

SPRING 1974

HYDROPLANE

QUARTERLY



We hold these truths:



UNITED STATES OF AMERICA

Allen J. Lang
Apt 207, Bldg #1
4600 Lake Villa Dr.
Belleville, MI 48111

THIRD CLASS MAIL - RETURN REQUESTED

Hydroplane
Quarterly
P.O. Box 26014
St. Louis, MO 63136

DEVOTED EXCLUSIVELY TO THE SPORT OF BOAT RACING

Racing Services for '74

Stan's Custom Pistons

6800 Donahoo
K.C., Ks. 66104
Tel: 913-299-6008

SPECIALIZING
IN
BALL BEARING
CRANKCASE
SET-UP
FOR
C-SERVICE

QUINCY FLAT TOP PISTONS		
FINISHED.....	\$12.50	
SEMI-FINISHED.....	9.50	
MERC B AND D DEFLECTOR PISTONS		
FINISHED.....	17.50	
SEMI-FINISHED.....	9.00	
'L' RINGS FOR ALL QUINCY ENGINES.....	3.00	each
REGULAR IRON RINGS.....	1.25	each
STEEL TORQUE TUBES (ANY RACING MOTOR).....	65.00	
MERC SPACER PLATE ½" THICK, MACHINED FLAT, INCORPORATES MERC TILLER BAR.....	9.95	
MERC CRANKING PULLEYS, FIT ALL 'H' FLYWHEELS, HEAT TREATED ALUMINUM, ALL MACHINED.....	9.95	
BLOCKS PORTED TO SPECS ON MILLING MACHINE		
4 CYLINDER BLOCK.....	25.00	
2 CYLINDER BLOCK.....	15.00	
CYLINDERS BORED PER HOLE.....	7.50	
CYLINDER HEADS FOR MERC QUINCY, THESE HEADS MADE FROM EXTRUDED ALUMINUM, POSITIVELY CANNOT LEAK.....	24.50	each
MERC FLYWHEELS BORED TO LARGER TAPER.....	8.50	
ALL STAINLESS STEEL STEERING BAR PULLEYS.....	4.50	each
MERC CRANKSHAFT TO KONIG UNIT DRIVESHAFT CONNECTORS.....	10.00	
YOU FURNISH DRIVESHAFT END.....	6.00	
KONIG UNIT TO MERC CRANKSHAFT CONNECTORS.....	3.50	
C-SERVICE EVINRUDE PARTS AND SERVICES		
GRIND CYLINDERS.....	12.00	each
PORT CYLINDERS TO SPECS.....	55.00	pair
BALANCE CRANKSHAFT.....	10.00	
INSTALL JOHNSON 75 RODS (LABOR).....	25.00	pair
FURNISH, FIT PISTONS AND RINGS.....	35.00	pair
SEMI-FINISHED C-SERVICE PISTONS.....	10.00	each
TIME AND REWORK ROTOR VALVE TO FIT CASE.....	35.00	
SQUARE CRANKCASE WITH NEW TOP MAIN BALL AND ROLLER.....	65.00	
MAKE STEEL FLYWHEEL, CUT CAM, BALANCE.....	40.00	
NEW COIL, DOUBLE OUTLET.....	30.00	
MACHINE SHOP LABOR.....	8.00	hour
KONIG V-D, V-C, AND A PISTONS		
FINISHED.....	18.00	
SEMI-FINISHED.....	12.00	
POWER KORE - 110 VOLTS ON YOUR CAR AT ALL TIMES.....	39.95	
NUMEROUS RACING PARTS - NEW AND USED		
ALL KINDS OF CUSTOM WORK		
MIDDLE WEST DEALER FOR DESILVA BOATS		

SUBJECT TO CHANGE WITHOUT NOTICE

Hydroplane Quarterly
P.O. Box 26014
St. Louis, Mo. 63136
Volume 5 • Number 1

Tim Chance *Editor*
Karl Williams *Associate Editor*
Bill Mitchell *Associate Editor*
Ann Chance *Circulation*
Representatives:
Karl Williams
Box 281
Aylmer East, Quebec
Jim McKean
9714 Lark Circle
Fountain Valley, Calif. 92708

featured

FACTS AND OPINIONS 3
An Editorial

LETTERS 4
Feedback from our readers

RACING REVIEW 7
Reports from the racing world

BOATS FOR PONCHO 8
or, Racing in Indonesia

NUTS AND BOATS 13
By Bill Mitchell

HANGER 7 14
Racing development

TEST YOUR HQ 16
A quiz

the cover

Hal and Vivian Kelly with a pair of racing boats bound for Indonesia, see story on page 8

Hydroplane Quarterly is published four times per year in Spring, Summer, Autumn, and Winter editions by Tim Chance. No information is to be reprinted without permission from Publisher. While all information is appreciated, no responsibility is assumed for unsolicited material. Any material submitted for publication must be from the originator and/or copyright holder or be cleared for publication by the submitter. Single copy price in USA, Canada, and Mexico \$1.00. Subscription \$4.00/year; \$5.00/year overseas. Printed in USA.

*facts
and
opinions
by the
editor*



Everybody has something to say about the energy crisis — so, we'll throw in our two cents worth. A recent newspaper article related some solutions; one suggestion was to ban motorcycles, boats and racing, then with the resultant saving in fuel, the problem would be solved. We don't think things will develop to that point — at least we hope not.

But we should consider our use of fuel. Is it wasteful and unnecessary or is it legitimate entertainment? Think of the gasoline expended just to transport motion picture film around the country, or the vast amount of jet fuel used by amateur and professional athletic teams.

Several senators have said that racing is a way of American life and is entitled to its share of fuel. Plus another magazine (car racing variety) had a listing of the top ten recreational usage of fuel and boating in general, not to mention boat racing wasn't even listed; so, we don't anticipate any curtailment of our sport.

And, we recently returned from a race in Florida and did not encounter any serious problems while traveling. Speaking of Florida, we never got our boat in the water (got blown out as usual). It would be nice to be able to go winter racing in a nice climate — Phoenix, Arizona for example.

Tim Chance

Tim Chance
Editor and Publisher

Letters

DEAR ANN AND TIM CHANCE:

I have just finished reading every word in the Hydroplane Quarterly. Enjoyed all of it even Scott Smith's ad on Konigs - thought the picture of Bill Seebold was very good - Marchetti's interview was splendid - John Dortch's ad was interesting ----- Mr. Baldwin spoke a good piece - the piece about the Berg-hauers was a dilly - just can't believe they grew up to be such BIG guys. We will look forward to what Bill Mitchell comes up with in the months to come. Dick O'Dea's ad was like Dick - very nice - the piece of writing I enjoyed most was Facts and Opinions by the Editor -- Keep up the good work - believe me this working together of you and Ann will make good memories in the years ahead --- Papa and Mama Smith have been together many years and have enjoyed every bit of it - Outboard racing is a fine sport and there is always something to discuss about it. With all good wishes to Ann and Tim and the Children. Sincerely,
Mama Smith
Shreveport, La.

Mama, this is the nicest letter I have ever received. Thank You, Sincerely, Tim.

.....

DEAR TIM:

I am writing to find the status of my subscription to Hydroplane Quarterly. When does my subscription run out? I enjoy the publication greatly and don't want to miss any issues.

One other question. What can you tell me about Quincy? Are they going to come out with a new motor or modification to run with the Konig?

Bob Grover
Vergennes, Vermont

Bob, you should have your subscription information in the mail. Quincy? Damned if I know. To the best of my knowledge they aren't planning anything. But as one example of what's happening around the country, read the article on Hanger 7 in this issue. Plus we hope to have a complete story in a future issue on a Quincy engine with Konig type cylinders that has already been tested on a boat. TC.

.....

