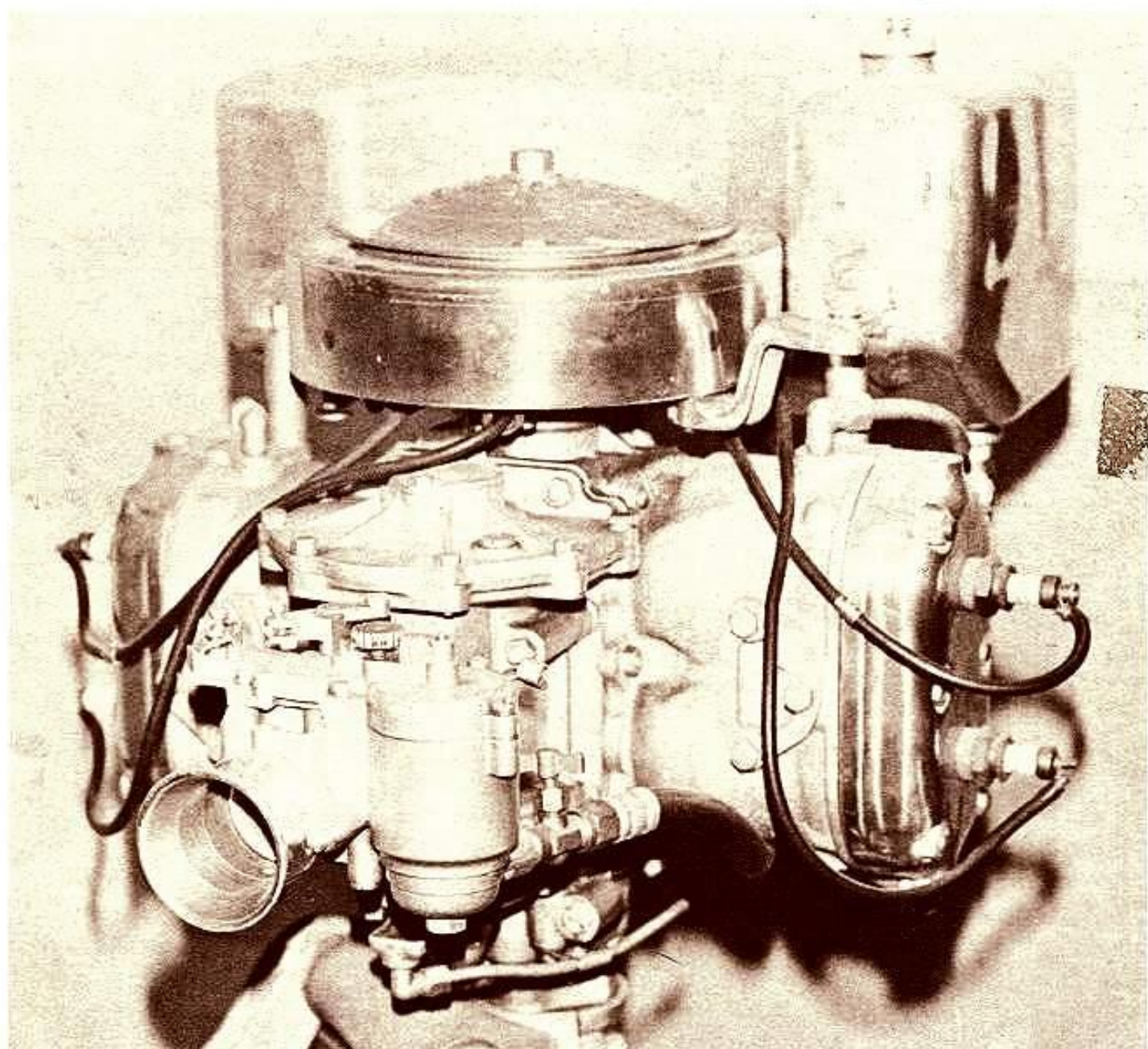
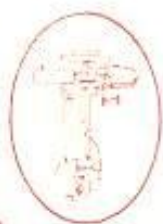


The **ANTIQUÉ OUTBOARDER**

The Pioneering Authority



April

1973

The Antique Outboard Motor Club Inc. is incorporated in the State of Texas as an Educational Institution. The Club is devoted to people all over the world who are interested in the search for, restoration and preservation of old time outboard motors. Regular membership dues are \$900 per year. Other membership information available on request % John D. Gould, Jr., 4707 Massachusetts Avenue Indianapolis, Indiana 46218, USA

CLUB OFFICERS & PUBLICATIONS STAFF

President..... Robert W. Brautigam
2316 W. 110th Street
Bloomington, Mn 55431

1st Vice President..... Bill Salisbury
71 Cardinal Drive
Tom's River, NJ 08753

2nd Vice President..... Dave Reinhartsen
7417 Whispering Pines
Dallas, Texas 75240

V.P. Technical Services..... Sam Vance
RFD 2
Unadilla, NY 13849

Secretary..... P.S. Brooke, Jr.
830 E. 35th St
Spokane, WA 99203

Treasurer..... John C. Harrison
1000 NW 54th Street
Miami, Florida 33127

Membership Chairman..... John D. Gould
4707 Massachusetts Av
Indianapolis, Ind 46218

Newsletter Editor.

Historian..... W. Jim Webb
2560 N. 97th Street
Wauwatosa, Wis. 53213

Curator..... Richard A. Hawie
31 Hillside Drive
Easton, Conn. 06612

Special Features..... James L. Smith
330 O'Connor Drive
Toronto 6, Ontario Can.

Motor Registration..... Donald Peterson
2884 S.E. Francis
Portland, Oregon 97202



THE ANTIQUE OUTBOARDER CONTENTS



April, 1973

Club Briefs	Page	2	Front Cover:
Meet Schedules		3	The powerhead of Lou
From The President		4	Eppel's XR Johnson.
Letters to The Editor		8	See Jim Webb's story
The Big Iron, Part 1		14	about The Big Iron
Outboards of Japan		24	beginning this issue.
Collector's Gallery		35	
The Scrapbook of Antique Ads		36	
AOMCI Special Feature		37	
1972 Connecticut Regatta		38	
Mahogany Racing Boat, Trailer and		41	Back Cover:
Two Big Fours - - - \$600			Custom X Class motor
Small Inboards Revisited		44	designed and built by
The Facts Are		47	Thomas Clarke for his
Florida Chapter News		50	attempt at the World's
Knuckle Busters News		50	X class speed record.
Mid-America Prop Spinners		51	
Twin Cities Scene		51	
The Yankee Chapter News		52	
Central Ohio September Meet		53	
Service Clinic		55	

Thompson
BEATS
the World
on BOATS



The Antique Outboarder

Volume 8 • No. 2

April, 1973

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The Antique Outboard Motor Club Inc



CLUB BRIEFS

HEY! STICK THIS ON YOUR MOTOR. AT LAST, THE REGISTERED ANTIQUE DECALS ARE AVAILABLE.... Pictured at the right, the decals measure 1 X 3", background is gold, lettering is black and trim is red. Write Don Peterson, 2884 S.E. Francis, Portland, Oregon 97202. Price per order is \$1.00 for the first and 25¢ for each additional decal. Decals permitted to be displayed on motors registered in the Club files only.



NO "NOTES FROM THE CURATOR" IN THIS ISSUE. DICK HAWIE WRITES: "SORRY, NO ARTICLE THIS time. A death in the family, when I would have been researching for the article, took all my time. The only item I have to pass on now is a new book on 2 cycle theory and present practice for Karts, Motor Cycles and Outboards. It is called "Two-Stroke Power Units" by Philip Irving and is available from "Cycle World" PO Box 2280, Newport Beach, California, 92260".

IN MEMORIAM: ED FREDERICKS, 38 DEERING LANE, NAUGATUCK, CONNECTICUT PASSED AWAY JANUARY 25th, 1973. It is sincerely hoped that Ed enjoyed being in the Club these past years.

DON'T FORGET, THE NEW CLUB SELF-STICK EMBLEM IS AVAILABLE FROM JOHN GOULD, MEMBERSHIP Chairman. Price is 25¢ each, not counting the one you get free when you renew your membership. The new emblem reflects the dates 1866 to 1950 - 84 Years of Outboarding. This means that any motor built through the year 1950 is an official antique qualifying for participation in Club events

HELP! THE PHOTO OF RAY PREGENZER ON THE BACK COVER OF THE JANUARY, 1973 ISSUE WAS WRONGLY credited to John Gould, by your Editor. As John pointed out, "Man, you've finally cracked"! That's probably true, but if the real owner of the photo will write in, I'll return the picture and straighten out the credits department.

WITHIN THE NEXT FEW WEEKS, THE AOMCI MANUAL OF PARTS SOURCES WILL BE UPDATED AND RE-printed. Any member who wants to submit new parts-availability information should send same to Mr. Sam Vance, RD 2, Unadilla, NY 13848.

Continued next page

AOMCI New Members (CONTINUED FROM BACK COVER)

Today's
Membership
Count

A cordial welcome is extended to all newcomers. Other members are encouraged to make contact either by writing or visiting. Show these new members how to join chapters and special interest groups. Make them feel like they really belong!

380

A.E. Messick
3400 W. 23rd
Panama City FL 32401

Frank Schwartz
10515 Cronins Dr. S.W.
Tacoma, Wash 98499

Randy Kreutner
Maples Resort
Delhi, Iowa 52223

John J. Owens
235 Tenn. Av
St. Cloud, FL 32769

Ollie Douth
Rt 7, Box 801
Bremerton, WA 98310

Alan G. Tober
19 Wendover Road
Longmeadow, MA 01108

Richard Rees
2013 Sunnyside Av
Pottstown, PA 19464

Robert O. Knutson
PO Box 243
Austin, MN 55912

1973 MEET SCHEDULES - PLAN TO PARTICIPATE!!

The following is a list of events scheduled for the 1973 outboard season. Some of it is a bit sketchy at this date, but firm dates should be forthcoming.

MEETS

San Francisco Chapter - Eric Gunderson

Spring Meet-April 29th at 9:00 a.m. at Anderson Reservoir. This is going to be a high speed event with C service races, C Racing races (PR's, Evinrude C's, or any other old C you might have). Of course, A's, B's, D's, and F's are also invited as well as all other antiques and owners who want to attend! Eric says there may be a cash prize for the fastest combination.

Regular Meet-September 29th, place and time to be announced. The usual formal events will be held at this one.

Knuckle Busters Chapter - Tom Luce

Informal Cruise-June 2, 10 AM. Location - Lake Hopatcong. This will be a family picnic with cruise on the lake. There will be a cruise for non-planing boats and one for planing boats. These two sections are planned to start and end together with the planing boat cruise to be longer in distance, but the same in time. Contact Tom Luce.

Formal Meet-The Charles Loshes (Sr. and Jr.) will hold this one in Pennsylvania. No date firmed yet.

Yankee Chapter - Peter Hunn

The Fourth Annual Connecticut Regional Regatta-September 8, 1973. The Fourth Conn. Regatta will be held at the East Hartford Launching ramp, East Hartford, Connecticut. There will be limited organized events, but will be mostly informal which everyone seems to really enjoy! Bob Zippa will be running this event too.

Bob Thornton Race Day-Set up tentatively for the 2nd or 3rd Saturday in May, to be held at Denton, Maryland, on the premises of the Chop Tank River Boat Club (fresh water). Bob would like to see at least 5 boats including PR and SR Power. Get your gear ready! Plan to make a 2 day event out of this meet, and attend the Sunday APBA Race. After the race, the Boat Club throws its Annual Chicken Bar-B-Q - terrific!

I would personally like to thank all of the chapter presidents who have responded to my request for their schedule of events for 1973. It is only through their concerted efforts that we will have a good outline of events for the new year. Our members who attend these planned meets are the final requirement for a successful meet and they need to know in advance the dates of these events. For those who have not yet responded, please do so as soon as possible. Here is hoping for the very best year yet!
Bill Salisbury

ANTIQUÉ TRANSPORTATION SHOW MEET

July 21 and 22, to be held at La Rue, Wisconsin (near Baraboo). Bill Rose is one of the Show's Board of Directors representing Antique Boating. The Show is a good one and all types of antique transportation are on display and in action. Saturday, the 21st is planned as a private day for the show participants (YOU) to enjoy each other's exhibits, while the 22nd, Sunday, is a day open to the public. Small motors are the best to run at this meet due to the smaller body of water at the site. All you guys in the area, get up to LaRue! Write Bill Rose 714 Bluff St, Waukegan, IL 60085.

THE NEW
MERCURY
Alternate-Firing
TWIN

1941

ROCKET STANDARD
\$104.50
Includes Motor
Illustrated \$114.99

A NEW high IN SMOOTH, BRILLIANT PERFORMANCE!

* Again, Mercury is FIRST with scientific engineering improvements that add thrills to outboard motoring. The "Rocket" Mercury Twin gives you performance as smooth as a "four"—flexible as an "eight." Plans a boat beautifully, yet idles perfectly for matchless trolling... and the perfected Roxex Water Pump always works at all speeds. Only a Mercury gives you a rust-proof, leak-proof, anti-proof gasoline tank... and here are a few of many other features: * Unique new Magnaspill starter * Twiplax propeller-protecting clutch * N.O.A. certified brake horsepower * Removable cylinder sleeves and jackets, self-wiper built * Improved specially calibrated carburetor.

\$4088 FROM 3 MODELS - Priced from \$4795 to \$11450, F.O.B. factory.

See a Mercury before you buy - limited but not equalled. Visit your Mercury dealer or write Dept. K-2 for literature.

KIEKHAEFER CORPORATION
CEDARBURG, WISCONSIN

From The President

April, 1973

Not a day goes by in the Club's business but what some new friend appears or a new story unfolds about boating in the past. Some of the letters I receive are from people who are truly outstanding members of the boating community. One such letter, from a gentleman named Thomas T. Clarke, prompted an exchange of correspondence which I'll share, in part, with you.

Gentlemen -

Many years ago I was in the small boat & motor business (Evinrude dealer) and when I sold the business I kept my oldest motor.

The old Evinrude was in service for over 25 years - then placed in the store as a display and conversation piece untouched and still running. That was 20 years ago. For the past 12 years it has been in storage gathering dust, is still free running and compression and spark is good.

I am now an old man and would like to see this motor purchased by someone that will get as much enjoyment out of it as I have over the years. It needs a little paint & polish, otherwise is complete in every detail right down to instruction manual and accessory catalog (badly worn - many people have thumbed through those little booklets).

Enjoyed reading about your Club Meet in Popular Mechanics. Would like to have been there as I have been an "Outboard Buff" since 12 years old. (That's a long way back.) Sincerely, Tom Clarke.

Robert:

well now! Your letter made my day! I do not get out much, widower, live alone in a small run down house - falling apart like myself - so I just had to sit down, pen in hand, and write you a few lines in reply.

You are right on the year of my "KICKER" 1918. I had forgotten which one it was as I had several for spare parts, regular junk yard all up in the attic of my shop & store. But there are still two or three of these - I know I left at least three pretty beatup Eltos (with rudder) and at least one and a half Evinrudes.

I went out in my garage today and hauled down the Evinrude (A97509) and she has gathered a lot of dust and a little rust but not too bad, will cleanup nicely.

Yes, I met Ralph Evinrude many years ago at the plant in Milwaukee; also think Jim Webb signed my dealer's Franchise once or twice. You also mentioned Caille - oh me, that sure takes me back. My first outboard was a Caille Twin - can remember that bright red gas tank to this day. It was a real "goer". I had it on a 11 foot Sea Sled - could not turn worth a darn, but, man, she was no slow poke on the straight-a-way.

Yep, agree most don't know outboards. I used to have fun with some of the "Tech Reps" on new models and improvements. "Why heck", I'd say, "look here" - and I'd show them one of my old motors with the basic, so called advancement - 20 years previous. Just in fun! Think the last improvement on design I remember was the "Fold-Up" small fishing motor - why Evinrude just went backwards about 20 years and built a fancier one!!

You also mentioned the 4-60; well, have enclosed a snapshot of the last one I had. Sold it to a used car dealer in Alabama who wanted to try his hand at outboard racing. He was pretty heavy and the F was just about right, but alas, he could never get the mixture right. I think I replaced four pistons (one at a time) for him - all burned before the first turn.



Here's a photograph of Tom at speed with a conventional 4-60. Tom designed and built the 14', three-point hydro himself.

Tom's X class motor mentioned in his letters is pictured on the back cover of this issue.

Then have also enclosed a photo for your album - my attempt to beat the world's record, held at the time by a Frenchman, Jean Dupuy, at 70.+. Well, all I broke was my bank account - got to 68.02 and the upper main would tie-up just a little. Think Paul nearly also built a similar motor, not sure. You can spot the different parts if you know your 4 - crankcase was my own - everything else was a modified Evinrude or Johnson racing engine part or a pumper part - ignition, flywheel, coils were special. Lower unit was also special much like a stretched out PK65. Sometime I'll tell you about tractor lower units. One darn near cost me a twisted spine on the first turn - at about 40 MPH - made two - the last one was a real "Buck Rogers". Can't recommend tractor lower units - plain suicide.

Now I used to be asked what motor was my pet. Well, that's an easy one to answer. At one time or another I owned and serviced most all of them from Lockwood to the 1960-75 Starflite - a 1934 Speeditwin; over the years have always had a couple of Speeditwins around - of one year or another, when Evinrude changed to the 25 in 1952 I was very sad, bought two Speeditwins! Why shucks, I could install new pistons & rings in about 30 minutes (if pushed, 20 minutes) and it took that long to get the cowl off the new fancy motors. But we all must advance so I went along - half way. Used a 25 Evinrude powerhead on a Speeditwin tower housing, bracket and a 1934 lower unit - so I could pull my young son on water skis. Still have that set up out in the garage - 25-30-35 power-head bolts right on.

Better close - I can "yack" for hours. Don't have anyone to shoot the ball with on old motors - stock or racing. So excuse the poor spelling and penmanship. Run the add as you suggest. Am pleased that you will do so. Hope for a reply to same.

As to old outboarders, I can name many - like the kid can name ball players. I used top name boats or my own - was a real fine sport way back when. Much thanks for your letter. Tom Clarke.

Well! Howdy Bob:

It is difficult for me to express how I felt when reading your letter and the three Antique Outboarders you sent. Perhaps I can explain it in this manner - I burnt my dinner, dug out an old album and read the print right off every page till the wee hours (3:00 AM). Think I even slept on my knees - driving for that first turn like mad.

Now, no, I did not know Mr. Harada - hard to keep track. A couple have passed away the last time I was able to make any contact was about 15 years ago when I told a friend about the Sumida Gowa Shipyard - and their chief designer. He was up on all new designs in hydros - built a hydro much like Jacoby and a three point that was introduced to Japan by myself. Any how, he passed away sometime ago and I have had no word from Mr. Itoh, pres. of Kinuta Motor Co. for many years.

Bob, they were great days both in Japan and here in the States. But that is just a very fond memory now as I am extremely limited both physically and financially. Live

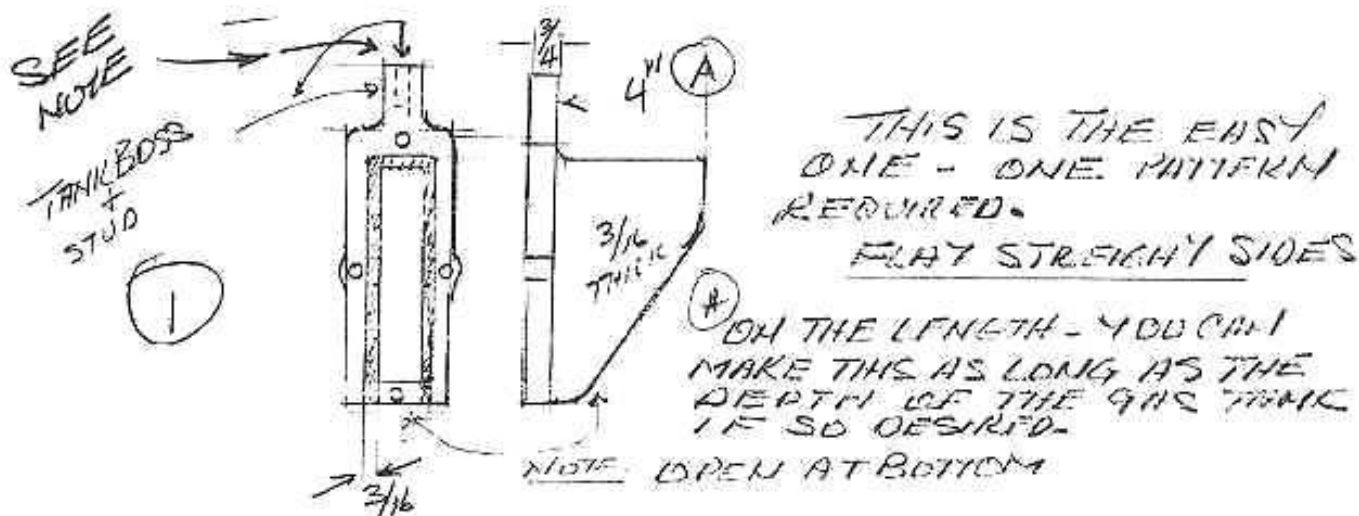
alone, my Mrs. passed away seven years ago of cancer. The past three years I have passed the time of day and nights by building ship models (Circa 1800-1900) and have turned out some pretty good ones - darn little house is full of ships & cannons, and, of course, some of my old Racing Trophies.

Yes, I remember Bill Tenney. He and Paul Wearly were top competitors. Think the last time I saw him was about 20 years ago - forgotten where - maybe Florida or Kansas at the Nationals. I ran a PR and a CS, both Hydro and Runabout. Flipped the Hydro when my steering wheel came off right as I came out of the first turn and, no kidding, I was in second place with Jack Maypole right on my transom. Tenney was a nice, tall blond fellow - not sure but I think he got some fuel from me "CHRIS-GO". I used to haul about 50 gallons around on my trailer along with 2 boats and 3 engines. By the way, the Hydro was a brand new 3 point "C" built by Dick Neal. First time in the water, steering wheel shaft nut was finger tight. A couple of years later I sold the Hydro to Bud Wiget along with some F parts. Bud never spoke to me again. I had tried to fiberglass the deck and made one heck of a mess out of it and he had a heck of a time getting the glass and resin off.

