

August 18, 1989

NEWSLETTER

DEAR GANG:

1. Lots to talk about. Things here at CGS are improving daily. Parts orders are going out in a timely fashion and kit deliveries are averaging 4-6 weeks (still a few rough spots, but we're headed in the right direction).

2. Ted, (my #3 son) who was injured in the Hawk crash at Sun-N-Fun, is doing fine. The cast is off his ankle and he's back to flying again. He has a little gimp that is slowly going away. Thanks to all of you who took time to call and send cards. It was really appreciated.

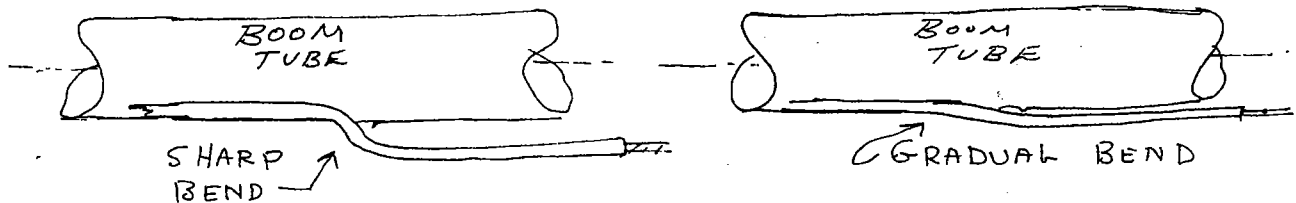
3. Since the Service Bulletin went out about the cables, we heard from about 30-35 owners who reported the following:

2 found worn and frayed cables (one at approximately 400 hrs and one at 700+ hrs.

10 found shiny cables but no frays.

20+ found nothing but are keeping an eye open. One fellow changed cables at 700+ hrs and found nothing.

It appears that the amount of wear on the cables is a function of how severe the bend in the housing is where they exit the boom.



It is beginning to seem that if you have a smooth transition of the housing going from inside to outside and you can see the cable inside and no soot is present, it's probably all right. But, if you can see soot, or, if the housing is cloudy or dirty inside and you have 500 hrs, change the cables. It is

cheap insurance. As more data is gathered we will keep you all abreast of any new developments.

4. Went to Johnson City, Tenn., for the United States Indoor Championships (USIC) in June. Won a couple of events and my #4 son, Don, won about 12 events. Hawk owner, Bob Cording, and his wife who were at Sun-N-Fun, stopped in to watch us fly. They live in that neck of the woods and keep their Hawk at a near by airport. Bob sent some pictures of his 5 year old Hawk with 650 hrs. His wife sewed up a nice seat cushion and back rest out of black velour and it looks great. The seat snaps on and has an open pocket in the front for maps, sectionals, etc.

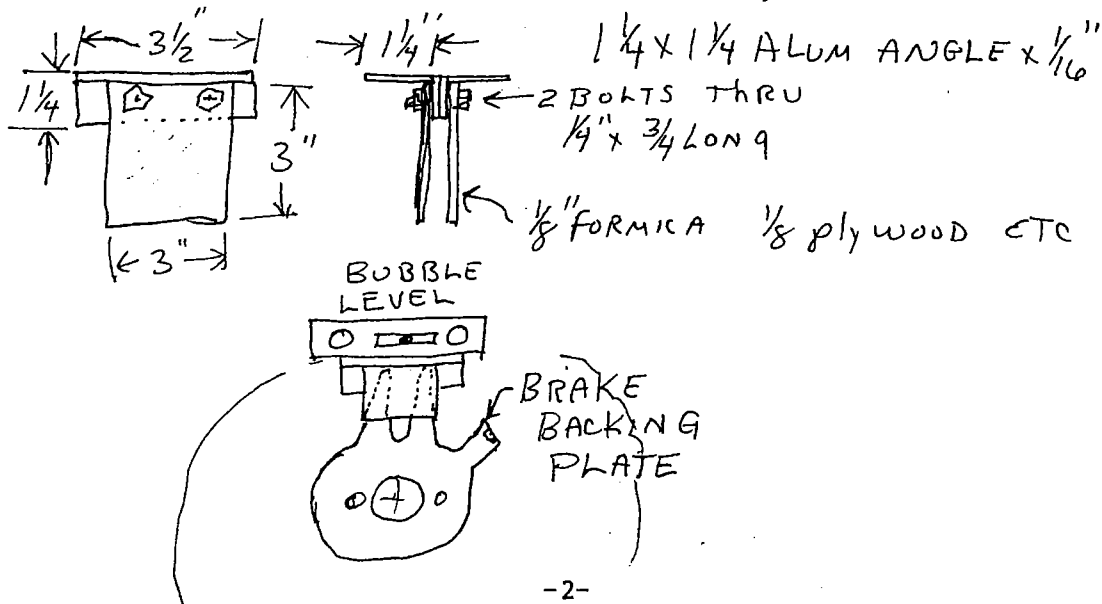
They also sent some pictures of Jeff Jackson's loaded Hawk. He's got a full panel that includes a solar cell panel to keep his battery charged. A unique feature of Jeff's Hawk is his air horns. He's got the only Hawk with air horns that I know of. Says he gets everyone's attention on the ground when he blows his horns. He's got an air compressor on board to keep them pumped up. See photo page.