DEAR TIM:

Just another four bucks, it must be about that time, I don't imagine you send out renewal notices, so I'll just send money now and again. The pictures and articles of Jim Merten were fabulous, that piece of machinery is really flying.

Earl Maha
Barrington, Illinois

Thanks for the kind words, Earl, and the reason you haven't received a renewal is that you have never run out. Wish all our subscribers had your sense of timing. TC.

.....

TIM:

I appreciate you keeping us on your mailing list. I enjoy your publication.

You are certainly to be commended for your efforts. I hope the Pros can survive and make a comeback. I'll be ready to help any way I can.

We are going strong with the pleasure Boat Division.

I see where APBA has again copied us for the pro rules - I hope it will help. Claude Fox
National Outboard Assoc.
Knoxville, Tennessee

Claude, considering that you know the selection process involved in publication, I really enjoy that you enjoy HQ. Incidentally, it should be noted that the new address of the National Outboard Association is: P.O. Box 10774, Knoxville, TN 37919, tel: 584-4341.

SIR:

Please send one subscription to Hydroplane Quarterly, and any back issues if available containing information on how to set up B stock engines and hydroplanes.

Ronnie Bryant
Birmingham, Alabama

Am sending you articles on the 20H and Hot Rod. We've never done anything on hydro set-ups. Never really thought about it, but it would make a good story - look for it sometime in the future. TC.

.....

DEAR TIM:

I've got a couple of suggestions. One might be to cover major outboard races such as Lakeland and Valleyfield. They're just as tough as a Nationals from a competitors standpoint. When you win, you've beat the best.

We've got many colorful people connected with racing and I'd like to see profiles on such characters as Bill Giles, Clark Maloof, the late Gerry Waldman, Bob Wainamaker (yes he ran outboards for years!), and others.

Riggs Smith
Montrose, Penna.

Well said. TC.

.....

HEY TIM:

I'm finally getting around to re-subscribing to the "Quarterly". But that's not the real reason I'm writing this letter.....

Hogan Liechty
Polk City, Iowa

What was the real reason you wrote the letter? TC.

.....

GENTLEMEN:

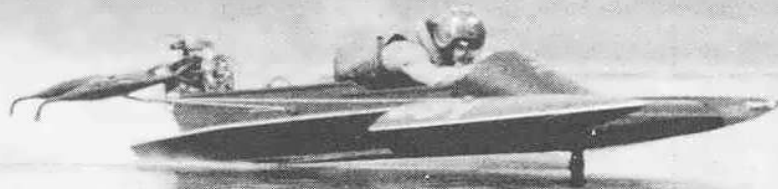
I have a Johnson 20, what do I have to do so I can race it on alcohol and nitro?

Fred Luce, Jr.
Portland, Oregon

Forget it, it would cost a lot of money and it wouldn't be competitive. Contact one of our advertisers. TC.

BUTTS AEROWING

COMPETITION KING



● A HYDRO

TIM BUTTS APBA - UIM WORLD CHAMPION 1973
TIM BUTTS APBA NATIONAL CHAMPION 1972
TIM BUTTS APBA 2ND PLACE 1973 NATIONALS
BALDWIN/BUTTS NOA COMPETITION RECORD HOLDER 1973

● B HYDRO

WAYNE BALDWIN APBA WORLD CHAMPION 1973
RAY HARDY APBA NATIONAL CHAMPION 1973
TIM BUTTS APBA DIVISIONAL CHAMPION 1972
TIM BUTTS NOA COMPETITION RECORD HOLDER 1973
DICK SCOPINICH APBA DIVISIONAL CHAMPION 1973

● C HYDRO

WAYNE BALDWIN APBA WORLD CHAMPION 1973
ARMAND HEBERT APBA 2ND PLACE 1973 NATIONALS
ARMAND HEBERT GRAND PRIX WINNER (5 OUT OF 6)
AND VALLEYFIELD CHAMPION 1973

● D HYDRO

J. YALE/D. O'DEA APBA NATIONAL CHAMPION 1973
J. YALE/D. O'DEA FLYING 1/4 MILE RECORD OF 110.6 (1973)
WAYNE BALDWIN NOA COMPETITION RECORD 1972

● F HYDRO

WAYNE BALDWIN APBA - UIM WORLD CHAMPION 1973
WAYNE BALDWIN APBA 5-MILE COMPETITION RECORD
(85.673 MPH AT LAKE LAND)

● E FORMULA

DICK SCOPINICH APBA NATIONAL CHAMPION 1973

● SUPER C

J. YALE/D. O'DEA APBA NATIONAL CHAMPION 1973

ALKY	STOCK	MODIFIED STOCK
A	SUPER C 25-SS	A
B		B
C		C
D		D
F		E
E Formula		
M		

TIM BUTTS AEROWING
11448 30 MILE ROAD
ROMEO, MICHIGAN 48065
(313) 752-6837

Who cares about boat racing?



Who cares about tech features?

HQ VOL. 2 NO. 1

Who cares about the Nationals?

HQ VOL. 1 NO. 4

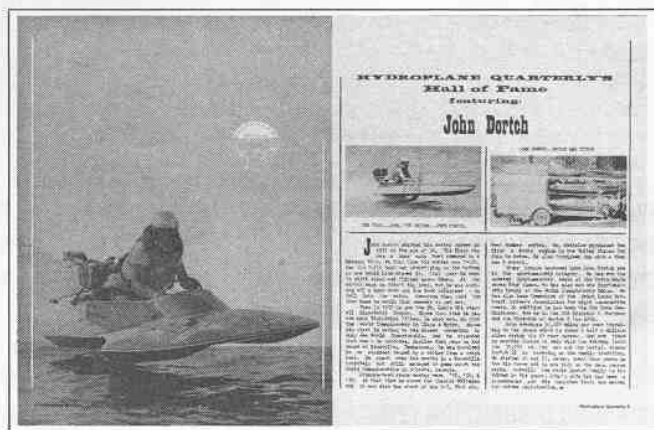


HQ VOL. 2 NO. 1



Who cares about setting-up racing engines?

HQ VOL. 2 NO. 2



Who cares about drivers?

HQ VOL. 1 NO. 3



Who cares about boat racing?

HQ VOL. 2 NO. 4



Hydroplane Quarterly cares!

racing review



WILLY KERSJES, CANADIAN HIGH POINT CHAMPION,
WITH HIS C RACING RUNABOUT - A DESILVA-CRESENT

LAST YEAR'S CANADIAN NATIONALS WERE HELD AT BELOILL, QUEBEC. Jacques Vallee from Sherbrooke, Quebec was the winner in Class A Hydro. The B Hydro winner was Doug Thompson of Bloomfield, Ontario. Class C was won by Andre Jolicoeur from Beauce, Ontario. Class C-Service Runabout was won by Chuck Howgate from Wyckoff, New Jersey.

The race of the day was the C-Service Runabout class with a tight battle between Willy Kersjes of Aylmer East Quebec and Howgate. In the first heat Kersjes got to the first turn first and led for one lap. Then in the second lap he drifted too wide on the turn and Howgate moved in; Kersjes had superior acceleration, however, and regained first place. On the next lap Kersjes repeated his mistake, and again Howgate moved in. This time the nose of his boat was on the inside and very close to Kersjes' throttle. In the last turn the two boats came together and then Howgate crossed the finish line first; followed by Kersjes, 'the flying dutchman'.

When Howgate was asked what happened in the last corner he replied, 'He did not leave me any room, so I made room'.

CANADIAN BOATING FEDERATION RACING OUTBOARD DIVISION TOP FIVE -- HIGH POINT

A RACING HYDRO

- J. Vallee Sherbrooke, Quebec
- B. Vielhauer Ogdensburg, N.Y.
- A. Hebert Lery, Quebec
- N. Cerino Milford, Conn.
- R. Grover Burlington, Vt.