Now, let's see, you mentioned stacks for your Big 4. I don't recall stacks for that engine. I did not use factory stacks on my 4-60 or X - made my own and also used Procter's. They are not too difficult to come by if you are at all handy with household hand tools - yep! You make a simple white pine pattern - don't forget the shrink (3/16 to the foot, I think). You can even make it on one pattern if you want - both sides the same with allowance for tank mount boss, just make the boss longer than required for the low cylinder and cut off later. There is very little machining - just drill and tap and you can surface the mounting flange on a sander or with a body file. I'll sketch 3 types. Oh, one thing, best not to mount the rear of the fuel tank to the stacks - too much weight and vibration - make a support bracket from the tiller bar up to the tank - a bolt on - bar to tank mount. Use a gasket for base pattern and add a little meat!

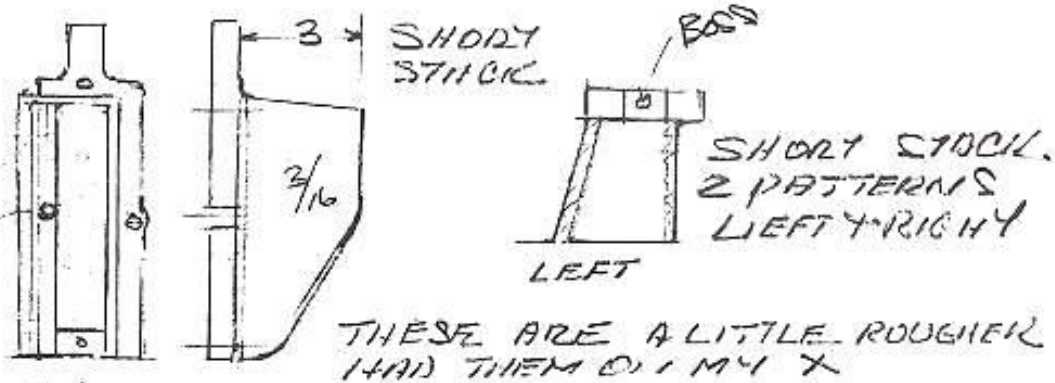
Any foundry can cast them up for you and should not charge too much. The pattern will do for a few - it doesn't have to be too accurate as it is almost all flat and can be cleaned up with a good file by hand. You will laugh but I used to pay about \$8.00 for a pair of castings. One thing comes back to me. I gave a pair of patterns for a Speeditwin to Clyde Wiseman, Wisco Piston Co., about 20 years ago or more. He had a foundry in Wickliffe, Ohio just outside of Cleveland. Heck of a lot of good that thought will do, just tossed it in.

You might ask around - Bud Wiget last I heard was retired and in Florida. He used to have F parts out the ears. Held the F record for a few years. Randolph Hubbell of Rosemead, Calif. also made parts but I do not recall anything for an F, all PR and later Mercury. There were several more, but I'm sorry I can't remember - too many years.



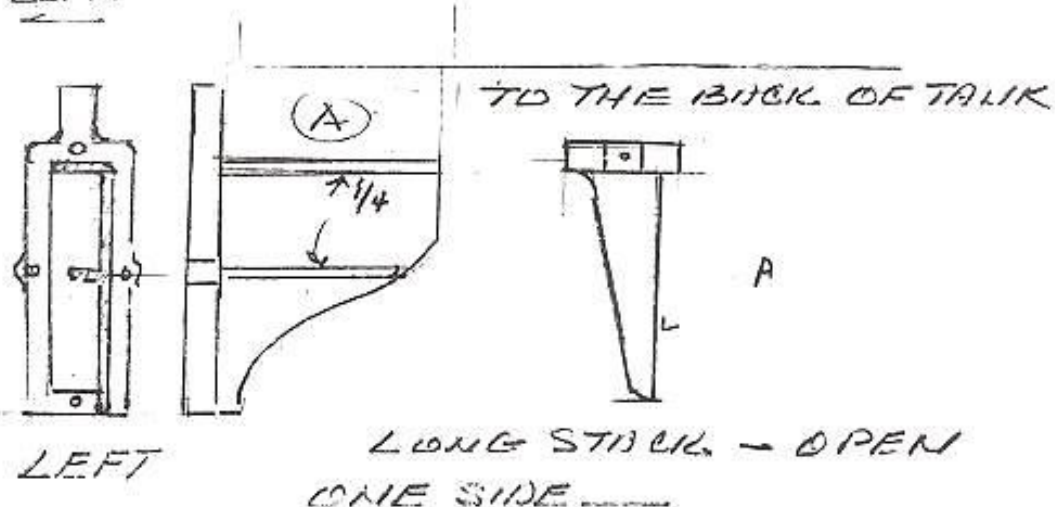
2

NOTE -
MOUNTING STUD
IS ON INSIDE
OF STACK.



THESE ARE A LITTLE ROUGHER
HAD THEM ON MY X

3



EASY PATTERN TO MAKE BUT
REQUIRES LEFT & RIGHT.

Drawing isn't what it used to be, but maybe you can get the idea. Base (mounting flange) use 3/4 white pine and the sides, I used to use 3/16" aircraft plywood - as for the fillets - pattern marker's wax will do the jobs. Or if you can find small molding it will work well glued in - sand up smooth and give the pattern a couple coats of shellac and rub down with steel wool - and you're in the stack business!

Better button this up-8 pages-but I just sat here and chatted via my Bix Pen. Also, don't forget when you use stacks the water outlet that cools the stack muffler is cut off (closed by the stack) so as you can see from all pictures of P, C's, PR, etc., the outlet comes off the top of the cylinder.

Read some more - a good many names came back to me as I read, some darn good outboard men were mentioned in all the books you sent. Those were the days - now I can hardly start my lawn mower and have to rest if it doesn't start on the third pull. That's all, Tom.

Bob:

So far no letters on the old Evinrude. It's pretty dirty and some rust on the cast iron. I have not been able to get into the garage as it floods every time it rains - 6" of water inside, also all around my house. Need a flat bottom boat to get in & out. I bought this little place 6 years ago during the summer. I had to have a place to be alone and just sit - and I do mean sit! After the first winter I knew why the Realtor was so eager to have me move in!

LETTERS TO THE EDITOR

WE'RE NOT GETTING OLDER----JUST BETTER

It has taken me a long time to prepare myself to admit that my products were antiques. In fact I still have the first letter I ever received suggesting the stuff we were making might be antique. From Mr. Hawie, dated Oct. 13, 1960. We had just won the APBA National Championships with my version of the SR so I thought it was enough of a joke to frame the letter and hang it on the wall. This was the last championship the old baffel type engine ever won; the Konig with the flat piston and the 50% increase in compression ratio that this piston allows was just too much engine. I have converted a PR to the flat piston and the 12:1 ratio and am getting 60 hp at 7500 without a tuned exhaust so may be getting back into the ball park. This has to be a "Labor of Love" now, as the pie is split too many ways to consider profit in the manufacture of a racing outboard motor. Randolph Hubbell.

Want to put a little
Zip into your tired PR?
Here's Randolph Hubbell's
recipe for success!



FOR PR TYPE ENGINES



FLAT TOP - LOOPER KIT



NEW HOPE FOR HOPELESS COILS

I recently received a letter from Wells Mfg. Corp., Fond Du Lac, Wis., that indicated a Mr. Geo. Paunder, 1520 High School Rd., Sebastopol, Calif. 95472, specializes in Magneto and Coil rewinding. Frank Schlacter, Wisconsin.

MAYBE JOHN HAS AN IDEA HERE

Dear Mr. Harrison: I received your letter a while ago and want to thank you for letting me be in the Club for one year for free, and still would like to be in it for years to come, and want to pay my dues like all the other members. I have a steady job of mowing lawns in the summer and will be able to keep up my membership. I haven't received my magazine as yet but am looking forward to reading it. I might get another motor from my uncle to fix. He is going to give it to me. I enjoy fixing them. I was wondering if anybody is selling engines down there and am interested in buying them to fix if I can and would pay shipping costs. I am interested in Club activities and would like to know what you do at meetings. Be looking forward to hearing from you again. Sy Morris.
age 11



January 25, 1973

The Antique Outboard Motor Club
2316 W. 110th Street
Minneapolis, Minnesota 55431

Attention: Mr. Robert Brautigam
President

Gentlemen:

I wish to thank you for your letter of January 6 and the accompanying reprint from the Antique Outboarder Magazine, describing your first national meet.

I regret very much that it was necessary for me to miss the meet. I had already made plans for my wife and me to take a trip to Europe. We left on the day that your meet opened.

The photographs contained in the magazine reprint brought back some fond memories. On many of the Johnson engines shown in the photos, I personally participated in the design of the unit or some of the major components. Some of the models I designed in the basement of my home in a preliminary way before introducing them as a proposed program.

I joined the Johnson organization while it was still "Johnson Motor Company" in 1933, and was put in charge of the outboard motor engineering when Outboard Marine Corporation was formed in 1936. Obviously, I have a great sentimental attachment to the "antique outboard motors." The only difficulty is that the designer is also an "antique".

I hope to be able to attend another of your national meets if you should decide to have one. Thanks again for your consideration in sending me the reprint.

Very truly yours,

A handwritten signature in cursive script that reads "W. C. Conover".

W. C. Conover
Vice President and Division Manager

ac

cc: W. J. Webb



The beginning of our second 50 years

SOUNDS LIKE A DAVID & GOLIATH DEAL



At left is a special race boat powered by an inverted 4-60. The boat raced against Gold Cup competition at Lake George, N.Y., in 1934. The boat is obviously home built and when the engine fired, the driver was thrown back in his seat. Bud Ridings.



At right, 16 cylinder Duesenberg, 1934 Gold Cupper "NOTRE DAME".

WE'RE ALL ANXIOUS TO SEE PHOTOS, AT LEAST

Mr. John Gould
Membership Chairman AOMCI
4707 Massachusetts Ave.
Indianapolis, Ind. 46218

Dear Sir,

I believe Dick Rees will be a valuable addition to our Club.

He is an old hand at Stock Outboard Racing and is the National high point winner in Class "D" Stock Runabout and placing high up in the CSR class. Dick builds all his boats and also builds Class A, B, C and D runabouts for a favored few (AOMCI's Dick Hawie for one). He has just completed a 1929 design "BULLET" for me, on which I intend to run my SR-45 Johnson and my 1930 racing Speeditwin at the Club regattas (See the April 1970 "Antique Outboarder" for the BULLET plans).

When I assemble boat, motor, controls, etc., will send a good picture to Bob Brautigam along with the notation that Dick will build these hulls for Club members. Incidentally, Dick's very small son named it "Daddy's Fat Boat", which it is in comparison with Dick's racing hulls. Yours, Mort Daller.

CLUB MEMBERSHIP CHAIRMAN NEEDS RESTFUL CRUISE

Sallie, Jill (12 yr. old #5 child) and I are considering seriously a six week jaunt to the British Isles & Eire starting on June 14 on the MS FRANCE and winding up back in NYC on July 25...so things may go to hell next summer. Will impress some poor soul here at the Office to take over...just like the British in the War of 1812. Sallie was last abroad in 1937 and my only excursion abroad was First Class on a moldy old Liberty Ship in WWII as a fearless U.S. Army Ship Transportation Officer (Cargo Security). As highest ranking Army Officer on board (2nd Lt.). I, of course, received preferential treatment fit for Gen. MacArthur being dealt the worst cabin...it was a hell of a lot better than being on land, I'll tell you. This all-expense cruise covered such points of scenic interest as - Honolulu (didn't land), Eniwetok (didn't land), Philippines (didn't land), Ulithi (did land, nothing to see), Okinawa (did land, didn't like until Harry dropped A-bomb) and beautiful Saipan where we took on bunkers to get the old rust bucket back to SF. A trip on the MS FRANCE sounds like more fun. The people here in the office say I better take along the Johnson A-25 in case we hit an Iceberg a la Titanic or run into the Andrea Doria.

Continued next page

NICE TO KNOW OUR CORRESPONDENCE EFFORTS ARE APPRECIATED

Dear Mr. Webb: I want you to know that I appreciate your interest and help with your information on my antique Johnson outboard motor. I had an offer of \$90.00 from Indpls Boat Co. for it and sold it. I thought that would be better than shipping it out of state. Thanks again for your kindness. Yours truly, Fred Dunnington.

Dear Sir: I had inquired about parts for my 3.3 H.P. Evinrude and you gave me the address of Mr. Harry Stern. Well, I guess I was in luck as he did have the parts of which he said were the last. I really do appreciate what you have done for me. Thanks again! Raymond E. Dwyer.

Dear Mr. Brautigam: I wish to thank you for answering my husband's inquiry letter pertaining to my father's "Johnson" J-25 outboard motor. The information received was most interesting and greatly appreciated.

My father (deceased) was an avid fisherman here on Van Auken Lake and the motor is a very dear keepsake. Again, thank you. Mr. & Mrs. C. Feltz.

GOT A CUCKOO IN YOUR NEIGHBORHOOD ? ? ? ?

Everyone who has operated an outboard to any extent has seen, and maybe even had contact with the Boating Cuckoo who, through ignorance or cussedness, has made life miserable or even unsafe for other users of our waterways. This has gone on for years.

The results of said cuckoo's antics have been adverse legislation at every government level, legislation that unfairly restricts or even shuts off the enjoyment of the great majority of sensible boatmen, people who regularly use "Common Sense Afloat".

Now legislation has its proper place in regulation, but widespread instruction in all phases of correct boat handling is far more effective; and that is where YOU, Mr. AOMCI member, come in.

As true lovers of ourboard motors, you AOMCI members and especially chapter members, certainly know at least as much about the right way to operate outboards as anyone else in your area. Also, YOU are probably one of the best known boatmen around. Hence, YOU are in the best position to lead the way in teaching outboard owners of all ages the best way to handle boats.

So get with it, you guys. Carry the idea of "Common Sense Afloat" to boaters in your area. Work with the local United States Coast Guard Auxiliary and/or the Power Squadron. These two organizations have done great work for the boating public. They need and will use all of the help they can get from people like you.

If you aren't already active in one of these groups, think about joining up. You will find some mighty fine people, and more than likely, some that are just waiting to talk about Antique Outboards with someone who knows, like you.

Evinrude Motors has made available, at no charge, two fine pamphlets on the proper use of our waterways. One is a 48 pager - "Outboard Boating Skills" - the other, "Let's Protect our Waterways", 36 pages. AOMCI members can procure copies for distribution to boating groups by writing Public Relations Department, Evinrude Motors, 4143 North 27th Street, Milwaukee, Wisconsin 53216. Jim Webb.

GOOD PRICE ON DECALS FOR MIDDLE AGE JOHNSON MOTORS

*The Antique Outboard Motor Club
2316 W. 110th St.
Minneapolis, Minn. 55431*

Attn. Mr. Robert Brautigam

Dear Bob:

*Thank you for your letters of the 8th and 17th of this month.
Here is a list of original factory decal sets, listed by factory*

Part Numbers, some do not have the Model Number of the engine, a few are not now available from the factory. Most of them are Middle-Age engines. These will be mailed Postage Paid at one half the last factory price quoted here. Hope this will be of some help to members and perhaps their friends who do not have Antique engines.

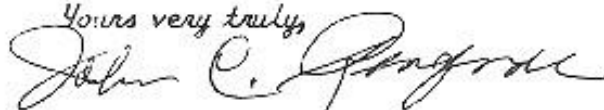
Quan.	Part Number	Price	Model Number of Engine.
3	376756	\$5.60 ea.	
2	376764	\$1.20 ea.	AD 10-10M
2	377419	\$1.90 ea.	CD-15
1	377436	\$1.80	FD-12
2	377437	\$2.20ea.	FDE-12
3	377425	\$2.10ea.	AD-12
2	376761	\$4.20 ea.	RD 17-18C RDE17-18C
3	377046	* \$1.00ea.	RGE-18 thru 18C
1	377247	* \$3.00	QD-10 thru FD-10 thru FDE10-thru PD10-thru RDE-16 thru RGE-18 FD10- thru 10S
1	377045	\$1.85	
1	376758	\$5.30	QD10 thru 14A
1	376761	\$4.20	
3	376760	\$4.80 ea.	RD10-16A
2	378138	\$4.80ea.	
2	379056	\$8.70ea.	JW10 thru 12R
1	377835	\$11.25ea.	FD-13
1	377055	\$4.60	RD-19
1	377617	\$.65	RDs-20
1	376763	\$2.30	CD10 thru 13A
1	379780	\$2.30	QD20-FD13-RD-21 V4-11-11B-V4S11

Also have many New Older Johnson parts such as PO Cranks- Bearings, Gears, Housings, etc. for others that have not been identified yet. Will try to get up a list and send you later.

John C. Renfro
PO Box 4037
St. Andrews Station
Panama City, FL 32401

Thank you very much.

Yours very truly,

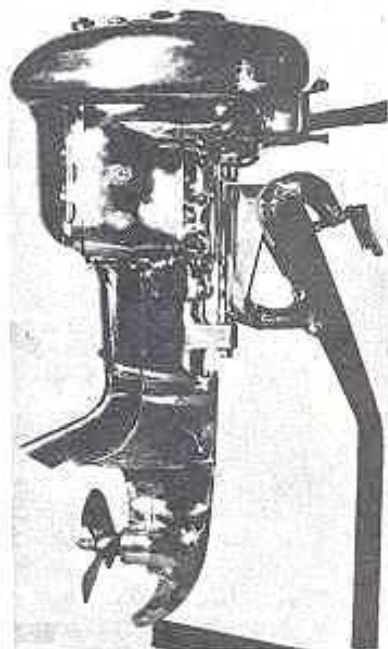


See attached snapshot. Sallie objected to oil leaking out, so I stuck aluminum pie pans under the A-25 & the LT-37. This helped some, but she still isn't enchanted...says I can keep these two or any other 2 in the Family Room (only 2 at a time) or else get rid of the Gum Ball Machine or The Cash Register (visible to rt. of fireplace) and add 1 more motor. Guess I'll keep the rest of the motors here at the office.

Editor's note: John well deserves a seagoing vacation for the fine job he's done for the Club (hope they let him land this time).



AN INTERESTING PROTOTYPE BY BENDIX



Here is a picture of a 4 cylinder outboard motor. Working for Bendix gave me the chance to unearth this picture. Here is what I know: it's a Bendix Motor, made by the Marine Div. of then South Bend, Ind. I believe the year was 1938. The HP and CID are unknown but it was felt to be in the 15 HP range with a 28 to 30 CID. This was a prototype and only one was made. It was air-cooled, as other Bendix motors. The story I got said it was never put on a boat but run only in a tank. It was 4 cyls. in line and I think it's safe to assume the bore & stroke would have been the same as the single and twin, 2 1/16 x 1 1/2. It appears to have the gas tank from the twin. An interesting note, anyway, to add to the Bendix family of outboards. I will try to search deeper to see if anyone knows any more about the 4 cylinder. Sam Vance.

THIS 4-CYLINDER MOTOR
... Was operated only in
test tank waters

Outboards Thrill Panama Sportsmen

Reports from Cristobal and Panama City indicate great interest being taken in outboard motor racing both in the Republic of Panama and in the Canal Zone. A feature of the fourth of July celebration at Cristobal was an outboard free-for-all race which attracted many entries. The thrilling speed of the winner, Miss Honolulu, a step boat powered with a new Johnson Big Twin motor, has prompted local sportsmen to lay plans for a series of outboard races to be held in the near future.

Photograph by G.M. News

1928



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**UNEQUALLED Outboard
Motor Performance—Plus
Multi-Flexible Control**



**3 Speeds Forward...
Neutral & Reverse**

Unboiled boating pleasure is yours when your boat is powered with a Caille Red Head—its dependable, unequalled power will amaze you. Its ease of handling, through Multi-Flexible Control, will add new thrills to your boating pleasures. Caille Red Heads are the only outboard motors with this patented feature—three speeds forward, neutral and reverse. Electric start, too, if you wish! See complete line at your dealer's. Write for 1939 Catalog.

CAILLE MOTOR COMPANY
4536 Second Blvd., Detroit, Mich.



1930



OF HISTORICAL INTEREST

..... *W J Webb*

--The **BIG IRON**

PART ONE

W. J. Webb - Historian

This is about the larger than 30 cubic inch piston displacement outboard motors produced from 1928 on through World War II. Compared to their descendants of today, these motors were very heavy for the power developed. One reason for this is the fact that none of the early motors used the die cast processes so prevalent today. And the heaviest parts were the iron cylinders, hence the name "Big Iron".

Leading off was the 1928 Elto Quad, about which plenty has already been said - it was a success - driven by Eldon Travis of Peoria on a Boyd-Martin Bullet it broke the unbreakable (for that day) barrier of 40 mile per hour by setting an official mile trial record of 41.748 mph at the Midwest Championship Regatta in September of 1928.

There are many angles to be considered when evaluating the achievements of a motor. Most are matters of opinion, "judgement calls" as they say in football. So the best evaluating point would seem to me to be something where all conditions are as nearly equal for all of the motors being evaluated as is possible. The mile trial record seems to present the point where most conditions are as nearly equal as evaluating conditions are able to be. So I will only mention, as top achievements, the Official Mile Trial Records. All records mentioned have been taken from American Power Boat Association published figures.

Before I go further let me say that every record that will be mentioned here has been broken many times since WW II. Why, the little Midgets are up in the high 50 mph bracket now and may well have passed the 60 mph mark before this gets into print. Remember, while I may stray briefly into the present, this article is intended to be only historical.

Johnson Motors, which had enjoyed two very successful years with its Big Twin in 1926 and 1927 saw its top position being threatened by the improving Evinrude Speeditwin, and responded by bringing out The Giant Twin Model-T in 1928.

The Giant Twin had a bore of 3" and stroke of 3½". It was the largest, most powerful motor on the market, weighing 110 pounds (or better) with a claimed horsepower of 25.75. It was a brute for straight pulling power, but accomplished very little in the racing field. It went out of production early in 1929 when Johnson introduced its fine line of gear driven rotary valve motors, which made the Giant Twin obsolete.