Way to Go Jeff.

5. Got a couple of nice photos from Bill Bernard (Lascassas, Tenn). The photos look like he did a great job building and covering his Hawk. You can't tell from the photos but his Hawk is red trimmed in white.

6. Tom Darlington wrote that since he received the Service Bulletin of 4/20/89, he gave his Hawk a real going over. Boom and cables were fine, but he did find 3 broken tabs on a flap hinge. It pays to be nosey. He also said "I built 3 experimental planes before the Hawk and one other ultralight since. I have sold all of the others because the Hawk is way better than any of them." Thanks Tom. It's nice to hear that you're enjoying your Hawk.

7. John Cook (Penn), former WWII P-47 pilot, sent in a neat tool for adjusting your toe in and toe out on your wheels.



The gadget was made out of two pieces of aluminum angle 3 1/2" long x 1 1/4 x 1 1/4 x 1/16 thick and two pieces of micarta 3" x 3" x 3/16 thick. You need to have brakes to make this set up work. First, level the plane with verticle cabin tube at 90 degrees to the ground. Slip gadget over the two horns on the brake backing plate and push down until tops of horns are resting against the aluminum. You now have a flat surface to put a bubble level on. Rotate spindle until bubble is level. Then drill spindle and attach bolts to lock. Do other wheel. Thanks John. We tried it and it works great.

8. HAWK OWNER'S FLY IN this year will be held October 16 & 17. See separate sheet enclosed.

9. If you have mechanical brakes on your Hawk this next bit of information could improve your braking. If your brake backing plate is mounted to your spindle with two 1/4" bolts, remove them and drill out the backing plate and mounting tab with a 5/16" drill. Replace the 1/4" bolts but do not tighten them all the way.

The backing plate should be free to move slightly. Try them. They should be much better. You could also change the cable from 1/16 x 7 x 7 to 1/16 x 1 x 19 cable. The 1 x 19 has less stretch than the 7 x 7 so less force is wasted.

10. Ted, my # 3 son, and his new bride, Amber, are expecting their first child this December. I can't believe I'm going to be a grandfather. Pixie can't wait to be a Grandma.

11. Lemon Pledge on the windshield seems to work better than a lot of the high priced so called plastic polishes. Use it inside and out.

12. Dale Hoover and Jim Koozer are doing lots of flying in Florida. Jim was the Florida State Champ last year and guess what? He did it again this year with a dramatic come-from-behind victory to once again be the Florida State Champ. Congratulations to Jim and to his piloting skills. Dale is in the process of putting ceconite on his Hawk and is going to have it ready for Sun-N-Fun next year. He's got a 65 hp Rotax 532 in his ship and it flies great. Dale is also our newest Dealer for the Florida State area. Good Luck Dale.