B RACING HYDRO

- D. Smith Ogdensburg, N.Y.
- R. Diabo Caughnawaga, Quebec
- D. Thompson Bloomfield, Ont.
- A. Jolicoeur Beauce, Quebec
- T. Russell Toronto, Ontario

C RACING HYDRO

- A. Hebert Lery, Quebec
- A. Jolicoeur Beauce, Quebec
- R. Diabo Caughnawaga, Quebec
- W. Compo Ogdensburg, N.Y.
- P. Lord Ogdensburg, N.Y.

C RACING RUNABOUT

- W. Kersjes Aylmer East, Quebec
- C. Howgate Wyckoff, N.J.
- W. LaSalle Ottawa, Ontario
- M. Kappeler Ottawa, Ontario
- M. William Augusta, Ontario

C SERVICE RUNABOUT

- W. Kersjes Aylmer East, Quebec
- M. Kappeler Ottawa, Ontario
- C. Howgate Wyckoff, N.J.
- J. William Augusta, Ontario
- W. LaSalle Ottawa, Ontario

GRAND PRIX HYDRO

- A. Hebert Lery, Quebec
- W. LaRose Ogdensburg, N.Y.
- B. Sovie Ogdensburg, N.Y.
- E. Deserre Utica, N.Y.
- D. Thompson Bloomfield, Ont.

REGGIE FOUNTAIN, JR. OF TARBORO, NORTH CAROLINA AND DOUG PEARL, GAINESVILLE, FLORIDA, respectively lead class U and SJ drivers to the finish line at the first major 1974 OPC race at Miami Florida.

Fountain, driving a mercury Twister II powered Molinari tunnel hull, made his first start this year as an independent since the Mercury factory racing team was discontinued. The Tarboro businessman averaged 82.5 mph around the 2-1/2 mile course during the one hour event, also taking first overall.

Pearl finished five laps behind Fountain, averaging 70 mph with his stock Merc 1500 outboard powered sports tunnel.

Tim Briggs, Lake Forest, Illinois, and Art Kennedy of Saint Louis, Missouri, drove OMC powered Scotti tunnel's to second and third overall.

A field of 31 boats responded to the starters signal in a modified dead engine Lemans start. Miami native Gary Peacock lead an initial charge across the starting line, two miles from the beach lineup.

Fountain then took over, exchanged the lead with Billy Seebold, Jr., regained the lead for good and toured the bouys 33 times. Pearl, defending National Marathon High Point Champion, easily paced the nine boat SJ contingent as he compiled 28 laps.

The race conditions were ideal with a moderate chop on the water. Several flips dunked drivers without any serious consequence. The purse totalled \$3100, with Fountain claiming nearly \$1000 and Pearl receiving \$450.

Boats for Poncho



Here are the two boats I built for Poncho, all nicely painted ready for delivery. When Poncho received the boats, he promptly taped red and white tape over my beautiful varnish and paint job. Interesting to note the wife and I built the boats in one month, there were some changes as the motors used did not have racing lower units and I had to build the transoms higher.



Poncho or, Racing in Indonesia

By Hal Kelly

I design small boats under 24', but my real specialty is designing outboard racing boats. Imagine my surprise to receive a letter from Capt. Nirmolo, the aide to Dr. General Ibnu Sutowo, the Oil General of Indonesia, to design and build two outboard racing boats for the General's Son. I do get orders from Foreign countries, but the cost of shipping generally kills the deal. Anyway, I gave him a price F.O.B. and in a few days, I receive a telephone call from Refining Associates from California. It seems the General wants the two boats built and they are handling the deal for him. A check is on the way for full payment on the boats. We have just a month to build them, this was in July and it is hot in Florida this time of the year. We met the schedule and delivered them to a professional crater in Miami, from there they were shipped to Indonesia, at a cost of over five grand.

About two weeks later we got a Telegram, the General would like me and my mate (wife) to fly over to Indonesia ... first class as his guest. The object was for me to set up the boats and teach his son Poncho to race them. We had just a few days to get our shots and get under way. We flew to San Francisco and there made arrangements for passports etc., and then half way around the world to Indonesia. With an invitation of this nature, naturally we looked up to see who our Angel was. We found an article in News Week explaining about the General. He handles all the oil rights for Indonesia and is the richest man in that country, which figures. Still I wondered what outboard racing would be like in a country that is so primitive.

CONTINUED NEXT PAGE

Boats for Poncho

CONTINUED

First we landed in Djakarta Indonesia where we were greeted royally by the General's representative and informed that the next day we would fly to Surabaya where the races would be held. It seems this outboard race would be part of the Indonesia Olympic Games which ran from August 26 to September 6. Athletes from all parts of Indonesia, Borneo, Bali, Sumatra, etc., would come to participate in all sports. The outboard races were to be held the 3rd and 4th of September in the harbor of Surabaya. Outboard races in this harbor made quite a contrast, what with the many huge oil tankers, and primitive native freighters; large 100' gaff rig sail boats with two enormous rudders that take two husky men to man just one of them. They pole them out a ways and set sail, they have no motors. They also

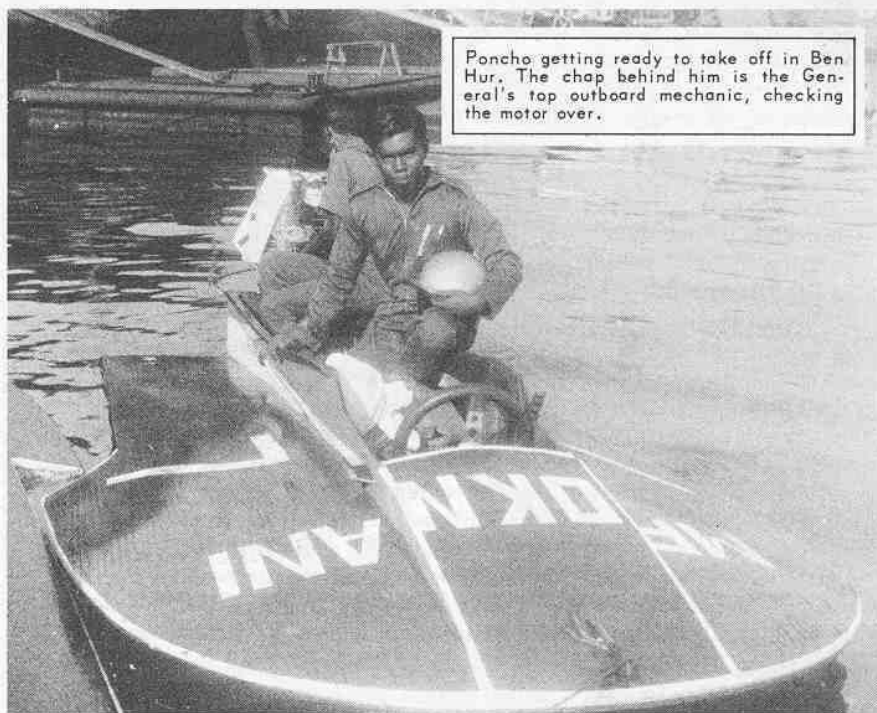
have many smaller freighters about 60' long with a lateen rig, again no motor. In one section of the harbor, these boats were docked at the wharf by the hundreds almost as far as the eye could see. They are used to carry freight from island to island, they tow their life boat, a dugout canoe. They load the darn things almost to the gunnel. In contrast to this, there are many Taxi boats running around the harbor; they are about 24' long with a jerry rig on the back to hold an ancient outboard motor, this looks like an afterthought and it is, as the boats were built to be sailed or paddled. Other crafts were outriggers carved from one log, with a bamboo pole on each side to act as an outrigger. They are lateen rigged; they will load them up with (in one case) two men and two young women, an old Grandma, a child, a live pig and a load of wares (food or what have you) as they load this craft it is pushed out into the deeper water and when fully loaded with people and goods, it is paddled out over the reefs, pull up the sail and 'away they go'.