The 1928 Quad and Giant Twin brought out a rash of roomy and substantial (for that day) family type runabouts, even a few cruisers. Both of these motors could pull plenty of

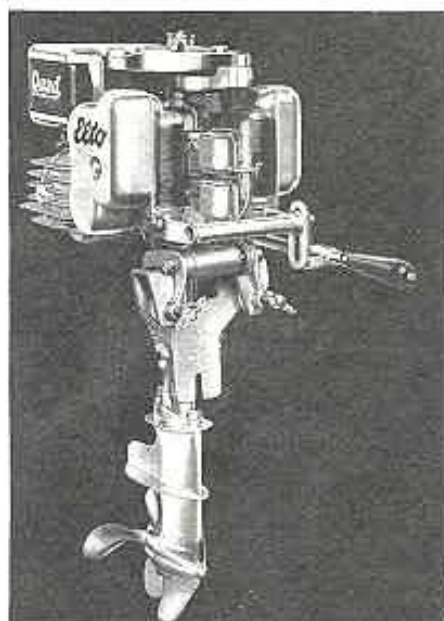


Ever wonder what an old, antique outboarder did when he was young? The above photo sheds some news. 33 Years ago, before the United States got into WW II, Antiquer John Harrison of Miami was racing Big Iron outboards every weekend. The picture shows young John fiddling with a sparkplug. In John's own words:

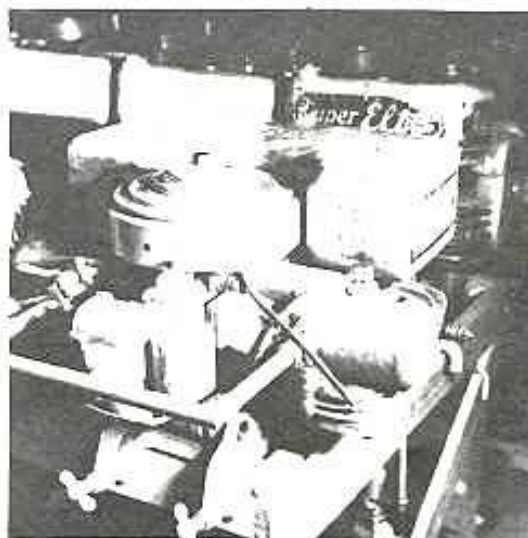
"I am including a 1940 newspaper picture taken at the old Miami Quarterdock Club where we used to race service boats every Sunday. I had just won the deal for that afternoon in my old 'Sea Hawk', built by Barker-Todd of Miami, with a muffler-less Johnson V-65. The boys on the dock are friends and competitors in the same race. Bob Ikerd on the left, now deceased, went on to considerable fame as a doer of unusual things like, for instance, running a 33 HP Evinrude from Key West, 90 miles over open ocean, to Havana and ending up in jail because he had no papers. Sort of like 'Wrong Way Corrigan'. I also remember him well, winning the Around Miami Beach Race in a 266 Hydro in the '50s.

It was so rough that he tore a spronson completely off the Hallet hull- and finished the race in 1st place anyway. Fantastic performance! Bob died of cancer about ten years ago. The boy on the right is George Fay, who is still an accountant here in town. Old John in the boat was a 19 year old kid."

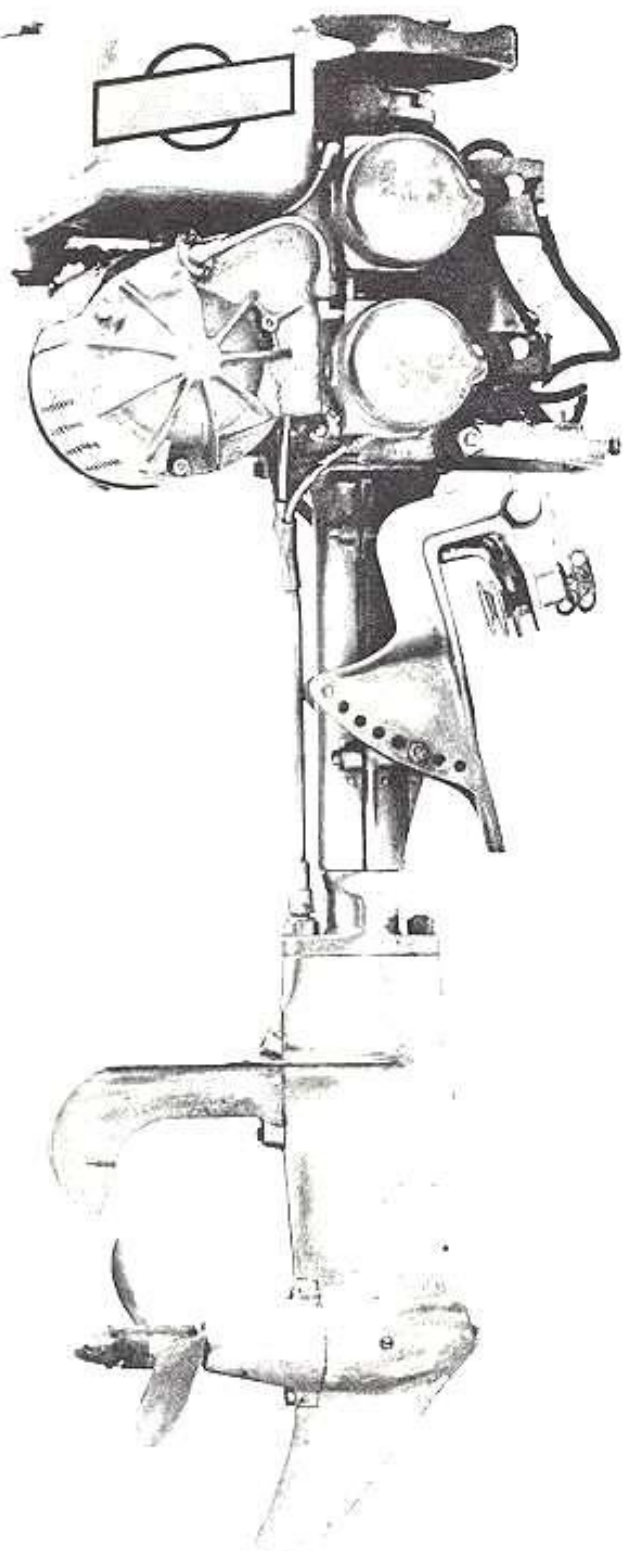
Hmmm- 33 plus 19 makes John 52 now. Take it from one who knows, 52 is not old! Just you wait 20 more yrs like me. Oh to be 71 again! Good looking kid wasn't he?



By 1929 outboard motors had come into their own. This four-cylinder Super Elro had 25 horsepower



Powerhead of the Johnson Giant Twin. Cylinders measure 25" end to end.



1928 ELTO QUAD, 18 HP

load, but before 1928 was half over, the demand for more power was heard.

Ole Evinrude responded by increasing the 1929 Quad from 39.6 to 49.74 cubic inches piston displacement with a bore of 2 3/4 inches and a stroke of 2 3/32 inches. It weighed 115 pounds.

The 1929 Quad was the first motor to show an aluminum housing which completely protected spark plugs against rain and spray as well as hard knocks. It vastly improved the motors' appearance and was the first step in streamlining and improving the looks of what had been the quite plain, if not homely, outboard.

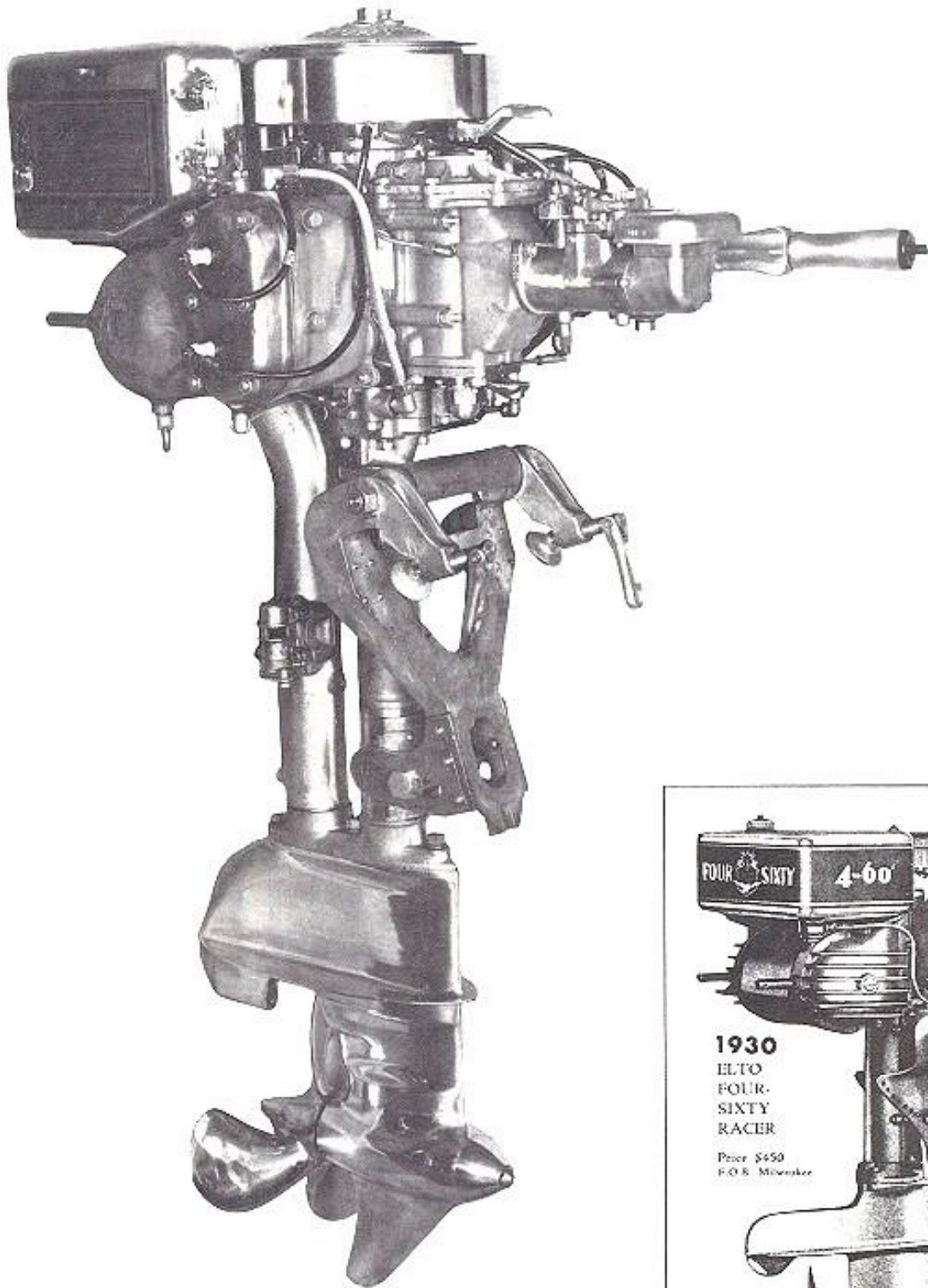
The 1929 Quad was a great load puller, but did not enjoy the success of its 1928 predecessor. As a matter of fact, while the 1929 Quad could drive a Century Traveller runabout with four passengers noticeably faster than the 1928 Quad, I don't recall that the 1929 Quad ever broke an official 40 mph on a hydroplane.

One of the main reasons for the decline of the 1929 Quad was the fine all around performance of the Johnson 32 (Model V), an opposed 4 cylinder, 39.86 cubic inches that stepped out and stayed in front of everything in the field from its unveiling in Florida in March until the Evinrude-Elto 4-60 finally took over by a whisker in 1930.

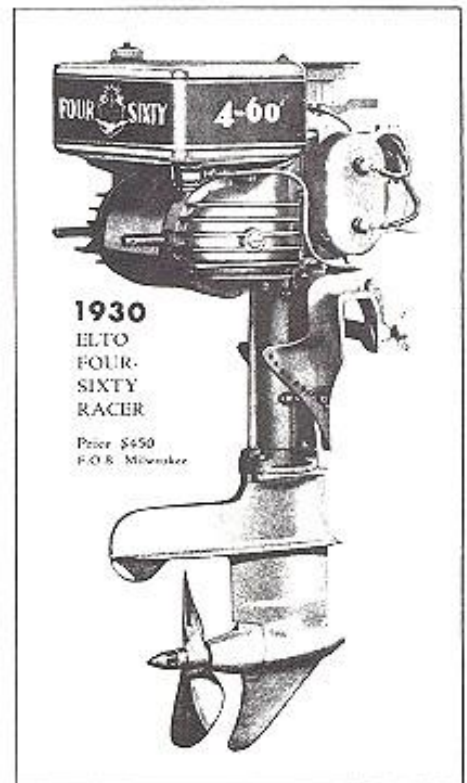
The Johnson 32, Model V, finally came to be produced in two versions - Model V or VA for general service, and the VR for racing. In 1929 both the V and VR used a single barrel carburetor. In 1930 the VR used a dual rotary valve intake with 2 carburetors. (See pic page 19, April 1971 issue.) In 1931 the VR returned to a single Vacturi carburetor and was rated at 36 hp.

H. G. Ferguson hit 49.48 mph with a Johnson VR on a Crandall Comet at Balboa, California in December of 1929. This record stood as the best mile trial until Ray Pregoner drove his Elto 4-60 to 50.934 mph on a Century Hurricane in September 1930.

The Johnson 32 (Models V and VR) used a gear driven rotary valve intake that was the best power producer developed up to that time. The boys in-the-know could and did Soup the 32 to performance peaks that no other engine, then in the field, could reach. The 1929 Johnson weighed



1929 Johnson Sea-Horse 32
Model V-45



138 pounds and sold for \$325.00. There was no such thing as certified horsepower in those days. The 1929 Quad was rated at 25 hp and the Johnson 32 at 26 hp.

The biggest outboard story to come up in 1929 was the formation of Outboard Motors Corporation (OMC) through the merger of the Elto Outboard Motor Company, Evinrude Motor Company, both of Milwaukee, and the Lockwood Motor Company of Jackson, Michigan.

Mr. Stephen F. Briggs, then Chairman of the highly successful Briggs and Stratton Company of Milwaukee, was the architect of the merger. Mr. Briggs became Chairman of the newly formed Outboard Motors Corporation, Ole Evinrude became President and Jake Stern Executive Vice President. Principal offices for OMC were established in the Evinrude plant, where a new and large (for those days) two story office building and factory addition was erected.

In 1936, Mr. Briggs and Ralph Evinrude, now OMC President following the death of his father in 1934, having purchased control of Johnson Motor Company of Waukegan, Illinois, merged Johnson with OMC to form Outboard Marine and Manufacturing Company. Mr. Briggs was Chairman, Ralph Evinrude President and Jake Stern Executive Vice President of the new company. Evinrude and Elto continued to operate out of Milwaukee and Johnson out of Waukegan. Lockwood was dropped at the end of 1930. Evinrude-Elto and Johnson have remained completely competitive. The whole story is too well known to merit more attention than this.

1930 saw the birth of electric starting, a most needed feature that nearly died, in fact was still in a state of suspended animation between the onset of WW II and the mid-fifties. As motors got larger, more and more people, especially women, had difficulty in starting and handling them. Mrs. Evinrude said many times that we weren't going to sell many big motors until women could start them easily.

Several starting devices went into development at about the same time - electric starting, compressed air motors, the inertia starter by Bendix, in which a series of weights were hand turned up to a certain speed and then forced into engagement with the fly-wheel, a wind up spring starter, a lever attached to a starting cord that gave quite a mechanical advantage, ever a shotgun shell starter.

This last would have been great for kids, or anyone else who liked noise. A shotgun shell was exploded against a piston which either spun a jury crank that was supposed to turn the main crankshaft through gearing. During WW II the armed forces seriously considered the shotgun shell type starter. However, the shotgun shell starter added needless weight, complications and cost and was not as reliable as the rope.

The inertia starter was actually pretty well perfected and put on the market, but it never did catch on, principally, in my opinion, because it took too long to get the inertia elements wound up to speed, and if the motor failed to start, the whole wind up process had to be repeated. Besides the inertia elements were heavy and bulky and the crank was in the way. The inertia type starter was widely used on airplanes for a while. Evinrude-Elto built and sold a few Eclipse inertia starter equipped motors of various sizes, but lack of demand caused early abandonment of this feature.

From 1928 on, when Mrs. Evinrude began to push him for an easier quicker way to get motors started, Ole Evinrude had been checking into the electric starting on his Packards. Packard used the starter-generator unit built by Owen-Dyneto of Syracuse, N. Y. Alternators were not known then.

The Owen-Dyneto unit looked good. We tried it out and it worked well in the relatively cool Fall weather. But it was designed for automobile engines which (in those days) almost never ran above 2500 rpm, and usually well below that. In 1930 outboards were running at 4000 rpm or faster. These starter units ran very well in the early cooler Spring, but when the weather got hot, the high outboard rpm caused the Owen-Dyneto unit to run well above its intended operating heat range. This brought on all kinds of troubles - insulation and relay failure, armature distortion, etc. Not every starter failed by any means. In fact, I did lots of running with Owen-Dyneto starters over several years and never had a failure. At a New York Motor Boat Show in the late '30's one kindly gentleman approached me saying something like, "I want to talk to you about

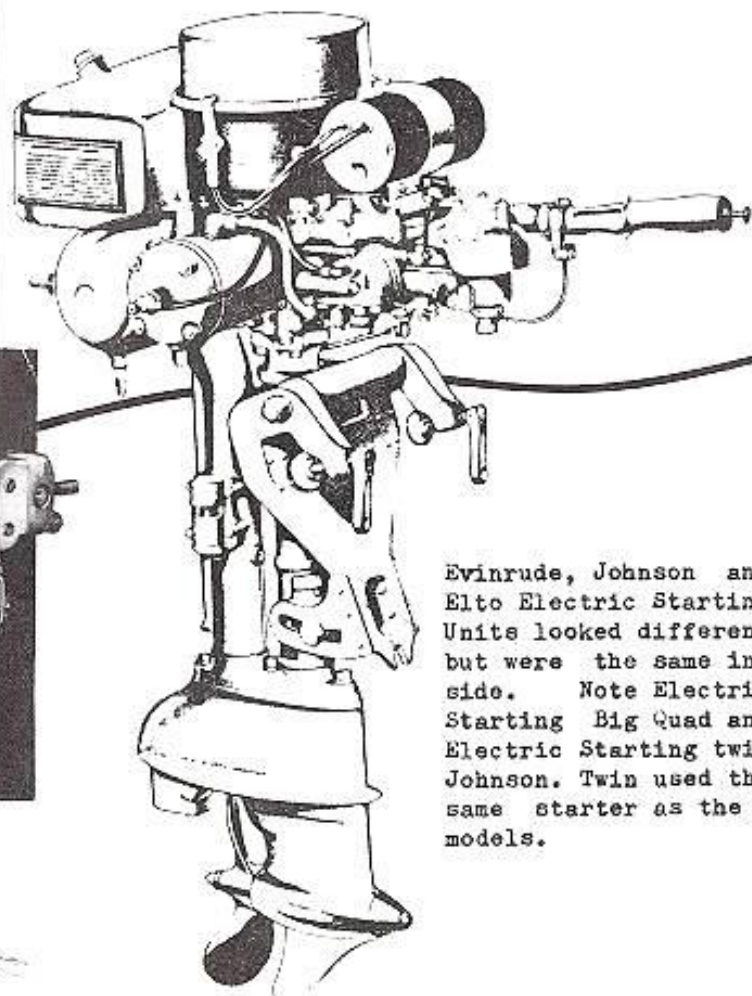
There's no end to the thrills and joys of owning a Quad-powered boat.

**Elto
Quads**



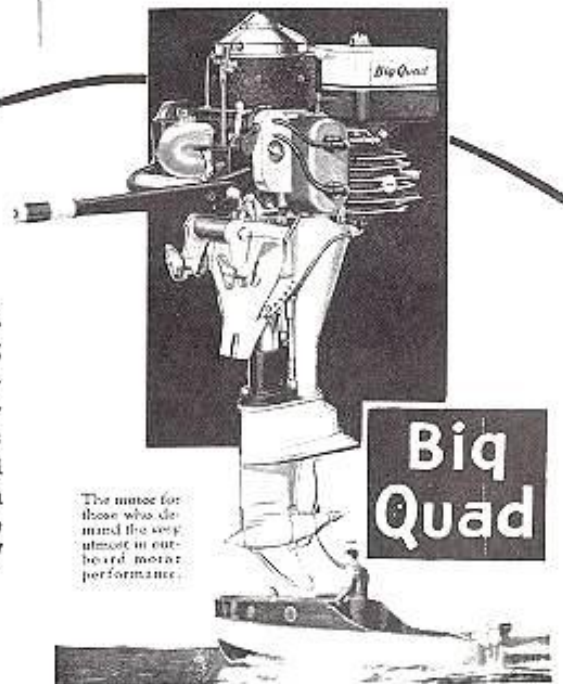
The Motors Supreme!

HERE'S sport for you! Speed that thrills you — smooth, vibrationless power that brings new joy to boating. Cruiser, runabout, family boat — a Quad for every size and type! Three famous Elto "Fours"—from 18 H. P. to 40 H. P. Look them over — and choose your Quad now for a summer of joyful pleasures.



Evinrude, Johnson and Elto Electric Starting Units looked different but were the same inside. Note Electric Starting Big Quad and Electric Starting twin Johnson. Twin used the same starter as the V models.

Models SE-50, PE-50



The motor for those who demand the very utmost in outboard motor performance.

**Big
Quad**

The Big Quad, 40 H. P.

THE pinnacle of outboard motor performance belongs to the owner of an Elto Big Quad. Ample power for largest outboard cruisers — flashing speed for big spacious runabouts. Rugged, sturdy construction and vibrationless operation mean long life. The Big Quad has all regular Quad features and refinements. Cord starting model, \$375.00 Electric starting model, \$445.00

my electric starting Quad". I braced for the worst and then nearly went through the floor when he told me that he had run his electric starting Quad for six summers and it was still going strong. He was going to buy another and wanted to see what new things we had put on.

However, enough units failed so that the electric starter got a black eye that almost killed the idea. Many dealers, particularly in areas where summers were hot, lost confidence in the electric starter completely. Evinrude continued to sell electric starting units until shortly before WW II. We spent a lot of money, making a lot of changes and giving a lot of service, and by the mid-thirties had a pretty good unit, but it still wasn't up to what we wanted. So electric starting went into moth balls until the mid-fifties which saw the development of a really good electric starting system. With that the demand for larger motors rapidly developed and was well satisfied by all manufacturers. But that is another story.

