**Note from Harvey Karten – I encountered some very serious computer problems while digitizing this issue. I realize that it must be completely re-done, but wanted you to at least have this preliminary version.

Newsletter #19
P.O. Box 77
Loreto, BCS, Mexico
June 1983

Dear Tayana Lovers,

To my knowledge there is only one Taiwan built boat that has an owners association, and that's our group. The principle reason that TOG has been effective is the cooperation received from the builder, TA-YANG. (Pressure from TOG dealers has also been very helpful). An example of the yard's attitude toward TOG can be seen in the recent letter from TA-YANG shown on page 4. Thank you for your continued support, Mr. Chiu.

A promise for even better communication with TA-YANG comes from Todd Harris. Todd lives in Taiwan and works as an inspector for dealers and importers (and sometimes individual buyers) of boats. Most of his work is with TA-YANG. I asked him if he was an official spokesman for the yard and he wrote back, "Good to hear that you will continue to publish the Tayana newsletter. Yes, I would also like to see the yard have more input in the newsletter, and that is why I wish to contribute. The yard actually has a lot to say, but is too tied up with manufacturing the boats and dealing with clients. Also the language problem affects their input to the newsletter.

No. I do not have any endorsement to speak for the yard. Whatever I write will be by my own hand and is my own words, and should not be considered as being the yard's view. However, I will be attempting to bridge the gap between the yard and the newsletter for the benefit of readers and prospective owners and owners with questions or problems. As I say, my contributions will be both from my own thoughts and from what I see the yard wants to say. I will be working on the earlier newsletters with one of the engineers and also will get input from Nan San.

I hope that any readers with specific or technical questions or problems will feel free to contact me through you or directly to me, and I will try to sort things out for them.

As my first contribution, I am preparing, with the assistance of one of the engineers, Mr. Basil Lin, some comments and updates on problems presented in the newsletters which concern the construction, commissioning, maintenance, or operation of the Tayana 37. We are going through these last five newsletters and hope to provide some enlightenment on such concerns. I hope to have these-comments out to you in the next week or two.

In the meantime, though the yard has not been a real correspondent with the newsletter, they have not been deaf to problems aired in the newsletters, as I hope to show in my following correspondence. A great many of the items are being corrected or have been corrected.

Current production of the Tayana 37 at the yard is brisk, and a second hull mold is going to be built. Hull numbers are now up in the 360's and 370's."

Later on in this newsletter you will find a discussion by Todd (whose father is a well known yacht designer) of engine choices for the T-37.

NEWSLETTER FOR OTHER TA-YANG BOATS

In addition to the Tayana 37, TA-YANG produces the Vancouver V-42, the Perry Tayana 52 and T-55. I have had several requests to start or help start another newsletter covering these other boats. I will volunteer to write to owners of the boats to see if there is a real interest. As a first step I will need the names and addresses of the owners. Dealers, please send me this information and any thoughts you have concerning the proposed newsletter.

BUYING DIRECT FROM TA-YANG

It's amazing how many times I get asked about buying direct from the yard. It is possible to buy direct under at least two situations that I am aware of:

1. If you go to Taiwan and sail the boat away, or,

2. If you live in an area with no Tayana dealer reasonably close. This case is not clear to me. For example, I know of one owner who bought direct, shipped the boat to San Francisco, trucked the boat from San Francisco to Oregon (took delivery in Oregon where there are no dealers) and then sailed the boat to Puget Sound. Maybe Todd Harris can find out TA-YANG's policy on this subject.

In any event, buying direct introduces a whole set of problems unknown to the buyer who purchases his boat thru a Tayana dealer. (The dealer purchase route can be hazardous too, as discussed in the last newsletter which described the demise of one dealer.

To help minimize this hazard, later in this newsletter you will find guidance on selecting your dealer/importer). These problems relate to financing, shipping, insurance, import regulations, commissioning, transportation, warrantees, language barriers, actions to make sure your boat requirements are specified in detail and that the spec is followed, etc. Despite all these problems people do buy direct and if all works well, they save money (assuming their personal time has no dollar value). One such person is Dick Riddle who bought direct and sailed his boat to the Philippines. His letter is on pages 5 and 6.