The race pits were right in the center of this bedlam, bamboo mats were woven on the spot for shelter,



Poncho receiving his medals; they make a big deal out of it ... band playing national song and so on.

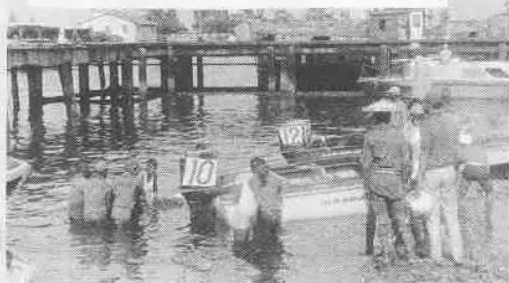
This is Poncho the General's son, I am trying to answer his question.



Poncho getting ready to take off in Ben Hur. The chap behind him is the General's top outboard mechanic, checking the motor over.



Note the pits are far from ideal, to the left they are trying to pull in a flipped boat.



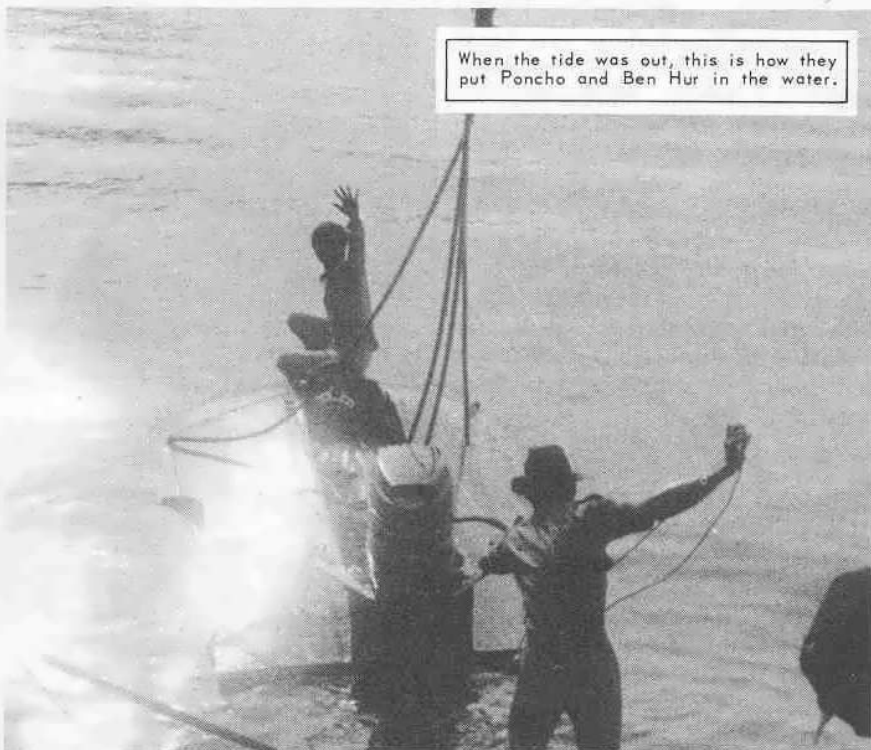
View from the pits of one of the races. The 4th boat is Poncho driving Ben Hur, he blew the start and now in the 2nd lap he is working his way up front, at the finish he was way out front.



Poncho coming into the pits with Madcap after wining his first race.



When the tide was out, this is how they put Poncho and Ben Hur in the water.



mostly for shade as it was very hot. It doesn't rain this time of the year rainy season is December to May). All the racing motors were the latest models made in America, Mercury, Evinrude, Johnson, etc. Almost all the racing boats were homemade from

'would you believe?' my boat plans. They were a bit on the crude side and heavy. Most of the racing outfits were owned by Generals, Businessmen, and sons of the well-to-do. My job was to make sure Poncho won!

CONTINUED NEXT PAGE

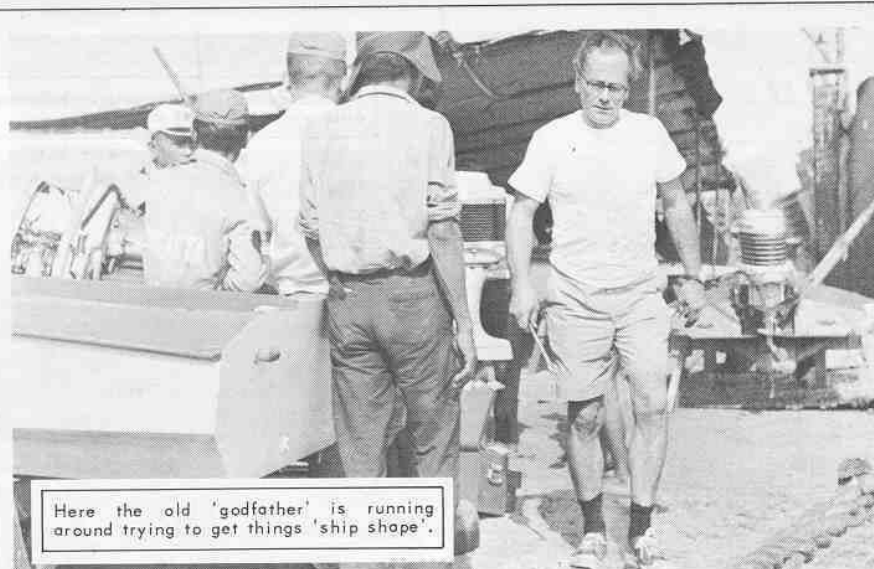
Boats for Poncho

CONTINUED

They had quite an assortment of props, but none quite right; I had to cut them down with a hand hack saw; had a native to crank the hand grind stone while I tried to grind the props smooth. I would beat them to the proper shape over a car bumper or anything that looked like it might do the trick. As for balancing the darn things ... well I just eye balled this, quite a challenge, but I managed to get another 8 miles an hour this way. It was a bit of a problem setting the boats up for top end. I had to remember that the real driver would weigh some 40 pounds less than I. One of the boats was a D Hydro and I did not want the boat to blow over backwards with Poncho. The other boat was a D Runabout, the motors were 50 H.P. Merc for the small class and 55 H.P. Merc for the large class. Now came the problem of teaching Poncho how to drive them, he did speak some English which was a big help. The hydro was easy, but turning a D Runabout is another story. I managed to get this across, he was a natural driver. Teaching him timing for a running start was something again.

Now I found out how and why the General wanted only me to build the boats. A Mr. Oey Tjin Tik ordered a set of Ben Hur plans from me and built a boat, he did a rather nice job and was beating all the local boys with it. This chap has an Evinrude dealership in Djakarta. At this time, Mr Oey Tjin Tik was helping Poncho to win these races. The General had his own mechanic, a Mr. Moriarti who was trained in the states by Mercury Motors. The pay scale is very low in Indonesia about a dollar a week, thus Mr. Moriarti's salary of 12 dollars a Month put him in the upper income bracket. It was his job to keep the motors in shape. Although he was good at working on pleasure

CONTINUED ON PAGE 17



Here the old 'godfather' is running around trying to get things 'ship shape'.



This is the General with the two 100 H.P. Mercs, which Poncho beat with one 55 H.P. Merc on Ben Hur in the 'free for all race'.



This is where the Motors were kept. Note that my wife Vivian is a bit jumpy. The Indonesian guard has a 'grease' gun over one shoulder and a bag of grenades over the other. Vivian is not too sure if he is guarding the motors ... or watching her.



