competitive driving after the race. Lou did the same thing last year after sharing driving honors with Joe Taggert, when "Slo-mo IV" won the cup, but maybe he means it this time. (End)

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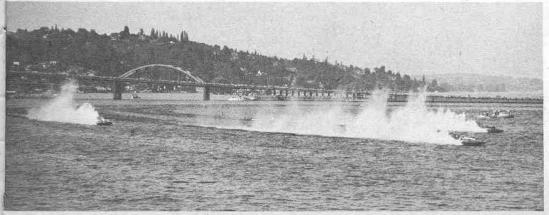


(Above) "Wha' Hoppen Too," the rechristened "Gale II" of last year, is owned by Marvin Henrich and Chuck Doran of Detroit, who gave an Horatio Alger touch to race by getting to Seattle and back on \$300, and who now have to scrape up money for another engine for the boat.





(Above) Stanley Sayres, owner of the "Slo-mo's," waves jubilantly after victory, while chief mechanic Mike Welsh, fresh from traditional dunking, is interviewed and Lou Fageol smiles.



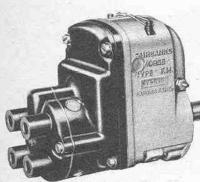
(Left) Gold Cup course at Seattle is bounded on north by Lake Washington Floating Bridge, which acts as a massive breakwater to protect the course. Passage under approach span extends starting straightaway.

OUTBOARD IGNITION TROUBLE SHOOTING

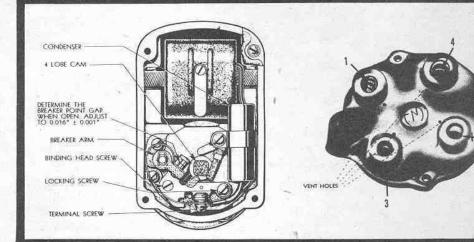
By Shannon Place

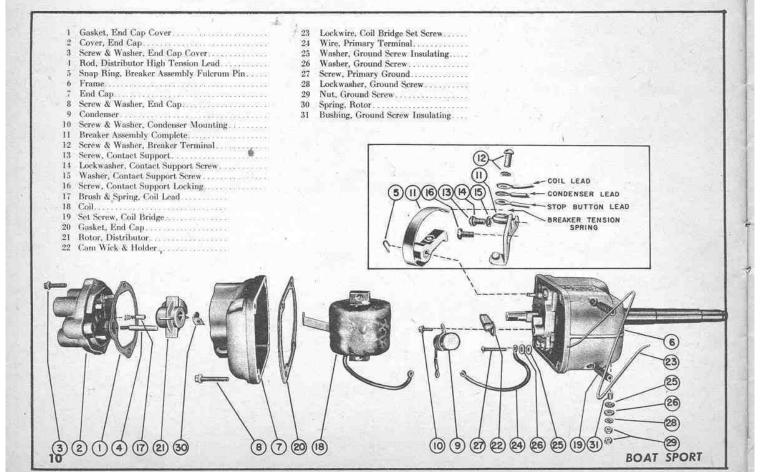
First in a series of ignition pieces on different model motors.

This article covers the Mercury Mark 40, KF-9 and KG-9.



- 1 (Above) Fairbanks Morse Type F.M. magneto which is used in Mercury 25 h.p.
- (Right) Top view of magneto with cover removed for making needed adjustments.
- 4 (Below) Internal parts of the Fairbanks Morse type outboard magneto identified.





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THE FOUR CYLINDER, 25 horsepower, Mercury outboard motor popularly used in Class D utility and D hydro racing, is equipped with either the XV4B70 or XV4B70-A type magnetos. The 70-A is basically identical to the 70 with the exception of the substitution of a slightly different rotor shaft. The 25 horsepower Merc mags have four pole rotors and four lobe cams, producing a spark for each 90 degrees of crankshaft rotation or four sparks for each revolution of the motor. Wind one at 7,000 r.p.m. and the requirement of 28,000 hot sparks per minute gives a dramatic indication of the importance perfect ignition plays at high

Mercury's manufacturer suggests to any Mark 40 owner that prior to delving into the magneto as a source of location of improper motor functioning that owners first assure themselves that the ignition spark produced is unsatisfactory. Poor plugs, faulty carburetion and other more readily checked failures may be the cause of faulty operation.

With the spark plug gaps properly adjusted and plugs in good condition, tests for spark can be made in several ways. The most effective method is, with the motor operating in a test tank, to hold the high tension lead of each spark plug in turn 3/16" away from the plug terminal. If the plug

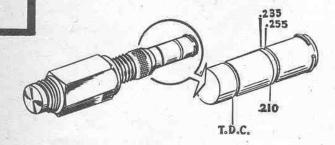
continues to fire, the strength of the ignition spark can be assumed to be sufficient. Timing, plugs or numerous other ailments, can, however, be blamed.

If the engine will not start and in roping over the motor no spark can be seen to jump the approximate 3/16" to 14" gap from the high tension lead to any ground point in the motor, an examination should be made to be sure that the short out button assembly has not accidentally been closed. If this is not the cause of ignition failure, then the magneto cover plate must be removed and the magneto checked.

Care should be taken when removing (Continued on Page 26)

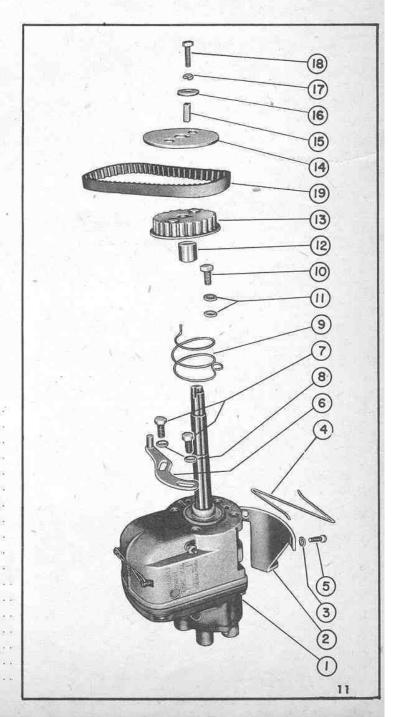
6 (Below) Magneto assembly of the Mercury Mark 40. Parts listed at left.

- 3 (Left) Mercury distributor cap showing the anticondensation vent holes and the proper numbered positions of high tension leads to spark plugs.
 - 5 (Below) Timing gauge for Class B & D Mercurys.



- Magneto and Shaft Extension....
- Bracket, Magneto Actuating
- Washer, Magneto Actuating Bracket Screw..... 3
- Lockwire, Magneto Actuating Bracket Screw....
- 5 Screw, Magneto Actuating Bracket Mounting. . .
- Magneto Bracket, Carburetor Actuating.....
- Screw, Carburetor Actuating Bracket Mounting.
- Washer, Carburetor Actuating Bracket Screw. . . . 8
- Spring, Magneto Assembly Torsion.....
- Screw, Torsion Spring Mounting..... 10
- Washer, Torsion Spring Mounting Screw.....
- 13 Pulley, Driven.....
- Flange, Driven Pulley..... 14
- Key, Magneto Driving
- 16 Washer, Magneto Pulley Clamping Screw....
- Split Lockwasher, Pulley Clamping Screw....
- 18 Screw, Magneto Pulley Clamping.....

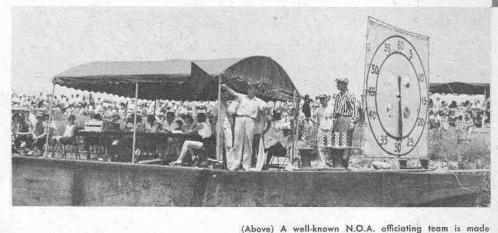
BOAT SPORT



(Below) Ronald Althouse, 14, Hamburg, Pa., was disappointed on the Delaware in June when his engine stuck while he was leading the AU pack. He proved his driving skill and stamina later when he drove his Raveau to a July win in the 104-mile West Michigan Marathon.

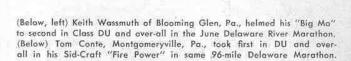


RACING ROUNDUP



(Below) the A.P.B.A. 1953 C Service Runabout champion and also the mayor of Bakersfield, Manuel Carnakis, has continued his winning ways with an early season string of victories in the L.A.S.A. events at de Anza Cove, Bakersfield and Long Beach in southern California.

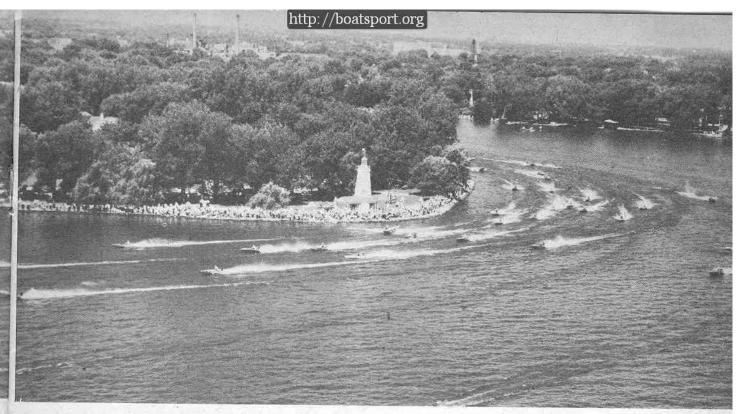




up of Harry Cupp, Oak Ridge, Tenn., and Henry Fergerson of Chattanooga, who both can serve as referee or starter. Cupp is behind fabric clock, and Fergerson flags.







(Above) An aerial view of the start of CU and DU classes in the sixth annual Milwaukee Sentinel-Winnebagoland Outboard Marathon at Nee-

nah, Wis. This ninety-two-mile grind, down Lake Winnebago and then up to Fremont and return, is one of A.P.B.A.'s stand-out stock events.

(Below) Henry Tietge and his wife, who does his pit work for him, campaign on the N.O.A. circuit in Classes B and C alky hydros. This racing couple make their home in Walker, Iowa.



(Below) H. H. Starnes, Hickory, N. C., a professional Class B and C hydro racer, is best known for the racing lower unit that bears his name. Most record breakers have used them.



(Below) When "Dub" Parker of Gadsden, Alabama, flips 'em, they stay flipped! Here Parker stands in the water beside-what used to be a perfectly good Class B racing hydro hull.