The electric starting story wasn't all bad. We had always had trouble having motors stolen at the New York and other shows. 1930 was no exception. A thief picked up one of the display Electric Starting Quads after the New York show closed..but he wasn't too smart. It gave him trouble and he took it to our Connecticut Distributor, C. E. French and began raising the roof. French, a typical New England Yankee, got suspicious right away, checked the serial number, quickly recognized it as the one which we had reported stolen, and kept the angry "customer" engaged until the cops arrived. We got the motor back and the thief got jugged; something that might not happen today.

The failure of electric starting killed off the development of the larger motors for awhile. Starting a 40-50-60 cubic inch motor with a rope is no job for a woman or many men who don't have the knack or strength to give her tail a good fast twist. And a good fast twist is what it took to get a sure starting spark from the magnetos of 30-40 years ago, as well as getting a proper starting mixture of air and gas through the carburetor. Alnico, that marvelous alloy now in general use that puts more life into a magneto than was thought possible, wasn't out of the lab yet. Battery ignition gave a good starting spark, but the battery was a nuisance to carry, and even with a battery, rope starting was a harder job than many people cared to tackle. Also, the carburetion of 40 years ago was well below today's quality.

In 1930 Ole Evinrude brought out the Senior Quad in rope and electric starting. This was a square motor - 2 1/4" bore 2 1/4" stroke, just over 49 cubic inches piston displacement. It was hoped it would be a winner in Class E, and a serious challenge to the Johnson VR. This Quad was a great motor. It had steel rods, roller bearings, aluminum pistons and the crankshaft rotary valve. Horsepower claimed was 35. It later certified at 33.7. It was a great load puller, rugged and dependable, but it was never as fast as the Johnson VR.

Later on in 1930 when it became evident that the 49 plus cubic inch Senior Quad was not going to be a match for the Johnson VR racing wise, Outboard Motors Corporation put two Evinrude Speeditwins together with a crankshaft rotary valve and thus was the 4-60 born. This motor had a bore of 2 3/4", stroke 2 1/4", piston displacement 59.4 cubic inches. This motor came out too late to do much in racing, but Ray Pregelzer set a record of 50.934 mph with an Elto 4-60 on a Century Hurricane at Fox Lake on 9/20/1930. This was the top official mark of the year. The 4-60 used only battery ignition and raced in Class F.

On the same date at the same place, Dick Neal set a 47.490 mph Class D mile trial record with a Johnson 32 (VR) on a Century. The best Class E record was 44.489 mph set with an Elto Quad at the same time.

After the 4-60 had set the top speed mark, Johnson was put under considerable pressure to build a larger motor to recapture its racing lead. In 1931 they responded by building a relatively small number of 49.86 cubic inch motors that later became to be known as the XR. The XR had a bore of 2 21/32" and stroke of 2 1/4", an external rotary valve with single barrel Vacturi carburetor. Mostly the XR was a bored out, hopped up VR with no holds barred as far as porting, etc., was concerned.

Using the XR on a Century boat, Tom Estlick set a 56.525 mph Class E mile trial record at Salton Sea on October 17-18, 1931. On the same date and place, Dick Neal hit 51.725 mph Class D record with a Johnson VR, again with a Century.

On October 12, 1932, at Bay City, Michigan, Art Sauerberg drove his Elto 4-60 to the top outboard record of the year, 58.915 mph, using a Wagner boat.

After 1932 Classes D and E were discontinued as official racing classes, but the Johnson 32s and XRs were raced until the onset of WW II and after. Johnson discontinued manufacture of the XR after 1931. The racing people were much disappointed by the decision to discontinue the XR, but their pleas fell on deaf ears.

None of the people privy to that decision are now around, so we can't be sure of the reason. However, I knew Pat Tanner, Johnson's very capable Vice President for Sales, very well, in fact after we both retired, we became good friends. Naturally we talked about business and I deduced from our talks that there were two principal reasons why Johnson did not build a line of larger motors. First, Pat felt that the market for big motors was limited. Second, the development of a new larger line of motors would cost a lot of money that could be better spent where the larger sales and profits were. Concentrating on the smaller motors proved the correct decision as the Johnson line of fishing motors topped the field.

To be continued next issue.

FROM THE PRESIDENT, continued from page 7 .

A patient wife - oh yes - I was a very lucky guy. I was married to an angel for 27 years. Once she even put up with a 4-60 in the bedroom - no kidding! It was behind a screen in the corner of our bedroom. The Hydro was outside leaning up against the side of the house with a tarp over it. That was in Dayton, Ohio. She used to sit with me by the hour while I worked on my projects. It's a laugh now as I think back - once I was building a Runabout in an apartment. She came home from shopping, ahead of time. I had all the frame set up in the living room - transom, keel, ribs, etc., all clamped together - making paper patterns of the plywood planking. Furniture was all out of the room, piled in the bedroom on the bed, etc. I got a little talking to but not bad, how about that!

No, don't know John Toprahanian. The no. 1 "F" man in this part of the west was Henry Wright - passed away about 8 years ago. He was little known to the outboard group but to the Midget Race Car driver/owner he was the best - made up engines for Midget Racers. Had his own shop, a gun shop, and was a very fine machinist. He manufactured special cylinders & heads for the 4-60 - they were 75 cubic inches.

I have not seen "Pep" Hubbell for over 15 years. Worked with him for a short time in about '52 - the FR was on its way down then. My Maggie (wife) did not like the Los Angeles area (nor did I) so we moved to Fresno where her folks were and I opened my first boat & motor shop & store. It was a good one, best shop and parts dept. in the Central Valley - (too many parts hurt me) shop included - lathe 12" - mill - welding - prop repair, etc. and complete woodshop - 3 mechanics - the employees did better than the boss! All I did was work - work - work. Maggie took care of the office with the help of a part time bookkeeper - AH! But one thing for sure, there was no shortage of boats in the Clarke Family - cruisers, runabouts - hot rods - we even got away once in awhile to use them. Regards, Tom.

Editor's note: Tom Clarke, a gifted boat and engine builder, driver and writer would enjoy a letter or a visit. Your effort would be a day-brightener for both you and Tom. Thomas T. Clarke, 1222 E. Hampton Way, Fresno, California 93704.



XR and 4-60 Retired!

"Over hill" says OMC

Phoenix, Thurs., March 1, 1973

Evinrude will debut new Wankel outboard

Jimbo McConnell and Ted May will drive Evinrude's new rotary Wankel powered tunnel hull in Parker's 9-Hour Enduro Sunday, the first outing for a rotary engine on the racing circuit.

But the 300-horsepower plus Evinrude Wankel will not have the Lake Moolvalya course to itself, however, because Jim Jost, public relations director for Evinrude Division of Outboard Marine Corporation, said an identical Johnson rotary - powered boat also will be entered. The Johnson also is manufactured by OMC.

Jost did not identify the Johnson drivers, however.

McConnell and May won the 1972 Enduro with a piston - powered Evinrude.

OMC will have eight boats and 16 drivers in the race, and competing factory teams are expected to represent Mercury and Chrysler.

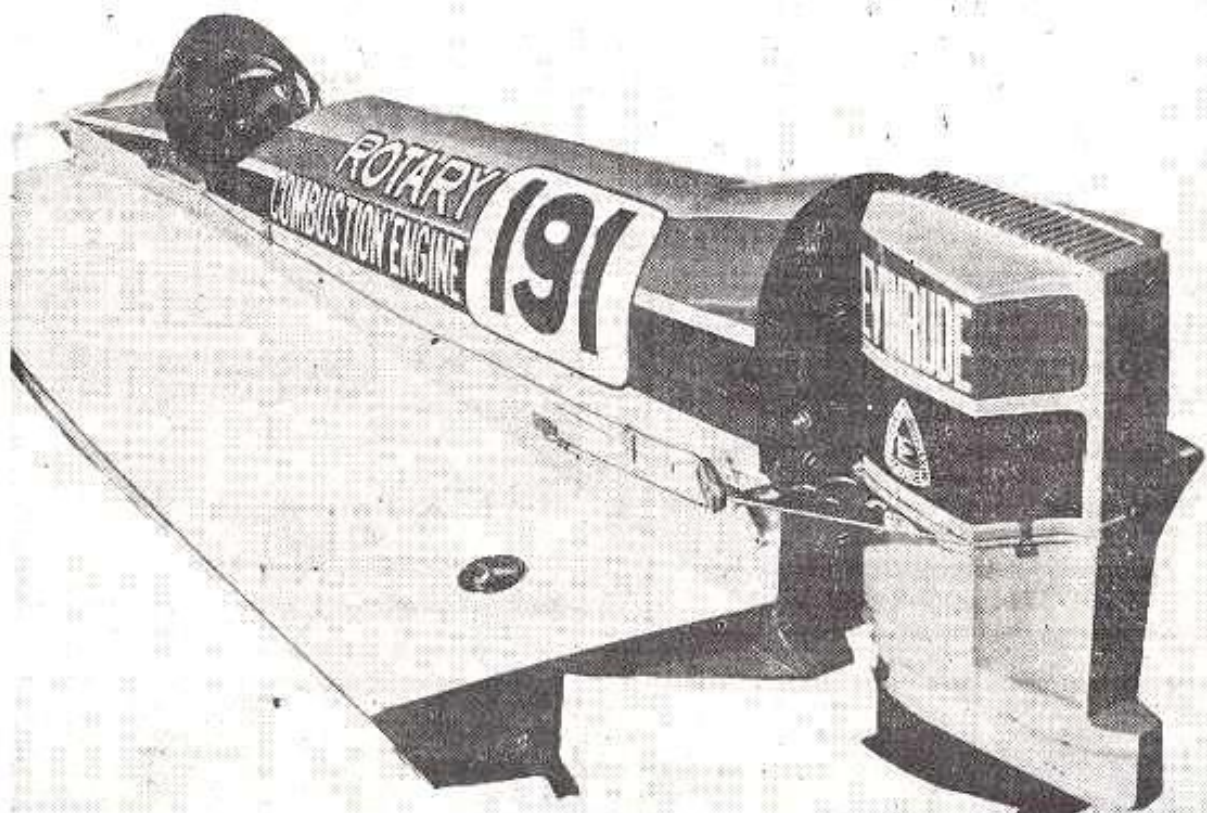
Race Chairman Gaston Van Hyfte is in Miami, Fla., where

the new motors were being tested to get clearance for the engines to run in the race.

It is estimated that the Wankels, which consist of four rotor units, will be capable of more than 300 horsepower. The engine is equivalent to 12 cylinders of a piston engine.

"The racing hardware we are about to disclose is uniquely different than anything we have raced heretofore," said S. L. Metcalf, director of marine engineering for OMC. "The engine and propeller drive is an integrated package designed to power the world's fastest outboard boats."

Metcalf said OMC does not disclose the horsepower of its racing engines. "But I can tell you," he said, "that this rotary engine has about two thirds more horsepower and torque than we are getting today from our best high performance piston racing engines."



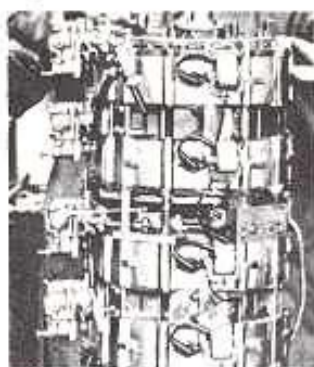
Revolutionary new Wankel rotary-powered tunnel hull boat Evinrude's Jimbo McConnell and Ted May will

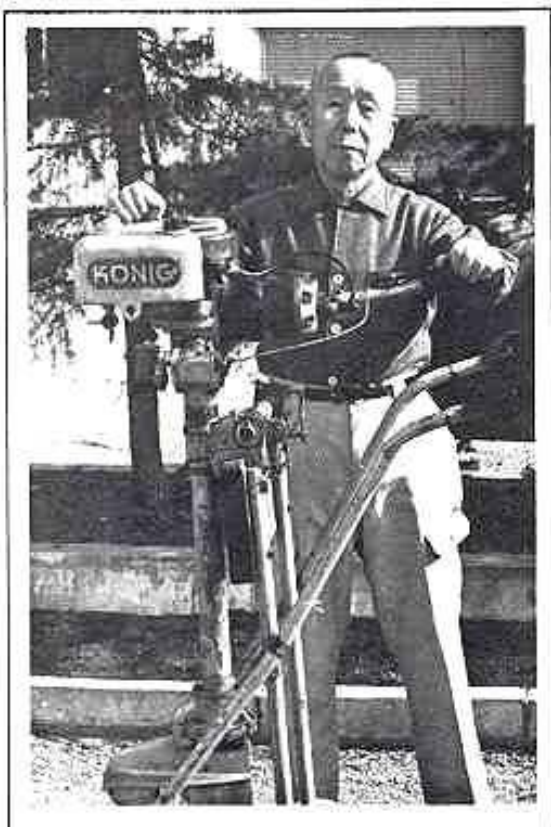
drive in Parker Nine-Hour Enduro on Lake Moolvalya along the famed Parker Strip.



PR Johnson out after 45 years!

Johnson and Evinrude will race OMC's new rotary powered outboard, above, in world wide events. Far right shows four rotor powerheads. Note four carburetors to left.





The author, Mr. Harada, shown with one of the motors which The Japan Motor Boat Association is testing at its laboratory. Motors from all countries are tested here. This one is a 5 HP Konig single.

OUTBOARDS OF JAPAN

With introduction by W. J. Webb

Back in 1964-5-6 when I was researching material for my book, the Pictorial History of Outboard Motors, I entered into a most interesting correspondence with Mr. Tsunayoshi Harada, the Executive Director of the Japan Motor Boat Association. Mr. Harada was most cooperative and helpful, and we have kept in irregular touch ever since, usually around Christmas time. Boating in Japan has been growing by leaps and bounds, due in no small part to Mr. Harada's efforts. So it occurred to me that Mr. Harada might provide AOMC members with some interesting comments on the progress of motorboating in Japan, and he certainly did. Here are Mr. Harada's own words.

PREFACE

After Christmas 1972, Mr. W. J. Webb, O.M.C., sent a letter requesting me to write "Outboard Motor History in Japan" for the Antique Outboard Motor Club Bulletin.

I was shocked, at the time, as if I came to be a comrade of so-called "the antique". I felt as if I suddenly found myself an old man with long white beard, and pictured that I began to have a long talk about Outboard Motor History in Japan as an old Santa Claus in an armchair, though I live a busy life but a peaceful one until now.

Next, I OK'd to Mr. Webb, asking some time for writing.

Taking up my pen, I found so many things I must mind - I must write, as an order, on the times when I was just born and cannot have any memory about. Month and Year, Name of person, description on motor, boat and etc. must be depended on the correct sources. Only tuning the context as romantic novels must not be granted. Moreover, the most important is differences in manners and customs on writings between your country and my country. Jokes will be lost. Long distance between us depress me in spite of the facts that we can talk by international phone readily and watch the actual scene on the Moon simultaneously on TV. This was my second shock.

Not overcome by two shocks, I have written this story. I shall shout "OH" when I glance at the printing - how foolishly I have written. Please forgive me, reader, and please read with your eyes closed - I will pray. May Japanese god bless me! I will invoke to the Buddhist temple or a Shinto shrine. Japan has a custom to worship Christ, Buddha, Shinto god, historical great men, foxes or monkeys. Much members are prepared in Japan for me to pray on your happiness.

This text is a trifling, poor in content, because Japanese Outboard Motor is poor in quality and quantity on history compared with your country's one.

January 30, 1973
Tokyo, Japan

T. Harada

I. BEGINNING OF MOTOR BOAT IN JAPAN

In Japan, Motor Boat was first manufactured in 1910. "Azuma No. 1" is first recorded in printed matter. Mr. S. Ikushima started to design at Tokyo Ishikawajima Shipbuilding Co. in December 27, 1910, and a launch was made on May 12, 1911. Boat was 24' in length, 4'3" in width and 3' in depth. Motor was made in America by Water Man Co., in 10-12 H.P. and 4 cylinder. The designer wrote that speed was 13 M/H. Another record tells that the same boat was 22 M/H in speed, but we prefer to believe in the said designer's one. But the correct record can not be known because of lack of official trial.

The same Ishikawajima Shipbuilding Co. made a launch of No. 2 boat, "Takiya" on May 26, 1911. Two boats seem to have been built at the same time. No. 1 boat was used at Kasumigaura and No. 2 was at Chuzenji-ko, Nikko.

On the same period, Mr. M. Hattori and Mr. B. Asai made two boats' launch at Ikeno Shipbuilding Co., Tsukishima, Tokyo, named "CHIGIKU No. 1" and "CHIGIKU No. 2" of 30' in length, 4'3" in width, 18 3/4 M/H in speed, which was inboard motor boat.

These are the beginning of Japanese motor boat and it is before manufacturing of Outboard Motor Boat from Ole Evinrude's.

Outboard motor was imported as small-sized Evinrude and small-sized Fisher Man used it. Starter handle with round grip was on the fly wheel and special technique was required for motor starting. Boat itself was a fisher boat made of thick board which has been used in Japan, steered by bar handle.

This is the beginning of outboard motor boat in Japan.

Since that, Johnson announced "Sea Horse 16, 24" and speed boat began to be imported to Japan. Sports boat was beginning to spread and motor boat race began in Japan.

II. BEGINNING OF MOTOR BOAT RACE IN JAPAN

The first all Japan outboard motor boat race was held at the Sumida-river in Tokyo. The Sumida-river streams in the center of the city, in front of the Mukojima-park where is famous of cherry blossoms. It was on July 26, 1932, a hot summer day. The participating boats were 41. Grading of Class A-9, B-10, C-11, D-15, E-5, G-1 was by A.P.B.A. Rule, and it was of 4 times-returns (4 times around) for two points of 800 meter. Spectators are said to be several ten thousand. To gather such spectators and popular attention would be from the fact that it was the first race in Japan and motor boat itself was the most fresh and unusual thing. The water surface was rough and the driver struggled so much. The present writer remembers in deep emotion of my taking part in this race and winning the victory on over-all class.

In this period, outboard motor boat began to be popular in Japan. All of motors were imported ones and numbers were few.

On November 7, 1932, the first official mile trial was held at the Arakawa-hosuiro (By-path of the Sumida) in Tokyo.

Records:

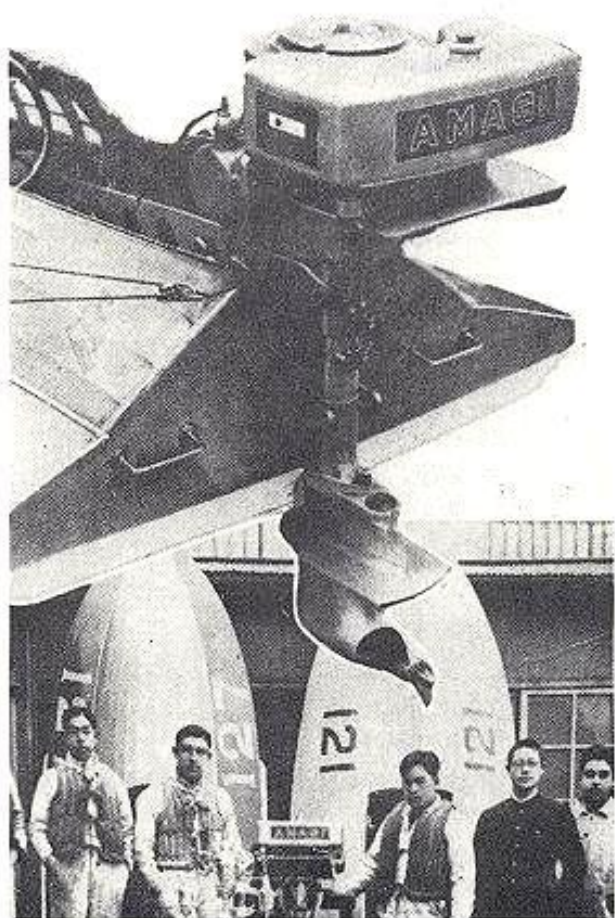
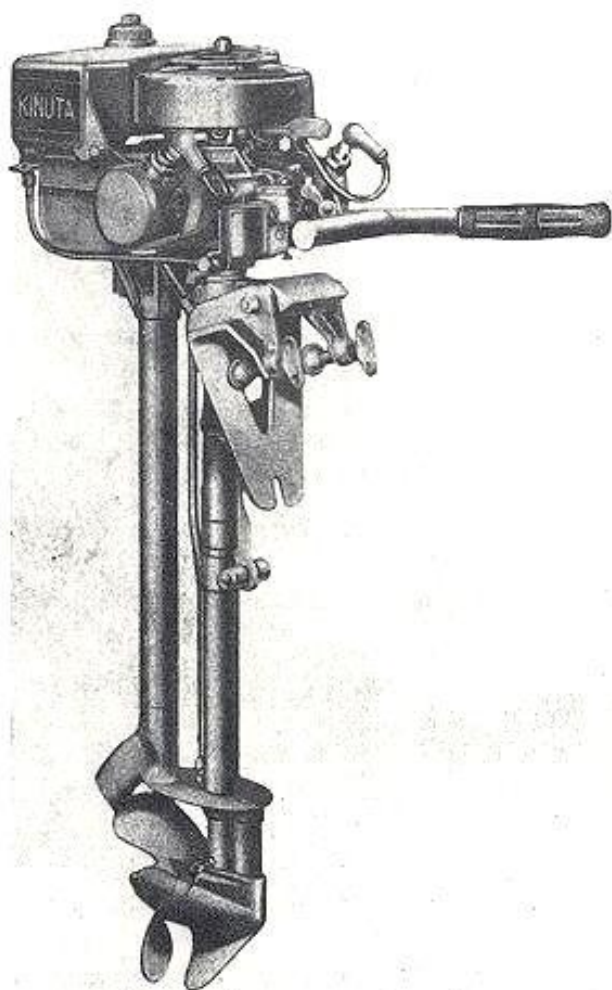
<u>Motor</u>	<u>Boat</u>	<u>Speed K M/H</u>	<u>Owner</u>	<u>Driver</u>
Johnson B16 HP	Elsinore	55.724	S. Minorikawa	T. Harada
Evinrude 24 HP	Elsinore	56.940	S. Minorikawa	T. Harada

Boat, motor, fuel and oil were all from U.S.A. This was the best record of outboard motor boat.