TAYANA PICS

I feel frustrated because I get some fabulous color pictures of T-37's and cannot reproduce them in this letter. I do have a scrapbook and carry it with me just in case I meet any of you. One recent pic was from Bob Crawford showing his snow covered boat on his mooring near Seattle. Also received a shot of the Rijkoff's boat, "Aleta Hawk" under way in San Francisco Bay. The boat has all red sails and teak on the cabin sides. Thanks much for the pics - really great photography.

TOG NEWSLETTER SELLS BOATS

In the mailbag this time were two letters attesting to the continuing value of this newsletter to prospective T-37 buyers. Jack Vogt of San Diego has been looking for the "right boat" since 1979. One of our members took him for a sail and showed him the newsletters. Jack wrote that the newsletters clinched his decision. Gary and Judy Schieferdecker have ordered a new Tayana MK II, Hull #373. Gary writes, "In fact, the newsletter has been a major factor in our decision to order a new Tayana. The dealership (Starboard Yachts) was very gracious in providing us with back issues. In our case, providing us with the newsletters certainly worked to the dealer's advantage as we would probably have been much less anxious to purchase a Tayana if we had not been able to share the experiences of other Tayana owners. We are aware that the perfect boat doesn't exist but we have been very impressed with TA-YANG's apparent attempts to continually improve the design and quality of their boats. The input from other Tayana owners who have contributed to the newsletter made the process of selecting options and making design changes much less difficult."

TA-YANG, YACHT BUILDING CO., LTD.

TELEX: 71238 TAYANG 60. **HAI CHEN ROAD.**
CHUNG MEN VILLAGE
CABLE: "TAYANYACHT" LIN YUAN **LIN YUAN**
KAOHSIUNG HSIEN.1813~,'~
TAYANA TEL. (07)6412422. 6412721-4 **TAIWAN.**
REPUBLIC OF CHINA

DATE: January 20, 1983

Mr. Norm Demain
1348 Nonchalant Drive
Simi Valley, Ca. 93065
USA

Dear Mr. Demain,

We are really appreciated to have the newsletter regularly especially, the time and the enthusiasm you spent on publishing the newsletter for all the Tayana Yachts owners.

Enclosed you will find one sola check in the amount of US$150.00 for the payment of postage and some expenses you pay.

Please let us know if you have any question on Tayana Yachts, or any service we can do for you.

With the warmest regards, we remain.

Sincerely yours, TA YANG YACHT BUILDING CO., LTD.

Sales Manager

NSC:cc Encl.

1 April 1983

Dear Norm,

Enclosed you will find my check for $15 for membership into the Tayana 37 Owners Group (TOG). I will send you $30 later on for the past issues of the subscription. Thank you for answering my letter so quickly.

You wanted to know about my experience of buying the boat directly from the factory? Well, all in all it was very pleasant. My wife and I both struck a friendly yet business relationship with the Chiu brothers. Because of the relationship I feel we really got our moneys worth. The following are the items I got for my boat:

Cutter Rig with standard set of Niel Pryde sails
Perkins 4-108 engine installed
yachtspar aluminum mast, stepped on deck
screens on all portholes and hatches
135% genoa in lieu of dinghy and davit
storm sail
name and logo of boat painted on two sides
propane stove with two 11 pound bottles, gimbaled with oven
two 45 pound plow anchors
extra blocks, engine & transmission oil
chronometer, barometer & two kerosene lamps
commissioning - including all customs and immigration
holding tank and associated piping
split fuel tanks located amidships
teak pin rails
installation of autohelm 3000
extra battery bank
teak flagpole and teak boarding ladder
complete pressurized water system

All of the above for under $55,000. The service of the yard we thought was excellent. I did not use Todd Harris' services because Taiwan was so accessible for me. The yard delivered on time and the product was reasonable.

On the maiden voyage from Taiwan to P.I. I didn't experience any problems with the boat that could be related to the construction by the Ta-Yang company. I have had a couple of problems since I have arrived in the PI. For example, we have found that just about every nut, bolt and screw in the boat is loose to some degree. The most serious of these loose component problems was a failure of the pedestal steering system while cruising around Subic Bay. Luckily, we could fix it while steering on the emergency tiller. I did loose a Dorade, one teak block and the stern light bulb burned out during the maiden voyage. Ta-Yang replaced these right away, sending them to me via air mail.

My boat has a very traditional interior with the head forward and to port. I have a pilot berth which is used by my 9 month old daughter when underway. The hull number is 368 and the name of the boat is; ENIGMA? HONOLULU

We plan to cruise around the P.I. until November 1984. Then if the Navy doesn't send us to Hawaii for duty we will retire and head south to Australia, taking our time to get there. If we go to Hawaii as we think we might, we will retire in 1988 and head south from Hawaii. Taking our time to go wherever.