(Below) One of the nation's best-known motor builders for the alky burners is Walt Blankenstein, Mission, Kan. Hop-up expert Blankenstein set up Bill Tenney's record holding irons.



(See Over)



(Above) Shown here are all the high point winners at the Lake Hickory Spring Regatto, in Henry River, N. C. Left to right, front row: Louis Deal; Gene Hilton; Herschel Starnes; Fred Deal. Rear row: Newt Cowan; Sweeney Proser, the fuel man; David Woods; J. Wilfong; Doug Creech.



(Above) John Johnson, who hails from Kenosha, Wisconsin, shown here, at right, as he hands over to his pit man the beautiful first prize trophy awarded by the Milwaukee Sentinel for his over-all win in this year's annual Milwaukee Sentinel-Winnebagoland Outboard Marathon.

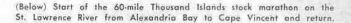
RACING

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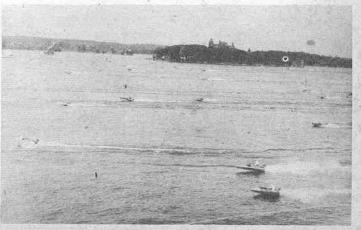
(Right) The Rebels retained the North-South title as weather conditions cancelled alky burning competition scheduled for the second day. "General" Bob Terry, '54 leader, presents the Captain Waide Hughes Trophy to Mabrey Edwards, who will lead Southerners next year. Both generals are from Jacksonville.



(Below) Thirteen B stock runabouts hit the starting line at Kentucky Lake, Paducah, Ky., in the annual N.O.A. North-South Championships.









(Above) The youngest class championship winner in the sixth running of the Winnebagoland marathon event was Craig DeWald of Reading, Pa., fourteen-year-old contestant who set new Class AU record with total elapsed time of 2 hrs., 27 mins., 37 secs. (Milwaukee Sentinel photo)



(Above) The only defending champion at Winnebagoland who successfully overcame the tough competition for victory honors was Larry Freeman, a Milwaukee resident, who raced the same Willis hull powered with a Johnson motor that won him Class C before: (Milwaukee Sentinel photo)



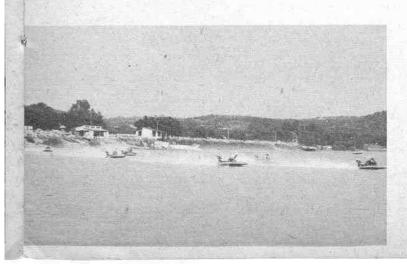
(Above) Shown here with his well-designed trailer is Gene Hawthorne, Detroit, who was Class BU winner in the Thousand Islands Marathon. This event is one of recent additions to A.P.B.A. stock racing slate.

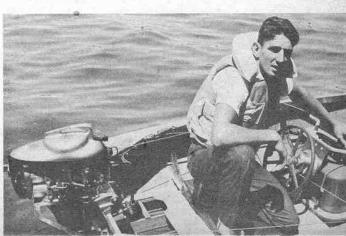


(Above) Chatting in the pits at Winnebagoland are, from the left: Ted Jones, designer of the "Slo-Mo's"; BOAT SPORT's Hank Bowman; Mickey Starego and Sid Uretsky, the designers and builders of Sid-Craft boats.

(Below) Bert Blaskie, Battle Creek, Mich., leads Bill Tenney, Dayton, Ohio, in second spot, in a solid field of Class A alky burning hydros at an N.O.A.-sanctioned regatta in Tennessee during the past season.

(Below) Ronnie Zuback, Morgan, N. J., went all the way out to Wisconsin to enter the ninety-two-mile Winnebagoland endurance test and brought back home a new Class BU record of 1 hour, 59 minutes, and 26 seconds.







An authorid in the wilds of Alaska carries two ardent fishermen on a thrilling voyage after Alaskan king salmon and grayling. Here they meet with a pilot in the hinterland who will take them overland to

remote waters. Boat is all-aluminum Aluma Craft; motor is a Scott-Atwater. This scene is from a 28-minute color movie, "Portage to Alaska", sponsored by Scott-Atwater Mfg. Co., Minneapolis 13, Minn.

OUTDOORS WITH THE OUTBOARDS

By Richard Van Benschoten

FURTHER PROOF of the increasing popularity of outboard cruising is the recognition by the American Power Boat Association of this class in its long-established cruiser racing events. William Edgar John of Rye, N. Y., past president and one of those active in the establishment of A.P.B.A., now vice-president of cruiser racing, announced that outboard cruisers are eligible for competition in the association's predicted log cruiser contests this year.

Also, to put this type of racing on the same basis as the inboard classes, a national high point trophy will be awarded each year. The award, to be known as the Mikkelsen Outboard Trophy, has been donated to the A.P.B.A. by George Mikkelsen, Manhasset, N. Y. and is the outboard equivalent of the National Predicted Log Contest Trophy awarded each year on a high-point basis to inboard cruisers.

To be eligible for this new trophy outboard cruisers must have a permanent cabin with sleeping accommodations for at least two people, must have toilet and galley facilities and must carry full equipment under the U. S. Coast Guard specifications, which include an "adequate" compass. Free-board at the transom must be at least 20" except where outboard motors are mounted in wells. Fuel may be carried either in fixed tanks or in portable tanks such as furnished by the motor manufacturer.

In already established inboard cruiser contests (in which outboards may now compete), the individual race committee must decide on the course for each class and determine whether it shall be the same or allow for a shorter run on the part of the smaller boats. In this connection, Vice-president John pointed out that the outboard cruiser stands as good a chance in this type of competition as does its bigger sister. He gave as an example the Seattle-Nanaimo contest last year in which a 21' outboard cruiser would

have won except for a few minutes' delay to repair a worn cable on the last leg of the run.

For further information on this subject, write the American Power Boat Association, 700 Canton Ave., Detroit 7, Mich.

CONSERVATION PROGRAMS

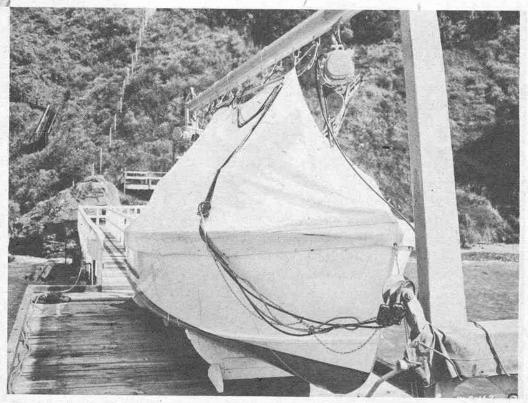
Outboarders should take pride in the fact that the new fish conservation programs undertaken by the National Wildlife Federation and the Sport Fishing Institute are backed by grants from the Outboard Boating Club of America. The programs will follow educational and research lines, including a "Let's Do Something" series of bulletins and movies to be circulated among an estimated 100,000 fish and game clubs throughout the country and studies of the silt program and its effect upon fish production and population in man-made lakes and water-

Continued on Page 28)

BOAT SPORT



Every duck hunter will recognize the tense, waiting look on the faces of these sportsmen. They're looking for the high ones to come winging into range. The motor is the 1953 Evinrude 7.5 hp. "Fleetwin."

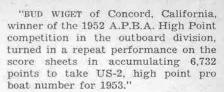


The owner of this outboard cruiser has an interesting and effective means of lounching and taking out his boat. Two one-ton capacity electric hoists mounted

on the boom allow him to launch or hoist his cruiser in less than two minutes. Hoists are manufactured by The Yale & Towne Mfg. Co., Philadelphia, Penna.



(Above) This Crandall-design, home built hydro was Bud's third and lost attempt at boat building. Note 1935 model trailer.



This paragraph appeared in the December, 1953, issue of "Propeller," monthly publication of the American Power Boat Association. It sounds rather cut and dried but it was a climax that came many exciting years after the beginning of this story.

Bud entered outboard racing in the spring of 1931 and in the twenty-two





(Above) Bud Wiget's first World Record was in five-mile competition: 49.599 m.p.h., set in 1941 in this Rockholt Class C Racing Runabout.

(Above) In 1939 and 1940 Bud raced his own C Runabout and rode ballast crew for Bob Jepson, who was 1939 National Class F Runabout Champion. (Right) Wiget in his Rockholt hull, C-93, shown passing Bill Tenney in R-99. Tenney, multi-World Record holder, now of Dayton, Ohio, was racing out of Oregon, hence the "R" in his boat number.

BUD WIGET

By Blake Gilpin

years span between these dates, he'd covered a lot of boating territory. Bud's story is an interesting one to the outboarding fan in that it rather typifies the road to a championship—a road of disappointments but also determination to learn to be the best. There have been some flash-in-the-pan champions who moved into the outboarding field, had a natural touch at the game, more than a bit of luck and plenty of financial backing to provide themselves with top-flight equipment. But they are the exceptions. Most of the long-range outstanding drivers have done it the hard way.

Back in 1931, Bud was in love. In fact, he had two loves and neither of them were outboard motors. One was a boat-tailed Auburn Speedster. He was in love with that but rather futilely because it was far beyond his financial means. The other love was the girl next door. The setting was his parents' cabin at a lake resort during summer vacation. Bud at that time owned a Caille outboard motor and though there was a time in outboarding competition when a twin-carb Caille Class C with tractor lower unit could hold its own with the best that came along, Bud's Caille wasn't that model. In fact it was

of the old knuckle-buster era and was strictly a workhorse.

The summer had started out uneventfully but pleasantly. Bud admired the Auburn Speedster from a distance and the gal next door at a little closer range. That was before some city slicker showed up with a Johnson powered sea sled. Bud lost the affection of the neighbor but quick. Right then he decided that he wanted a fast outboard more than he wanted an automobile. (Even if it was "boat-tailed," he couldn't take the Auburn for a moonlight cruise on the lake.)

(Continued on Page 20)





(Left) Bud and Ethel Wiget, shown at Seattle, Washington, in 1953, just after Bud drove his Neal hull, "Flying High," powered by an Evinrude motor, to A.P.B.A. one-mile F hydro mark of 71.993 m.p.h.



(Right) Bud Wiget's first National Championship in Class F Hydro was won in this boat, "Nighthawk," during the 1950 racing season.