Race became annual, participating boats increased year by year, and audience also increased. Sixty thousand audience was recorded in the second race. Outboard motors in this period were Evinrude, Elto and Johnson.



Above: AMAGI; Below left: November, 1940, From Kaji - Kinuta; and
Below right, AMAGI D, 1935, May, Magijin (Kaji).



III. OUTBOARD NO. 1 OF DOMESTIC PRODUCTION IN JAPAN

The first domestically produced boat in Japan was "AMAGI", and it was announced in Mile Trial on November, 1933.

B Class (350 c.c.), 2 cylinder, 2 stroke, fly wheel magnet and water-cooling. Power was not officially announced but R.P.M. and H.P. was short, compared with Johnson "Sea Horse 16" of the day.

25.993 M/H in speed, designed and made by Mr. H. Ishikawa, engineered and driven by Mr. M. Abe. This was the technical trial manufacture, so only 6 motors were made and not on the market.

Performance was tested by participating in race or mile trial. Official record on November 4, 1934 shows 30.899 M/H.

This photo was on the magazine "KAJI" and is rare material in this kind. It was of racing type, under water exhaust pipe was taken off, plate muffler was set and Skeg of lower unit was also taken off. Boat also was in original design and manufacture.

At the same time, outboard motor named "HINODE" is said to be manufactured in Osaka, but I have not any chance to look at the real boat and any record about it does not remain now.

In 1940, "KINUTA" was manufactured of two types of A class and B class with 2 stroke, 2 cylinder and water-cooling. It was sold on the market. The photo is the first announced one on the magazine. Manufacturing factory was located in "KINUTA", the western area of Tokyo. Mr. H. Ito designed and manufactured.

This motor continued to be sold on the market until recent days, but now stop manufacturing.

The above-mentioned "AMAGI" was not on the market and "KINUTA" was broadly on the market and much number were put into real use, so that the first domestic boat in Japan in its real meaning can be said this "KINUTA".

IV. IN THE WAR

In 1941, the sad war rose, and outboard motor for recreational use was under discontinuance. Outboard motor was newly designed and used for military use in the War.

Shoda Aeroplane Manufacture made motor with gasoline engine, 4 cycle, 2 cylinder, overhead valve, push rod system, 15 H.P. water-cooling.

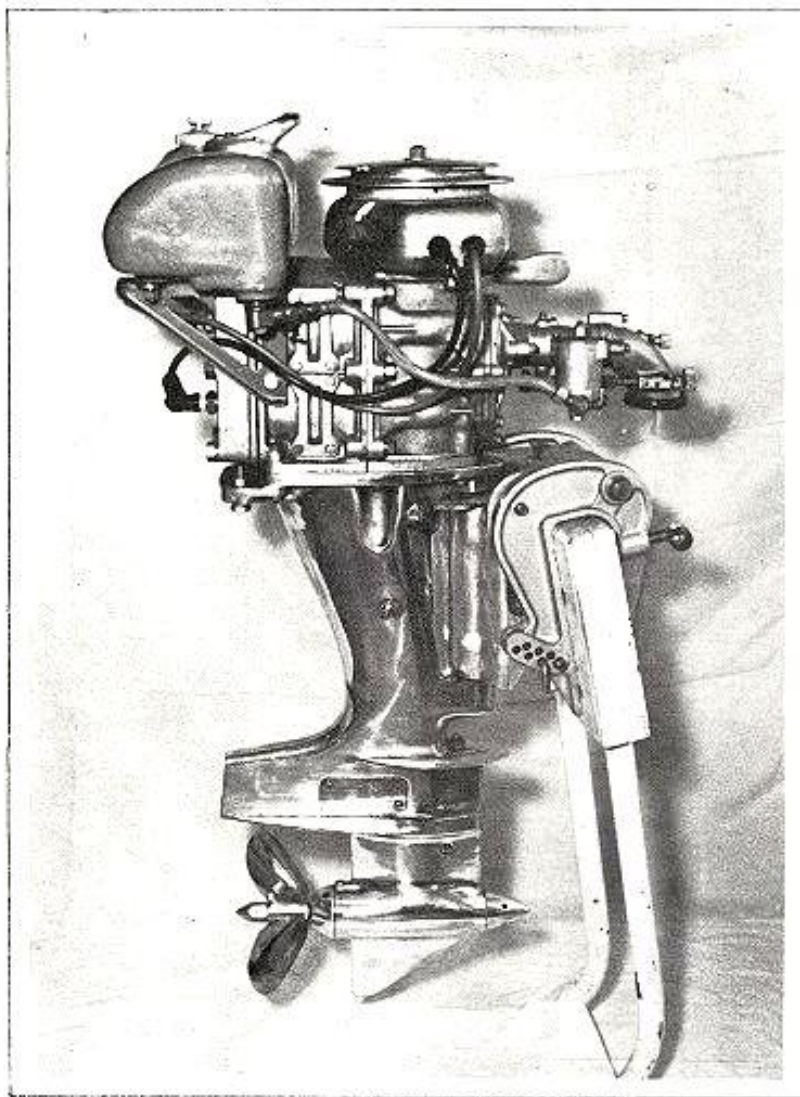
This was much complicatedly constructed, compared with two-stroked motors made in U.S.A. Parts and assemblies was so elaborate that they reminded of parts for airplane. This motor was active on the war of its beginning.

The Japanese army went on southwards by land from Malay, and made river-crossing operations before enemy at Johore Buhru before entering Singapore. I remember impressively the photo of a boat, setting Shoda outboard motor in portable and flatable hull, crossing the river in a shower of bullets. It is a sorrowful memory but one of the scenes in the outboard motor history in Japan.

Manufacturing of this "SHODA" motor stopped at the end of the War, and cannot only be seen now.

V. AFTER THE WAR

In summer of 1947, American soldiers began boating, bringing outboard motor boats to Hakone Lake or Sagami Lake near Tokyo. The Japanese people were in poor life and could not be a company of them and only gazed at new boats from U.S.A. with astonishing eyes, as we could not have any knowledge on America in the War time.



Above: Yamato "60", 1960 B Stock, 347 cc,
28 HP/7000 RPM. Right, Tohatsu.

ル (T T M 型)
58cc
 000回転毎分)
 ミビール油 1)
 起動ロープ式
 (寸)×4" (寸)
 3 ~ 10 杆 / 時
 ...単一レバー
約 1.5 立
1.7 尺
 作 (後進可能)
15 吋

特 長

- 1: 始動が特に良くしてあります。
- 2: スローが実によく効きます。
- 3: アスターン (通航) が出来るので、免着が便利です。
- 4: 夜間における照明装置 (6-8 V, 8 W) が附属しています。
- 5: 船に取付けた上更に附属のロープで船体に結びつけられる様になっています。

クランクキャップ
 燃料タンク
 起動機
 チョークレバー
 化油器
 ピーコック

ブレード
 トーションプレート
 ロペラ

VI. RESTORATION OF OUTBOARD MOTOR AFTER THE WAR

All productive factory were occupied in the military purpose in the War. They were destroyed and business must have been reorganized. They all seeked for work, exchanging their business to peacetime industries.

Nakajima Airplane Factory in Omiya dissolved and tried to manufacture craft motors. In those days, craft motor could not be thought to be used for sports, now existing.

Inboard engine, 5 H.P. or outboard motor, 3 H.P. and the alike were manufactured for small-sized coastal fishery. Outboard was called "Taro" and inboard "Jiro". "Taro" and "Jiro" is popular names in Japan as "Jack" or "Tom" in America.

"Taro" outboard used Kerosene with non-diesel and spark plug ignition, designed for usage of heavy strongly-built hull in low fuel expense, reflecting a phase of the time. This motor is very interesting, thinking of the origin of its design. This motor soon disappeared, in spite of the plan of manufacturing and selling. Economics of those days was not restored to permit this motor for usage, but now we think this plan is regretful to abandon.

Alike "Taro", Tokyo Motor K.K. began manufacturing of outboard motor. This factory has much experience on small air-cooling, 2 stroke engine and so suitable for manufacturing of small outboard motor. It was 1.5 H.P., air-cooling, 1 cylinder, 58 c.c., 4,000 R.P.M. gasoline engine, 17 Kg weight and set the selling target to small fishing boat, that is, attach motor to small-sized rowing boat or sailing boat. This became a pioneer of domestic small outboard motor, trying to advertise and make service for fishermen. This is an example of success becoming to have a good sale in cooperation with the recovery of economics and now continuing manufacturing with the increased selling results for export.

Taking the same way, Mitsubishi, Kawasaki, Honda, Yamaha and etc., which had experience in small motor manufacturing, began selling activity successively in small-sized motors (1.5 H.P. - 10 H.P.).

VII. RACE AFTER THE WAR

In 1952, motor boat race revived and held in many districts. Kinuta outboard motor was used for it.

In 1953, B class outboard motor "YAMATO" was announced: 18 H.P., 5,500 R.P.M., 2 cycle, 2 cylinder, bore of cylinder 54 m/m, stroke 54 m/m, piston displacement 325 c.c., compression ratio 7:1, ignition plug 18 m.m., fuel tank capacity 4.6 liter, weight approx. 33 Kg, water-cooling, propeller D-5 5/8", F-9 1/2", gear ratio - 14 to 16, rope start, non-clutch, and semi-racer. This motor is much used now, with several time of model change.

After that, motor of the same type was manufactured by Fuji Motor Company. These companies are trying technical improvement of products and compete each other at racing as good rivals.

VIII. OFFSHORE RACE

Tokyo-Osaka 1,000 Km Offshore Race was held in 3 days from July 7 to 9 of 1961.

July 7: Tokyo-Omaesaki, 350 Km
July 8: Omaesaki-Kushimoto, 350 Km
July 9: Dushimoto-Osaka, 300 Km

Railroad distance on land between Tokyo and Osaka is 552.6 Km. This race was made along the south coast line of the center in land, and is the first big offshore race in Japan.

Best sailing time was 20.03 hours in total. Participants were 20 boats, 33 persons and they all used outboard motor.

No. 1 is Mr. K. Horiguchi, Mr. Y. Matsui and Mr. K. Kanohara team with Scott 70 H.P. x 4 and others were Mercury 80 H.P. x 2 and etc.

From this period, outboard motor for sports can be said to take second growing era after the War.

Afterwards, Tokyo-Osaka offshore race was closed with the third tournament. It is caused by transforming the offshore race type and not by stopping the race with accident endangering human life.

IX. RECENT OFFSHORE RACE

The recent offshore race is gradually changing the style. Inboard out-drive (Stern Drive) became popular, though there are few outboard with several big-powered motors.

Outboard motor boat race is held in circuit race course of short distance at flat water of river or lake.

The representative race in recent Japan is held in the Bay of Atami. Atami is a famous and favorite health resort, having a hot spring, 100 Km from Tokyo, facing the sea.

At the beginning of July every year, one day race is held. Courses are two, offshore and circular in the bay.

Participating boats were 276 in 1972. Among 50 boats participated in offshore race, 16 boats were outboard ones. 160 Km race was made by 20 returns of 4 Km distant points.

It is a grand sight that 50 big-powered boats run at the same time in big waves. Considerable audience gathers, and drivers feel it one of the best honor to win this race.

X. A WORLD RECORD

In 1964, Mr. Beppu was authorized by U.I.M. (Union of International Motorboating) in J class of outboard motor.

On November 7, 1970, Mr. A. Tamura was authorized speed 150.24 Km/H by U.I.M. in B class hydroplane. Motor and boat is manufactured in Japan by Fuji Motor Co., with piston displacement 347 c.c., 2 cycle, 4 cylinder, 4 carburetor, 4 exhaust ports, 11,500 R.P.M., gear ratio 1:1, battery ignition.

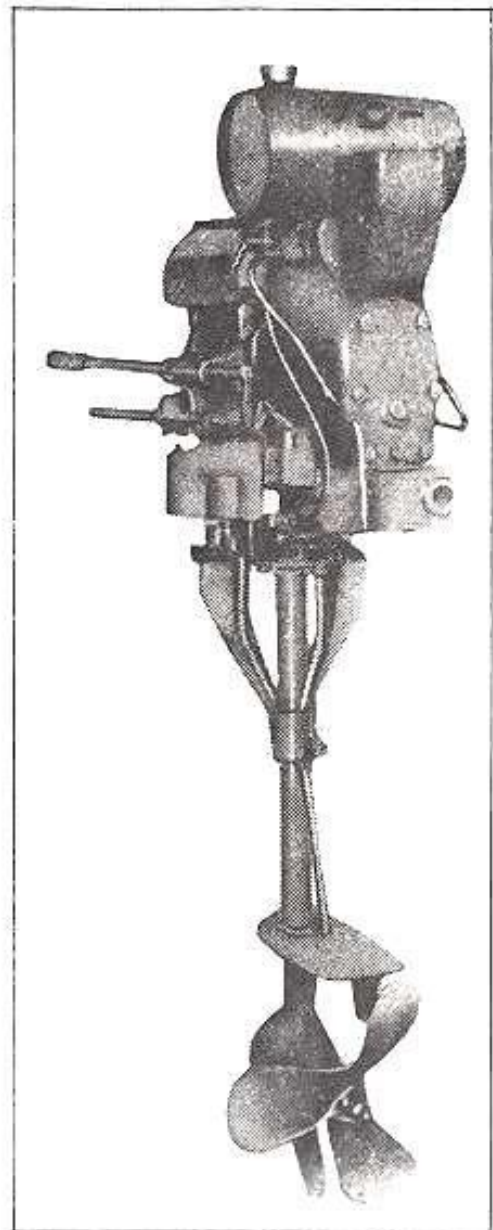
This motor was designed and manufactured only for trial and have studied for long time and normal motor boat cannot use it.

Trial is held in 1 Km course.

XI. BOAT SHOW

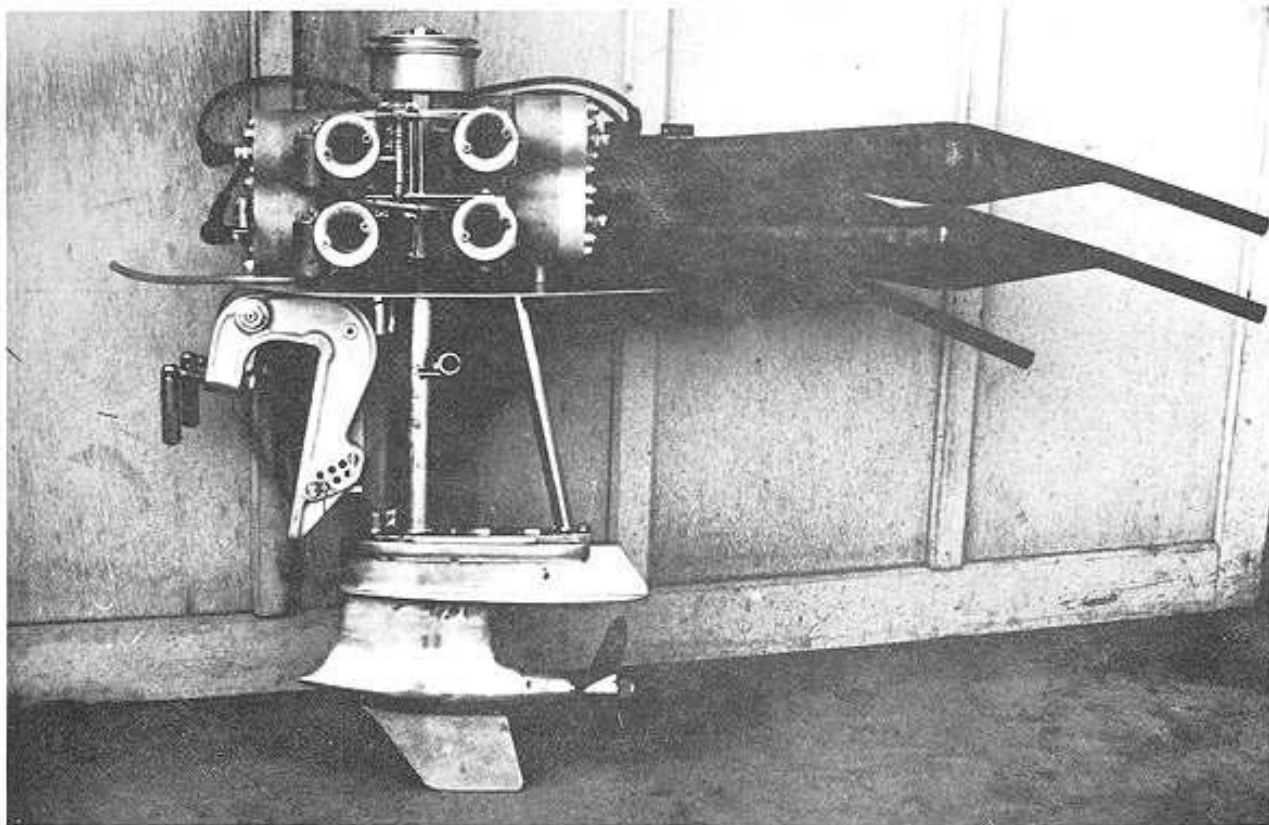
The first Boat Show in Japan was held in 1963, and since it became successful year by year. The 11th Show in 1972 was held of 93 exhibiting companies.

Outboard motors exhibited to Boat Show are as follows:



TARO

FUJI RB - 2
UIM World Record
150.24 Km/h 1970
55 HP/10,500 RPM
347 cc.

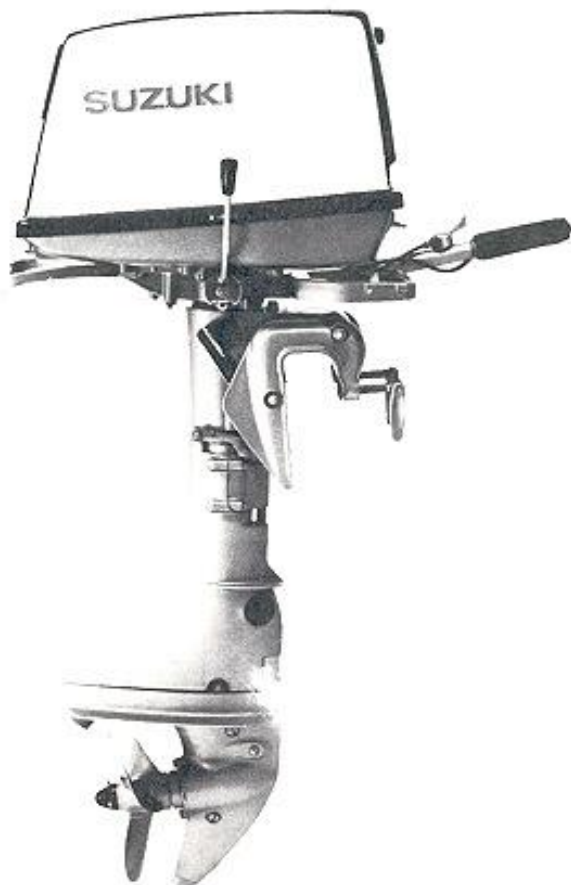


Below left: At Hannover, FUJI
RB-1. 5th Overall/17 boats.
Driver: Ario Tamura, UIM World
Record Class OB (150.24 Km/h).

Below right: Japanese Team,
European Tour, Hannover, Germany,
1970. Center two boats are fitted
with FUJI RB-1 motors, end boats
have Yamato MT-5 engines.