For your info I find the following characteristics notable of the boat:

1. The boat sails well under most wind conditions I have encountered. This includes winds under 5 knots and up to 35 knots.

2. The boat backs terrible. I have a difficult time controlling direction when backing.

3. Downwind is a little difficult because the mainsail is against the shrouds almost immediately.

4. Anchoring is a problem because of a decent fairlead for the rode.

Another thing I didn't tell you that I should have. Although I have the cutter rig, I opted not to have the boom. Instead I have two tracks on the cabin top and an additional winch to handle the sheets. Around the bay here I usually sail the boat as a sloop and leave a lot of foredeck space for guests to hang around. This works for me but may not work for other people.

I'll be more than happy to share my experiences with other owners. Just let me know what you're interested in hearing about. Write us soon.

Dick and Loretta Riddle

THEFT AND ALARMS

I would appreciate some input on this subject as I know it is an ever increasing problem. Bob Crawford wrote me that at his Yacht Club near Seattle, thieves cut a boat house adrift and used chain cutters to take motors, etc. Bob has 2 alarm systems which also protects his dinghy and outboard. If interested, write him for details at 5971 Wynn Jones Rd. E., Port Orchard, WA 98366.

BOB PERRY SAYS

The T-37 designer and TOG honorary member, gives us his views (and humor) on pages 9 and 9. Good hearing from you, Bob.

ACCOMMODATION PLAN IDEAS

Gary Schieferdecker, when recently ordering Hull #373, incorporated a couple of interesting changes to the basic MK II design. "Two changes which we are incorporating in the boat I have not seen mentioned in any of the newsletters and might be of interest to perspective buyers. We are having a permanent full size nav station built in at the forward end of the starboard settee. The idea was taken from the Hans Christian 33 and is accomplished by shortening the starboard settee by 19 inches and have a desk top built in. Although the nav station is located quite far away from the cockpit we believe it is still an improvement over the fold down table at the forward end of the starboard settee which is standard on the Mark II's. Since the Tayana has more than enough berths for our needs, we do not think the loss of the settee as a berth will be missed.

Another interior design change which we are having made is to delete the hanging locker at the aft end of the aft cabin and move the berth back into this area. We then specified that a divided hanging locker be built forward of the berth and against the hull. One side of this locker is to be dry and the other side provided with drainage to the bilge (wet)."

Gary also had two 60 gallon water tanks located under each settee and the 100 gallon fuel tank located in the bilge. He specified that the plumbing system allow for manual transfer of water between tanks in order to be able to trim ship.

THIRD ANNUAL TAYANA CRUISE

Charlie Lovell is once again organizing a group cruise as he explains on page 10.

ROBERT H. PERRY YACHT DESIGNERS, INC.

6400 Seaview Ave. N.W.
Seattle, Washington 98107
2067826633

4-20-83

Tayana 37 Newsletter
P.O. Box 77
Loreto, BCS, Mexico

Dear Norm:
The new newsletter just arrived and I thoroughly enjoyed reading it. The yard is way behind on their T-37 royalties and the newsletter represents the only tangible display of gratitude I am currently receiving for the T-37 design. In many ways the newsletter means much more than the money, but I can't convince the grocer that the fact that I designed the T-37 should entitle me to free meat.

I am grateful to the newsletter for spreading the word about re-raking the mast. I know that anyone who has gone to the trouble to take the rake out of their mast will enjoy the boat much more.

Speed claims ..... I have grown cynical. I only believe what I experience myself or see in published, organized race results. I have even had designers quote grossly exaggerated speed claims for their boats. (Designers, above all, must be the most critical of their work.) I'm with you. When I hear someone say, "We carried full sail in 35 knots " all I can usually think of is I'm glad I wasn't there. Reef the main early. Don't sail with main and Yankee without the staysail. Consider a "reefing tack" for the yankee. Keep the helm as balanced as possible and ease the traveller down in a blow. I am confidant that if I were out in a T-37 in a 35 knot blow I would be reduced to staysail and double reefed main.

The rendezvous was great. We had a total of 32 boats show up and I anticipate more this year, It was a very

informal group and I had purposely avoided making plans for activities. I would welcome any suggestions. I thought that I provided sufficient entertainment by promptly falling into the water after my arrival. Unfortunately this was not observed by most of the fleet but was captured forever on film. I now know why they are called "tenders".