BUD

WIGET

(Continued from Page 19)



(Above) This battery-ignition Elto C is the Wiget pet. Named "Babby," Bud and Ethel paid \$100 down and \$30 a month for it in their early days of marriage; and Bud has used it in setting every record he has made since 1941 in C Racing Hydros and C Racing Runabouts.



(Above) This Rockholt runabout was used to set three World Records during 1948: a one-mile record of 55.429 m.p.h. at Celina, Tenn., in September; a raising of this mark to 56.271 m.p.h at Salton Sea, a month later; and the professional five-mile mark of 50.733 m.p.h. also set at Salton Sea.

(Continued from Page ??)

The late Mully Scull had already made a name for himself in eastern outboard competition. A boating magazine of that period carried plans of Mull's "Shooting Star" and before Bud eft for engineering school that fall, he had completed the frame and started planking his first home-made boat. At that time and for many years afterward. Bud was very strapped financially. But he managed to scrape together enough money to buy a beat-up 1929 Johnson Class B racing enginean SR 45. His life savings went into that first boat but after his initial ride, this new love eclipsed both of his former affections. "I was hooked like a dope fiend for life to the fast boat bug."

With that outfit, he won his first race in Class B at a California lake resort and took home a spotlight as the prize. Right after that regatta, Bud decided he was a real race driver. After a few more local affairs, he confidently entered the 1932 Northern California Championships at Strawberry Lake, Pinecrest, and suddenly learned the facts of life. He came in last. A chastened Bud continued to race sanctioned events but with such modest success that by the end of the year he had totalled only 289 points, 6,443 less than he scored in 1953! At the close of the 1932 season, he ranked 359th in National standing.

"For the next five years my only success was in not cluttering the house with a single first place trophy," Bud, then known in racing circles as Clark Wiget, said. In 1933, he made a second boat, took some second honors at smaller regattas and then in 1934 moved up to his first Class C racing engine—an old, flat head Evinrude with internal rotary valves.

Competition out on the West Coast in the early thirties was pretty tough, with such drivers as Herman Wright, Grover Speegle, Loyal Oesau, Adolph Spreckles, Forest Lundy and the still plenty rough, Ward Angilley.

"About 1935, the late great Ernie (Continued on Page 30)

(Below, top) Wiget's three-point C hydro carries the coveted numeral US-2, indicative of the High Point Championship for professionals in the ranks of American Power Boat Association alcohol burning pilots.

(Below, bottom) Like any other top-flight racer, Bud sometimes makes mistakes. He is shown in action at Marysville, California, in 1949, where his hard-cornering driving was wasted because he jumped the gun.



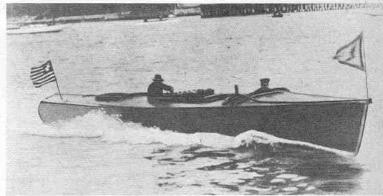




(Left) The "Lillian Russell", a 21" naphtha launch built in 1904, still is in running condition. This boat was the "queen" of the 1954 Golden Jubilee National Motor Boat Show in New York, where celebration of the 50th anniversary of recreational boating in America was launched.

(Below) The first Gold Cup winner, "Standard", was a 59°, three cockpit, heavy displacement, gasoline powered craft which won the event in 1904 with a speed of 23.6 mph. One of first "automobile" boats, it was built by C. C. Riotte. (All photos courtesy of the National Association of Engine & Boat Mfgs.)

BOATING'S FIFTY YEARS



THE YEAR-LONG CELEBRATION of a half-century of recreational boating in America, which was launched with the Golden Jubilee National Motor Boat Show in January 1954, is drawing to a close. As the biggest racing year in history and with more men, women and children participating in the joys of boating than ever before, the commemorative year proved a fitting one for the sport that has become one of the most popular in this country.

The second fifty years of boating embarks with the 45th annual National Motor Boat Show in New York's mammoth Kingsbridge Armory, January 14-23, 1955. Leaders in the sport and industry look to the next half-century which they feel will show even greater growth than the past five decades.

Back at the height of the "Gibson Girl Era" in 1904 a small group of forward-looking men gathered in New York to form the National Association of Engine and Boat Manufacturers, the first trade association in the infant boating industry. Their purpose as voiced at that original meeting was "to protect, promote, further and advance the interest of the members, as manufacturers and sellers of engines, motors and boats of every kind and de-

scription and accessories thereto, and as journalists devoted in all or in part to the interests of engines, motors and boats and allied and kindred industries."

In that same year the first Gold Cup Race was conducted on the Hudson River at New York City and was won by C. C. Riotte's 59-foot "automobile" boat "Standard" with the "blinding" speed of 23.6 mph. Today, that speed has been raised to near 100 mph for the premier American motor boating event, and the one-mile record stands at 178.497 mph.

The few scattered competitive events held in that first year under the jurisdiction of the American Power Boating Association have, in the Golden Jubilee year just ended, risen to more than 300 different regattas. The popular stock outboard runabout and hydroplane rigs—within the reach of modest-budget income brackets—now dominate the racing scene, constituting about two-thirds of all competition run under the

Starting in 1904 with some 15,000 recreational craft scattered along the eastern seaboard and in the Great Lakes, there are now well over 5,000,000 craft in all sections of the country.

Boating has fired the imagination of Mr. and Mrs. America with its offering of healthful, relaxing family hours afloat. Not only have major centers of the sport such as New York, Boston, Detroit, Seattle and the San Francisco Bay area contributed to this tremendous growth, but even more significant are the huge numbers of boating enthusiasts on the small natural and man-made lakes and rivers that dot the vast mid-section of the continent.

Many racing drivers and leisurely family boatmen alike now keep their craft in their own back yards on trailers, ready to go whenever the boating urge moves them. To find an Arizona boating family trailing their craft 75 or 100 miles to a beautiful lake for a day afloat is not uncommon. The racing pilots go even greater distances, some more than 1,000 miles, to compete in colorful regattas.

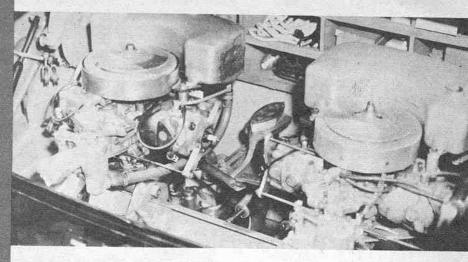
Be it the thrill of stimulating competition or the relaxation of skimming over a peaceful lake with the wife and kids on a Sunday, boating has in its first fifty years matured as a mass participation recreation. Where will it go in the next fifty? Will jet or rocket power propel the family boats of 2004? Only time will tell. (End)

TORQUE TALK

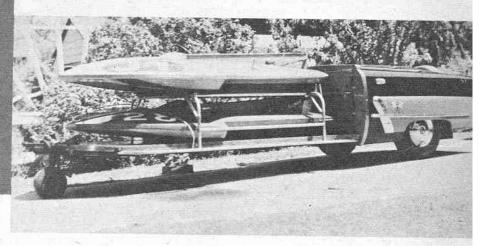
BY LOU EPPEL

SOME EIGHT YEARS AGO, when we finally decided that toting 190 pounds around the buoys in a Class A hydro was asking too much of any motor, Pete "Shorty" Van Biert, of Rutherford, N. J. bought us out lock, stock and barrel. Since that time Shorty and his team mate, Tommy Marsh, have been constant front runners not only in A but also in B and C. As so often happens, the bug to have real sharp transportation for the racing rigs bit Shorty. and last winter, with the great help of Pete Agnone, and Gene Kemp, Van Biert and Marsh put together a trailer which has been the center of all eyes in the pits wherever they may be. Using the after end of a 1953 Ford Victoria, the Rutherford speedsters assembled a trailer which we feel is the greatest thing since canned beer. Carrying two C hydros up forward, with the trunk section converted to carry two motors, lower units, propellers and assorted gear, the red and black trailer, complete with continental spare tire, creates more interest than any later day Lady Godiva would, when it is out on the road. Hooked on to the back of Shorty's Merc station wagon, the outfit has created envy from the St. Lawrence river down through the Southern circuit.

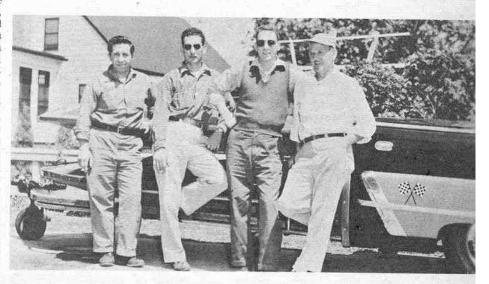
The two seven litre boats owned by B. G. Bartley, Sr. and B. G. Bartley Jr. (Continued on Page 31)



(Above) The trunk section of a 1953 Ford Victoria which was converted to a boat trailer by Pete "Shorty" Van Biert, Rutherford, N. J., holds two motors, tools and spare parts.



(Above) Complete with Continental spare tire on the rear, this eye-catching trailer is painted red and black, holds two C hydros up forward. Note how rear end of Ford Victoria remains intact.



The builders of the Van Biert outboard trailer stand proudly beside their masterpiece. From the left: Peter Agnone, Gene Kemp and Tommy Marsh, who helped Pete Van Biert (at the extreme right).

TRANSOM HEIGHTS AND ENGINE ANGLES

(Continued from Page 7)

and stay out in the front. The difference between the two types of records is quite simply due to a different engine set up between that used for competition and that used for one-mile straightaway runs. Motors can be jacked a lot higher for the mile straightaway—in fact, they will be jacked right up to the point above which noticeable slippage will occur.

For straightaway runs, generally speaking, the closer your propeller can be brought to the surface of the water without slippage or cavitation occuring, the greater the r.p.m.s at which your engine can wind. This is due to the face that water pressure increases by the square of the depth, and hence the deeper your prop is set, to revolve the more h.p. is needed to wind it. Seemingly unimportant deviations of 1/16" or 1/8" can add several hundred r.p.m.'s to your motor's peak performance. Even several additional r.p.m.'s over your competition, all other things equal, can win races.

With stock utilities, transom heights have become an exceedingly touchy proposition, far touchier than with racing motors. The normal transom of a stock utility designed for competition purposes is only 14". The transom is lower for stock motors than for alcohol burning racing motors since the lower unit configuration and overall driveshaft housing length of the stocks is less. Again, with the stock utility, different factors affect competition on closed courses as contrasted to marathon-type competition.

