

 **TAYANA 37**

Newsletter No. 7
1348 Nonchalant Drive
Simi Valley, California 93065

Dear Group,

As you can see from the attached membership roster, our little group keeps growing. The list (computer prepared) breaks down as follows:

76 Owners
6 Dealers
5 Prospective Owners
3 Honorary

90 Total

Please send me the information missing about you on the list.

Pete Eckerson who uses his Tayana as a dental office, is preparing to move his base of operation to the Caribbean. Upon hauling his boat he discovered that the bob-stay fitting near the waterline was loose. He called me as the boat hung in the sling with 5 guys standing around trying to figure out what to do. I recalled that Buz Radican had to have a repair in the same area. Buz, at the time was enroute, on his Tayana, from Japan to Guam. I told Pete I would try to reach Buz via a friend's ham radio, and then get back to him. I really got excited thinking of accomplishing this feat. I almost made it too. We did get through to Buz via the Pacific Maritime Net (14.313 MHz) but lost him when moving off the net frequency so as to be able to chat. Sorry Pete, what did you finally wind up doing? I must say that despite all the good info I've gotten on our boat, questions keep arising that I have no smarts about . . . maybe someday . . .

Our good friend Jake Huber spent much time and effort writing me a detailed letter on various subjects. I really appreciate the time and effort required to write such letters and would encourage more of you to do so. Here's what Jake had to say:

#1. RE: Worm Gear Steering We've just finished checking out and fixing two worm-gear steering systems on Tayanas. I seem to get involved in helping with these problems and find them challenging. On one boat the thread-bar (steering wheel shaft) was bent and causing the wheel to jam on a hard starboard turn. The problem was actually the fault of the steering arm to the rudder post (it's too short). It does not give enough leverage or mechanical advantage to the entire steering system. The reason the steering arm does not have enough leverage is that it is only 3-15/16" from the center of the rudder post to the center of the connecting pin. It should be 5" or 6" instead. Additionally, the steering arm is made of cast iron and it should not be. Cast iron cannot withstand tension loads which are a prominent part of the loads this arm must withstand. The arm should be made of 3/~ or 1/2" steel plate and welded together or machined out of a solid block of steel.

People with worm-gear steering should be made aware of this potential problem.

An additional problem that people with worm-gear steering should be aware of is that the entire system literally comes un-bolted with normal usage. Apparently, on the boats I looked at (2), the various bolts and screws used to secure the system together are "Coarse thread" bolts which are not noted for being able to withstand vibrations. As the rudder moves thru the water it transmits a great deal of vibration to the steering system causing the bolts and screws to loosen. "Fine threads" withstand vibration much better but cast iron (as in the standard steering arm) will not thread well with fine threads. Therefore, each owner of a worm gear steering system should, at the very least, take out each bolt and screw and install "star washer" type lock washers (the type used in automotive assemblies). If these washers are made of stainless steel, so much the better. This applies to each bolt or screw in the steering arm (4) the pillow block bearing (2) the end of the steering wheel shaft (1), and any other bolts in the assembly. Some owners may choose to use chemical compounds like "Locktite" etc. but I wouldn't.

2. The problems of freezing seacocks is really not much of a problem at all. The seacocks Tayana has been using are slightly tapered. All one needs to do to "unfreeze" the most stubborn seacock is to loosen the nut on the side of the seacock 1/2 or 1 full turn and tap the end of the taper (the part that shows thru the center of the nut) firmly with a hammer, Be careful to hit it squarely so as not to deform the threads. This nut is at the opposite side of the lever handle. This will loosen the most stubborn seacock instantly. Move the handle (rotate it) back and forth several times to abrade the corrosion that may have occurred inside and retighten the nut. Never use the hammer to hit the handle.

(Jake's approach certainly offers relief from this sticky problem. In my view its a nuisance to have to worry about since they seem to freeze up rapidly. As we now know, the newer boats don't have the problem. I would still like to know if it would be practical and helpful to add a grease fitting to the old style seacocks).

3. The problem of prop shafts coming loose is a problem that numerous Taiwan boats suffer from not just Tayanas. One reason for this is that the set screws in the coupling at the rear of the transmission are often improperly installed. The prop shaft should have indentations drilled into it for the set screws to fit into when they are tightened down. If no such indentations exist the set screws cannot by themselves (there are usually three or four around the coupling) withstand the constant vibration and fore/aft thrust of the shaft when in reverse or forward. To check whether your boat is OK, remove each set screw and measure the depth of the hole (with a toothpick, etc.) as compared with the depth that the set screw threads into the coupling. The set screw should thread into the coupling 1/4 to 3/16 inch further than the thickness of the coupling. If not then indentations should be drilled into the prop shaft (1/8-3/16") for the set screws to fit into.