I have are a tip for downwind performance. Rather than let the staysail hang lazily in the wind shadow of the main while you wing out the yankee or genoa (For God's sake don't wing out the staysail and leave the main on the same side as yankee---that's a T-37 story I'll save for another time) try this. Drop the staysail unhanking it as it comes down and leave it attached at the halyard. Untack the staysail and lead the tack forward till you tack the staysail down at the end of the bowsprit. Now hoist the staysail without using the hanks, in fact set the staysail flying tacked to the end of the bowsprit. This pulls the staysail out the the shadow of the main and exposes a lot more area and will reward the minimal effort required with a substantial increase in speed. This could be valuable on a long passage.

Keep up your good work,

Bob

SEXTANT YACHT SALES, LTD*

45 Bowen's Wharf
Newport, R.I. 02840
(401) 846-6770

YACHT SALES CHARTER BROKERAGE

April 12, 1983

Dear Tayana Owners:

Once again it is time to plan for the third Annual Tayana Rendezvous, Cruise and Extravaganza! So much interest was generated over thewinter thathave decided to repeat the Maine trip we did two years ago

Tentative schedule: meet in Newport at Sextant Yachts on Bowen's Wharf on Friday **July 15th** for skipper's meeting and Party. Depart early Sunday for the offshore passage from Cane Cod Canal to Camden, Maine arriving Monday midday. Then follows eight days of leisurely cruising and a four or five day harbor hop back to Newport arriving by Sunday, July 31st

There are several future Tayana owners whose yachts are in the pipeline now and which will not be ready prior to the cruise, so if you are looking for qualified crew, let me know.

Last announcement: I will he having an open house for my new company “Sextant Yacht Sales, Ltd." on Saturday **May** 7th in Newport. The cruise will be discussed, as well as latest news from Ta-Yang Yacht Building Co. - The Mark II Tayana 37 and the new Perry Tayana 52.

If either the Maine Cruise or the Open House is on your agenda, please call to let me know I am looking forward to hearing from all of you!

best regards,

Charles Lovell

TRIP PLANS AND EXPERIENCES

1. Kim and Ransome Rijkoff, "Aleta Hawk" will spend a couple of weeks in August on the Delta (between San Francisco and Sacramento).

2. Bob Crawford plans to sail to Louise Inlet (north of Vancouver, B.C.) this season.

3. Eva and Jeff Dunlap, "Zephyr" have departed from the west coast of Florida to the east coast. They will cross over to the Bahamas, sail down to the Caicos and over to the Dominican Republic, thru the Virgin Islands, on down to Trinidad, Venezuela, Columbia and the Panama Canal.

4. Rich Witesman, "Tannhval" along with 24 other boats from Southern California, went for a 2 1/2 week cruise amongst the nearby offshore islands of Catalina, Santa Cruz, Santa Barbara. Great trip, says Rich, except when the main traveler delaminated in a blow.

5. Frank and Cynthia Lawson, "Satori are headed for Labrador from Cape Breton in Baddeck, Nova Scotia. They will go up the west coast of Newfoundland then back to Cape Breton via east and south coasts of Newfoundland. They are looking forward to seeing icebergs. They have been to N.F. before where they ate moose and caribou (tastes like beef) but they don't recommend seal flippers.

6. Don and Honey Costa, "Honey Too" departed for Bermuda midJune from New York and expect to return a month later.

7. Fred and Gwen Gross, "Fairbourne" have been visiting many of the interesting harbors in the Chesapeake. "Without exaggeration there must be hundreds. As the weather warms up we are going north to Maine for July/August and then back to Annapolis for the October boat show. Then to Florida and the Bahamas for the winter. Next year we plan a trip to the Great Lakes and possibly down the Mississippi."

EQUIPMENT COMMENTS

1. Fred and Gwen Gross, "Fairbourne" have a Micrologic 2000 Loran C. With the correct in, information, Fred gets his position to the nearest 03". They also have a Sea Frost refrigeration unit driven off the flywheel pulley. "We are getting ice with 20 to 25 minutes running. In warm weather it takes a little longer."

2. Also from Fred is a comment about his Taiwan 45 lb. stainless steel anchor not holding as it should. "In discussing this with other Taiwan built boat owners they feel the CQR copy looks good but misses that extra something that makes it work. Is this the experience of others? We bought a 33 lb. Bruce and are very pleased with it."