Sid Uretsky and Micky Starego, designers and builders of Sid-Craft stock utilities, which hold more than one builder's share of the utility records, are constantly experimenting with the performance of their boats. With Kaminc and Oakland Johnson wheels, Sid and Mickey have found that for closed course events, 3/8" shimming is best for drivers in the 140-150 pound range.

Sid Uretsky warns, "Don't fool yourself and go too high."

Sid and Micky did find that with either of the two type propellers mentioned, motors could be jacked up to 15" and even 15½" without loss in speed. However, the higher jacking, particularly on a closed course, can explain some of the numerous flips.

With the motor jacked to its maximum, the boat is very nearly propriding. Going through choppy water, the propeller will tend to cavitate though it may have a firm bite on smooth water. However, to guide a boat properly through a turn, the driver needs not only the control offered him by proper fin placement but also he requires the propeller's action and the rudder-like action of the lower unit. If a driver enters a corner and his motor breaks free in a chop, the

prop will start to cavitate. The driver can turn the motor in the direction he intends to go but the boat will continue straight ahead. The motor is cocked by the time the driver realizes that the boat refuses to turn. In an effort to get around the corner, the tyro will probably turn the motor more acutely. Suddenly the disturbance which caused the cavitation is overcome. With the engine cocked for a very acute turn, one of two things usually happens. The motor suddenly grabs solid water and, zingo, the driver is tossed out but quick. Either this, or the boat hooks tightly, trips and barrel rolls. In either event, overly high jacking, particularly with a stock utility, can place a boat in a manner conducive to getting out of control.

On stock hydros of the three-point type, the standard transoms are higher and drivers can jack their engines as high as 16¼" because of the different planing features of the hydro. But the result is a very light riding, "loosygoosy," sensation which would only seem reasonable to the stock driver who has never driven an alky burner hydro. To the alky burner, a ride in a high-jacked stock hydro gives the same sensation encountered in operating an iceboat with a broomstick as steering control. Take Sid's advice and "don't fool yourself and go too high."

The proper transom angle is a little easier to arrive at than the perfect engine height. With the engine cocked too far in toward the transom, the hull will bounce up on plane in a hurry but then will ride nose heavy and tend to fishtail. At the early stock hydro regattas, several years ago, it was fairly commonplace to see the stock boys dive their noses through waves and flip them end over end. From a driver's standpoint, an endover-end flip is the ruggedest type; even if the driver is uninjured, the best made hull will tend to break up with this kind of treatment.

A utility set-up with the engine cocked too far in will not be as noticeably inclined to fishtail on the straightaways as will a hydro but it will be hard to control and will tend to oversteer and broach in the corners.

If the transom angle is too great, the boat will be harder to get on plane and if it is jacked high on the transom, it may be unable to get on plane. This type engine adjustment will cause either a hydro or a runabout to dance along on the after-planing surface. The tendency is, particularly upwind, for the boat to try to become airborne and perform a back flip.

If not too great, this positive angle of attack will add some speed although not stability. If you are acrobatically inclinded and have the nimbleness of a Gil Petermann or a Dick O'Dea in the cockpit of a boat (which very, very few drivers do) you may be able to gain an advantage by this means. But actually the boat designer and the motor designer have been in accord in creating their two products so that they will mate properly for best riding

results with the motor's anti-cavitation plate parallel to the planing surface of the boat.

Some drivers, in trying to get the ultimate out of their equipment, have jacked their mills so high, plus adding a positive transom angle, that they have difficulty in getting their boats up over the hump and out onto the water's surface. In fact this tendency reached almost ludicrous proportions when, during the past winter, a stock hydro set up for a record attempt had to be towed to get on plane! This novel approach presented a neat new problem to the officials as to whether or not they could recognize a record set under such conditions.

Elsewhere drivers who were savvy and experimentally inclined quickly realized that if they loosened the thumb screws holding the motor to the transom the temporary angle of attack would be less positive and the boat could be brought on plane more readily. Tightening the thumbscrews returned the motor cock to its original positive angle after the boat was underway.

There is, however, one great big flaw in this thumb-screw-loosening system. It's too dangerous. If the boat, with transom clamp-down screws loosened, should hit a sudden swell or require a sharp emergency turn, the motor would be free to leap from the transom causing either an upset or possible injury to the driver. Though drivers who tried this gimmick were on the right track, the practice is hazardous and not to be recommended. It is quite probable that, recognizing this, rules will be included in both major sanctioning bodies' 1955 books to ban the practice.

How then can the transom angle be altered while the boat is in motion? This is something that has been done now for perhaps a year by a limited few. And like most outboarding secrets, the method was hard to hide for too long. Today the use of a hydraulic method is fairly commonplace.

Few stock drivers are interested in a variable transom angle except in marathon competition in which varying water conditions are encountered. The drivers who make the most careful preparations and plan to take advantage of every favorable condition permitted under the rules are using hydraulic jacking mechanisms for long-distance grinds.

These transom jacks operate on the same principle used in any type of hydraulic hoist. The equipment, however, is sufficiently heavy so that a marginal driver weight-wise would probably not want to take advantage of it. But under marathon conditions, the nearly imperceptible drag of three or four extra pounds may be offset by added ease of boat handling under roungh conditions and greater speed under smooth conditions. Also the hydraulic jack can be used to compensate for load shifts as fuel supplies are used. Drivers who have not yet taken to auto-jacking may well be interested.

The basic equipment is simple and cheap. A complete rig may be fabricated for under \$30. One brand which is popularly used is the Black Hawk Jack Model R242 made by the Blackhawk Mfg. Co. of Milwaukee, Wisc. A typical installation consists of a small lightweight hand operated hydraulic pump, which can be obtained at any auto supply store, a piston-type jack mechanism usually removed from the autotype jack, and a section of %" to 1" flexible tubing, sufficiently long to extend from the pump location to the transom. The piston arrangement is welded to a plate. The plate and piston are permanently affixed to the rear of the transom. The height at time of installation is adjusted so that a slight negative angle is possible. The pistons are usually limited to a 2" to 21/2" lift (actually a horizontal motion). The engine is secured against the piston by means of heavy aircraft type shock cord, or, better still, by a stainless steel motor-tie-down-cable joined with two heavy duty springs on either side of the transom, most usually fastened to carrying handles.

The tendency of the motor in operation, of course, is to press as closely against the transom as is possible, to force in and lift up at the same time. Only some form of positive stop would prevent the motor bracket from moving in all the way against the transom in an acute negative angle when the motor is functioning.

The jacking handle mechanism is securely mounted at a location convenient to the driver's left hand. When smooth, even water conditions are encountered, the driver can then jack out the motor as far as he feels is advantageous. When rough going is again met, a release valve mechanism, on most types operated by a half-twist of the handle, permits the hydraulic piston to recede until the valve is closed.

These jacks, as I say, are usually used only for marathon purposes where they can be efficient and effective. Generally speaking, they are of little advantage on a closed course race because of the danger angle. After all, a driver has only two hands and on a closed course one is needed on the wheel and one on the throttle at all times. To operate the jack requires locking the throttle, which isn't smart but not too bad if you are going just straight ahead, or taking your hands off the wheel, which isn't too savvy an operating policy at any time.

A second disadvantage to the hydraulic jack is perhaps a rarity but it can happen. It did during the 1954 Winnebagoland Marathon. At least one driver lost an opportunity to place up among the winners when his hydraulic mechanism failed to release as he entered onto the rough open water of Lake Winnebago itself on the final leg of the race. His boat became so wild riding with the jacking piston fully expanded that he had no alternative but to slack off on his throttle to prevent a flip.

(See Over)



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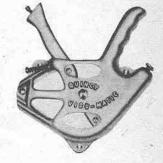
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Dick O'Dea repeats in Class AU at the Nationals in De Pere, Wisc.

Jim Coulbourn of Burlington, N. J. in a stock model SID-CRAFT drove his BU outboard at 49.793 m. p. h. for the mile straightaway and 46.512 m. p. h. for the five-mile competition at Lakeland, Fla. Walter Robbins of Springfield, Mass. took first in DU and his son Bob took class BU in Connecticut River Marathon, driving SID-CRAFTS.

SID-CRAFTS driven by Ronald Zuback, Gene Hawthorne, and Bob Robbins placed 1st, 2nd, and 3rd in BU at the Winnebagoland Marathon, SID-CRAFTS were first in BU at the Sheboygan, Michigan marathon (driven by Jerry Van Ambers), and at the Thousand Islands Marathon (driven by Gene Hawthorne).

Hawthorne).
Ronald Zuback, driving a SID-CRAFT is high point winner in BU class, and Dickie O'Dea in SID-CRAFTS is averall high point champion.
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TRANSOM HEIGHTS

(Continued from preceding page)

If you are planning to experiment with jacking your motor, keep in mind that, from the standpoint of your safety and that of other drivers, your motor clamps must have full grip on the wood of the transom. The clamping pads should not extend above the top of the transom unless your shims have been so firmly affixed that they have become an intergral part of the transom itself. Earlier this season an accident occurred at Beaumont, Texas, which has been attributed to the

driver's not keeping this safety factor in mind. When his motor was retrieved, after it had been thrown from the boat as the result of a competition flip, a 1" block of wood and several thinner shims were still clamped firmly to the motor bracket. Apparently this driver had trusted to a few wood screws to hold his pile of shimming blocks in place.

Get the most speed you can out of your equipment within the rules, but play it safe and do it properly if you want to enjoy your extra zip long enough to win races. (End)

OUTBOARD IGNITION

(Continued from Page 11)

the distributor end cap from which the four high tension lines extend to be sure that the gasket is not damaged.

On inspection of the distributor cap, you should note four air vents as shown in Figure #3. These holes must be kept free from dirt and foreign matter since they are designed to offer ventilation and prevent condensation. If they become obstructed and remain so for any appreciable length of time, corrosion of the metal parts within the end cap can occur.

All Mark 40 and the later KG-9 Model engines have air vent holes drilled in the distributor cover end cap as shown in Figure #3 which also indicates proper high tension distribution to plugs to give proper firing order. If your magneto does not have these vent holes, a 3/64" drill should be used to locate them as indicated in the sketch. Do not drill these without first removing the cap with carbon tetrachloride after drilling. Plastic filings are just what your mag does not need!

Some racers apply a water proofing compound around the high tension leads where they are secured into the cap. This is a good practice if care is taken not to plug the vent holes.