NUTS and BOATS

by Bill Mitchell

Did I read in Baldy's article that Quincy is going to buy some Konig engines? (He said something about Quincy going to have some competitive engines. HQ Summer 73). Thinking about the gas shortage, it might not be such a bad idea to consider being pushed around the pond on rice power. In the past five years, there have been enough two strokes exported from the land of the rising sin (er son, er sun) to give every driver a pair, a spare, and many more; in any class desired.

Adapting one to a lower unit is simple enough, usually requiring an adapter plate which can be whacked out using a hacksaw, an electric hand drill, and a file. If you've raced in S.P., A.P., S.S., or whatever, you are probably pretty adept at using a file. Adapting the drive shaft can be done by grinding each end square at the splice and fitting a piece of square tubing in between.

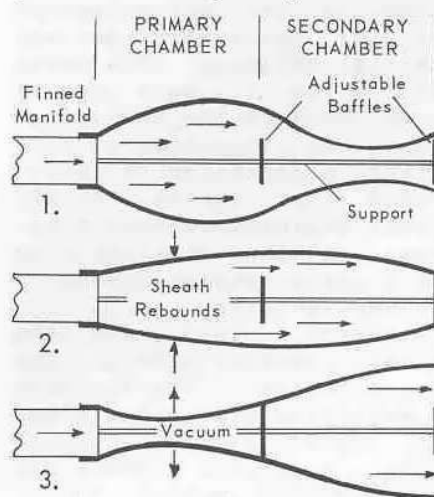
Even though I have several bushels of merc parts, I think this is a direction to swing. This line of thought became reinforced when I saw 125 cc's of Yamaha run five laps while 7.5 cu. in. of Merc ran three.

Along the new development trail, there have been several

versions of a rather simple approach to increased high speed performance with a corresponding noise reduction.

The principle element is the silicone rubber sheath which fits over a finned tube which contains two baffles with adjustable spacing. The finned section acts as a heat exchanger for reducing the exhaust gas temperature from 1200°F down to about 400°F.

The illustration shows the muffler in three operating phases. 1) Exhaust stream fills rubber sheath and moves into secondary chamber; sheath around primary chamber starts to spring back. 2) Last of exhaust pulse enters secondary chamber; rubber sheath uses kinetic energy to continue moving past base line and depresses into primary chamber



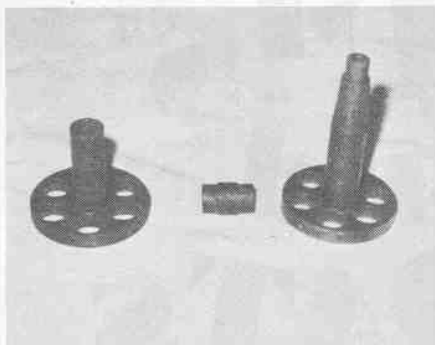
forcing last of exhaust gas into secondary chamber. 3) Rubber over primary chamber starts to rebound out of primary chamber creating a particle vacuum that engine exhausts into while first charge exits from secondary chamber.

This unit has been tested on engines from model airplane size, to motorcycles, and diesel trucks with reported success. The unit has made it possible to idle a two-stroke motorcycle for long periods without plug fouling.

During the hard water season (winter to you non-Yankees), I'm involved in kids ice hockey. I came across a group that should be of interest to the reformers of boat racing. This group spent an entire year getting themselves organized to the point that now on one knows who is doing what and why. At present, they still exist and we wonder why. Total reorganization involves scrapping the old and bringing on the new. This should be approached carefully as you throw away the parts that were really important.

Until next quarter, keep those cards and letters rolling in. My thanks to Mama Smith for her kind words.

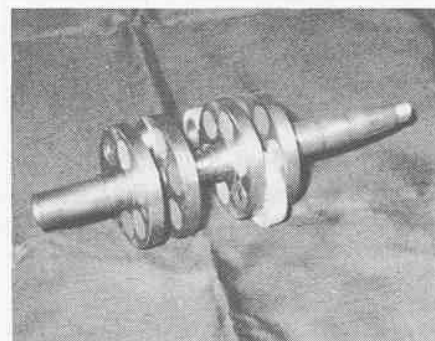
Bill Mitchell
4793 Eastlawn Drive
Rockford, Illinois 61108



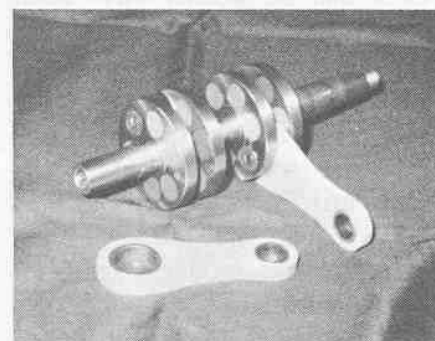
UNMACHINED CRANKSHAFT PARTS



COMPLETE DISASSEMBLED TWO CYLINDER MERCURY CRANKSHAFT



ASSEMBLED MULTIPLE PIECE MERCURY CRANKSHAFT



ASSEMBLED CRANKSHAFT, SHOWING ROD

What is Hanger 7?

Primarily Hanger 7 is in the research and development of prototype manufacture of mechanics for any endeavor.

What was the first innovation that you came up with for an outboard motor?

The very first? This goes back a long long way. My involvement with outboard racing commenced in the summer of '59. And at that particular time period Dick Pond was our driver.

Prior to that time my involvement had been almost exclusively with four cycle engines, in the field of automobile racing, with stock cars and sports cars.

At the time they were running modified Mercury engines. The very first time I took a look at one, I disliked the center feed of the reed valve. Consequently, this area was one of my first projects. It involved eliminating the reed block and mounting two separate V reeds on the side of the crankcase, and we used a set of homemade fuel injectors to feed it.

Like probably every other project we've undertaken, we seem to get our enjoyment out of the concept and the initial building; then maybe we'll run it once and it goes back in the corner because by this time we have other projects we're interested in. That's exactly what happened on that project, in fact we still have that old crankcase somewhere around the area.

Anyway, that was the first project with a two cycle engine - there's been a multitude since that time. OK. That led up to the multiple piece crankshaft that you're making today.

HANGER 7

a Hydro-Plane

Bill Collins and his Father-in-Law, Ross Gibson, from Macomb, Illinois have built some exotic Mercury engines

When did you decide to make a crank, and for what reason? I've wanted to construct a built-up crankshaft, whereby we could effectively use the one piece connecting rod and the caged needle bearing, for, well, you might say from the first time I saw this engine.

From a practical standpoint, capabilities have been the stopping block. It has only been in the last couple of years that we've had the necessary equipment to make a built-up crankshaft.

The reason, and this is one of the interesting facets, I suppose, of any competitive sport, is that if you talk to ten people you'll get ten different opinions on a single subject. And this is true, regardless if it's a layman with practically no racing experience, or an engineer with a heavy background.

I happen to be in the school of thought that says for high output engines, if you want some semblance of reliability, one of the things that is mandatory is that you must have a one piece connecting rod and that the needles must be caged. Of course, you must couple this up with making the cage as light as pos-

ER - 7

& interview

over the years. This article is about crankshaft development Collins has done at Hanger 7, his R&D facility.

sible, and then compromise on the needle diameter, so you don't get your rolling speed beyond limitations, and you don't get your rollers so big you run into load reversal and point loading problems in that area.

You'll talk to other people, of course, that still swear by the uncaged type of needle bearing, and give very little thought to whether it's a single piece rod at the journal end, or a conventional split rod. And I'm certainly not saying that they are wrong, as a matter of fact, one particular crankshaft we have set up, is set up to use loose needle rollers. This is for obvious reasons, namely you can use this crankshaft with the conventional split mercury rod. Or, you can use it with our one piece aluminum rod, or we can vary the crankpin diameter and the rod material to suit any specification.