13. Well you Hawk Owners are going to be the first to hear of what's coming. We are right now, as I write, sanding the first

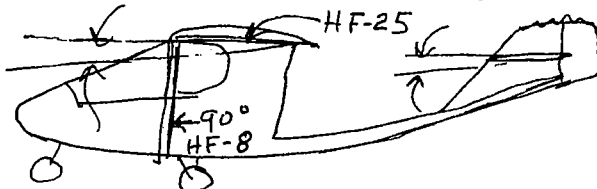
mold for the new fiberglass pod. The pod will feature a curved windshield with a steeper angle for improved visibility. The beauty part is that this pod will retro-fit existing airframes. Our date to show the new pods for both single and two place will be Sun-N-Fun 1990. I can't wait. The doors will still be removable and the internal structure will basically remain the same. More about this project as we progress.

14. Some people noticed that my Hawk flew more nose down than others. They were right. About a year ago I made a change to my Hawk which had the following results: Higher speed-about 3-4 mph. Better view through windshield and (this is purely subjective) a nicer look in flight. What I did was to change the angle that the fuselage hung from the wings. See sketch.



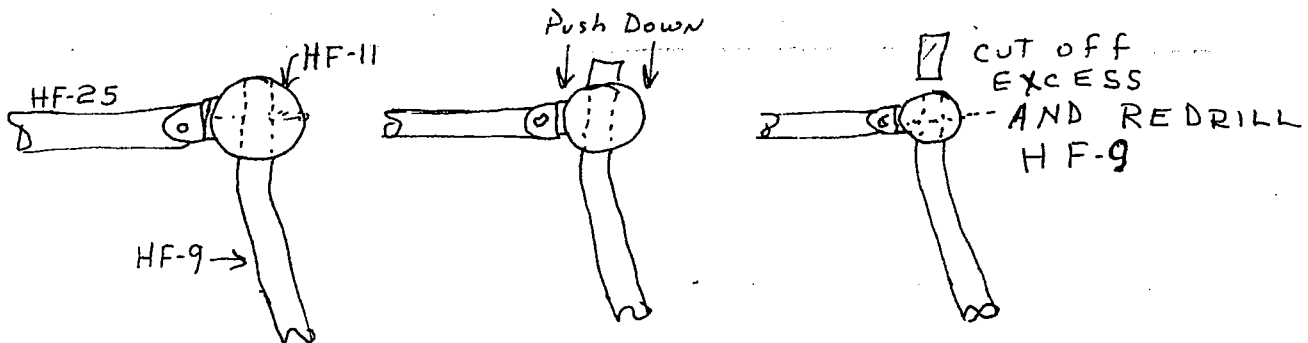
The wing and stabilizer remain at the same angle to each other, but, the fuselage gets changed. The reason we never said anything about it until now was we wanted to make sure no problems arose. So if you want to make this change, here's how you do it.

First, level your plane so the upright cabin tubes are vertical. Now measure with a bubble protractor the angle of the wing and stabilizer. Measure wing at HF-25 (see sketch)



Example-If your wing is at 4 degrees positive and your tail is 1 degree negative, then you have a 5 degree difference between your wing and tail. If you have 4 degrees positive and 1 degree positive then you have a 3 degree difference. Write this information down.

Next, remove the bolts in HF-11 (the trailing edge connecting tube) that bolt the rear down tubes HF-9 to HF-11.



Push HF-11 down as far as it will go, about 1 - 1 1/2" up to the bend.

Drill new holes through HF-9 for the bolts. Drill first from the rear then the front. Don't try to drill through in one pass. You are liable to drill a crooked hole. Cut off the excess tubing sticking out the top of HF-11 with a hack saw and file smooth. Reinstall bolts and tighten.

Now that this is done you will need to adjust your wing washout back to 4 degrees or if you like 2 degrees. The lower washout angle, 2 degrees, will give you a little better performance, but more airplane like stall characteristics. So if you like how your plane flies now, leave it at 4 degrees. Refer to your plans or the Owner's Manual for instructions on how to do this step. DO NOT fly plane unless both washout and stabilizer incidence are adjusted. It will be necessary to install two new HS-9 strut inserts.

After the wing washout is returned to 4 degrees, or any number between 2 degrees and 4 degrees, as long as both wings are the same, it is time to reset the tail. Once again, level the plane so that the verticle cabin tube, HF-8, is verticle. Now with your bubble protractor, check the wing angle of incidence at the HF-25 tube. For example: If the measurement now at the wing is 6 degrees and your original measurements showed a difference of 5 degrees between wing and tail, it will be necessary to raise the LE of the stabilizer 1 degree to obtain the same 5 degrees differential you started with. What we are doing here is keeping the wing and tail relationship the same and moving the body around.