After a cap check, inspect the breaker points to determine whether they have become pitted or if metal cones have built up on them. At the same time compare the contour of the cam with the one shown in Figure #2. A badly worn or unevenly worn cam will make proper gapping impossible.

The breaker point pivot pin should also be checked for condition. Wear of this part will cause erratic point action most noticeable in the high speed brackets. The breaker arm actuating spring, which is secured at one end by a terminal screw (see Figure #2), should be replaced periodically so that you are assured of proper tension. Since this spring must flex from 16,000 to as high as 30,000 times a minute, it will in time lose much of its tension and point flutter will result.

All moving parts should be carefully cleaned with carbon tetrachloride. Breaker points that are badly worn or pitted should be replaced. If you plan to race at a great distance from your

TROUBLE SHOOTING

home, and are not certain where you can buy replacement parts, it is recommended that you carry a complete replacement magneto.

The breaker points in the Mercury 25 horsepower B70 magneto, which are Fairbanks Morse Type F.M., call for a clearance of .016" plus or minus. .001" at full open. To alter the adjustment loosen the binding head screw and locking screw shown in Figure #2 and then with the points fully separated, move the contact support to the proper clearance with the breaker point cam follower riding at the peak of one of the four high points of the cam lobe.

The Fairbanks Morse Magneto is factory lubricated. Over-lubrication can cause more harm than good. The only lubrication necessary is an occasional replacement of the cam automatic oiling wick and a replacement of the lubrication in the rotor driveshaft housing and round the driveshaft bearing after a thorough cleaning.

The most common ignition flaws occuring in the Mark 40 are, like those in most outboard ignition systems, due to improperly gapped or wrong heat range spark plugs, poor high tension cable connections; broken cables; moisture, dirt or corrosion within the magneto itself; burned, worn, badly pitted points; a worn cam and cam follower or faulty coils and condensers.

Of these one of the most commonplace occurences for the racer is the presence of moisture and dirt inside the magneto which causes high voltage arcing and results in oxidization leading in time to complete ignition failure, but more frequently to loss of power in higher r.p.m. ranges. If a greenish deposit is present on any of the metal parts within the magneto, this is an evidence that high voltage arcing has reacted to form an oxide. It is a definite danger signal and if it isn't corrected, ignition failure will result.

Carbon tracks within the magneto or broken, badly worn or sticking distributor brushes can lead to high voltage arcing, as can a loose connection in the secondary circuit in the mag.

For a complete servicing job of the magneto, the entire unit must be removed from the motor. This is the procedure to be followed:

High tension cables are screwed into the outlets in the distributor end cap cover so do not try to jerk these free. Remove the two screws from the distributor cover and remove the distributor rotor and spring by pulling it out. The rotor is a hand press fit. Next remove the four screws securing the cap cover. Remove the breaker points, contact support screw and contact support locking screw. Remove the terminal screw and the primary ground lead. Follow this by removing the condenser, first removing the condenser mounting screw (10, Figure #4). You will note that the cam wick and wick holder are now loose. Coil (18) is next withdrawn after loosening the two coil set screws. (an allenhead wrench is needed for this). Coils and condensers should be tested at a repair shop where proper test equipment is available.

The condensers should be checked for breakdown, leakage, capacitance and series resistance. It is also recommended that the condenser be heated to approximately 140 degrees F. prior to testing in order to simulate engine operating heat conditions.

The following test values should be noted down and shown to the individual making the test: S series condensers 3 mfd. + .32 — .38; M series condensers 2 mfd. + .22 — .18. If there is any doubt as to the condition of your condenser, don't take a chance. Replace the dubious condenser with a new one.

A coil tester should be of the dual gap winding type so that both primary and secondary windings may be checked for shorts, open circuits or unduly high resistance. At the same time, the lead wire to the coil should be checked for breaks, wear or faulty insulation.

Another possible source of magneto trouble is worn ball bearings on the rotor shaft. Four small screws and the breaker cam assembly plate must be removed to check these bearings. The plate is pulled by rapping on the rotor shaft drive end with a soft rawhide or, plastic mallet. The rapping will push the plate off the rotor shaft and expose the bearings for inspection. If the bearings seem in good condition, they should be relubricated with a ball bearing grease designed for this purpose. Fairbanks Morse maintains service stations in most major metropolitan areas and this special grease may be obtained there.

Prior to greasing, however, the bearings should be dipped into clean, lightweight machine oil and spun until thoroughly clean. Load no more than 50% of the bearings' total capacity with grease since too much grease can cause bearing failure due to overheating. If the bearing proves to be worn, take it to a Mercury dealer for replacement. A special tool is required to pull the ball bearing outer races from the frame end plate.

After full cleaning, replacement of worn parts and reassembly the magneto must be replaced and then accurately timed. Timing refers to the determination of the proper moment for the spark to be produced in each cylinder in relation to that cylinder's piston travel. Spark timing is designated by a given number of degrees of angular travel of the crankshaft before the piston reaches top dead center. Correct timing is extremely important.

Figure #5 represents a special Mercury timing gauge which greatly simplifies accurate timing of the 25 horsepower Mercs. The tool number is M-60-5126 and may be obtained from any Mercury distributor.

In replacing the magneto, the following steps must be taken:

Tension spring (9, Figure #6) must be placed in the bottom of the crankcase magneto drive housing with the pointed end insterted in the small hole provided for it. The driveshaft housing should be lubricated with hypoid oil or lower unit grease. Care should be taken not to get any grease in the timing case, which is designed to run with no lubricant. The magneto is installed by inserting the rotor shaft up into the housing. The spacer (12, Figure #6) goes into the upper end of the magneto driveshaft housing and key (15) must be inserted in the rotor shaft keyway. The timer pulley (13) is replaced on the end of the shaft, being careful that the side marked "down" is placed in that position. Tap it lightly with a fiber mallet to seat it.

Next, secure the end of the tension return spring to the cap screw in the magneto so that sufficient tension is placed on the spring to return the magneto to an idling position after it is moved to the left. You will note there are several screw holes provided for locating the spring. If insufficient tension exists, shift the end of the spring to the next hole.

Reinstall the pulley drive key, the drive pulley flange plate, followed by the pulley itself, on the end of the crankshaft so that the keyway lines up with the key in the crankshaft. Line up the two arrows on the pulley plate so that they are directly opposite each other using a straight edge, then slip the timing belt over the two pulleys.

Now take the timing gauge and with cylinder #1, sparkplug withdrawn, screw the timing gauge into the plug hole. Set the #1 piston on top dead center. Then adjust the knurled screw on the tool shaft so that the top of it matches the bottom of the first groove marking on the instrument (Figure #5). This bottom line is the Top Dead Center marking groove. Rotate the flywheel counterclockwise. With steady pressure maintained on the end of the gauge so that the tool insert moves inward as the piston moves down, continue the flywheel rotation until the gauge registers at the bottom of the third line. This is .235" which corresponds to 34.5 degrees before top dead center; while the upper mark on the gauge, which is the top of the third line is .255" from top dead center. This distance is equal to 36 degrees before top dead center.

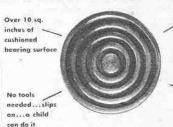
(See Over)

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OUTBOARD IGNITION TROUBLE SHOOTING

(Continued from preceding page)

For normal operation, the lesser advance should be used, that is .235" before top dead center. However for racing work you can go from the .255" to as high as .280". You should note. *however, that the earlier KF-9 models must be timed at .210" before top dead center for general operation, which on the gauge is the first marking above Top Dead Center and KF-9s cannot be advanced as far as later models without pre-igniting.

When running higher than 5500 r.p.m., commonplace in competition, more exacting timing may be gained through actual underway testing. Starting with a timing of .255" and running at full open throttle with a tachometer as your guide, further advance the spark by adjusting the spark adjustment linkage above the handle bracket assembly of the KF-9 and KG-9 or the set screw or both depending upon the model of your engine. Incidentally, the KF and KG-9s had a mechanical take off for a tachometer. The belt driven mag, on the Mark 40 makes it necessary to install an electric tachometer.

Continue your advance until you reach the highest r.p.m. which can be obtained and maintained over a two to three mile or longer run. Do not

make an advancement beyond the recommended .255", note a satisfactory increase in r.p.m.s and then immediately cut your motor, and feel the job is done. The reason for this is that the higher advance may cause pre-ignition which may not be evident until an extended period of wide open throttle running of four or five minutes or more. Thus after making this advance greater than .255", you must continue to run at wide open throttle for at least five minutes while checking your tachometer. If no drop in r.p.m.s is noted after five minutes, then you can safely assume that pre-ignition is not occurring and you need not be concerned about possible burned or stuck pistons.

Your final step is to sychronize the magneto to the carburetor. To do this turn the flywheel until #1 piston is at top dead center, then manually advance the magneto until the magneto breaker points just begin to break. At this point, set the magneto bracket so that the bracket pin just contacts the throttle cam so throttle and magneto advance work in unison.

With the magneto installed on the engine, you must remove the entire steering bracket assembly on the KF-9, KG-9 and the instrument control bracket on the Mark 40. Keep this in mind in reassembly and do your breaker adjustments before these parts have been reinstalled. (End)

boats (16' or over in length) must have at least one hand portable fire extinguisher, plus other qualifications, before they can be awarded the certification decal.

As a closing event at the Safety Afloat Conference a waterfront sports show was presented. Water ski exhibitions were given by champion men and women to show both fundamentals and trick riding. A demonstration of U.S. Navy hydrofoil boats was put on, showing how the hulls of these experimental boats are raised up on the stiltlike hydrofoils to permit greater speeds than possible under conventional operation. Also an exhibition of skindiving with masks, fins and aqualungs was presented.

All in all, it was a most successful and beneficial two days for those lucky enough to be able to attend. As for those who couldn't make it, they will reap the benefits indirectly as time goes by and more and more people learn the proper safety measures involved in boating and pass this knowledge along to others.

TIME PAYMENT

It's a good sign and one that's been long in coming to learn that many banks and finance companies are now beginning to consider the purchase of an outboard boat and motor as legitimate business which they should handle. There has been much discussion of this recently because of the attitude of such firms in the past. Outboarding seems to be in about the same position that motoring was not so very many years ago. It took time for a lot of things to be worked out, and financing was one of them. So, as outboarding continues to grow, such problems will be settled.