The main reason behind the crankshaft itself is that I feel it's absolutely mandatory to go this route in order to achieve higher performance out of the basic Quincy-Merc engine. And along that line I feel confident that the Quincy-Merc

engine, with modifications, can be made to at least perform with the current Konig equipment.

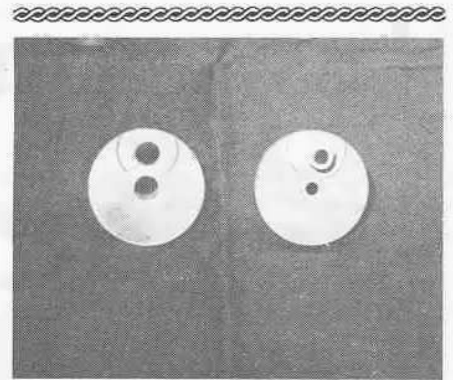
Basically then, the crank is for the Merc-Quincy engine. But the alky population is far outnumbered by the stock and modified stock drivers, have you, since the same shaft is used in each type of engine, pursued anything along this line?

We can develop a crankshaft to fit the demand. Let me point out that there are a couple of limitations involved here. First of all, one of the ideas behind this crankshaft was to design a replacement unit that would fit into a Mercury or Merc-Quincy crankcase. Now because of this we're locked in dimensionally. In other words, we have to design within the existing dimensional extremes. It has created a marginal situation, from what we would like to do on one hand, but can't do on the other because of physical limitations.

What about cost?

In a nutshell, I'll say this. It is costly. There's no question about it. And when you're dealing in a market that is limited in terms of potential sales, you're dealing with a market that can, in no way, justify tooling for mass production. All this adds up to a high labor cost per unit, and this has to be passed along in terms of cost of the finished product. Therefore, the small volume items are costly. We have over five thousand dollars wrapped up in the development of this one crankshaft alone. It may sound unbelievable, but it isn't. Now this hasn't been

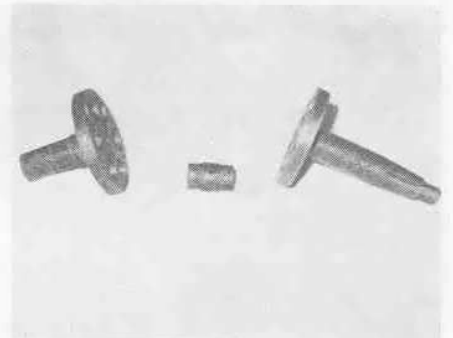
CONTINUED ON PAGE 18



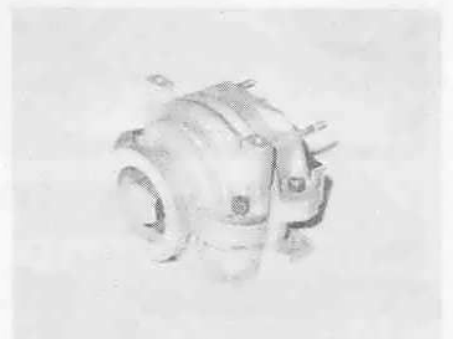
MACHINED, READY FOR ASSEMBLY



ONE PIECE ALUMINUM ROD AND BEARING



SINGLE CYLINDER CRANKSHAFT COMPONENTS



SINGLE CYLINDER CRANKCASE FOR PROTOTYPE 125 CC BLOCK

Test your HQ

(HYDROPLANE
QUOTIENT)

ALL
OF
THE
TIME

SOME
OF
THE
TIME

NONE
OF
THE
TIME

LETTER

1. THE ULTIMATE IN BOAT RACING IS: A) TO HAVE RUN A PR B) TO NEVER HAVE RUN A PR C) WHAT'S A PR

11. I HAVE A GREAT FEAR OF FINDING AN INTOXICATED HAMSTER IN MY GAS TANK

2. AN OPC DRIVERS' GREATEST THRILL IS: A) OPERATING HIS POWER TRIM B) GETTING A NEW SET OF OAR LOCKS C) LEARNING TO TIE HIS OWN SHOE LACES

12. SHEAR PINS DON'T SMELL GOOD

3. THE FORMULA FOR WINNING IS TO: A) SPEND A LOT OF TIME B) SPEND A LOT OF MONEY C) CHEAT

13. I HAVE NIGHTMARES ABOUT A GIANT LIZZARD CRAWLING OUT FROM UNDER MY DECK

4. ALCOHOL IS FOR: A) DRINKING B) BURNING C) USE AS AN ANTISEPTIC D) ALL OF ABOVE E) NONE OF ABOVE

14. MY ALKY ENGINE WILL START BETTER WHEN I WEAR A JOCK STRAP AS AN ASCOTT

5. OCEAN RACERS, IF THEY RACE TOO FAR FROM SHORE, WILL FALL OFF THE EDGE OF THE EARTH: A) TRUE B) FALSE C) SOMETIMES TRUE, SOMETIMES FALSE

16. WHEN I GET A DRINK OF WATER, THE SEAT HITS MY HEAD

6. AN ALKY DRIVERS' GREATEST THRILL IS: A) STARTING HIS KONIG ON THE FIRST PULL B) STARTING HIS KONIG ON THE SECOND PULL C) STARTING HIS KONIG WITHIN A WEEK

17. A RAINBOW TROUT CAN HOLD ITS BREATH FOR 20 MINUTES OR MORE

7. A CRESCENT IS: A) A DINNER ROLL B) A WINDOW IN AN OUTHOUSE C) A RACING MOTOR D) UN-AMERICAN

18. I CAN HOLD MY BREATH FOR FOR 20 MINUTES OR MORE

8. THE OVERLAP RULE IS: A) WHEN TWO BOATS ARE RUNNING SIDE-BY-SIDE, THEN NEITHER CAN TURN B) FOR THE OTHER GUY C) THE WHAT!!!

19. I HAVE A FEAR THAT SOME DAY I WILL RACE IN THE NUDE

20. I USE A PYTHON AS A CRANKING ROPE

21. SCREWDRIVERS MAKE GOOD HAMMERS

9. A STOCK DRIVERS' GREATEST THRILL IS: A) TACH TUNING HIS ENGINE B) PAINTING HIS NUMBERS BLACK AND WHITE C) SAYING BAD THINGS ABOUT ALKY RACING

22. THEY USE LIVE AMMUNITION ON ME IN THE STARTING CANNON

10. THE PICTURE OF MARILYNN WILSON ON PAGE 17 OF THE LAST ISSUE IS: A) ALREADY IN MY SCRAPBOOK B) HIDDEN IN MY WALLET C) OBSCENE D) WAIT WHILE I LOOK AT THE LAST ISSUE

23. WHEN NO ONE IS LOOKING I CARRY ON A CONVERSATION WITH MY BOAT AND MOTOR

24. 10' BOATS ARE LONGER

25. HYDROS ARE PHALIC SYMBOLS

GIVE YOURSELF ONE POINT FOR EVERY "A", TWO POINTS FOR EVERY "B", THREE POINTS FOR EVERY "C", FIVE POINTS FOR EVERY "D", SUBTRACT NINE POINTS FOR ALL ANSWERS OF "E" AND ABOVE. GIVE YOURSELF SIX POINTS FOR EVERY "ALL OF THE TIME", EXCEPT FOR NUMBER 14. IF YOU SAID "ALL OF THE TIME" FOR NUMBER 14, YOU ARE DEEMED TO HAVE CHEATED AND MUST SUBTRACT YOUR TOTAL SCORE TO THIS POINT. TAKE ZERO POINTS FOR "SOME OF THE TIME", UNLESS YOU SCORED ALL "SOME OF THE TIME", THEN TAKE A TOTAL OF FIFTY POINTS. SUBTRACT ONE POINT FOR EVERY "NONE OF THE TIME", EXCEPT FOR NUMBERS 13 AND 14, ADD EITHER 14 OR 13 POINTS. NEXT MULTIPLY BY THE NUMBER OF BOATS AND MOTORS YOU OWN. AND DIVIDE BY THE NUMBER OF RACES YOU ATTEND PER YEAR. SCORING: BELOW 70 POOR, 70 TO 80 FAIR, 80 TO 90 GOOD, 90 TO 100 EXCELLENT, OVER 100 - RUN FOR NATIONAL OFFICE. NOW COMPARE YOUR SCORE TO THE SCORES OF THE EXPERTS ON PAGE 37.