4. On our "Alta" it takes about 4 hours of engine running time to bring the water heater up to a mild luke warm temperature. And then that water was quickly used up which then required another 4 hours of engine time to heat up another batch. These water heaters have a very poor heat exchanger between the engine cooling water and the fresh water in the heater. It simply consists of a piece of 1/2" copper tubing about 18" bent double and stuck into another piece of copper tubing about 1 1/2" in diameter. The engine cooling system hoses connect to the ends of the 1/2" tubing. The 1 1/2" tubing fits into another slightly larger tube welded (soldered) into the water tank. The problems with this type of heating are numerous. A. There are too many "temperature barriers" between the engine water and the fresh water. A temperature barrier exists between the surfaces of any two different materials. In this system there are six such barriers. A significant temperature loss occurs at each barrier. B. The tubing (1/2") from the engine does not protrude far enough into the water tank. More "coils" should be in the tank so that more heat from the engine water can be extracted. C. A "check valve" should be installed on the inlet line from the main fresh water tank to the water heater. In essence, what happens is that the engine is asked to heat up not only the water in the hot water tank but the water in the main fresh-water tank (all 100 gallons) as well. I installed such a check valve (this valve only allows the water to be pumped from the main tank to the hot water tank and does not allow it to flow back) on "Alta" and it shortened the time for the engine to heat a hatch of water to 1 hour. I have no complaints about the efficiency of the water heater when using shore power."

Rolf Zenker, one of our new members (Hull #246), spent 5 years (1974-1979) in the Far East. During that time he traveled to Taiwan on many occasions and visited over a dozen boat yards. He concluded that Ta-Yang was one of the best. He ordered a T-37 and was able to spend time at the yard working out the details. He opted for the full cockpit coaming. His forward berth is not a "V", but rather a triangle. (I like this because I find the filler cushion molding uncomfortable and rarely lift out the filler anyway.) There is a separate shower forward of the head, with a large laundry tub to port. He ordered a large drop leaf table for the dinette instead of the hi-lo table. This drop leaf allows people to sit on the starboard settee while eating at the table. (He received the hi-lo table, however, he hopes to exchange it for what he ordered). Rolf claims that the drop leaf table is now standard. Is that true Ta-Yang? Instead of a quarter berth, Rolf has a tool locker outboard (with room for a small work bench) and a wet locker inboard. He opted for the aluminum (Australian) spars and is delighted with the quality. His only suggestion to Ta-Yang relative to the mast concerns the sleeve at the cabin top. The sleeve, which is cylindrical, should have a taper at the upper end of about 1" to allow the rubber O-rings to slide into the collar more readily. Also the hole in the mast step for electrical wires is too small - it should be 1" diameter.

It cost Rolf \$7900 (Mar. '80) for transportation, insurance and import charges. The boat was unloaded in Camden, N.J. A week later it was put in the water for the 100 mile trip to Annapolis - the worst boat trip Rolf ever had. The temperature was 3~°F with blowing snow and rain. He and his son kept trading places at the helm so they could go below and try to revive their stiff fingers on the hot engine - their only heat. There was only one small leak around the lexan pane at the forward hatch "we never experienced such a tight boat, new or used".

Rolf tells me that his bow sprit is made from laminated wood - left unpainted. Ta-Yang, is this standard now? (I hope so)

For winches, Rolf installed two #25 self-tailing as primaries, 1 #23 selftailing for the main sheet, #20 for staysail sheet, 2 #23A for jib and staysail halyards and a reel winch for the main wire halyard.