This situation was pointed out recently, when Howard F. Larson, director of sales of Evinrude Motors, commented on the increase in his company's sales, which were running 66% over the same period a year ago. Mr. Larson said, concerning financing, "A growing number of banks and finance companies have had excellent experience in the handling of time payment paper on outboards. This has enabled more dealers to offer extended payments on motors and has been especially helpful in the sale of the larger motors.'

As proof of the steady increase in outboard boating, Evinrude is now building additions to its plant in Milwaukee which will nearly double its manufacturing space.

KNOTS, SPLICES AND ROPE WORK The Norman W. Henry Pub. Co., 254 W. 54th St., New York, N. Y., has recently issued the fifth edition of a valuable little reference book on "Knots, Splices and Rope Work." Originally by A. Hyatt Verrill, it has been revised and enlarged by E. Armitage McCann (Master Mariner). It sells for \$2.00 in a cloth binding; \$1.50 in the paper edition. This well-illustrated book contains much practical advice on how to tie the correct knot handily.

THE OUTBOARDS OUTDOORS WITH

(Continued from Page 17) Since outboard boaters are rapidly becoming one of the nation's largest outdoor sports groups, it is fitting that they should take the lead in such actions for the conservation of our natural resources. The O.B.C. announced that its grants were made principally from funds derived from the Outboard Boat Mfgs. Association and the Out-Board Motor Mfgs. Association. All outboarders, whether they are ardent fishermen or not, should benefit from these far-sighted programs.

SAFETY AFLOAT

The 3rd Annual Midwest Safety Affoat Conference was held May 22-23 at the Illinois State Conservation Department's training school on Fox Lake, about 60 miles northwest of Chicago. Sponsors were the American Red Cross Safety Service Department and the Outboard Boating Club of America, with co-sponsors including the American Camping Association, Chicago Power Squadron, Illinois State Department of Conservation and U.S. Coast Guard and Coast Guard Auxiliary.

In what amounted to an "aquatic college" the "students" were treated to classroom lectures and on-the-water demonstrations of small craft safety, including the new Red Cross program of outboard instruction, which is now a part of the organizations nationwide small craft and aquatic program. In turn, the "graduates" of this course

will pass on their basic boating safety knowledge to thousands of others at regional safety schools, summer camps and waterfront sessions all over the country. Stressed in the demonstrations were safe techniques of boat operation, observance of rules of the road with regard to boaters and non-boaters, proper use of safety equipment, and water rescue techniques.

The Coast Guard Auxiliary presented a display of the various services performed by it on behalf of boaters using waters under Coast Guard jurisdiction, including the "courtesy inspection," in which the Auxiliary, upon request of the boater, officially inspects both boat and equipment for the purpose of a safety certification. Some 22,000 pleasure craft were examined by the Auxiliary last year, many of them outboard cruisers. It should be remembered that this inspection and the requirements that go to insure its certification are more detailed than the minimum legal requirements, but for this very reason any boater should be happy to comply with them to the fullest degree. For instance, to qualify for the CGA decal which shows safety certification, a galley stove cannot be gasoline fuelled, and if it has more than one burner it must be securely fixed and its enclosures protected against flame, heat, etc. Also another requirement is that the anchor be heavy enough for the boat and that there be enough suitable line for it. And, too, although not required by law. Class One outboard motorThere is the best knot for every occasion and it can be found in this little volume. It's a worth-while, practical source of how-to-do-it information.

BOAT-A-CADE

The fifth annual Kissimmee-Okeechobee Boat-A-Cade will be held on October 21, 22, 23 and 24, with either Ft. Myers or Stuart, Fla., as optional terminals for the group voyage. This most interesting event has been growing rapidly each year and attracting more and more families who have heard of the fun and adventure of threading the winding rivers and beautiful lakes which make up the three days of cruising. Anyone with a boat. provided it isn't too large to navigate the "korkscrew" Kissimmee river, is welcome to join in on the fun of day cruising and night layovers with barbecues, fishing, entertainment and good companionship all thrown in. For further particulars and reservations write Boat-A-Cade, Kissimmee, Fla.

BOAT SHOWS SET

The 45th annual National Motor Boat Show in New York will be held again in the Kingsbridge Armory, Bronx, January 14-23, and for the first time in its long history will be open on two successive Sundays. In announcing the date of the show, Joseph E. Choate, show manager, said that the demand for exhibition space, judging from present indications, should be even greater than it was at last winter's event in which 214 exhibitors crammed every available foot of the huge drill shed in the Bronx. By redesigning the floor space a slightly greater display area will be made available. Also a new floor plan will group all marine accessory firms together in the eastern side of the building while the large cruisers and engine displays will be mostly located west of the main aisle, near the large freight doors. Outboard boats and motors will all be exhibited in the same general area.

The 22nd annual Chicago National Boat Show will be held February 4-13 in the International Amphitheatre, where the entire first floor, including an extension now under construction, will be filled with exhibits. Executive Director Guy W. Huges said that this 40 percent expansion of exhibit space was added after learning the results of a survey made of 1954 exhibitors and a waiting list of those who could not be accommodated before. As a result, this show will be the largest of its kind in the world in terms of both floor space and number of boats on exhibit.

MOTOR TRADE-INS

Another step which, like the increase in financing of outboard boats and motors, has brought boating nearer to the way things are done in the automobile field is the standardization of trade-in allowances on used motors. This has been made possible in recent years by the publication of the "Outboard Dealer Trade-in Guide," published by the (See Over)

RACING LOWER UNITS

Harden's Machine Shop, 3506 High Street, Portsmouth, Va., has announced a new lower unit replacement for Johnson racing PRs and Class C racing Evinrudes. The foot has been approved by A.P.B.A. Completely assembled, filed and buffed, ready to race, the units sell for \$175. Also to be available soon is a 13-16 gear ratio unit for Class Fs.

Harden's also handle KR units, cylinders and heads as well as PR cylinders and heads, plus a complete line of Wiseco, Hubbell and Fuller racing parts.

Red Jones, Box 567, Cardiff, California, handles new KR units and KR stator plates with a heavy center clamp.





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OUTDOORS WITH THE OUTBOARDS

(Continued from preceding page)

Abos Publishing Co., Mishawaka, Ind. This blue book for the outboard motor trade is available only to marine dealers, distributors, marine finance and insurance companies and lists 27 different brands of outboard motors with suggested trade-in prices for models going back to 1939. Before the publication of this book few dealers would risk taking a used motor in trade and when they did they either lost the sale by offering too little or took a loss by offering too much. Dealers report that by using this book to show their customers the listed prices they have had excellent results in taking in old motors, and both dealers and customers have been happy. So, if you're planning on a new motor next year, ask your dealer to show you what your old one is worth in the "Guide." Similarly, if you're interested in a used motor you can check its value in the same way. However, a recent survey showed that there were not enough used motors in the hands of the country's outboard dealers to supply the public's demand.

EVINRUDE'S NEW DUCKTWIN

Said to be the first outboard motor designed exclusively for the duck hunter, the new Evinrude Ducktwin is a 3 h.p. motor, weighing 32 pounds, and painted the color of dead grass in order to blend with the marsh grass usually found near duck blinds. This is the first time that Evinrude has departed from its traditional blue color on its motors. An adaptation of the Lightwin, the Ducktwin is designed to bob over rocks and hidden obstacles, through normally entangling growth such as found in duck waters and over sandy or mud bottoms.

NEW ALUMINUM CRUISER

Southwest Manufacturing Co., Little Rock, Ark., launched a prototype Arkansas Traveler 20' aluminum outboard cruiser in June. After test runs of the new CR-20 model are completed, plans for early production will be made. The prototype model was fitted out with sink, toilet, two-burner stove, water tank, seat cushions, remote controls and hydraulic steering rig-with all control lines running in concealed channels.

COVER STORY

Philip Lesly Company for getting the color photograph of the Evinrudepowered Speedicraft used on the cover of this issue. A sturdy, dependable motor and a trim, equally dependable craft! Who could ask for a better combination? Every time one of these photographs comes our way it just happens that we're tied down to the desk during what always seems to be the hottest spell of the year. What a way to torture an editor who can't "get away from it all' and enjoy the wonderful sport of cutting across clear water under a summer sky in just the right boat with just the right motor!

THANKS ARE DUE Elizabeth Catlin of the But when we do manage to sell the publishers of Boat Sport, Joe Hardie and Ray Kelly, with the idea that another long weekend wouldn't do us any harm, we start moving-and fastto put the overcrowded highways behind us and find some lake or river, climb into a boat, zip the engine off to a quick start and an all-too-short day in the open. No doubt about it, the modern outboard motor and the easyriding boat have made it possible-no matter how limited is our income-for all of us to share in the outdoor life that means so much to our health and happiness.

BUD WIGET

(Continued from Page 21)

Millot began to lend me a hand and my fortunes in racing started to improve. With limited finances of his own, Ernie (or Pop, as he was called befitting his old age of about 31) was in my estimation the greatest boat racer who ever snatched a cord. His shop didn't even boast a lathe or welding torch, yet he built C and F engines that our-ran Dean Draper's. He could drive anything from A to F runabouts and hydros with equal skill and frequently drove patched up junk two or three miles slower than the competition to take first place. Much of my spare time for the next few years was spent in Ernie's shop and boat house, learning to build, run and drive racing engines. I guess Millot's reward for helping me and other would-be boat racers was only a sense of helping the sport he loved. His ability to race was even exceeded by his generosity as in later years I came to realize that some of the 'cast-off' parts he gave me were better than some of the things he ran himself and that I paid his cost price (and sometimes less) for the new things I got from him."

By 1937 Bud was beginning to drive up in the front ranks and push some of the really fast boys. At the Pacific Coast Championships at Lakeport on September 7, 1937, Bob Watkins of Hoquiam, Washington, piloted his boat to a new Class C World's hydro record at 52.631 m.p.h. Second place behind Watkins in a new DeSilva hydro was Bud Wiget who, though he was yet to break a world's record himself, helped push the record breaker to a new mark.

Wiget's first major win was in a C Service Runabout in 1938 in the Northern California Championships. "I remember that one," Bud relates, "because it had enough expense money attached to enable me to compete in the National Runabout Championships in British Columbia that year. I didn't even finish in those races, however."