Boats for Poncho

CONTINUED FROM PAGE 12

motors, he would never do - to tune or set-up a racing motor. In one of the races, Mr. Oey Tjin Tik was out front when his motor stopped, Mr. Moriarti forgot to plug the gasoline hose into the motor firmly and it worked lose. Thus I made it a point to personally check out Poncho's outfit carefully before each race. I wanted Poncho to WIN, I did not want my picture taken smoking my last cigarette in front of a firing squad. As it was at the General's house where we stayed, they had several little chaps running around with 'Burp' guns guarding the place, and there was always one at the race pit, I never was quite sure whether they were guarding us or watching me.

We had real speed on our competitors and although Poncho blew the starts in the first four races, last over the start, he worked his way up to first. By the time he came to for 'free for all' his starts were good ... they had to be as his chief competitor, a small rather round General, had two 100 HP Mercs on the back of a Cat racing boat which he ran in both of the 'free for all's' - for the Runabout class and Hydro class. In these races, Poncho broke out first and won both races. If he had blown these starts, he would have never caught the little round General as we only had about a mile in speed on him. The little round General was all broke up over this and exclaimed! 'next year I have boat with THREE motors' all over 100 HP.

I never did meet General Ibnu Sutowo, but his aide Capt. Nirmolo was quite pleased to the point he lent us a Jeep and a driver and we had a grand tour of Bali where we bought many beautiful hand carvings. I quickly noted that there was more topless girls in San Francisco than in Bali, and so to Singapore, Japan and back to the states.

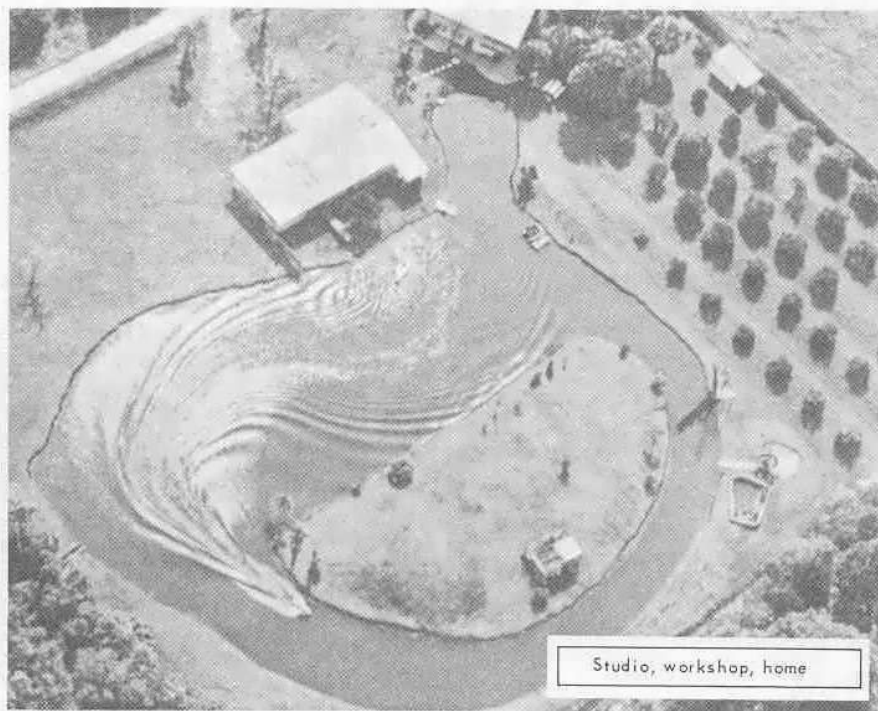
THE WORLD'S FASTEST 'BUILT-AT-HOME' BOATSall outboard classes



HYDROS
CABOVERS
SEMI-CABOVERS
RUNABOUTS

Build a racing boat designed by a racing driver. More records have been set, and races won with boats built from our plans, than boats built from any other plans. All our plans have FULL SIZE RIB DRAWINGS, and dozens of step-by-step photos, plus scale drawings, full instructions, etc. For full information and new plans Catalog send 35c to:

HAL KELLY'S TESTED PLANS P.O. Box 1767 Fort Pierce, Fla. Zip 33450



Studio, workshop, home



A few of our designs

PROPELLERS

Custom Props

That WIN Races

BILL SEEBOLD

2402 MADISON
GRANITE CITY, ILLINOIS
TEL: 618-876-5601

AEROMARINE COMPANY

BILL TENNEY

Crystal Bay, Minn. 55323
BRITISH ANZANI RACING MOTORS
WORLDS WORLD'S FASTEST - A & B CLASSES

DESILVA BOATS

P.O. Box 394
Sebastopol, Calif. 95472
Tel: 707-823-5951

CHAMPIONSHIP RACING BOATS

HOPKINS PROPELLER SERVICE

P.O. Box 922
Covington, La. 70433
Tel: 504-892-3868
OPC - INBOARD - STOCK - ALKY - AM PRO

KARL WILLIAMS RACING FUELS

3131 Carling Ave., Ottawa, Ontario

or
Box 84, Aylmer, Quebec

all fuels
guaranteed & hydrometer tested

FOR SALE: D SUPER STOCK (MODIFIED STOCK) MERCURY, BAYER PIPES & LEAVEN-DUSKY TOWER HOUSING, HI-POINT DH ENGINE IN KANSAS CITY. COMPLETE \$425.00
TOM BERRY, 1411 N. 64 ST.
KANSAS CITY, KS, 66102, TEL: 231-1858

WANTED: D STOCK MOTOR, PRICED RIGHT.
DICK RAMSEY
36-7 TH. AVE. S.E.
OELWEIN, IOWA 50662

FOR SALE: 12'-8" MARCHETTI. \$400.00.
DON LIETZKE, JR.
BOX 564, AUGUSTA, KANSAS 67010

FOR SALE: 1970 12'-8" WOOD DECK MARCHETTI, \$400.00. 12'-4" SODERSTROM HYDRO, \$300.00. 1967 13'-6" DESILVA RUNABOUT, \$400.00. ALL BOATS IN EXCELLENT CONDITION. 44 C.I. FLATHEAD WITH SS IGNITION, NYDAHL DOWNHOUSING AND KONIG LOWER UNIT.
ALAN DAVIS
LOT #9 ERVIN, LAKE DALLAS, TEXAS 75065
817-497-4158

interview

CONTINUED FROM PAGE 15

a priority project, we've been playing with it ever since we moved a cylindrical grinder into our shop. Which I suppose goes back to around 1970 some time. Like I said it hasn't been a priority project, but based on our records, this is about what we've got into it.

Right now all we can do is individual negotiation with anyone who wants to buy a crankshaft.

What sort of materials are used in its construction?

At the present time, and we don't plan any departure, the entire crankshaft is made from AISI steel designated as 8620 bearing quality. It's heat treated, carburized and finish ground.

The steel inserts used in the aluminum connecting rod are of the same material. The aluminum itself is designated as a 7075T6. Those are the basic material specs on the unit.

Do you see any major work other than Mercury cranks?

We'd certainly be willing to do just about anything the customer desired, we haven't envisioned a number of things with any great certainty. I think it might be significant to take note of a couple of things. To the best of my knowledge the only manufacturing organization in the United States that caters to boat racing competition is Quincy Welding.