Now adjust your fuselage cover if need be by relocating a snap or two or tightening the lacing cord at the bottom.

Check for all nut and bolts on tight. Here's a quick check list.

Wing incidence and tail incidence same as before
Wing washout same as before 4 degrees max - 2 degrees min.
Strut bolts installed and tight.
Bolts and nuts in HF-11 tight
Double check everything and go fly

First flight should be as if a new plane. Do fast taxis and short hops to check out trim. Take your time. Any questions, call us.

15. Additional notes on Teddy's crash at Sun-N-Fun:

As violent as Ted's crash was and as hard as the boom tube was whipped, the failure of the boom was NOT rivet hole to rivet hole but 1" away from the rivet lines. The boom was buckled about 12" in front of the rear bulkhead and the boom fracture only included about three rivet holes. This was witnessed by about 6 Hawk owners at the site.

16. Went to Taiwan and spent a week there with our new Hawk Distributor, Tony Wei. He has a first class operation going with hangars, pilot recreation rooms, controll tower, lessons, sight seeing, sales, and service. I got to fly the first Hawk in Taiwan. One thing I noticed was the large amount of Chinese people who lived there. Had a lot of fun with a great group of guys.

17. Well that just about does it for this edition. Send in any tid bits you got for the next issue. It sure makes my job writing this thing easier.

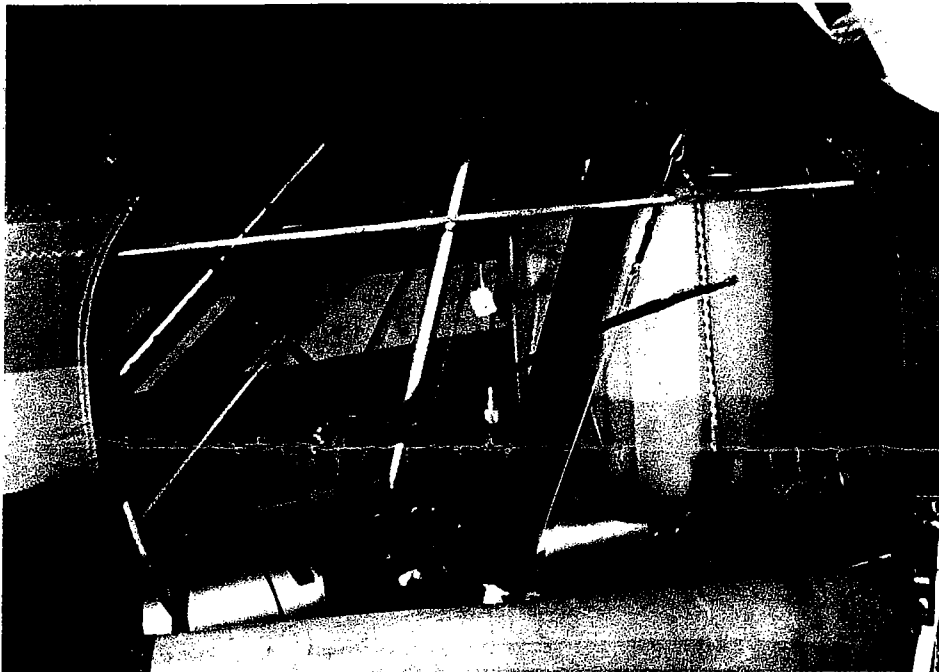
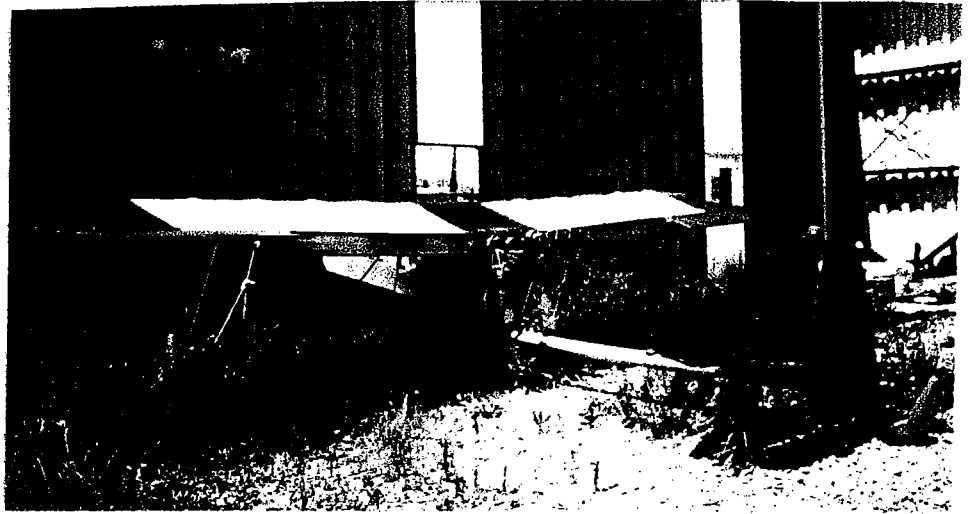
18. If you sell your Hawk, tell us the new owner's name and address so we can add them to our mailing list. If you see Hawk owner's, ask them if they are on our mailing list. A lot of our mailings to those on our current list get sent back to us by the post office. Please help us update our records. Thanks.