3. Fred also writes, "We installed another set of hinges on theforward hatch (to open aft) for better "no draft" ver still having. Our Tillermaster is great under power and the Ratcliff self steering Joe Sutton had installed is excellent with enough wind to make it perform."

CHOOSING YOUR BOAT IMPORTER

Mike English, a Tayana dealer and yacht importer from Annapolis furnished the write up shown on pages 13 and 14. 1 have not altered his text. I am interested in comments from other TOG dealers/importers on this subject. The objective in presenting this material is obviously to help our members avoid the type of experience reported in the last newsletter regarding Seaboard Marine.

TECHNICAL SECTION

Pages 15 thru 20 contain some rather detailed technical discussion concerning engine performance, engine choices, and related. If you have no interest in technical details, skip to page 21. For those of you who are interested, there is a discussion by Todd Harris about engine choices from TA-YANG and calculations about horsepower requirements for the T-37. Following Todd's discussion is an input from Nick Fast, "Nix", Hull #380 While Todd concludes that the T-37 needs only 18.9 horsepower to reach hull speed in flat calm seas with a clean bottom, Nick believes 30 horsepower is needed. Because of this difference, Todd says a 33 HP Yanmar will do fine even in rough seas, while Nick says he feels safer in the 37HP Perkins. So the controversy goes on.

Procedures in ordering a boat from the Orient:

The first and foremost thing that a buyer must recognize in "eyeing" an importer of yachts is that unless an importer is able to write letters of credit (L.C.) based on his own finances, and not the customers, then that importer is not safe to do business with. NEVER make out a letter of credit so the dealer or importer can cash it. Do not accept the word of the importer that he can import the boat. Sometimes the "importer" will take the deposit first, and then confront the customer with the fact that he will not get his boat unless he provides the letter of credit! Letters of credit are not that easy to come by. They generally must be backed up by cash or blue chips for a substantial portion of the L.C. value. Just try to get an L.C. out of a local bank. First of all, they will not know what you are talking about, and then, if they do, they will have you back it up with solid equity- your house, liquid property, stocks, etc.

First of all, understand that an L. c. is an irrevocable note to the bank of the yacht manufacturer that guarantees to the manufacturer that he will be paid X amount of dollars when he delivers the product (boat) on deck in Taiwan. The bank issuing this letter of credit absolutely guarantees this by the L.C., and therefore, the bank demands that the importer be financially responsible.

If an importer insists that the customer supplies the L.C., then the customer is taking all the risks, not the importer. Is the customer not paying the importer to assume this risk? He should.

Therefore, (1) customer should demand to know who is the importer's banker, and exactly how the transaction will go from start to finish. (2) The customer should definitely check to make sure that the importer does really have the financial clout to bring in the vessel without the financial assistance of the buyer. (3) Give the importer/dealer only the reasonable deposit before the boat is actually in the U.S.A. 20% should be sufficient. Any worthwhile importer does not have to deposit

NEXT PAGE OF TEXT IS MISSING>
P. 14 in original newsletter.

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TAIWAN. REPUBLIC OF CHINA

DATE:

REMARKS REGARDING TOG TAYANA 37 NEWSLETTER #13-17

PART I, ENGINES

A). Engine Choices

From the Tayana factory, technically there is no standard engine. Though dealers may say such and such an engine is standard," as far as the yard is concerned, the base T-37 has the engine as an "option" in that there is no standard. Like a lot of other things, the dealers often make up their own "standard T-37" package with engine, interior layout, and other yard "options" and call them "standard."

However, only two engine choices kept in stock at the factory at this time. They are the Perkins 4.108(M) so called 49 brake horsepower unit, and the Yanmar 3HQM30-F or 3QM30F model, so called 30 horsepower. In the past other engines such as the Volvo 17C and the Yanmar 3HM, were stocked, but no longer.

If any of you are familiar with Skene's Elements of Yacht Design, here are a few calculations from it which show the required horsepower to drive the Tayana 37 at a hull speed.

Theoretical hull speed = Sq. root of LWL x 1.25 = 31.83 ft x 1.25
= 7.05 knots

Let's go a little faster, at a speed to length ratio of V/ LWL of 1.3, for our calculations, exceeding hull

speed = Sq rt. LWL x 1.33 = 31-83 ft x 1.33
= 7.3 knots

What is the effective horsepower needed to push the T-37 at 7.3 knots?