31





スズキポートエンジン
DT150

Suzuki DT 150
Two Stroke, water cooled
9.0 PS / 5000 RPM
152 cc 26.5 KG

Honda 75 Twin 27 KG
4 Stroke, water cooled
7.5 PS/6000 RPM
149 cc/50mm X 38mm



YAMAHA OUTBOARD MOTOR 15A

Yamaha 15A
2 cycle, water cooled
15 PS/5200 RPM
430 cc 38 KG

ロータリー船外機だけがもつ画期的な性能

■特長

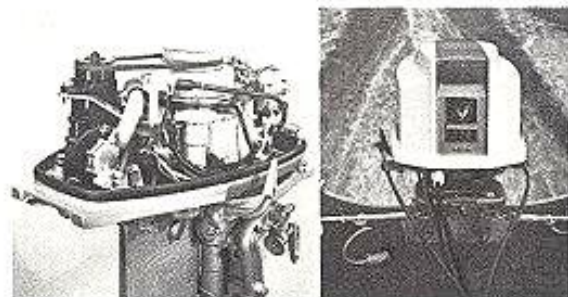
抜群の高速性能

他のエンジンといわれるが、ロータリーエンジンには往復運動をするピストンがありません。回転部分だけで成り立っていますので従来のレシウムエンジンでは得られなかった高速回転がスムーズに得られるのです。高速性能が要求される海、湖での疾走、水上スキーにはうってつけの船外機といえます。



コンパクトで省かれた燃費

イリニウムが非常に簡単なため、同出力の2サイクルエンジンよりコンパクトです。しかも他社の船外機の殆ど燃費ですが燃費油多量。省が小さいイリニウム燃料供給の手間はほぼゼロ。



騒音、振動のない快適なレジャー

騒音や振動の源である往復運動部分や軸受け機構がありませんから非常に静かです。とくに高速運転のとき非常に静かなため快適なレジャーをお約束いたします。



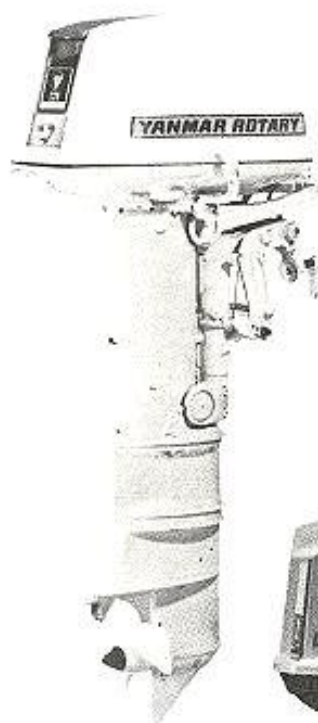
安全な運転機構

回転はシ・クルーパー式のリテーナーコンタクト機構で、ギアは前進、中立、後進が自由に選べる高速回転時にはシ・クルーパー式安全機構になっています。また、省力化をお望みの方には電気始動も用意いたしました。

簡単な構造、少ない部品点数

回転運動から直接動力をとり出す機構で、当然部品も少なく、したがって故障も少なくなりました。また、ヤマハの強力な全国サービス網がご満足いくアフターサービスいたします。

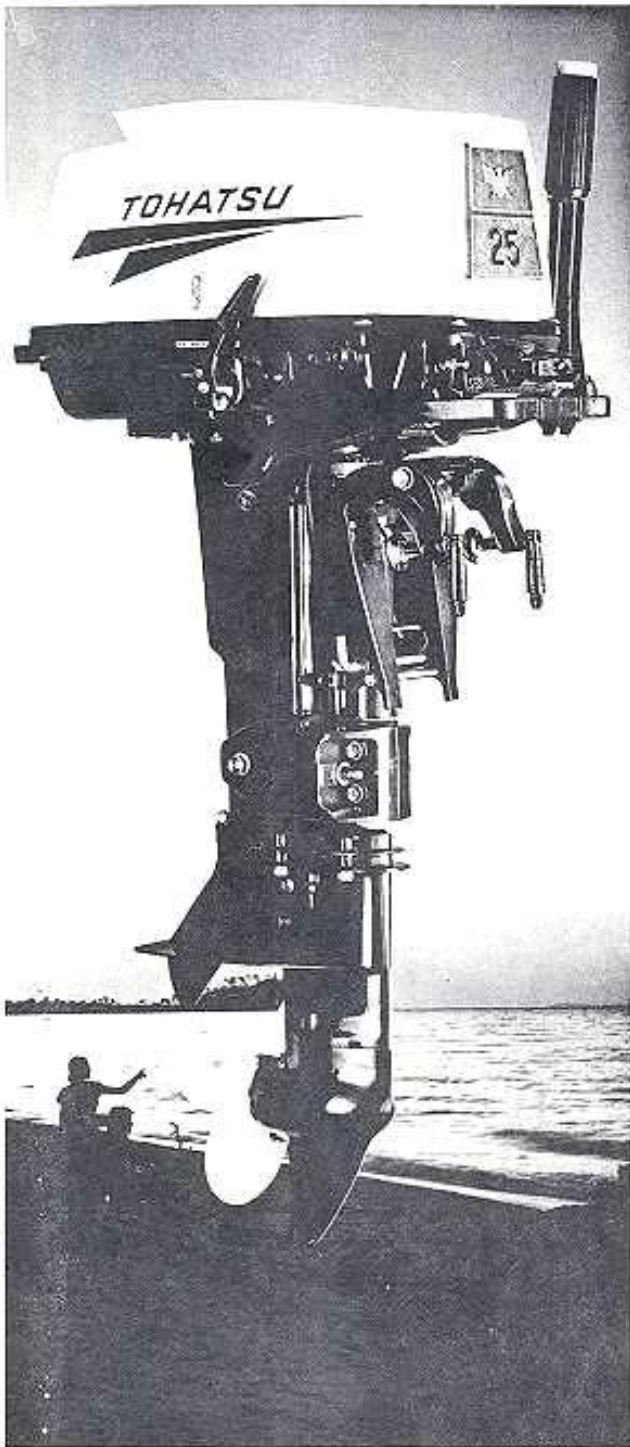
SR25



R220



R450



Imported outboard motor boat: 9 companies, 90 models. Domestic outboard motor boat: 10 companies, 48 models.

Imported ones are almost all from U.S.A. and there are many over 100 H.P. motors. Domestic outboard motors are 48 models, but almost all are small powered outboard under 30 c.c. except each one model of Piston Displacement 450 c.c.-50 c.c.

Yanmar Industry Co., Ltd. should be paid attention for its rotary outboard motor: N.S.U. Vankel, rotary motor, water-cooling, single cylinder chamber volume 220 c.c.-20 P.S./6,000 R.P.M., already on the market and used at many districts.

XII. PRESENT STATUS OF OUTBOARD MOTOR

In Japan, outboard motor, both domestic and imported, will be improved in quality and quantity and demand will be increased more and more.

Small outboard motor is most needed for fishery attaching rowing boat on the coast or in lake or river.

(END)

Editor's note: In the text you noticed the term "PS" relative to power measurement. PS (German word Pferdstarke) means HP - almost. To determine the equivalent horsepower, multiply the PS by 1.014. To convert the metric designations, use the following information: One cubic inch = 16.387 cubic centimeters; one mile = 1.6093 Kilometers; one inch = 2.54 Centimeters; and one pound = .454 Kilograms.

Specifications of the Yanmar Rotary engine may be found on page 49 .

Photo at left, Tohatsu B38 A2
Sea Eagle. 2 Stroke, water cooled.
25 PS/5¹ HP, 385 cc, 43 kg.

PLEASE REMEMBER . . .



Check your date of membership renewal and forward your dues before a notice has to be sent; you'll save the Club time & money

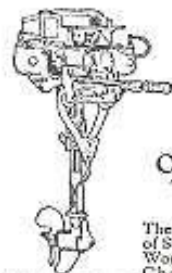
Send to..

Mr. John D. Gould
4707 Massachusetts Av.
Indianapolis, Ind 46218

How Speeditwin Was Invented

Speeditwin is the result of Evinrude's long specialization in the twin motor field. Eleven years ago, in 1916, the Evinrude Motor Company built and marketed a twin cylinder outboard motor.

When we say that Speeditwin is the sensation of the industry you cannot fully appreciate what a big promise this is until you see what its predecessor — the Evinrude Big Twin — accomplished. You will know what to expect if you realize that Speeditwin is tremendously better than the Big Twin which made the following records.



Old Big Twin

The forerunner of Speeditwin, World's Speed Champion in 1926. The only outboard motor ever to make a cross-continent run.

Crossed America in 1926



In the greatest endurance test ever made, the now discarded Evinrude Big Twin in 1926 crossed America—5280 miles. Evinrude, and Evinrude alone, has stood this supreme test.



Won All Events at Savannah July 5, 1926

Speed too! Just as much more in speed as in power and dependability! That's what you get in the Evinrude. At Savannah, Ga., July 5, 1926, Valentine Seyden captured first in all three events, including free-for-all with the old Evinrude Big Twin.



World's Speed Champion
26½ miles per hour

Record set by the "Skip" over five mile course at the fourth annual Pacific Coast Championship Regatta. Evinrude Big Twin, powering "Skip", finished 2 minutes 42 seconds ahead of nearest boat of similar design.

COLLECTOR'S GALLERY

By Don Peterson



EVINRUDE'S
Newest Triumph
Speeditwin
only 70 pounds full 8 H.P.

1927

EVINRUDE SPEEDITWIN
Models T and TS(salt)

2-3/4" Bore
2-1/2" Stroke

8 HP at 4000 RPM

Sales Price \$215

Spark Plugs—Champ O set at .016

Fuel mix— 2/3 quart oil per gallon of gasoline

Full Reverse

THE SCRAPBOOK of ANTIQUE ADS

Mail a
Postal
Today
for the
Brooks
Boat
Book



Especially Designed
For Outboard
Motor

New Brooks Model

New Semi-V-Bottom Type Built with extra strength and buoyancy at stern to offset strain and weight of motor—seats 6 or 7 persons—light in weight—fast—seaworthy.

\$25.00 Buys All Materials
Shipped Knocked-Down

Or boat built complete at factory—shipped ready to use—only \$45.00

The Brooks Outboard Motor can be had with either plan. We will send you—1, boat in knocked-down form for \$26.00—2, knocked-down boat and motor \$70.00—3, completed boat, ready to use, \$15.00—4, completed boat and motor, \$30.00. Boat is light, fast, seaworthy—sturdy frame—designed by experts—can be assembled by anyone in spare time.

Write for full description—also catalog showing complete line of boats. Write today.

BROOKS MFG. CO., 6427 Brooks Ave., Saginaw, Mich., U. S. A.
Largest concern of its kind in the world. Originators of the Pattern System of boat building.

By Don Peterson

The New Waterman PORTO

Complete With
**SINTZ REVERSING
PROPELLER**

Giving Multiple Speed Control

not only makes any boat a motorboat—but a motorboat of international trade—both forward and reverse. From the swiftness of its 30 miles an hour, you can slow down to an imperceptible drift and into reverse at any time you desire, without discomforting jerks and shudders.

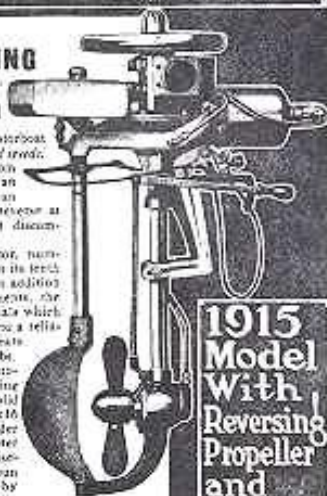
The original outboard motor, numbering 10,000 satisfied users in its tenth year of unqualified success, is added to its two wonderful refinements, the 1915 model carries the *Waterman Porto* which have made the *Waterman Porto* a reliable steed for more than 9 years.

Develops 5 h.p. Weighs 55 lbs. fits any shape stern. Has adjustable carburetor, not "mixing valve"; removable bearings; solid bronze skeg protruding 10 1/2 x 16 inch propeller. Steers by rudder from any part of the boat. Water cooled exhaust manifold; noiseless under-water exhaust; spun copper water jacket; ignition by high grade high tension magnets.

And guaranteed for life. These are not features, but standards. As such, demand them on every outboard motor, as you will make getting full value for your money.

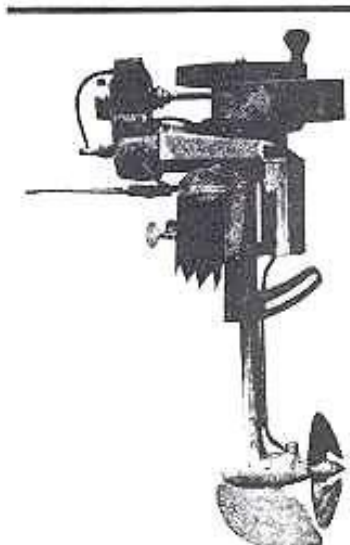
Write today for free Marine Engine Book containing full information on our full line of engines.

WATERMAN MOTOR CO., 204 MI. ELLIOT AVE., DETROIT, MICH.

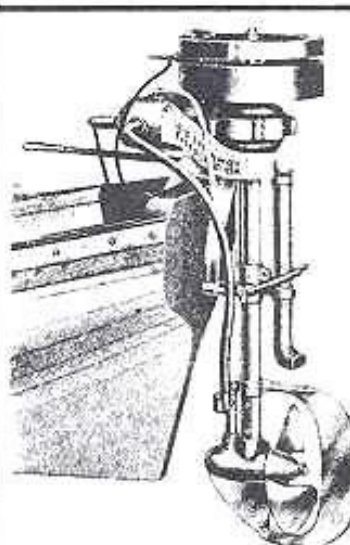


1915 Model With Reversing Propeller and Multiple Speed Control

1915



The Anderson



The Spinaway

Make a racer out of your Row Boat or Canoe

Attach the speedy little Wisconsin Junior to your boat—add a new thrill to your vacation this year. Low priced, dependable. Delivers power to propeller direct, without loss. Has self-locking ratchet that holds boat into course you set by simple turn of wrist—you can get this wonderful convenience only on a

Wisconsin Detachable Row Boat Motor

Backed by 14 years' marine motor experience

All parts standardized—Wisconsin Water-proof Reversible High-Tension Magneto (insures hot spark at all speeds); Wisconsin Water-cooled Silencer—eliminates rattling, so no loss of power. Tapered Adjuster—sets at top enables you to set angle without disturbing the water.

Thousands in use

This motor sized or shaped best. Smoothed, polished to get out of ruts, scratched. Whatever type of row boat motor you want—water-cooled or not—write to day—your name, address and service for your money. It's a Wisconsin. Write for catalog Z.

WISCONSIN MACHINERY & MFG. CO.,
10 Corning St., Milwaukee, Wis.
Makers of marine motors for 14 years.

Distributing at Panama-Pacific Exposition, Transportation Palace, Block 24, and at the following dealers:
Clay Arms Co., 583 Market St., San Francisco, Calif.
Tully-Lyco Arms Co., 425-433 S. Spring St., Los Angeles, Cal.
Knox Gas Engine Co., 503 Western Ave., Seattle, Wash.
McGowan Bros. Hardware Co., Spillane, Mass.



Wisconsin Junior 2 H.P. weight 50 lbs.

AOMCI SPECIAL *Feature*



AOMCI Special Features Editor
James L. Smith

The Miller motor was manufactured about 1914. Like so many others of this period, it followed closely in appearance the Evinrude Detachable Rowboat Motor which had made a successful but "heavy" impact on the market in 1909. With typical forward facing single cylinder, it abounded in heavy cast iron and brass parts providing a backbreaking and awkward weight estimated at 60 to 70 pounds.

Describing this "outboarder's delight" and starting at the top we note the heavy iron flywheel, nickled at the rim and cast with four holes doubtless in an effort to lighten it. Cast into the metal on the top of the flywheel is the inscription "Miller Gas and Vacuum Engine Co." The sample unrestored model has a wooden spool replacing the original starting knob.

Turning to the gas tank we see the squarish sheet iron construction and on the side the original decal:

The "Miller" Motor
manufactured by
The Miller Gas & Vacuum Engine Co.
Chicago, Ill. U.S.A.

The split or sectional type crankcase has top and bottom halves, the lower half being attached to the iron mounting bracket. This bracket has an adjustable feature for transom rake by merely loosening the wing nut. The upper bearing has a large grease cup to aid in lubrication. The steering handle folds at a point halfway in its length and the part nearest to the motor is connected to a collar which is bolted tightly to the bronze driveshaft housing. In this way the whole lower unit can be rotated while the power head stays stationary. The all bronze lower unit has a plunger pump working off the prop shaft. The rubber hose connected to it brings cooling water, entering at the starboard side of the cylinder with exit at the top rear of the cylinder by means of a metal pipe to the top of the muffler.

The muffler itself is of sheet brass and cylindrical up and down. Its length is about 7 inches and diameter about 3 inches. It is connected to the cylinder by means of an exhaust manifold made of a light metal alloy. Cooling water drains from the bottom of the muffler along with the exhaust gases. A two blade bronze prop is friction locked to the prop shaft with two square headed bolts.

To complete the description of this outboarding wonder we examine the carburetor and electrical system. The small brass carb appears to have no lettering for identifying the make. It is bolted on the left side of the cylinder and has a fuel line to the tank with a turn off stopcock interposing. Of the check valve type, it has two needle valves, one to meter the fuel from the tank to the carb and the other to meter the fuel from carb directly to cylinder.

The electrical system is probably the most interesting feature of this motor but unfortunately parts of it appear to be missing. Like the Ferro, a magneto is bolted to the top of the cylinder and geared so as to operate from the top of the crankshaft. The interposing bearing is bolted to a portion of the cylinder nearest the crankcase and has an oil hole for lubrication. The magneto terminates in a circular unit bearing an advance retard lever held steady with a friction spring. From this section also comes the high tension lead for the spark plug. The spark plug itself is 7/8 inch and very old. It has some printing on it which is indistinguishable. Four outer electrodes curve up and there is a single center electrode. The magneto is marked "The St. Lawrence Engine Co. Ltd., Brockville, Canada".

Webb's Pictorial History lists the last Miller about 1923. Probably the Millers were never turned out in numbers comparable to the more popular Evinrudes. Nevertheless they were worthy examples of the iron and brass era and our members should be proud to place them alongside their best.

J. L. Smith

1972 Connecticut Regatta in Pictures

Pictures by Bob Zipps
Story by Peter Hunn

September 9, 1972 was a special day for the Eastern Antique Outboarders who were able to attend the Connecticut Antique Outboard Motor Regatta at the East Hartford Launching Ramp on the Connecticut River. All 22 members who came ignored the cloudy skies and proceeded to have a great time. The rain wanted to show us how fickle New England weather really is, so it poured on us towards the afternoon's end. Fortunately, an Antiquer always carries, with him, a positive attitude and the rain made no matter. Besides all the members who came, many motors were there also to speak well of their owners. We all had a lot of fun and are grateful to Bob Zipps for organizing the meet and acting as Meet Chairman. Pat Zipps and Gayle Salisbury acted as the Meet Registrars. Special thanks also go to Mr. Steve Patterson for acting as the Meet Photographer.

So that is how it was that day. Here are a few pictures that will provide you with a little idea of what went on.

Organization & Credits:

Meet Chairman - Bob Zipps
Photographer - Steve Patterson
Registrar: Tricia Zipps - Gayle Salisbury

Bill Andrulitus, West Hartford, Conn.
John Buonocore, Westbury, N. Y.
Dick Carvell, Cornwall, N. Y.
Doc Craver, Hopatcong, N. J.
Bill Davis, Hopatcong, N. J.
Stan Dubois, New York, N. Y.
John Gustaffson, Amityville, N. Y.
Don Hinds, Stoughton, Mass.
Bill Hodges, Cohoes, N. Y.
Peter Hunn, Simsbury, Conn.
Matt Kowalski, Windsor, Conn.

Phil Lanz, Slingerlands, N. Y.
Vinny Boss, Levittown, N. Y.
Jean Luce, Westfield, N. J.
Tom Luce, Westfield, N. J.
Len Norman, Auburn, Mass.
Fred Panckeri, Pine Beach, N. J.
Bill Salisbury, Toms River, N. J.
Frank Shimer, Bellmore, N. J.
Brad Snow, Middletown, Conn.
Mark Wright, Little Silver, N. J.
Bob Zipps, East Hartford, Conn.



The Drivers Meeting. This is where we all get acquainted with the course and learn the agenda for the day.



NO! He's not mowing the grass - John Gustaffsen readies his Elto rudder twin for the water.



What are they looking at? (L-R) Bill Salisbury, Bill Andrulitus, Len Norman and Fred Panckerl.



Peter Hunn puts the finishing touch on his Mercury/Class B Sid Craft combination.



Rich King and Len Norman learn how the Big Four got its name. BIG! Peter and Bob Zipps lift the motor onto its rack.



Brad Snow makes the final check on his Mercury powered hydro.



Marcus Wright and Dick Shaber do the "1907 Waterman Shake".



Hey! This looks like a waffle iron! Bill Andrulitus negotiates with Bill Salisbury on a Indian Silver Arrow.



Frank Shimer and Vin Loss prepare to take on the river as the R. Corvell family returns from a Speeditwin ride.



Bob Zipps sternly hangs on for dear life to the boat seat and the Big 4 steering handle. A serious moment!



Stan DuBois and his Sid Craft next to David Salisbury who seems to be wishing he could run the course in Brad's hydro.



Stan and Vera DuBois chat with Mr. and Mrs. Bill Hodges about motors maybe? Probably not!

Mahogany Racing Boat, Trailer and Two Big Fours ----- Only \$600 by Dealer Dave

Dave Reinhartsen
1107 Pueblo Street
Richardson, Texas 75080

August 10, 1970

Sirs:

I have an Evinrude Motor, Number 8014-00612 made around 1945. This is a racing motor - I think about 60 horsepower. It is in good running condition and is now on the original racing boat and trailer.

Have another identical motor for spare parts.

What is the value of this rig and where could I sell it?

I thank you in advance for your information.

Sincerely,
Harry Hartfield
Ozark, Mo.

Dear Mr. Hartfield,

Hard to give price, without photo - depends on condition, etc. Suggest you send photo and asking price. Then I can better advise you as to value.

D. Reinhartsen

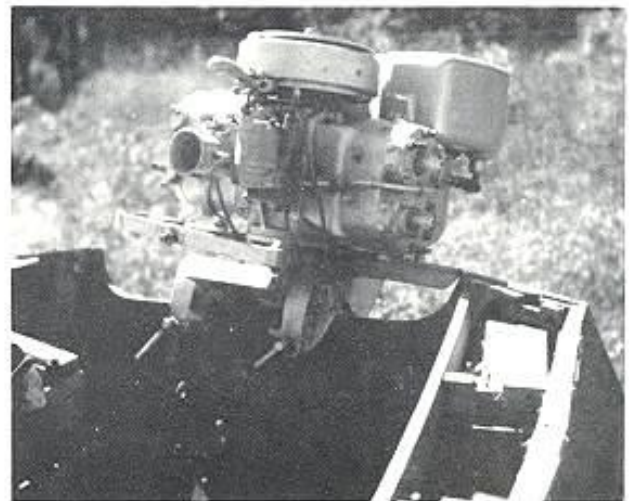
September 27, 1970
Ozark, Mo.

Dear Sir:

Sorry it has taken so long to answer your card about the boat. I didn't have any film for the camera.

The boat won a trophy in 1942; it is a mahogany boat, 14 feet long. Has a "Big 4" Evinrude Motor which is 60 hp and has been modified to give 10 more hp for racing. There is another motor which can be used for parts.

The Evinrude dealer at Wichita, Kansas says this motor should be worth between \$400.00 and \$600.00.



My two boys bought the boat at Wichita, Kansas while we lived there. They were in the process of restoring the boat and motor to original. Since then, one has gone to the Navy and the other boy is married and lives in Texas.

We brought the boat here to Ozark, Mo. when we moved here. Now, I am wanting to sell it. It will have to be worked over and refinished. Should make a nice looking boat and could race again.

If you are interested in buying the boat and trailer, spare parts and motor, I have priced it low at \$200.00. Please contact me here at Ozark.

Yours truly,
H. Hartfield

Dear Mr. Hartfield,

Am indeed interested in your boat & motor, and am trying to find a way to have a look at it. I have several questions:

- Do the motors run?
- How have they been stored - how long - are they free (i.e., not froze up)?
- Did your sons put oil in the cylinders before storing?
- Are they stored where it is warm and dry?
- Are the motors complete?
- Will you sell the motors only - I'm not too interested in the boat or trailer?
- What make is the boat?
- What make is the trailer?
- Will you take less than the amount you specify?

D. Reinhartsen

November 3, 1970
Ozark, Mo.

Dear Sir:

Sorry to be so slow in answering but we were in the state of Washington for a few weeks at Oak Harbor.

The boat belongs to my son who is in the Navy, we are trying to sell it for him.

The gas tank from one motor was put on the motor on boat. I believe the other tank has a crack in it. To my knowledge the motors are complete.

A complete sale is wanted. The price is low enough as is - Evinrude dealer at Wichita, Kansas has turned down \$400.00 for same motor. Says it is worth \$600.00.

Boat has been stored in open covered with plastic cover.