Chuck

PICTURE PAGE

JEFF JACKSON'S
LOADED HAWK

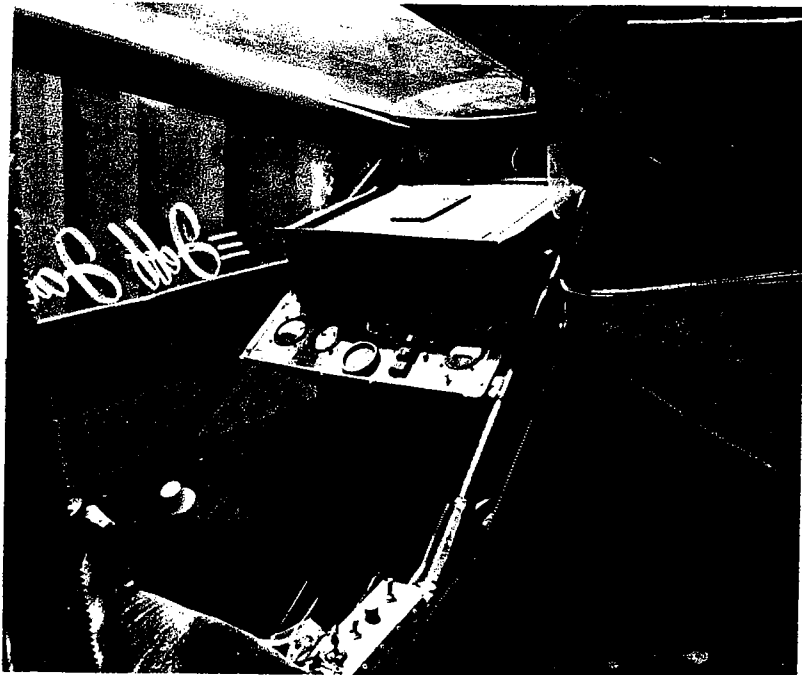
- LIGHTS
- GROUND HANDLING
- TAIL WHEEL
- PARACHUTE
- "AIR-HORNS"!!