First we have to calculate the hull resistance, against which the engine must act at that speed:

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TAYANA

DATE:

The figure of 45 pounds of resistance for each long ton of displacement is taken from the table of resistance in the book. Since the "designed" displacement of the T-37 is 23,520 pounds, dividing that by 2240 lbs. in a long ton gives us 10.5 long tons of displacement;

hull resistance = long tons X resist. factor from the table

= 10.5 long tons x 45 pounds resistance

= 472.5 pounds of resistance

To find the effective shaft horsepower needed to go 7.3 knots, we continue:

Effective shaft horsepower = E.S.H.P.
= resistance x speed x .003
= 472.5 lbs. X 7.3 knots x .003
= 10.4 shaft horsepower.

However, it must be remembered that a propellor isn't 100 percent efficient. In fact, a 3-bladed fixed prop like TaYang provides is only about 55% efficient. Therefore, we have to find the shaft horsepower at the engine, which, coupled with the low-efficiency of the prop, still gives us our desired speed;

Es+. Needed engine shaft horsepower = E.S.H.P.
= 10.4 / .55
= 18.9 SHP

It is desireable to add say 1/3 extra power when selecting an engine, to account for the extra power needed in a chop or with headwinds. Thus

SHP x 1-33 = SHP with a safety margin

= 25.1 shaft horsepower with margin

Looking for a suitable engine for the Tayana 37, then, one should find an engine which can deliver 25 horsepower to the shaft or more.

- 2 -

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TA-YANG YACHT BUILDING CO., LTD.

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DATE:

Page 3 -

Both the Yanmar 3QM30F and the Perkins 4.108(M) fit this requirement; the Yanmar at about 2350 RPM and the Perkins at about 3200 RPM, according to their specifications curves, shown in their sales literature.

What Ed Potter had to say in the 13th Newsletter is well taken, that the Yanmar develops the same horsepower at a lower RPM. Newsletter #15 has additional comments by Mr. Potter in favor of the Yanmar's efficiency. I would further agree with Mr. Potter that the Yanmar is well suited to the Tayana 37, and many owners. specified the Yanmar in their Vancouver 42's with success (except under high wind and wave conditions.) I think prospective buyers should examine carefully the service and parts networks in the areas where they plan to cruise and base a lot of their choice of engine on that.

On the Yanmar installation, Ta-Yang currently supplies the Yanmar 3QM30F ('IF" standing for fresh-water cooling) with a 2.21:1 reduction gear, flexible coupling, fixed stern tube with packing gland, **1-111** shaft, and 1811 x 1311 right-hand turning prop which is

4

from Japan, and has high-aspect ratio blades.

On the Perkins installation, the yard currently installs the Perkins 4.108(M) fresh-water cooled engine (of United Kingdom marinization as opposed to U.S. marinization) with a Hurth HBW 100 model, 1.86:1 reduction gear, flexible coupling, the 1 1/4" shaft and fixed stern tube, and typically a 17X 11 left-hand rotation 3-bladed fixed propellor. The propellor is of Taiwan origin and has wider blades than the Yanmar prop and was chosen due to less horsepower at the shaft of the Perkins 4.108

at "normal" revolutions. The Hurth gearbox is a mechanically operated helical-geared unit with a special multiple-disc clutch assembly. allowing the gears to be changed from forward to reverse at top speed in an emergency (though you may sheer the shaft keyway or roll-pin in the process on the propellor shaft --- beware). When you are moored on a river or waterway with a current, the gear can be set in neutral allowing the shaft to turn freely, without damage. Likewise when sailing or if you are towed. Also, the gear lever may be set to the "reverse" mode while sailing to stop propellor rotation. One important note to Perkins owners with this gearbox is that for heavy duty use, long term running under power, charter service, etc.,

1 7
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TAYANA **TAIWAN. REPUBLIC OF CHINA**
MA TEL. (07)6412422. 6412721-4

DATE:

a transmission oil cooler should be installed.* This is an aluminum cooler box which mounts on the portside of the gearbox and through which the raw water runs enroute from the seacock to the salt water pump. Check with the Perkins or Hurth representative near you. Normal operating 0 temperature of the ATF oil in the gearbox should not exceed 130 Centigrade, or an oil cooler is required.