The trailer is a heavy well-built one.

The boy had motor running before he went into service.

As far as I know the boys were particular about getting motor ready for storage.

If you want this please send something to hold - \$50.00 would be O.K.

Sincerely,
H. Hartfield

No reply was made to this letter - the intent being to let him try to sell it for awhile. Next contact was a phone call in which I said I'd be through Ozark in a few weeks and might be able to take a look at his motors. What was the price again, Mr. Hartfield? \$100.00! I quickly sent a postcard to confirm it.

In May of 1972, I finally got down to business, telling the seller that I'd be coming through one weekend soon, did he still have the boat, two 50 hp motors and a trailer - all for \$100, he did.

Son Scott and I left Dallas the next Saturday afternoon and arrived in Missouri that

evening. We went to see the boat and motors, but no one was home. We did find some of the equipment --- outside, uncovered and exposed to the rain. The boat was once a beautiful mahogany rig, but it had been fibreglassed on the bottom and the sides were rotten. The trailer was homemade and of low quality. Parts of the motors were in a chicken coop, exposed to the chickens. A special clean-up would be required there. The boat was worth \$5 for firewood, the trailer - \$25. The motor parts another \$5.

On the way to the motel, I coached Scott, age 10 on what to tell me about the equipment in front of the seller.

The next morning I contacted member Casey West, we got together and discussed Antique Outboards till time for the appointment with Mr. Hartfield. Casey agreed to substitute for Scott as devil's advocate, and advise me not to buy the rig.

We arrived at Mr. Hartfield's at 1:00. By 1:30 I asked Casey (the disinterested third party) what was a fair price? Casey replied \$25. To show Mr. Hartfield what a nice guy I am, I offered him \$30. He didn't say no, and he didn't say yes. Instead he said to his wife, "What do you think?" His wife replied, "I don't know, what do you think?" Finally he said no.

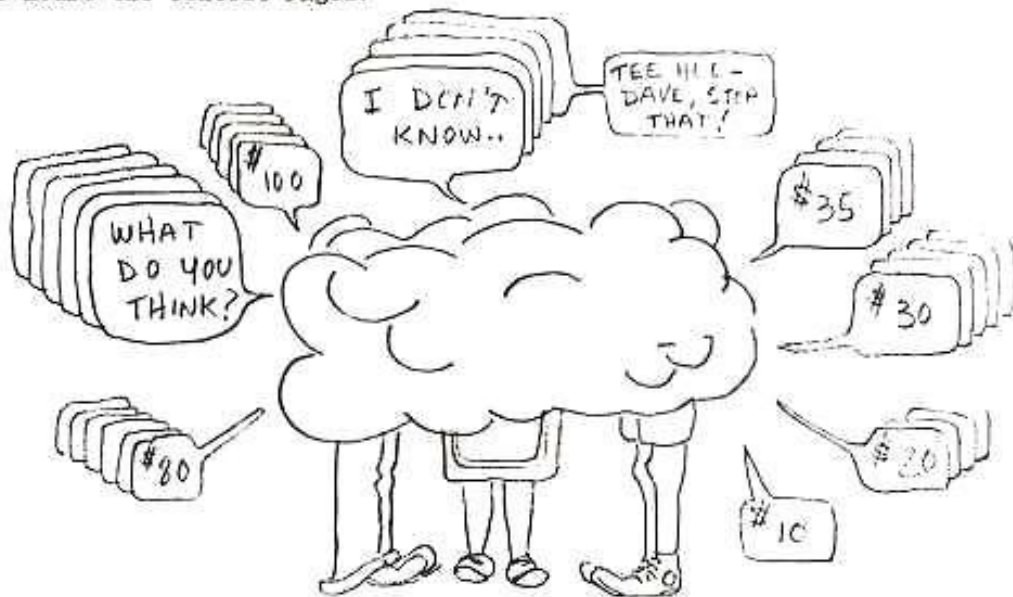
I told him how far I had come, and how much it had cost, and trying to make him feel bad, I told him that I hated to go home empty, and that I'd give him \$35. Hartfield said to his wife, "What do you think?" She said, "I don't know, what do you think?"

I offered to take a car load of things to his brother in Dallas, in addition. Hartfield: What do you think? Wife: I don't know, what do you think? No luck!

Well - what are you going to do if you don't sell the boat and motors? Fix them up and use them next summer. OK - I'll give you \$35 for the motors and within 1 year return one in guaranteed operating condition. Then all you have to do is rebuild the boat. What do you think, Honey? I don't know, what do you think?

By this time it was 3:00 and I still had a 7 hour drive back to Dallas. Patience was a bit thin, because it had taken two hours to get nowhere. I told him that I guess we couldn't do business - I'd just have to go back to Dallas empty. Sure was sorry to have wasted his time. Casey took over, engaging him in conversation while I took a fourth look at the boat (firewood), motors (frozen and rusted) and trailer (a pipefitters nightmare). I came back, "Tell you what. I'm prepared to give you more money if you can take a bit less. What is the least you'll take?" He said: What do you think, Honey? His wife: I don't know, what do you think? \$100.00 was the reply.

For 3 more hours the contest raged:



And guess what! We bought the two motors for \$10.00.

Special Interest Group News

Here's a list of the different Interest Groups intended to help focus on your needs for literature, information, parts and fellowship regarding your favorite motor or subject. Notice that not all of the Groups have leaders - volunteers are needed! Write to the V.F. Technical Services, Sam Vance, RD 2, Unadilla, NY 13849.

Giant Twin - Don Peterson	Mercury - Bill Kelly	Clarke - Phil Kranz
Class "F" Owners - D. Reinhartsen	Unusual and rare motors	History - W. J. Webb
Johnson PC - Bill Salisbury	Inboards - P.S. Brooke Jr.	Eltos - Sam Vance
Johnson V Series - J. Harrison	Racing - Eric Gunderson	Caillas - W. Weidmann
Johnson A Series - Les Stevenson	Watermans - Dick A. Hawie	Lockwood - B. Anderson
Antique Boats and equipment	Research - Dick A. Hawie	Martin - Glen Ollila

SMALL INBOARDS REVISITED

by P. S. Brooke, Jr.

The Motorboat Manual published in 1911 by the Temple Press Ltd., London, England, contains a very fine analysis of the development of the marine engine which is worth quoting. "It is true that instances of internal-combustion engines installed in boats occur long before motor cars were in general use, but the real birth of the motor-marine industry followed the establishment of motoring ashore, and it was unquestionably the success of the internal-combustion engine on the road that led to its general use afloat. Once applied to boat work, motors soon developed on lines of their own, became, in fact, genuine marine engines, with a sub-division of characteristics rendered necessary by the widely differing types of craft in which they have since been employed." The writer further stated "The fast-running car engine, even when fitted with the necessary cooling and lubricating arrangements, soon proved unequal to the constant hard work demanded of a marine motor. Simultaneously, the impossibility of obtaining good propeller efficiency at high revolutions--except in the case of very fast boats was recognized. A more robust, heavier, slower-running class of engine was developed--in fine, a true marine motor--and the way was clear for the introduction of genuine pleasure launches and yachts' tenders."

Inboard marine engines of six horsepower and under offered by British manufacturers in the year 1911 included the Kromhout which was an oil fueled design in both two and four cycle models. The two cycle model featured blow lamp starting which was looked upon with disdain by other makers according to their advertisements. Another engine offered to the public was the two cycle Ajax made in sizes from two to twenty-four horsepower and featuring a "patent exhaust scavenge" and "forced lubrication". This engine was built in Manchester, England by J. F. Coates. Kelvin motors boasted in their ads of low tension magnetos, water cooled silencers, self-contained reverse and "no blow lamps". The makers of this brand, The Bergius Launch and Engine Company of Dobbies Loan, Glasgow, Scotland claimed that 140 sailing vessels had already installed the Kelvin as auxiliary power.

G. Halls and Company of Alloa, Scotland offered the Perth Petrol and Paraffin Motor in sizes from six to twelve horsepower. Their engines are fitted with the Cotterills Patent Vaporizer and could be started with a blow lamp or petrol.

Ailsa Craig advertised as "No-Trouble" Motors were also claiming "all working parts enclosed and yet perfectly accessible". Ailsa Craig Motor Co., Ltd., offered models in sizes from three horsepower to two-hundred in either petrol or paraffin.

James Taylor, marine engineer, yacht builder and government contractor, offered a twenty-six foot high-speed river launch equipped with a two cylinder ten horsepower Taylor Silent Simplex motor for 160 pounds or approximately \$800. Mr. Taylor also advised that he was agent for Gardner, Thornycroft, Renault, and Taylor Silent Simplex motors.

It is interesting to note that an American make - Fairbanks-Morse - was prominently advertised in the British marine market at this time. The three and one-half type "E" single cylinder engine was offered in England for about \$100 complete with water circulating pump, timer, float feed carburetor, ball thrust bearing, shaft coupling, lubricating cups, wrenches and book of instructions.

Back in the States the "Fitting-Out Number" of Rudder for March, 1911, had articles on the Boston Power Boat Show and the New York Power Boat Show. Commenting on the Boston show the reporter allowed as how "practically all of the engines shown were of the regular stock types, the prominent builders having long ago given up the idea of springing anything radical".

Thus even some sixty years ago conformity and standardization were on the march. The reporter went on to state that it would not be proper to catalog all the engines exhibited as his readers were pretty familiar with the various makes offered and any lack of satisfactory operation on the part of well known brands was probably due nine times out of ten to the "lunk head" who neglected the machinery or forgot to turn on the gasoline. A new entry in the field exhibited at the Boston show was the Reynolds which featured a rotary valve in place of the usual poppet valve.

The Eagle Company of Newark, New Jersey ran a full page advertisement in the March, 1911 issue of "Rudder" ticking off the virtues of their engines in one, two, three and four cylinder models and soliciting agents.

Lackawanna Valveless Motors announced a new factory had been acquired for the manufacture of their engines at Newburg, New York. This concern also made the Coldwell lawn mower and was a pioneer in developing the power driven mower.

At this time the Pierce Engine Co. of Chicago, Illinois was offering their six horsepower twin cylinder two cycle engine at a reduced price and claimed that this model actually developed better than eight horsepower. T & M Marine Engines claimed that "sixteen years of success prove the correctness of T & M principle". These engines were offered in sizes from two to one hundred twenty horsepower. Termant & Monahan Co. of Oshkosh, Wisconsin was the maker.

B. A. Hjorth & Co. of Stockholm, Sweden were invading the American market with a line of crude oil engines called "Avance" in sizes from three to eight hundred horsepower. They were intended primarily for the fishing boat market, and were fitted with either reversing gear, reversible propeller blades or a direct reversible arrangement.

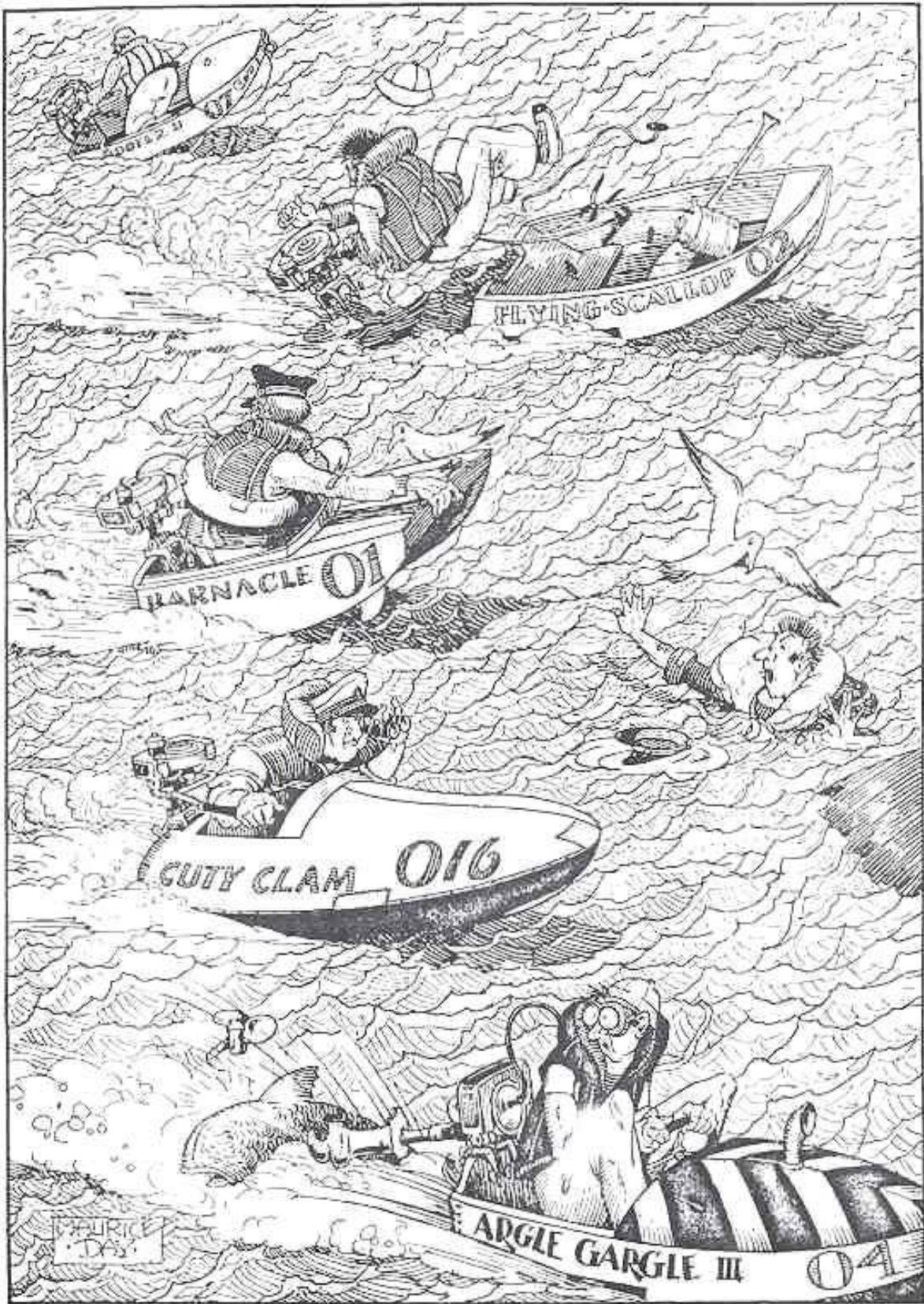
The Monarch Tool & Mfg. Co. of Cincinnati, Ohio was offering the "Little Skipper" two cycle engine in three sizes - two, four and six horsepower. The makers claimed that it was "the only simple, two-cycle gasoline engine that does not take the mixture into the crankcase". Further, it was "the most compact two-cycle engine built".

The Universal Machine Co. of Toledo, Ohio was offering a line of engines called the "Toledo" in sizes from six horsepower up to eighteen horsepower. Prices ranged from \$84.00 to \$250.00 f.o.b. Toledo, Ohio.

The Galle Perfection Motor Co. of Detroit, Michigan advertised that their engine was "essentially the longest-lived marine motor built and would last as long as the toughest boat". In 1911 these engines were offered in sizes from two to eight horsepower in single cylinder models and prices ranged from \$40.00 on up.

If you were in the vicinity of Philadelphia, Pennsylvania at this time you could avail yourself of the opportunity of seeing many different makes of marine engines on display and in actual operation all under one roof. An establishment called "The Philadelphia Bourse" claimed to have the only permanent exhibition and selling department in the country devoted to the display and sale of all kinds of machinery and mechanical appliances. The exhibitors' spaces were equipped with gas, water and exhaust pipes so that the engines could be run for the potential customer. Makes on display at that time included Bridgeport, Campbell, Clay, Elbridge, Ferre, Fox, Frisbie, Gray, Hall, Knox, Liberty, Lloyd, Lockwood-Ash, Loew-Victor, Mianus, Niagara, Oriole, Perfection, Palmer, Roberts, Reynolds, Regal, Ralaco, Standard, Sterling, Wolverine and Westman.

Continued on page 49 .



First published in the September, 1928 issue of Motor Boating. Looks like an AOMCI meet!

The Outboard Race

Spectators at outboard regattas are not all impressed with the thrilling sport. Our artist was amused at many incidents which occurred at some of the races he has attended, and has drawn for you some of the antics which appeared to him the most



THE FACTS ARE

■ ■ ■ ■ A collection of significant truths about the subjects of outboards, outboarding & motor-minded people. If you have information that you think would be of interest to our readers, send it in!

Cost Comparisons of Outboards - 1909 to 1970

Mark Wright

Since outboard motors have become commercially available, great strides have been made in manufacturing cost reduction. Along with this it is far easier to accumulate \$50 now than it was in 1909. While the dollar would buy more at the time Ole Evinrude sold his first engines, a person worked many many more hours to accumulate the same amount of money. The Antiques of yesterday helped show the way to bargains in new outboard motors built today.

The following list gives some interesting comparisons between yesterday's and today's prices as the change in the value of the dollar is taken into consideration. We have used engines in the same approximate HP range and drawn our figures from a price index published in Fortune Magazine which shows the dollar value index of 100 in the years 1850 - 1859. The 1970 index of 435 means the dollar is worth about $\frac{1}{4}$ what it was before the Civil War.

Year	Model	1850-59:100 Price Index (Approx.)	Original Cost When Purchased	Original Cost 1970 Dollars (Approx.)	Cost per HP 1970 \$ (Approx.)
1909	Evinrude A, 1 $\frac{1}{2}$ HP	110	\$62.00	\$246.00	\$164.00
1915	Ferro 2 $\frac{1}{2}$ HP	115	65.00	246.00	99.00
1920	Caille Liberty single 3 HP	230	75.00	142.00	47.00
1925	Elto, 3 HP	195	145.00	324.00	108.00
1930	Johnson A50, 4 HP	185	145.00	341.00	85.00
1935	Thor, 2 $\frac{1}{2}$ HP	160	42.50	115.00	51.00
1942	Evinrude Sportwin 3.3 HP	180	118.75	287.00	87.00
1950	Evinrude Sportwin 3.3 HP	275	147.50	234.00	71.00
1960	Evinrude Lightwin 3 HP	340	160.00	205.00	68.00
1970	Evinrude/Johnson 4 HP Alt. Twin	435	212.50	212.50	53.00

Some interesting points can be noticed from the above table. For one thing, the cost per HP has steadily come down over the years. Reliability and life has been increased greatly contributing immeasurably to the value received for the dollar paid - this can't be easily measured but it is there. The steady decline of cost per HP of Evinrude engines over 61 years shows this quite clearly.

Note how Eltos and Ferros were high cost engines in 1970 dollars. Their quality was so good they remain today as prized antiques. Thor and Caille were priced quite low - goes to show how hard they tried to compete in the open market and may also partially explain why they are no longer in business - not enough profit gained, perhaps, to survive.

While this information is of little actual use to a Collector we thought you might like to think about your Antiques in the light of how they helped build the outboard motor industry to today by making it possible to buy modern engines at very reasonable cost.

W. J. Webb

Sure, we are Antiquers - but did you realize that the Outboard Industry, among the roots of which we are now grubbing, had an awful lot, maybe even the major share in the building of Boating, which today is America's Top Family Sport? Well, let's see now -

The Boating Industry Association of 401 North Michigan Avenue in Chicago has recently published a statistical report that reveals some surprising figures.

Back in 1913, the first year of record in which use-estimates were attempted, the National Association of Engine and Boat Manufacturers (NAEBM) estimated that there were approximately 400,000 boats of all sizes in recreational use in this country. For 1971 it is estimated, I believe accurately, and NAEBM had a part in developing the estimate, that there are 8,981,000 boats of all sizes in recreational use in the United States - more than 22 times as many as in 1913!

No one knows for sure how many outboard motors were in use in this country in 1913, but a figure of 40,000 would probably be quite generous. For 1971 what must be a fairly accurate estimate shows that there are 7,300,000 outboards of all sizes (and ages) in use here, about 182 times as many as in 1913. OK, if you don't like the 40,000 figure for 1913, let's get ridiculous and make it 80,000. That would mean that today we have 91 times as many outboards, still a huge jump.

Census population figures are not available for 1913, but in 1910 we had 93,484,000 people, so let's say 100,000,000 for 1913. April 1970 census figures show 207,678,247. For 1971 what do you want? Let's say 210,000,000. Anyway you figure it, while our U. S. population was doing just a little better than doubling, our use of boats in recreation was increasing 22 times and the number of outboards was picking up from 91 to 182 times depending upon what 1913 figure you choose.

But what about outboards in commercial use? Best guesstimates as to the percentage in commercial use is about the same today as it was back in 1913, so that overall increase percentages would not be greatly affected. Also, the increased recreational use had to show more prospective commercial users that this outboard would be a valuable commercial helper.

Because of the scarcity of accurate data sources, no one has attempted to guesstimate the amounts of money spent for boating in the early years, but in 1950 a sincere and successful effort was made to organize and develop accurate sources of statistical information for the good of the whole Boating Industry. I am personally proud of the fact that the Outboard Motor Manufacturers had a large part in this development.

In 1950 reliable sources developed an estimated figure of \$680,000,000.00 as the amount spent on Boating. This included sums spent for new and used motors, boats, accessories, safety equipment, fuel, insurance, docking, maintenance, launching, storage, repairs, club memberships, etc.

For 1971 that figure had risen more than 5 times to \$3,610,000,000.00! In 1950 the average sized outboard sold developed 6.9 horsepower. In 1971 the average outboard horsepower sold was 35.6. In 1950 there were 131,000 outboard boats sold. In 1971 this figure had risen to 278,000.

From the standpoint of outboard motors in use, the top five states are:	
	New York
	593,000
	Michigan
	478,000
	Texas
	448,000
	Florida
	440,000
	California
	430,000

Anyway you want to figure it, the once lowly outboard had a tremendous lot to do with popularizing Family Boating. Users of small boats usually yearn for larger boats and better equipment and step up as soon as they can afford it.

All of the above figures except my own guesses as to the number of outboards in use in 1913 are taken from a report prepared jointly by the Marketing Department of the

Boating Industry Associations, 401 North Michigan Avenue, Chicago, Illinois, 60611, representing the Outboard Motor Manufacturers' Association, the Boat Manufacturers' Association, the Boat Trailer Manufacturers' Association, and the Outboard Boating Club of America; and the National Association of Engine and Boat Manufacturers, 537 Steamboat Road, Greenwich, Connecticut, 06830.