In the Southern California Championships of 1939, Bud piloted his Class C Racing Runabout "Nightwind" to the title. On Clear Lake, Lakeport, on September 5, the National Runabout Championships were scheduled. There a tragic incident occurred that nearly caused Bud to drop out of speedboating entirely.

Two weeks before, Ernie Millot had set a new World's F Runabout record of nearly 53 m.p.h. at Lake Yosemite. near Merced, California. National championships at that time were divided into Division I (amateurs) and Division II (professionals). Bud won the C Racing Runabout title at 46.632 m.p.h.-not bad when you consider that Gar Wood, Jr., winning the Division I C hydro title clocked 53.004 m.p.h. Then in the second heat of Class F the first fatality in organized outboard racing occurred, when the bunched field of Class F runabouts plunged into the first turn and Ernie Millot's boat flipped. Millot was thrown and struck fatally by the fin and propeller of his own boat.

Known fondly by many of the racing fraternity as the "Bald Count of Stockton," Ernie had been in the game for ten years. He had established his first speed record for C Racing Runabouts in 1934; in 1936 and again in 1938 he had been the National High Point professional driver.

Bud in commenting on the accident stated, "I finally came to realize that Ernie had always loved the sport as something good and clean and he would have liked his friends to carry it on."

In two-man runabout races Ethel (or Meizzie, which is her nickname) Millot had crewed as riding mechanic on Ernie's boat. In speaking of Ethel, Bud said, "I don't recall first meeting her but I guess she was around at all the first races I attended. Sometime after seeing her covered with grease smudges, installing rings in an engine, I became aware that I was comparing my then current crop of girl friends unfavorably to her."

Later Bud and Ethel were married to form one of the greatest husband and wife racing teams of all times. Bud is firmly convinced that Ethel is a better boat jockey than he is. Ethel has raced in A, B and C hydros as well as C Service and in all of Bud's races, he considers that Ethel's quick thinking and work in the pits are greatly responsible for his winnings.

Through the years Bud has established an impressive number of world's records. On some occasions his records were either raised by himself or someone else so soon after being established that he never applied to the A.P.B.A.

for certificates. But hanging on his shop wall at Concord, California, are eleven official certifications listing the

- C Racing Runabout—5 miles—49.559, Salton Sea, Oct. 1941
- C Service Hydro-5 miles-45.708, Celina, Tenn., Sept. 1948
- C Racing Runabout-1 mile-55.429, Salton Sea, Oct. 1948
- C Racing Runabout-1 mile-56.271, Salton Sea, Oct. 1948
- Service Hydro-5 miles-47.670, Fresno, Calif., May, 1949
- C Service Hydro, 5 miles-48,128, Lake Alfred, Fla., Oct. 1950
- C Service Hydro, 1 mile-52.403, Seattle, Aug., 1951
- C Racing Hydro-5 miles-57.508, Salton Sea, Nov. 1951
- F Hydro-5 miles-59.367, Fresno, Cal., May, 1953
- F Hydro-1 mile-71.993, Seattle, Wash., Aug. 1953
- F Hydro-5 miles-62.198, Devils Lake, Ore., Sept. 1953

When Bud was asked about memorable races, like a lot of other boat jockies, the ones that seemed to impress themselves the most on his mind were the near wins or casualties rather than the championship titles he has copped. Still vivid is his recollection of his first serious flip with his SR at Stockton, Calfornia, in 1933. That one cost him \$75 for replacement parts with the money earned at the rate of 20c an hour during school vacations. His parents were stuck with the \$100 doctor bill.

In 1946 at Boulder Dam he was testing a brand new Rockholt runabout which had been given him as a birthday present. He was breaking in a new motor and, in a misting rain and rough chop, he failed to see a long low floating pier and ran over it at 50 m.p.h. The Rockholt was ruggedly built but not rugged enough to take that type of punishment.

There was also a 50-mile refueling marathon in 1939 at the Long Beach California Marine Stadium. Bud was leading that one and was still out in front at the end of 49 miles when his driveshaft broke.

In 1948 at Merced, California, he had his C Racing Runabout out in front of the field. Going into the last lap, he was roughly six seconds under the World's record. It looked like a cinch to set a new competition mark when some joker, who hadn't been able to get away from the pits at the start, roped over, got going, cut across in front of Bud and Bud flipped over the wake, blowing his chances at the record and also blowing a really hot motor.

The name Bud Wiget has cropped up consistently in the win brackets at the Nationals. But 1950 was his high point on that score. He took the C Service Hydro title winning at 48.128 m.p.h. to break his own World's mark, went on to take the C Service Runabout Championships and wound up an impressive display of driving by taking two firsts from thirteen of the nation's top Class F hydro drivers.

Most outstanding point of his Class F hydro victory was also one phase of the 1950 Nationals that Bud at least temporarily cussed himself for. In both heats he started, but lousy, back in tail-end spot. And yet in both heats he was able to pass boat after boat to take his entire field of competitors into camp at the finish. In that Class C Service Hydro record breaking heat, Ethel drove an impressive race to finish in third spot.

In 1947, 1953 and again in 1954, Bud as a result of his high-point wins, has had the enviable distinction of carrying the number US-2.

Bud's background is that of a mechanical engineer and for fifteen years he did fuel and lubricants research for the Shell Oil Company, which gave him the background for production of his own Super oils and alcohol and nitro fuels, sold under the trade name of Super Speed Racing Fuels. Since he left Shell Oil Company two years ago, he has been concentrating on boat business, selling boats and parts and doing racing work for other boating fans. Recently A.P.B.A.'s Outboard Racing Commission approved a number of racing items, such as Class F cylinder heads, Class C service coil holders, switch box timer assembly and custom ignition which carry the name Wiget stamped or cast on each part. On the sidelines, Bud and Ethel have a walnut ranch, which qualifies Bud to sign his occupation as "farmer" on entry blanks.

How old is Bud? Well, he still writes "over 21" on his entry blanks and so far he's gotten away with not saying just how far over. He plans to continue racing alcohol burners with the hope of winning and the sure knowledge that frequently he will be beaten. For 1955 his ambition is to keep the C-2 number which he has held since 1946. He doubts if he has much prospect of again getting the U.S. number-but that remains to be seen. He currently holds the A.P.B.A. Class F one-mile mark at 71.993 m.p.h. but he hopes to raise that up about 5 or 6 miles an hour where he figures it should be.

Still in the dream stage—he has plans of building an outboard outfit that he

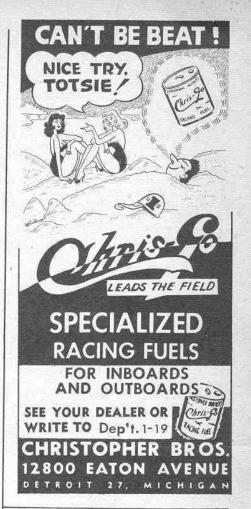
TORQUE TALK

(Continued from Page 23)

took the measure of a fine fleet of the Junior Gold Class at Detroit. Junior and Senior, in two of the best balanced combinations we have ever seen,

While the inboards were trailing away from Detroit on the fourth of July, the stock outboards roared (See Over)

can drive to membership in the 100mile-an-hour club. (End) tore the river to shreds, and with an 83 m.p.h. lap speed proved that the 7's are potentially the hottest class to appear on the horizon in many a moon.



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TORQUE TALK

(Continued from preceding page)

around courses all over the map. One of the biggest turnouts was up in New Bedford, Mass., where the Second Annual Whaling City Regatta was held under the skillful guidance of Commodore George Duhaime and Regatta Secretary Prior Bassett. About 120 outfits from all over New England, New York and New Jersey gathered on the shores of the Acushnet River for eighteen heats of hotly contested racing. Bill Chilton of Seymour, Conn., walked off with top honors in both A Stock Hydros and B Stock Hydros. Henry Piechinski, of Huntington, Long Island, fired up his big D job to take the laurels in both the Hydro and Runabout divisions of this class. Eldon Meyers of Scituate, Mass. led Commodore Brad Fuller of the New England Outboard Racing Association from Auburn, Mass., and Red Wallace of Needham, Mass., in the Class A Racing heats. Ken Chassner of Cromwell, Conn., took Chilton's number in the AU events with a first and a second and less time to Chilton's first and second. Harry Blakley of Wellsley Hills, Mass., took third spot with a pair of thirds. In the BU's Bob Robbins of Springfield, Mass., copped his elimination heat and the final to win

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DEPT. BS, 215 FOURTH AVENUE NEW YORK 3, NEW YORK out over Vernon Ladinig of Portland, Conn. Blakley again finished third in the final scoring.

In the A Stock Hydros, it was Chilton over Chassner with Henry Kokernack of Worcester, Mass., in show position, and in the battle for the B Stock Hydro title, it was Chilton over Burt Troop of Whitman, Mass., and Frank Goodwin of Hanson, Mass. The race for the D Stock Hydros was the big event of the day with Piechinski scoring a first- and a second to outpoint Skip Hunt of Hartford, Conn., and Johnny Covals, the Hasbrouck Heights, N. J. speedster who has turned to the big D jobs after dominating the A and B fleets for so long. At the start of the second heat for the D hydros, Covals took to the air in the crowded start and by great good luck managed, after executing a neat snap roll, to come down right side up and finish in third spot. The DU's, as did the BU's, had elimination heats. with the speeding Piechinski taking two firsts to top Walt Robbins who racked up a first and a second to nose out third place winner Bill Potto of North Weymouth, Mass. Local senti-ment was all in back of Tommy Von Mello of nearby Wareham, whose feats in the alcohol burner outboard classes won him national recognition, however, the stock boys refused to be awed by the reputation of Von Mello and allowed him only a pair of fourths in the D Stock Hydros.

The combined efforts of the New Bedford city government, the Connecticut Outboard Association and the N.E.O.R.A., plus the work of Duhaime and his committee has made the Whaling City regatta one of the best events in the east. Jed Hanley, of Bristol, Rhode Island, perrennial Chairman of A.P.B.A.'s Region One deserves much credit for master-minding the rejuvenation of outboard racing in New England. Let's hope that the big regattas at Boston and other spots in Yankee land will soon appear on regatta calendars again.