Regarding reader input of performance and fuel consumption, etc., on your Tayana 379 be sure to give information on how you obtained your data. Did you clock the speed over a measured course? Did you make several passes, in both directions and come up with an average? Was there wind or chop? What load were you carrying on board? Full cruising gear, half-full tanks, or what? What was the condition of the bottom? The more accurate and complete the information given, the better we can understand and use the data. Give also your hull number, which engine model, which transmission, ratio, and propellor used.

HBW 100

*Only necessary if you have a left-hand propellor with the HBW 100. Right-hand prop rotation people disregard.

Mr. **Nicholas W. Fast**
414 Tyler Avenue
Groton, CT 06340

I have a few qualifications which may contribute. I majored in naval architecture and marine engineering at MIT, and I've been designing and building my own boats up until now as a hobby while building submarines for a living After looking at many boats from 32' to 40' and narrowing that range down to 35-39 feet, Bob Perry's design for the Tayana 37 and Tayana's ability to turn out customized boats of consistently high quality convinced me that I couldn't do better. That, of course, won't keep me from trying to improve on the boat in small ways.

A number of items in the Newsletter have discussed power, speed, and propellers. In Newsletter #15, Ed Potter of Southern Offshore Yachts was quoted extensively on the comparison of Yanmar 30M30 and Perkins 4-108 engines. Unfortunately, the data he used was incorrect. I made up a chart in October 1982 which uses the data from the factory performance curves of the two engines. Both the intermittent and continuous ratings are plotted. I think the intermittent rating is rational for our purposes since it reflects how most of us would normally treat our engines. The Yanmar will indeed turn out 33 HP at 2800 RPM. But note that the Perkins is putting out 37 HP at that RPM. At any given RPM the Perkins will put out more horsepower than the Yanmar. If you could wind a Perkins up to 3600 RPM you would get 45 HP from it, well beyond anything the Yanmar can do. However, all of this means nothing until you put it through the propeller into the water, and here is where all the confusion begins.

The only way you can get these engines, or any others, to follow their power curves is with variable pitch propellers, and I don't believe any one has done that on a Tayana yet. If you use a small enough pitch wheel to get a Perkins up to 3600 RPM, you will get all 45 of those horses pulling, and you'll have the first Tayana tugboat. When you throttle back to a nice easy 1800 RPM, the rest of the fleet will go right by you, and they will use less fuel per mile. Most of the boats have been outfitted with a moderate pitch wheel which gives fine performance at the mid range. It uses all the power the engine develops, at about 2/3 of full RPM, and gets good fuel economy. But it will not let the engine rev up, and this is most noticeable on the Perkins which needs to spin up to get its extra power.

There is an extra line on the chart which does not relate to engine RPM at all. It simply expresses the relation between actual horsepower delivered by the propeller and the speed that produces on the Tayana 37 hull. This was not developed in a laboratory but by listening to the reports of owners and applying their data to a simple curve. What it tells us is that we only need 30 horsepower to get a Tayana up to speed in calm water and so the Yanmar engine is just fine. I ordered a Perkins anyhow. I think it will give me the edge I want when things get messy. The wheel I ordered probably has too much pitch (14"P X 18"D) to get the engine up over 3000 RPM, but that's OK with me. At cruising speed it will give me the low noise (low RPM) and fuel efficiency I'm looking for. I'll let you know how it works out.

MISCELLANEOUS

1. Tom Bowers from Northridge, California has ordered a Tayana 37 Long Cabin Pilot House model. Fortunately for Tom, TOG members Carrol and Sandy Smith of Long Beach, California own a Long Cabin Pilot House and allowed Tom to look around, take photos, measurements, etc. Tom wrote that all the Tayana owners he contacted were very helpful. Tom is planning to add a Dickinson Pacific Mariner Stove (diesel) and would appreciate comments from other TOG members concerning pros and cons of the stove. His address is 10925 Muirkirk Drive, Northridge, CA 91326.

2. Fred Gross, "Fairbourne" sent in the article on the Prusik hitch shown on page 22. "A marvelous knot, it holds firmly but can be slipped along the standing line when pressure is released. Try it!"

3. Bill and Marilyn Murray, Hull #300, have a unique Perkins 4- 109 in their boat. It was manufactured in Spain. "The U.S. Perkins people will not stand behind the engine. We found two badly cracked impeller blades on the raw water pump and the oil filter was almost rusted thru in spots. We cannot find an oil cooler on this engine. We sent to Spain for the engine manual. Where is the oil cooler supposed to be? Does anyone else have a Perkins made in Spain?