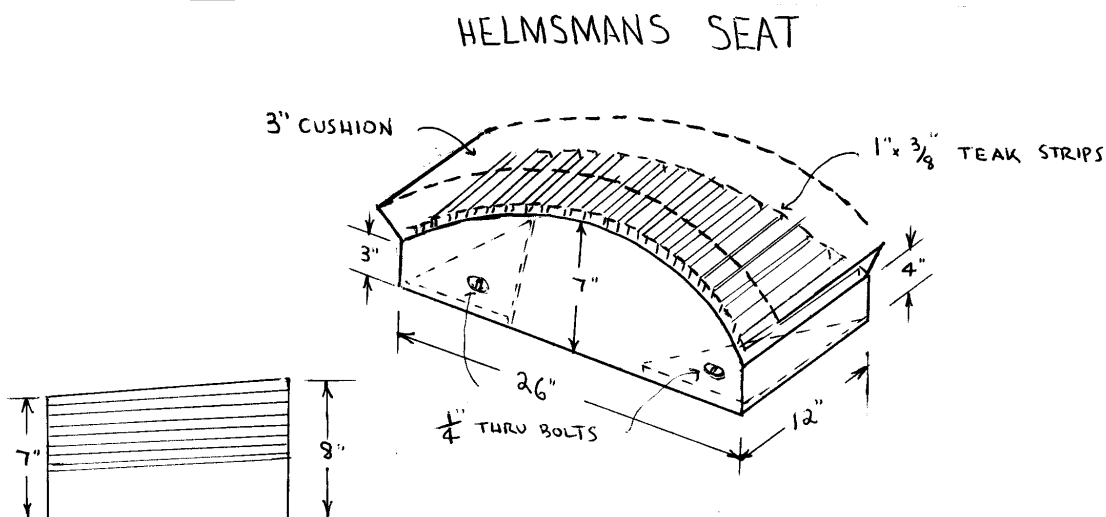
The fuel tank dip stick has been calibrated in 5 gallon increments. (Rolf this would sure be helpful. Can you send me a sketch showing the measurements of these increments along the dip stick?)

For a stove, Rolf bought a 3-burner propane with oven. The Trav'ler MINI range made by Elixer Industries, Gardena, Calif. had just the right height (Model 163-QO) and cost ~210.

Regarding engine oil, Rolf agrees with the last newsletter. "After having spent a few years with Texaco in developing lubricants mainly for diesel engines, I can assure you that your diesel engine will like any oil that meets the specifications called for by the manufacturer of the engine. Brand names mean nothing, If you want to do your engine a favor, then stay away from so called "Multi-grades". All you are doing is buying viscosity improvers which are only useful if you operate in areas with extreme temperature differences. Otherwise you only feed your engine with unnecessary metal additives which can have undesirable side effects on piston rings, and valve seats."

The standard hanging locker in the galley has a louvered door on one side and an open area and drawer on the other side. Rolf did not like this arrangement because the open area is almost useless and the small drawer is hard to see in (I agree with him). He ordered (but unfortunately did not get) a cabinet with two louvered doors. I would like to see this become standard. Do I hear any yeas? nays? (I do hope Mr. Chiu helps Rolf get his cabinet).

Rolf has made a helmsman seat which allows him to sit high on either tack and to see well while motoring (see sketch). The cushion is kept on the seat with straps. The back is open for storage.



Rolf has some suggestions for improvements that he would like passed on to Ta-Yang. Before I do, I would like your comments.

1. The head is installed too low. The base should be 4" to 6" higher.
2. There should be a 110V outlet at the galley next to the dinette area (my boat has one below the sink. Rolf's sink and ice chest are reversed and perhaps the outlet got lost in the switch).
3. The lock in the head door could be omitted (cost improvement).
4. Storage behind Setees would be better if the openings were bigger. They are too small now, at least in our boat. Instead of three compartments behind each settee back rest, two would be better. It's the ideal space for storing bedding (pillows, sheets and blankets).
5. Some thought should be given to permit some access to that deep bilge. I lost a wrench when adjusting the stall setting on the engine's governor. Almost impossible with the length of arms we had on the boat, to retrieve that wrench out of the bilge.
6. (This one is mine). I would like to see these doors made larger:
 - o The one in the aft bulkhead of the quarter berth
 - o The one in the bulkhead aft of the engine. This would improve access to the rear of the engine.

. Rolf is not happy with the Thiokol bedding under his teak deck. He has found voids in the Thiokol such that the teak strips actually move underfoot. He is concerned about water leaking in and deck core rot. In the last letter I reported that Buz Radican observed that Ta-Yang used an adequate amount of compound under the teak. Those of you with teak decks, please let me know of your experience.

Rolf has offered to loan his photos of the Tayana 42 to anyone interested. He also will talk with any member about buying a boat directly from a builder in Taiwan (Ta-Yang, I understand, sells only to dealers or to people who take delivery in Taiwan).