Down in Long Branch, N. J., the good citizens are celebrating their Golden Jubilee, and one of the big events is the annual regatta sponsored by the Long Branch Ice Boat and Yacht Club. In the normally shelted waters of Pleasure Bay on the Shrewsbury River, gusty squalls whippedaround and about and added considerably to the general excitement of the stock outboard races held on July 18th. Bill Harrison of Meadville, Pa., was tossed out of his B Stock Hydro in the first elimination heat and for some reason, the throttle stuck in open position after Harrison found himself in the drink. After a series of wild gyrations which included running up on the beach and off again, hopping over a rowboat whose occupants had sufficient good sense to abandon in time, Harrison's outfit finally dumped itself in the wash created by the fleet of pursuing craft. Ronnie Zuback of Morgan, N. J. former BU National Champ, also tangled with the breezes and spun out

in the BU finals after copping the second elimination heat. Johnny Schubert of Clifton, N. J., took the first elimination heat and the final heat to cop the B Stock Hydro title with George Amadei of Vineland, N. J., in second place. Johnny Covals, whose D Hydro suffered minor damage in testing, fired up his A Stock Hydro rig to win over Tommy Smith of Westfield, N. J., and Dave Kough of Hawthorne, N. J. In the AU heats, Kough and Pete Rosati of Howard Beach, Long Island, turned in identical elapsed times with a first and second each and split the first prize on a tie. Fellow Long Islander Dick Zimmerman of Amityville was scored third behind Kough and Rosati.

Kough again scored a first and a second in the BU event to come out top man, with Harold Kelly of Bergenfield, N. J., scoring a first and a third to garner second place honors. Jim Alexander of Vineland scored with a second and a third to get the third place award. Gene Horenburger of Pleasantville, N. J., continued his domination of the CU class in a oneheat event. The D Stock Hydros again saw Covals out on the course in hot pursuit of Horace Macconi of Penns Grove, N. J., in both heats. When the tallies were added up it was Macconi in first place with 800 points, Covals second with 600, and Tom Conte of Montgomeryville, Pa., in third place.

Ken Adams and his crew at Long Branch should be roundly applauded for their efforts in keeping motorboat racing alive on the Shrewsbury River. With this year's demise of the National Sweepstakes Regatta at Red Bank, the Heart of racing activity in New Jersey suffered a great blow. It may be that the solons at Red Bank will take a page from the books of the Long Branch group, and manage to make plans sufficiently far in advance to insure a 1955 running of the Eastern racing classic on the finest race course this side of Salton Sea. Lots of folks outside the confines of Red Bank, with no axes to grind, have tried to do their best to keep the Red Bank date open for them in 1955. Let's all hope that the village fathers will do the boating world a favor and get on the ball now for next year. (End)

IT'S NEWS

MAGNAFLUX INSPECTION

Cleveland Hone & Mfg. Co., 8816 Harkness Road, Cleveland 6, Ohio, specializes in magnafluxing to reveal unseen cracks, metal fatigue and other defects to serve as a guarantee that your used parts are in perfect condition. Prices include: connecting rods, \$1.00 each; crankshafts, \$2.00; single bore cylinders, \$2.00 and double bore cylinders, \$3.00. Cleveland Hone also straightens and reconditions worn or bent connecting rods to original factory standards or to any oversize dimensions specified at \$4.00 per rod including a magnaflux inspection.

IT'S NEWS

PERMANENT PITOT TUBE

Maypole Boats & Motors, 5901-07 W. Madison, Chicago 44, Ill., announce that



they are now handling the Finson "Pitot Fin," a highly polished fin with pitot tube built into the trailing edge. These list at \$7.50 and should be appealing to the racing driver.

FIBERGLASS PRIMER

A new fiberglass primer and surfacer, developed to overcome difficulties in obtaining good adhesion on fiberglass-surfaced and molded fiberglass boats, has been announced by the C. A. Woolsey Paint & Color Co. Inc., 229 E. 42nd St., NYC 17.



This new white primer (#748 White) serves as an anchor coat for subsequent applications of topside, deck, hull and bottom finishes, may be applied either by brush or spray to cover 400-450 square feet per gallon and may be recoated after three hours if necessary, although overnight drying is recommended on bottoms. One coat is claimed to prime, seal and smooth the surface and to take sanding well.

EVINRUDE'S '55 LINE

Evinrude Motors has announced that four of its new 1955 models of outboard motors will incorporate aquasonic advances for "soundproofing" on water. The firm states that for the first time in the marine field it is utilizing a new principle of engine mounting similar to that used in the aircraft industry to

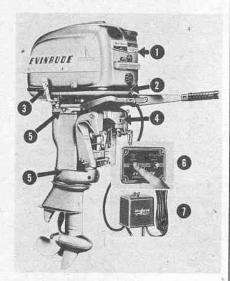
pillow vibration, making it possible to "float" the entire powerhead of the motor and isolate engine vibration from

The four models that will have what Evinrude calls "whispering power" are: the 25 h.p. electric-starting Big Twin; the 25 h.p. standard Big Twin; the 15 h.p. Fastwin; and the 7½ h.p. Fleetwin. In addition to these four aquasonic models, the 1955 line will also include the 3 h.p. Lightwin, which has carburetor air intake silencers.

All 1955 models except the Lightwin will have Roto-Matic speed control; and the Big Twin and Fastwin will be equipped with a special manual lock to prevent the motor from tilting forward during sudden deceleration, but which will release automatically if the motor strikes an underwater obstacle.

For Big Twin owners who wish to install larger, custom-built fuel tanks. Evinrude dealers will provide fittings for such installations without cost in exchange for the 6-gal. Cruis-a-Day remote fuel tank.

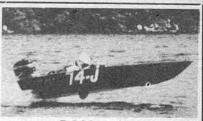
Lower units 5" longer than standard are available for all models at additional cost, and for commercial use of the Big Twin a shaft 20" longer than standard is available.



In the photograph of the 25 h.p. electric-starting Big Twin shown here, the numbers identify the following features: 1) auto lift hood; 2) undercover sound trap; 3) gearshift; 4) anti-tilt trigger; 5) aquasonic mountings; 6) dashboard panel with starter and choke buttons and 7) transom junction box.

1955 JOHNSON MOTORS

Johnson Motors has announced its new Sea-Horse models for 1955. They include the same horsepower motors-3, 51/2, 10 and 25-as this year, but the major change is in the "silencing" of the 10 and 25 h.p. models. Johnson has employed the same "suspension drive" which quieted the $5\frac{1}{2}$ this year and won it the National Noise Abatement Council's Certificate of Merit-the first time a commercial product has been so (See Over)



DRY RUN

Plans are now available for the sleek, prizewinning A-B Runabout "Dry Run". One of these boats took first place in A runabout at the Winnebagoland Marathon in 1954. Many are taking firsts in sanction races. Build your own "Dry Run" from professional plans: Large detailed drawings, a complete bill of materials, full building instructions, and 8 pictures of her in construction are offered for \$3.00 postpaid. For further information write direct to: Hal Kelly, 98 Anderson Ave., Bergenfield, New Jersey.

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FORD, LINCOLN, MERCURY, JEEP marine conversion kits, reversing gears, accessories. Ask for deluxe catalogue: Oscomotors, Phila. 40-BS, Penna.

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IT'S NEWS

(Continued from preceding page)

honored. Both the 10 and 25 have a rubber-cushioned hood which completely seals the engine when it is closed, although it is fully removable by lifting two snap-fasteners. The 5 also has a two-stage intake silencer, and is available in either the standard model or the electric-starting model. Also a tilting lock has been added to the 25 to minimize engine-jar in decelerating, and a tilting bumper installed to protect both motor and boat from enginejar due to striking an underwater obstruction. The Sea-Horse 3 and 51/2 have been additionally "silenced" by the introduction of quieter gears.



Johnson officials announce that the silencing methods used on the two bigger motors are "even more effective" than those employed on this year's Sea-Horse 5½, and that the 10 and 5 should be available in market quantities during October.

PAPER WRAPPED BOATS

Recent tests completed by Union Bag & Paper Corporation, 33 Broadway, New York, N. Y., prove that boats can now be economically wrapped in Scu-



tan reinforced waterproof papers. For the tests Union used boats that ranged in length from 16 feet to 33 feet. The usual "A" frame, generally used for conventional covering, is also used to support the Scutan reinforced waterproof paper cover. The paper is cut to fit each side. The bottom is double folded and grommets are installed in the paper along the waterline. Another sheet of paper fits along the ridge from the bow to the stern. This is secured to the side sheets by wood lathe strips nailed into the wooden "A" frame. Finally, a lanyard threaded through the grommets is laced under the hull. This prevents the wind from getting under the sides. It also provides easy access to the boat if the owner wants to do any maintenance during the Spring months. A breather tube, inserted in the bow and stern, prevents moisture condensation and subsequent dry rot.

DOWN EAST

MOTORBOAT RACES were one of the high lights of the day at the Castine, Maine, 4th of July Celebration. This year the entire program was sponsored by the Castine Lions' Club and the Castine Civic Club. The money for the celebration was given by civic minded "Natives" and "Summer Folk."

At 10:30 A.M. the races got under way on the Bagaduce River at the Town Dock, Four races were run, comprising four classes. The first class was 10 hp for three laps; the winner was Horace Wardwell. 2d class, 7½ hp for two laps, the winner was Dyk Dennett. 3d class, 16-25 hp for three laps; the winner was Wayne Wardwell, (son of Horace Wardwell). A handicap free-for-all finished the end of the boat races. Boats were handicapped by passengers and laps. The winner was Horace Wardwell.

The course was supervised by one of the co-chairmen of the Race Committee from a crash boat. Tidal waters and tidal debris make this procedure necessary. Commander Russel Terry of the Maine Maritime Academy was in charge of the course, making a Navy launch manned by a crew of midshipmen his floating headquarters.

The starting and finishing guns and flags were managed from the Town Wharf by the other members of the committee. Excellent use was made of special couriers for the actual conditions and starting times.

The condition of the course and tidal hours, because of the tide runs, made it necessary to take a number of precautions in regard to the nandling of the races, which are usually not necessary under fresh water conditions.

In spite of many and varied types of debris present during any race there has never been a serious accident and only one upset in five years of holding these salt water races. This reflects good judgment and good management on the part of the Race Committee.

Doris W. Pratt

OUTBOARD GUIDE

"Troubleshooting Your Outboard," a handy folder containing helpful hints on locating trouble with your motor, may be obtained free on request to Cruisegide Bureau, Gulf Building, Pittsburgh 19, Pa. More than 40 items from motor vibrations to slowdowns or loss of power are covered.

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