4. From Ken and Nancy Sainsbury comes this report on "Pride". "Nancy and I had a great summer sailing Pride around our usual haunts, namely Long Island sound and Buzzards Bay. Pride behaved well with no problems except for a leaky stuffing box. Every time we returned from a day's sailing, the stuffing box would have to be tightened. I finally surmised that there must be corrosion in the shaft under the packing, causing it to be chewed up. I had grounded a couple of wires on the stuffing box and had not used a zinc on the prop shaft until the last two years."

Since I had ordered a Luke feathering prop, I had the shaft pulled and found corrosion as expected.. Nothing was lost, however, because I needed a new shaft for the feathering prop (the taper is different). This prop is supposed to feather in 2 knots and is supposedly more efficient in reverse because the blades rotate 180 so that the leading edge is the same in forward and reverse. A friend picked up a Luke prop in a junk yard for $15, and loves the way it performs. Mine cost $1400. I'm not in the water yet, but expect to be soon and will let you know how it works.

5. Frank and Cynthia Lawson, "Satori", have a Dyer dinghy and write, "The 9 Dyer does not fit on deck we use the davits. It is a fine boat; I a lot more boat than the model. Sails really well with 2 aboard. A very high volume boat ... mighty expensive
though."

BOSUN'S ARTS

The Prusik Hitch

Peter J. Unger explains a useful "adjustable" knot

Sailors and mountaineers share a chair and push up the foot loops. dose association with ropes and Then stand in the foot loops and knots. Both regard the bowline as push up the bosun's chair. Repeat the "king of knots," with good until you reach the desired height.

reason. However, climbers routinely use another knot, nearly as useful as the bowline, called the Prusik (proo'sik) hitch. If you so desire, another Prusik can be pushed along on a separate halyard for insurance.

Superior to the well-known "rolling hitch," it will not jam or **loosen when** you twist it. Yet, when tension is released, the knot may be slid along the standing part, making it adjustable without re-tying it. The easiest way to tie a Prusik hitch is to form a loop in a short line and pull it through itself twice around a standing line (Fig. *1)*. When the hitch is snugged down onto the standing line **under** tension, it resists slipping, yet when the tension is released, the knot can be pushed easily in either direction along the standing part (Fig. 2). The Prusik hitch may also be tied without a separate standing line to form an adjustable loop (Fig. 3). Such loops have numerous applications on a boat, I including adjustable mooring and fender lines mid adjustable filler lashings.

Figure 3: Prusik hitch may be tied without separate standing line, thus forming adjustable eye

Figure 1: To tie Prusik hitch, form loop in short line and pull it through itself twice around standing line

When you are using two separate lines, the line for the Prusik hitch should be no larger in diameter than the standing part. Ideally, it should be somewhat

hitch

Prusik hitch

end splice

taped

W-

gure-eight
smaller In most instances, two *knot*
loops around the standing part
suffice, but three provide
halyard

(secured at
additional security. Incidentally,
bottom)
use Dacron rope; do not use
polypropylene rope because it
tends to slip.

I climb my mast regularly using two Prusiks, one on a halyard at tached to the bosun's chair and one with two foot loops tied Prusik below the chair on the same Prusik halyard (Fig. 4). The halyard is spliced cleated as the passive standing line. To climb, sit in the bosun's

Figure *4:* Mast-climbing arrangement uses two hitches. For bosun's chair, hitch uses line already into a loop

Figure 2: When pulled tight, Prusik hitch will not slip on standing line

SAIL JANUARY 1979

151

TOG HOMEBASE NOTES

Annie and I are still enjoying our stay in Mexico. Annie's back is fair, but we manage to get in a nice amount of diving. Her doctor told her that swimming is real good for her, especially in a rubber suit which provides excellent support (like a full length girdle). I got bitten by a Moray eel twice (same eel) as I attempted to remove his fellow cave dwellers, the plump lobsters (langostas). There are two T-37's here in Puerto Escondido. One owner picked up his boat in Taiwan and is cruising the world.

Please write me soon - I need your input.

Warm regards,

Norm

P.S.

Since this newsletter is on a quarterly publication now, this issue put us half way thru the year, I regret to have to say that unless I have received your 183 membership dues ($15) prior to the end of August, this will be your last newsletter. Why not do it now!