SAIL TALK

I have a few corrections to sail info given in previous newsletters.

1. Fred Brodersen's cruising spinnaker (MPS) is 800 sq. ft., not 1200 (it just seemed that big to Fred when he was struggling to bring it in).
2. My genoa is 650 sq. ft., not 850. Can someone tell me what percentage this represents? Seems like the percentages get confusing on cutters since the mast is set aft further than on a sloop.³³
3. Buz Radican referred to his storm tactic (50+ knot winds, 20 ft. seas) as being hove-to. The only sail he had flying was his storm jib . . . the main was not in use. He thinks lying-a-hull would more accurately describe his tactic. (Sounds to me like half way between.)

Bill Hill suggests that hoisting a small sail on the back stay would help stabilize the boat while at anchor. Anybody tried this?

Several owners have mentioned adding a flattening reef to the main. This type of reef basically consists of a set of cringles, one each in the luff and leech, located about one foot or so above the boom. In practice the halyard is slacked, the cringles pulled down and fastened, and the halyard reset. This type reef has been used in racing sails to remove bagginess when going to weather. I would like some input on the effectiveness of the flattening reef.

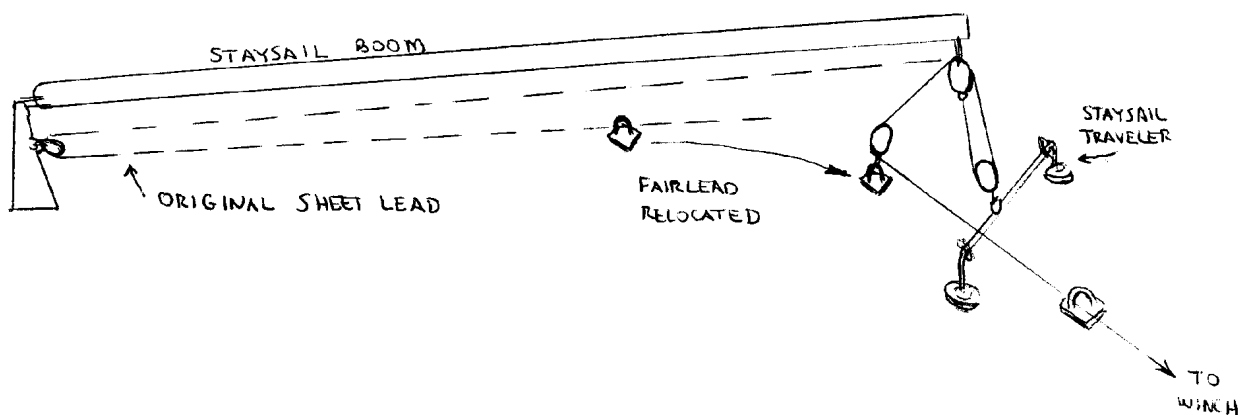
The thick wooden battens that came with my boat were warped and useless. What's your opinion on them? Shall we ask Lam to switch to a better batten?

Allen Badner would appreciate any information from owners who have raced their Tayana. He uses a 135% genny in winds from 10-15 knots, and a 170% drifter for under 10 knots.