SMALL INBOARDS REVISITED, continued from page 45.



Here is a photograph of a one cylinder Gray engine, 2 cycle and 6 HP, just restored by the author. Engine was built about 1910 and the flywheel alone has a weight of 65 pounds.

Continued from page 34 • Yanmar specifications

Specification of YANMAR ROTARY OUTBOARD

Model	R-220	SR 25	R-450
Type	NSU Wankel, Water-cooled Rotary Engine		
Number of Cyl.	1		
Cyl. Capacity	220		450
H.P./rpm	20/6000	25/6000	45/5500
Ignition	Flywheel Magneto		Battery
Fuel Consumption	8 l/h	9 l/h	18 l/h
Gear Ratio	15:12		
Fuel	Mix Gasoline 100:1		
Max. Weight	46 kg	46 kg	80 kg
Propeller	9 x 11"	9 x 11"	10 3/8 x 13 1/4"
Fuel Tank	23 liter		

ENGINES FOR SALE ?

Parts Too? Use the Classified Ads Section of the AOMCI Newsletter.

FLORIDA CHAPTER NEWS



By John C. Harrison

Well, I really haven't disappeared or died but, as you know, have been out of town - Russia, then after three days in New York came home and showed up shortly with a very bad case of Rasputin's Revenge or the New York Green Apple Quick Step or something like that. This went on for quite some time and ended up breaking loose an old stomach ulcer, hospital for a week and really quite ill. Haven't fully recovered from that one yet and I have a great deal of empathy when I walk through a hospital and see folks in hospitals with that garden hose affair down the nose and into the stomach. I assure you that is a lousy situation and don't recommend it for parties at all. But as I say, I am up to about 95 on my 110% feel good scale and hope to get right on back up there.

On the Russian trip, it was fantastically interesting and changed my ideas completely about what is going on in Russia and my general feeling about the situation is one of apprehension as these people are really charging ahead in the educational field and every other field and everywhere there is an overriding feeling of guided discipline. The average salary in Russia is between \$75.00 and \$100.00 a month and even one of the highly paid school administrators who talked to us makes the grand sum of \$333.00 a month. These are upper echelon people. I really don't know how they look so well fed and well dressed because both food and clothes are at least as expensive as they are in this country at our prices but there is this overriding disciplined feeling of digging in for tomorrow.

I saw not one hippie and, as they say, they have no drug problem - yet. The students at Moscow University are far better dressed than our university students. You can walk the streets of Moscow, Leningrad, and Novosibirsk in Siberia at any hour of the night and have no fear of anybody knocking you in the head for anything. If this is a police state, maybe we need a little of that. I have also heard it said that freedom is so precious that perhaps it needs to be rationed a little bit. My general feeling of apprehension comes from looking down at these people who are so vigorously climbing up to the top of the hill where we are and then I look around and see how busy so many of our young people are plowing up the top of the hill and cutting up the railroad tracks by which we got here:

I delved into the possibilities of bringing some Russian high school students over to this country at no cost to them as part of our Rotary group exchange and you should have seen the sidestepping and shilly-shallying answers that came out to that, but the real answer is that no way are they going to let high school level students see the freedoms that all our kids take for granted so readily. They do have a few graduate level students in this country studying at university, a very few, but all have families back in Russia. Time will tell.

KNUCKLE BUSTERS NEWS

Tom Luce

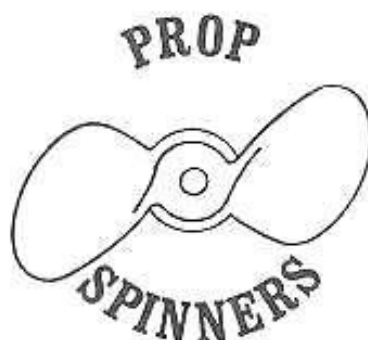
Now that a date has been set for our informal Spring Knuckle Busters Chapter meeting, I thought I'd advise you of the details. The meet will be held at the north end of Lake Hopatcong, N. J., Route 15, at the same location as last year, Woodport Boat Basin. The Basin has again offered to reduce their usual fees for parking, picnic tables and

launching. They will also have a few registered row boats to rent. New Jersey operators licenses are required for all New Jersey registered boats, but not for the boats members bring that are registered in other states.

The meet will be held on Saturday, June 2, and will begin at 10:00 AM. There will be time for members and their families to visit, try their engines and to do a little swapping. In addition, since it seems as though many Antique Outboarders have seen only small portions of Lake Hopatcong, this year there will be a one-to-two-hour cruise beginning at 1:30 PM.

More information may be obtained from Tony Caglione or myself.

**MID-
AMERICA**



Ron Ellis

The Mid America Prop Spinners are off to a roaring start. First winter meet was held at Clarence Sittons in St. Charles, Mo., on Feb. 24. Seventeen people were present, both members and families.

By being off to a roaring start: Mr. Willis Talbot and family brought their Cross Radial all the way from Leavenworth, Kansas, so that we could all see a large piece of "iron". What a power house, I now know why Fred Lucas has wheels on his!

A new A.O.M.C. member, Mr. Gordon Christopher, brought a nicely restored Wisconsin which he bought in 1935 for \$1.25!

Clarence has the racing bug again; he has a "new" PR and several of those nasty, skinny, little lower ends.

Walt Ellis and Casey West spent most of the day devising devious ways to relieve Wayburn Niemeyer of several of his engines while he was away from the farm.

Ron Harrison, Wayburn and I discussed Cross Radials and motorcycles, what a combination! Gene Yonker and his lovely chauffeur Mrs. arrived in time to identify Mr. Christopher's engine.

Walt Ellis volunteered to organize a spring meet, on the water sometime in May.

I ran out of gas on the way home!

Best of Cranking,
Ron

TWIN CITIES SCENE

Ron Johnson

We met at the home of Leonard Pangburn the evening of Feb. 21. Len has a big basement with some very nice outboards - like a Gierholt, a 1928 Elto Quad (with a spare Atwater Kent timer and lower unit) which Len found at a garage sale, a K45 Johnson, a 1924 Caille, Lockwood Ace, 2 Neptunes and many more. Bob Peterson, noted hardluck Neptune driver, said, "I would like to see a Neptune that will run in water for more than 15 seconds". It was decided to have a Neptune contest this summer.

There was a fine lunch and then we held the Club business meeting. Len was elected President; Gene Theisen, our Secretary-Treasurer. We then planned an indoor meeting for April 6 at the home of Bob Peterson; also, our first outdoor meet, May 6 at Prior Lake.

Members Bob Peterson, Glenn Ollila, Gene Theisen, Robert Brautigam, Earl Biermann and I, thank you for a good time, Len.

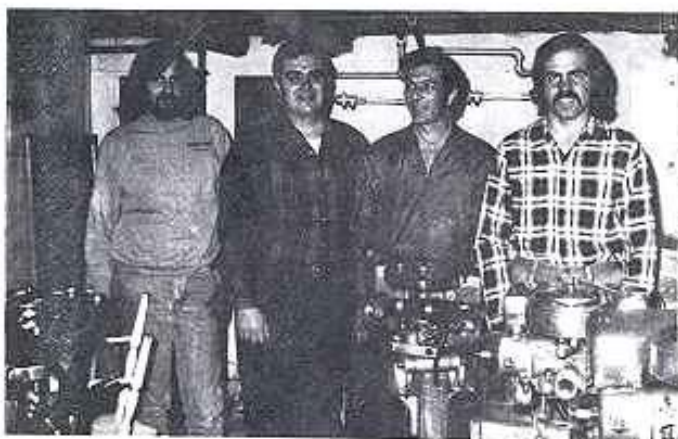
For the latest rebuilding news, Glenn has a XR Johnson that will be ready by this summer and I should have a V45 and a SR50.

We had a special visit last July by Mr. & Mrs. George Martin and George's son-in-law, Kent Hampton & family. George "happened" to bring a Hi-speed Martin 60 race engine that we ran on Glenn's Class B, Wolf runabout. It ran so well that the Water Patrol had to stop and have a look; lucky the boat was out of the water by the time they arrived or we all would still be trying to raise bail.

Well, that's all for now and happy motor starting to you.

THE **Yankee** **Chapter** NEWS

by Bob Zippis



Last January when the lakes in New England were covered with a thick layer of ice, the Antique Outboard spirit was stronger than ever at the home of Bill Andrulitus of West Hartford, Connecticut where an impromptu meet was held. Shown in the photo from left to right are: Brad Snow who has one of the greatest Mercury racing motor collections anywhere, Bob Zippis who

just finished restoring a really wild Hubbell "460", Dick Schaeber who has a nice collection of Champions, and Bill Andrulitus, who is doing a first rate job restoring a recently acquired Hartford. Bill works for the Gray & Prior, the company which made the Hartford. He has deciphered the meaning of the Hartford serial numbers, and will tell us all about it in a future article.

35.259

MILES PER HOUR

**PAWLING
DRIVING
EVINRUDE**



PRICE OF CENTURY CYCLONE, \$195.00

MADISON, WIS.

August 5th

1928

**POPE
DRIVING
JOHNSON**

CENTRAL OHIO september meet



September 17 dawned bright and mild over the Delaware, Ohio state park as O. B. Coomer and myself appeared on the scene, sure to be the first ones on hand for the meet. As we walked towards the dock area, however, a tremendous roar shattered the silence! Upon investigation, we discovered this outburst to have been caused by Bruce Kennedy and his mighty, chopped-exhaust Caille model 79. Bruce was scheduled to leave for Utah that morning, but just couldn't leave before putting in an appearance at the meet. Bruce later reported that he had walked across the Grand Canyon and, although he won't admit it, we understand that he had heard a rumor about a Giant Twin lying abandoned by the Colorado River. Although that proved to be a false lead, it shows what an AOMCI member will do to locate old outboards.

One interested spectator, who had dropped by to see our motors as we set up our display racks, had heard about the meet and was curious enough to travel 90 miles to the park. After talking with him for a few minutes, Bruce suddenly recognized him as an acquaintance he hadn't seen for over twenty years! That coincidence made Bruce doubly glad that he had come to the meet before leaving town.

Next member to arrive was Lowell Hetzner with his pre-war, Century boat and a flock of motors, including a complete set of Martins. Lowell's Johnson K-65 had a spot-polished fuel tank which was evidently a factory finish. Lowell's dad had been a Johnson dealer in the 30's, and Lowell remembers seeing similarly finished motors in the showroom. Lowell tested his air-cooled Bendix SMD on a display rack before putting it on a boat, and the old Bendix idled so slowly that it was possible to count the propeller revolu-



Skip Hight and a trio of
Evinrude products.



Ed Diederick and O.B. Coomer look
over Ed's pair of 1907 Watermans.



Lowell Hetzner resting on his Bendix SMD while looking over some of the motor display.



Bill Horst and his wife, Ann, underway, powered by a spotless Elto "C".

Below: Ed and Howard Diederick cruising along with a Johnson model A-25.

tions.

Paul Saeger arrived with his Evinrude model F Fleetwin, followed by Ray Fisher who brought several K Johnsons, a Neptune and a Wizard. Skip Hight showed up with a 1935 Elto Fisherman, an Evinrude Ranger and a 1927 Evinrude model R. His model R baffled me as the model R was made only in 1927 and my model R has an entirely different style lower unit and magneto. A little research into an old Evinrude parts catalog revealed that there had been a change made in the model R in the middle of the year. Evidently, similar changes had also been made in the 1929 models F, H, and U. Another first for outboarding! It took the automotive industry 40 years to catch up!

Ed Diederick pulled into the parking lot with a station wagon full of family and a trailer full of motors, including two 1907 Watermans and a freshly-restored 1913 Motorgo that he had acquired at the Antioch meet. Cont. pg 56.





Service Clinic



Elto High Speed Speedster

Mark Wright

Introduced in 1929, this engine was the high performance version of the well known Speedster which first appeared one year earlier. Rating was 11 HP @ 4500 RPM and 12 HP @ 4800 RPM up from the 7 HP @ 3500 RPM specified for the Speedster model. Bore and stroke is the same at 2 $\frac{1}{2}$ " X 2", or 19.7 cu. ins.

The H. S. Speedster used aluminum pistons and connecting rods, higher compression and a unique system to breathe more air into the crankcase so more air/fuel could be ingested to deliver more HP.

This rather rare model is really different to run and operate from any other antique outboard I've ever been shipmates with. Called by Jim Webb "an Engineer's engine for Engineers", you will really believe this after running one for an afternoon!

First off, this engine must be run on a very light rowboat under 100 lbs. or a small hydroplane hull. The H. S. Speedster is an especially low torque motor and thrives on very light boats where it can wind out to 4500 RPM. On such boats, with the correct propeller, clocked speeds close to 30 MPH can be attained.

The cold starting procedure is the same as the service Speedster except you must be careful of flooding - the H. S. Speedster floods very easily. Hot starting is something else entirely. If the engine doesn't start hot on the first or second bounce, shut the mixture needle, start the engine, simultaneously and immediately advancing the spark handle to straight ahead and opening the needle valve to $\frac{1}{2}$ turn open. Once you get the boat nearly planed out and reach about 2500 to 3000 RPM, open the carburetor needle to about 1 turn open, advancing the spark as you do. When slowing down to come back to the beach it will be necessary to reduce the needle back to about $\frac{1}{2}$ turn.

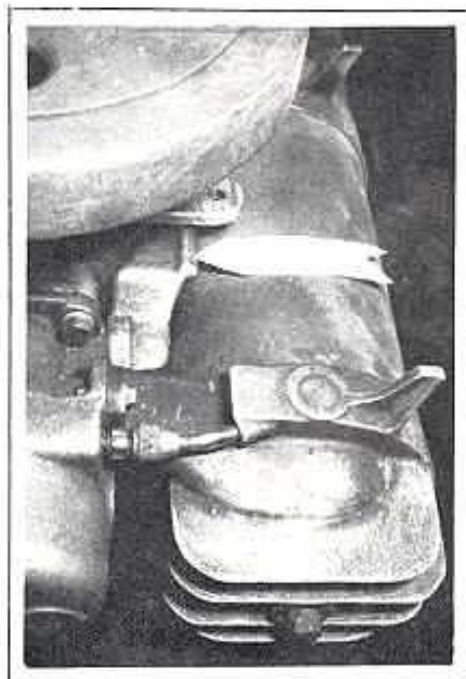


Photo at left (arrow) shows the extra air breathing manifold used on the Hi Speed Speedster.



Photo at right is a 1929 Speedster.

Very important is the use of a Champion 5M or equivalent plugs and a prop that will permit RPM gain all the way to full advance. If you go beyond a spark advance setting that doesn't yield more RPM you can burn a piston, so drop the prop pitch 1" at a time until you have the engine loaded so RPM gain is realized all the way up to full advance, peaking at 4500 to 4800 RPM.

The breathing characteristics of this engine are such that the auxiliary air intake arrangement begins to work about 2500 to 3000 RPM. This is why the mixture must be enriched at this point - more fuel is needed in this additional air to maintain the best air/fuel ratio. A further explanation (which applies also to the H. S. Quad) appears in the January 1972 "The Antique Outboarder".

As these engines are rare, it is suggested the rods and pistons be balanced. Run the H. S. Speedster flat out only in short bursts for preservation. Warning: Rod to crankshaft clearance must be .003 to .004 to prevent seizure.

The H. S. Speedster can be externally recognized by the presence of an auxiliary air intake manifold between the muffler and the cylinders. The letter "H" appears at the end of the serial number and on the flywheel, which is specially balanced and timed for the ignition.

The Elto High Speed Speedster is an especially significant Milestone engine due to high performance in its day from the unusual breathing design. If you don't have one, make a special point to familiarize yourself with this motor when you visit a Collector owning one.

Better still: Get one yourself.

CENTRAL OHIO SEPTEMBER MEET continued from page 54.

Incidentally, Ed's wife, Betty, not only puts up with his hobby, but actually participates by cleaning and polishing parts, and she helps Ed to assemble his motors.

Bill Horst drove in with a mint condition model C Elto Ruddertwin. Bill proceeded to demonstrate the operating characteristics of this motor for the benefit of those of us who had never seen one in operation. This demonstration included the famous Elto instant reverse which was then followed by a demonstration of much flywheel tightening. Not to be outdone, I started my Elto 309 Lightweight and managed to beat Bill in an impromptu race. That extra $\frac{1}{2}$ horsepower really does the trick! I also ran my Caille model 20 5-speed, although I wasn't very exclusive as there were three other 5-speeds at the meet.

Before the end of the day there was the usual trading of parts and motors and, of course, lots of conversation about our favorite subject (NO, not girls). There were 31, pre-1942 motors brought to this year's meet, and the farthest-travelled member was again O. B. Coomer who drove 250 miles to attend. Lowell Hertzner was responsible for arranging with marine operator Dock Robinson for our free use of his rental boats. Dock's generosity was appreciated by all, as were the delicious hamburgers served by his food concession.

This is the second year for the Central Ohio meet and appears that it may become habit forming. We tentatively plan to hold the meet again on the third Sunday of September 1973, so those of you wanting to attend should start now to prepare your motors.

ATTENDING MEMBERS

O. B. Coomer - Louisville, Ky.
Edmund Diederick - Elyria, Ohio
Raymond P. Fisher - Gallion, Ohio
Lowell Hertzner - Prospect, Ohio
Skip Hight - Neapolis, Ohio

Bill Horst - Ft. Thomas, Ky.
Bruce Kennedy - Columbus, Ohio
Milt Moos - Westerville, Ohio
Paul E. Saeger - Louisville, Ohio

AOMCI NEW MEMBERS

Skipper Birbarie
43 Standard Av
Branford, CT 06405

Richard W. Fuchs
17 Deerfield Ln
Simsbury, CT 06070

Herman R. Schaber
31 Coles Av
Newington, CT 06111

Robert C. Wilcox
6 Windsor Court
Saybrook, CT 06475

R. Stanley Bennett
PO Box TT
Venice, FL 33595

Tracy M. Coleman
250 Merravay
Florence, KY 41042

Carl Benson Spivey
1090 Drift Road
Westport, MA 02790

Robert E. Spencer
2638 Procter St
Flint, MI 48504

Loren Staley
2663 Marathon Road
Lapeer, MI 48446

Marvin Sperring
11902 21st Av S.W.
Seattle, WA 98146

Robert Sperring
Rt 3 Box 219
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NEW MEMBER LIST CONTINUED
ON PAGE 2.

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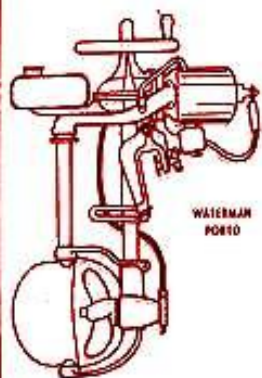
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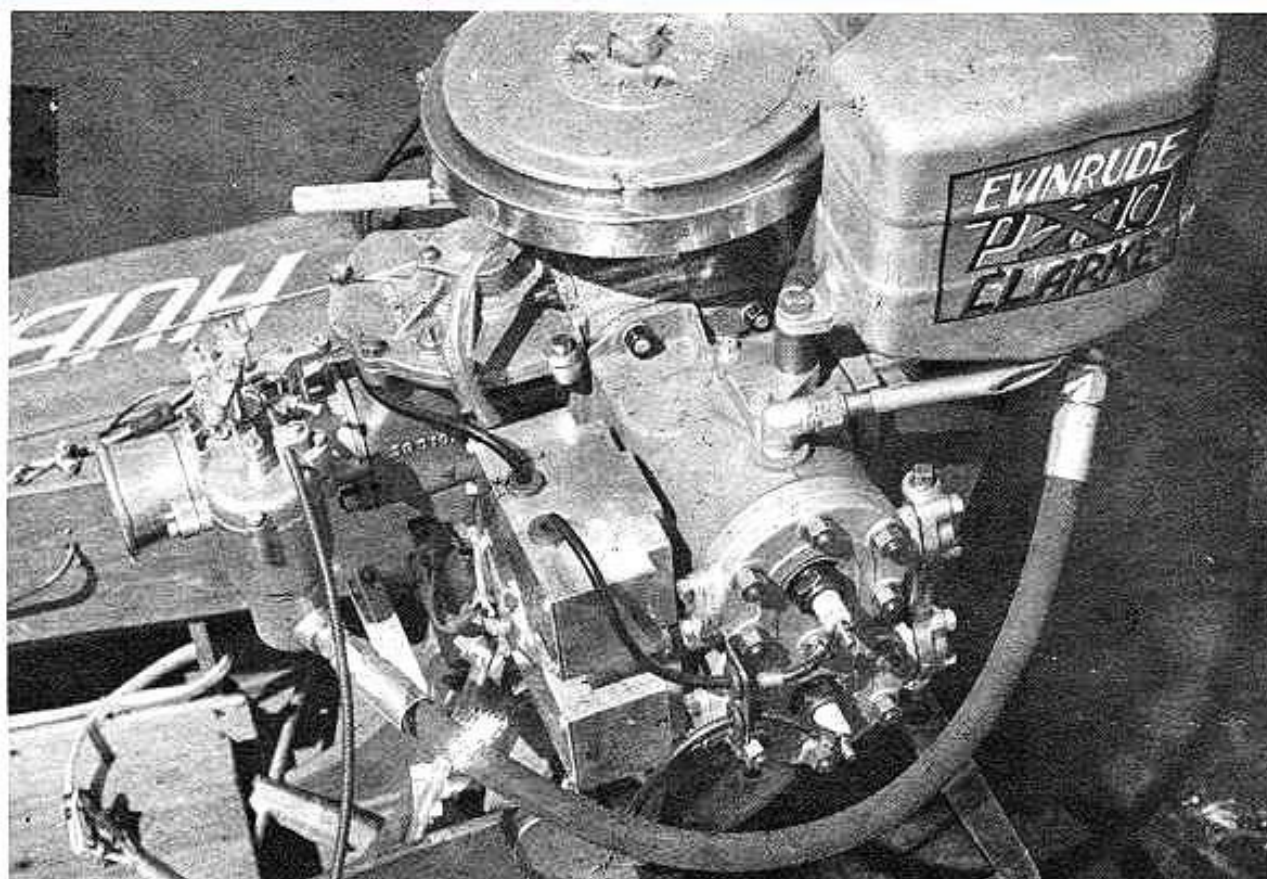
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