There are a number of individuals that make replacement parts and do engine set-up work, mostly specializing in the Mercury or the Konig engine.

But what I was referring to was a major company, and we're speaking in relative terms. I really have to take my hat off to O.F. Christner because the problems associ-

ated with building an engine are almost beyond belief.

We have no plans to do anything that could be construed with competing with Quincy Welding. We may well supplement what they are already doing, but beyond that point, I can't speculate.

However I would hasten to add that we will undoubtedly from time-to-time have various engine configurations. This will be a one-type-of so to speak. We've among other things designed a new piston/cylinder arrangement. That will be for the single cylinder crankcase?

Yes, we have a single cylinder crankshaft we're putting together. The principle purpose of which is to test a cylinder design, which might be properly characterized as radical.

We also have a two cylinder crankshaft where the center reed block is entirely eliminated, and the center section is replaced with a barrier which carries two additional ball bearings to support the crankshaft.

In this version, the existing Quincy-Merc cylinders are modified to handle a combination of reed valves and ports on either side.

As one last note, did you ever race yourself? And when, and for how long, and with what success?

Ha, ha. You want the truth on this don't you. Well, it was back in the first year I had any contact with the sport. It was a rather typical setup, a Swift Big Bee and a modified Mercury. As far as success, I hasten to add I never completed a race all summer long and actually it was several years after that before I completed my first race, and at that time I finished last. We're not really concerned with winning. We get more of our kicks out of innovating and doing different things. I've never been hung up on having equipment that constantly runs out front.

KONIG OUTBOARD RACING MOTORS

FASTER • DEPENDABLE • PROVEN

KONIG FM, FA, VB, VC, VD, VF

1973 Outboard Nationals and World Championship Results

A-HYDRO	RON ANDERSON	WINNER	APBA NATIONALS
A-HYDRO	TIM BUTTS	WINNER	WORLD CHAMPIONSHIP
A-RUNABOUT	LEE SUTTER	WINNER	APBA NATIONALS
A-RUNABOUT	LEE SUTTER	WINNER	WORLD CHAMPIONSHIP
B-HYDRO	RAY HARDY	WINNER	APBA NATIONALS
B-HYDRO	WAYNE BLADWIN	WINNER	WORLD CHAMPIONSHIP
B-RUNABOUT	DUB PARKER	WINNER	APBA NATIONALS
B-RUNABOUT	JERRY SIMISON	WINNER	WORLD CHAMPIONSHIP
C-HYDRO	DAN KIRTS	WINNER	APBA NATIONALS
C-HYDRO	WAYNE BALDWIN	WINNER	WORLD CHAMPIONSHIP
C-RUNABOUT	RICH KRIER	WINNER	APBA NATIONALS
C-RUNABOUT	ARTIE LUND	WINNER	WORLD CHAMPIONSHIP
D-HYDRO	JOHN YALE	WINNER	APBA NATIONALS
D-HYDRO	TOMMY HOOTEN	WINNER	WORLD CHAMPIONSHIP
D-RUNABOUT	JERRY SIMISON	WINNER	APBA NATIONALS
D-RUNABOUT	JERRY SIMISON	WINNER	WORLD CHAMPIONSHIP
F-HYDRO	WAYNE BALDWIN	WINNER	WORLD CHAMPIONSHIP
<u>F-RUNABOUT</u>	DOUG BINDRIM	WINNER	APBA NATIONALS
F-RUNABOUT	(PETE HELLSTEN - DECK RIDER)		
	CHARLIE BAILEY	WINNER	WORLD CHAMPIONSHIP
	(WAYNE BALDWIN - DECK RIDER)		

APBA Records

M-HYDRO	STEVE BELLEVILLE	KILO	61.121
M-HYDRO	MIKE CARSON	5 MILE	47.269
A-HYDRO	RON ANDERSON	KILO	90.936
A-HYDRO	RON ANDERSON	5 MILE	75.885
B-HYDRO	GERRY WALIN	5 MILE	81.744
C-HYDRO	JIM McKEAN	KILO (PENDING)	98.828
C-HYDRO	JOHN SCHUBERT	5 MILE	82.418
D-HYDRO	JIM McKEAN	KILO (PENDING)	106.249
D-HYDRO	JOHN SCHUBERT	5 MILE	84.906
A-RUNABOUT	LEE SUTTER	KILO	78.148
A-RUNABOUT	LEE SUTTER	5 MILE	68.208
C-RUNABOUT	BRYAN McDUGALL	KILO	83.946
C-RUNABOUT	RICHARD FUCHSLIN	5 MILE	70.838

SEE YOUR KONIG DEALERS

Distributor - **OVERSEAS DEALERS, INC.**

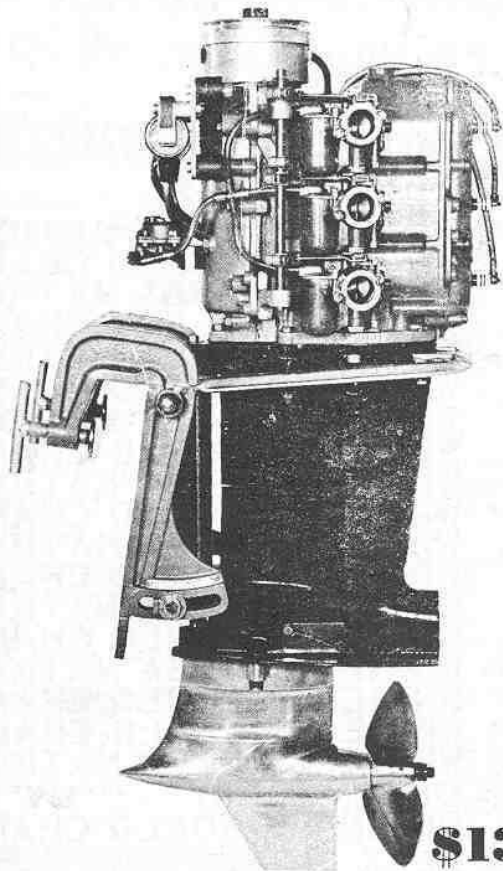
245 EAST GRIFFIN AVENUE, DALLAS, GEORGIA 30132

PHONE (404) 445-3434

GO WITH THE WINNER

Crescent

The continuous development work on the Crescent Class C motors has earned world-wide recognition as the leader in its field.



**CRESCENT C STOCK
APPROVED BY APBA FOR
C SUPER STOCK**

- 29.9 Cubic Inch Displacement
- Engine Weight 81 Lbs.
- Chrome Plated Aluminum Cylinders
- Loop Scavenge Design
- Three Fixed Jet Bing Carburetors
- Fully Tuned Closed Exhaust
- 12V Battery Ignition
- 13:14 Reduction Gear Ratio
- Full Circle Counterweighted Crankshaft
- L Ring Racing Pistons
- Motor Includes Steering Bar and Throttle Cable
- Less - Battery - Fuel Tank and Prop

\$1390 fob Patterson, N.J.

The new C Stock Motor is the most powerful production engine in its class. The motor currently holds the U.I.M. C Stock world record at 94 plus miles per hour. The C Stock Motor incorporates one piece connecting rods, and built up full circle crankshaft. Any part in the crankshaft can be replaced if needed. New style rod bearing retainers allow high RPM for long periods of time.



NEW MERC 25SS

Stock Racing Motor

- INCLUDING STEERING BAR
- INCLUDING SAFETY SHUT-OFF SWITCH

\$760.00 fob PATTERSON, NEW JERSEY



Dick O'Dea Racing Motors

247 DERROM AVENUE

PATERSON, NEW JERSEY 07504

SHOP PHONE: 201-523-3911

HOME: 201-278-0614

JOIN THE **Crescent** RACING TEAM