RIGGING TALK

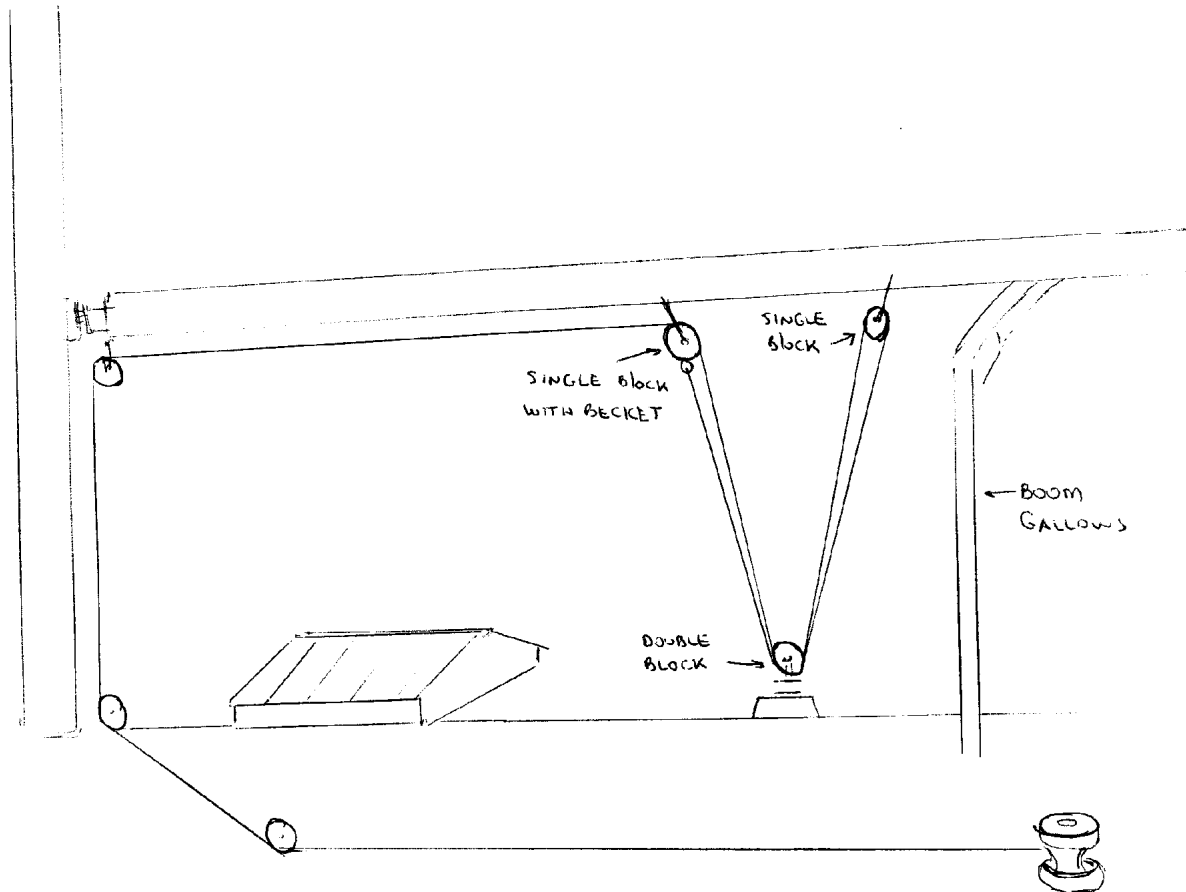
According to Erwin Wehner, Hull #53, there are several types of arrangements for the forward lower shrouds. On the older boats the forward lower came down to a tang alongside of the uppers. The lowers were moved forward about Hull #93 at the request of a dealer who erroneously attributed spreader failure to the position of the lowers. This change led to a shorter staysail boom and recutting of the staysail. Erwin believes that if the staysail needs to be recut, it should be done on the luff, not the leech, in order to keep a good shape.

Erwin has rearranged his staysail sheeting as follows:



This arrangement has eliminated the compression load on the boom, and the loose sheets hanging up on the dorade vents (one owner lost a cowl vent this way). Incidentally, if anyone has replaced his staysail traveler with a better one, I'd like to hear about it.

Erwin also re-rigged his mainsheet as shown to obtain a better load distribution.



Ketch Rig

I would like to get more input from our ketch rig owners. Meanwhile I do have some info from Elizabeth Stennis and Henry Hook. For winches, the Stennis' have (all Barlow)

Sheet Winches

Jib/Genny - #26 2-speed
Main - #23 2-speed
Staysail - #16

Halyard Winches

Mizzen - #16
Main - #19 2-speed
Staysail - #16
Jib/Genny - #19 2-speed

They use their sails as follows:

We go to windward- effectively at about 35° - 40° apparent wind, according to sea condition.

Windward Combinations

Apparent Wind

Mizzen, Main, Staysail, Jib	15-25K
Reefed Mizzen, Reefed Main, Staysail	Over 25K
2nd Reef in Main and Mizzen, Staysail	Over 35K
Double Reefed Main only and maybe Reefed Staysail	Over 40K
Genny, Staysail, Main, Mizzen	Under 15K

Reaching Combinations

Same combinations on close, beam and broad reaching.

Running Combinations

(With Preventer) main and Genny on Whisker Pole	Up to 12-15K
Main, Staysail, Jib	Up to 25K
1st Reef in Main, Staysail	Above 25K
2nd Reef in Main, Reefed Staysail	Above 35K
Staysail Only	Above 40K

Hove to on Reach (Close)

Staysail and Mizzen

Mizzen used for steadying sail while motoring at times - also when raising other sails - keeps us headed to windward.

We use whisker pole - telescoping type with the 150% genny. It attaches to a bracket on the main. All sails are by Lam - ordered with boat.~-

Henry Hook has the pilot house model ketch.

"I re-arranged my sheets on my mizzen boom so that I can tend them myself from behind the wheel and installed a two to one purchase downhaul at the mizzen instead of the original self-tensioning arrangements for the luff.

Getting around the shroud on the mizzenmast at the corner of the pilot house gives some people fits and I must admit it is not the most desirable arrangement for going forward or for boarding and coming into the cockpit. I have seen one other arrangement made where the shroud is carried through an opening in the pilot house roof and a change in the location of the chain plate was made but I have not felt that makes enough improvement to warrant the added expense of changing it in this way. I am considering putting a quick release type of device on the shroud at the turnbuckle area similar to that which is used on some large yachts for running back stays. This way, when we are at dock and not underway, on the boarding side this could be released and one could more easily come aboard and bring supplies aboard than what we have with the existing arrangement."

PROP TALK

Three weeks after Buz Radican cleaned his hull, a one inch thick "belt" of growth appeared from the waterline down 2 feet. The prop was also fouled. Buz 's normal RPM (Perkins) is 2750 max . With this growth, he could only turn 2000 RPM and move at 3 knots. He hauled out several weeks later and had a 2-3" thick carpet all over the bottom. He contends that the Ta-Yang applied paint (Regatta - a US Paint) was lousy. He now has 3 coats of Navy paint on and to his surprise and delight, the prop now turns at 2950 RPM.

Ron Gemme gets a maximum speed of 4.5 to 5.2 knots in calm water using an 18x10 three-bladed prop at 2450 RPM (Yanmar engine) .

Rolf Zenker is happy with his three-blade 18x10 prop (Perkins engine). He gets 7 1/2 knots (+/- 10%) at 2800 RPM. At 2000-2200 RPM, his speed is 6 1/2 knots. He used Petit Super Slick on the bottom.

SAFETY ITEMS

On many (if not all) Tayanas there is a holding tank located in the bilge under the engine. Fred Brodersen took one look at the plumbing connections to that and shuddered thinking of having to fix anything in that very hard to reach and see area. Any comments?

I talked to a delivery skipper with many years of experience. He delivered a Tayana from San Francisco to San Diego. He liked the boat very much except for one feature - you can't get out from behind the steering wheel (pedestal steering) very easily. He thought a little smaller wheel would help. Any thoughts on this?

I talked to Bob Beveridge (C.E. Smith Co. - Perkins distributor) about the electrical connector on top of the Perkins engine. I told him the connector had melted and shorted out on several boats. Bob recommends getting rid of the connector even though it's the best one available. He believes the wires should be joined together using stake on butt terminals. Then cover the terminals with clear silicon rubber (or blue Permatex), wrap them up with good electrical tape, and set it all back into the clamp. While you are at it, put the silicon on the starter, alternator, and other exposed connections. Finally, remove the screws holding in the instrument panel, pull it out, gunk all the connections, spray the back of the panel with clear acrylic, and reassemble.

MISCELLANEOUS ITEMS

I would like you to know that Garelick Mfg. Co., 644 Second St., St. Paul, MN 55701 promptly sent me a new telescoping boat hook at no charge after mine, after 2 1/2 years of use, came apart. Garelick has a line of aluminum tubular items such as ladders, boat hooks, etc.

Arvin Industries, Columbus, Indiana, also treated me very well when my 1500 watt electric heater died after 2 years, they sent me a new one. (I returned it to them directly despite instructions to the contrary in the brochure).

I am finding out that if I deal directly with the equipment manufacturers (rather than the retail supplier) I make out much better.

Craig Templeton adds his name to the lengthening list of owners complaining about bulwark leaks. He will first try sealant at the cap rail and hawse and if that doesn't work, he'll consider foam inside the bulwarks. He has teak on his bulwarks, attached by screws, which may be compounding the problem. I hope Ta-Yang is working to solve this problem. I have been asked by several owners about how best to fill the bulwarks by foam. I would like input from anyone who has ideas on this. One approach is to locate and knock out the plugs in the inboard side of the bulwarks. The plugs are located where the bolts go thru the cap rail. The plugs are cut to accommodate a wrench during the cap rail installation. (On the subject of these plugs, I have been told by several owners that the outline of these plugs show up as a small circular crack in the gelcoat. Since the bulwarks are already a source of leaks in the boat, I would encourage owners to fill these cracks. Also Mr. Chiu, please take extra care in sealing in these plugs. Rolf Zenker sent me a picture of this condition which I have included in the copy of this newsletter sent to Ta-Yang.) The foam (see letter #6) can then be injected into the holes. I got some prices on foam and it ain't cheap' Buying it retail. it would cost \$20 to fill 3/4 cu. ft., \$228 for 15 cu. ft., and \$507 for 50 cu. ft. Perhaps there is another kind of foam, less costly, that would work as well, or perhaps several owners could get together and buy the bigger size.

The alternator on my engine is a Delco Remy, part no. 1100585. It's output is 42 amps. Later Perkins engines have a 62 amp output alternator. The amp rating and part no. are stamped on the alternator (you will likely need a mirror to find it). I'm telling you this because the Perkins manuals do not include this info. I suggest you request a data sheet on your alternator from the manufacturer.

I would like someone to describe to me how that stuffing box and large clamped on hose arrangement (in the lazarette area) works at the rudder post underwater exit. What maintenance is required?

In an effort to save postage, I've been sending Ta-Yang their copies of the newsletter as printed matter, I just found out it takes 6-8 weeks to get there that way. No wonder I haven't been hearing back from them promptly. I'll have to figure another way to save money.

Tom Beard suggests that since the Tayana engines are mounted on shock mounts, and free to move about, then the stuffing box must also be isolated. He says this is commonly done with a short section of steam hose clamped on one end of the stern tube and the other to the stuffing box. I discussed this matter with a qualified source and he agrees with Tom. He advised that the alignment should be checked every six months because the rubber mounts wear. Misalignment can cause, among other problems, the recessed nut on the back end of the transmission (Borg Warner) to come loose. Also the oil seal can come loose and damage the transmission. Bob Hollister, Hull #209 did find this nut loose. I would like to send Ta-Yang a definitive suggestion on how to improve the packing gland and it's installation. Any suggestions?

Also on the subject of transmissions, I have been advised by Bob Beveridge that the Borg Warner gear should be serviced once a year (no less than every 2 years). The transmission fluid needs to be drained out. To do this, locate the hose coming from the transmission cooler (which is co-located with the oil cooler on the side of the engine) to the bottom of the transmission. Disconnect this hose and let the fluid drain out. While this hose is disconnected, reach in the hole and pull out a strainer and clean it. Replace fluid.

When periodically checking the trans fluid level, smell the fluid. If it smells acrid or burned, replace it regardless of how long it's been since the last service. If the fluid appears milky, chances are there is a leak in the trans cooler.

In answer to Skip Jones' question on why his boat moves faster on the starboard tack than on a port tack. Ron Gemme suggests that the boat heels more on a starboard tack because the boat is normally port heavy. (This would result in a slightly longer waterline length). Rolf Zenker (a new member) suggests that your greater speed is only apparent, due to the location of your knotmeter paddlewheel on one side of the keel. He says if you had a paddlewheel on each side, you would likely get the same reading.

Mr. Chiu, do you offer a starboard cockpit hatch as an option? If not, why not?

Bill Kresge has an effective formula for preventing or clearing clogged drains. Place 3 tablespoons of baking soda in the drain, add vinegar, and quickly plug all openings. Bill claims it's effective and nonpolluting. He uses it once a month to get rid of any build up.

Rolf Zenker made me aware that I have not been recognizing new group members as they join the family. I intend to do this starting with the next newsletter.

I would like to hear from anyone who has disassembled the pedestal for routine maintenance. How complicated is the job? Are the shift and throttle linkages well built? How often does this have to be done?

In newsletter #6 I quoted Elizabeth Stennis as saying that Bob Perry objected to the location of the shower at the foot of the companionway. It was not Bob that objected, but rather another designer called in to do the interior layout details.

Well friends, once again I've enjoyed passing on to you the collective experience of our members. With your participation, I can provide newsletters containing much useful information. Without your help, the well runs dry. I'm sorry to report that since I sent out the last newsletter #6, I have received only a few letters from the group. I know that many of you have important things to tell me. WELL, I'M LISTENING' Right now would be a good time to sit down and tell me all.

Sincerely,

Norm
Happy Holidays