L.) JEFF JACKSON'S
AIR COMPRESSOR
TO POWER HIS
AIR HORNS

L.L.) JACKSON'S PANEL

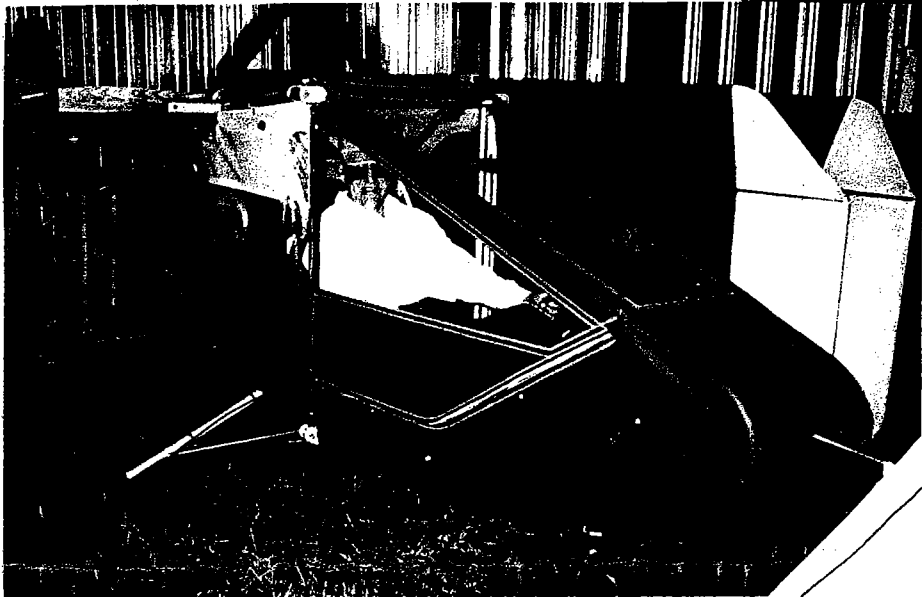
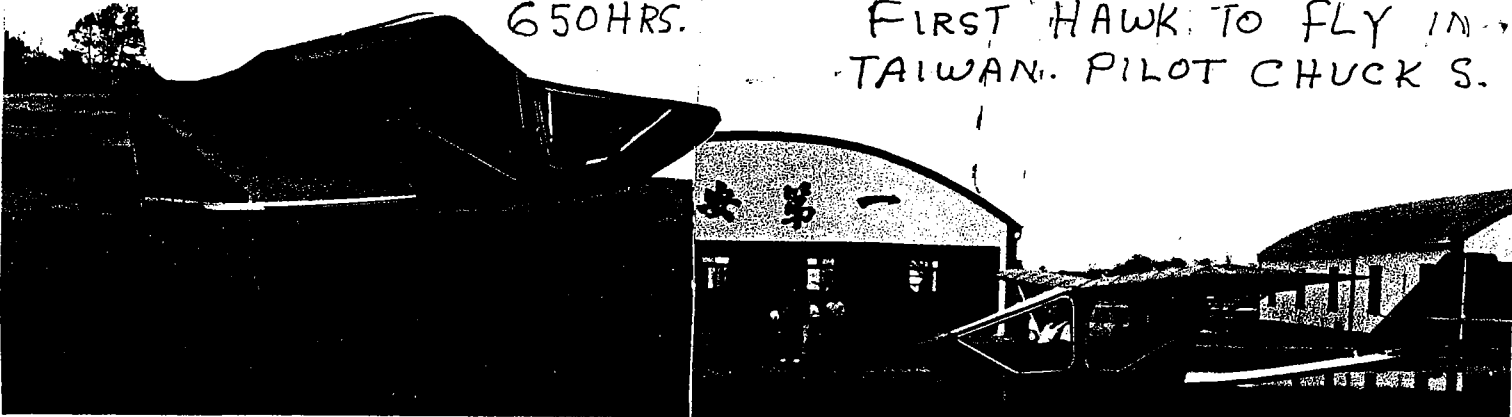
L.R.) CORDINGS SEAT
WITH MAP POCKET



BOB CORDINGS HAWK
650HRS.

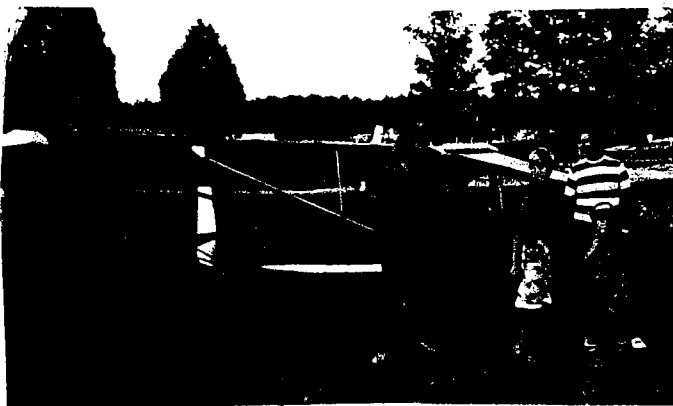
PICTURE TAKE TWO

FIRST HAWK TO FLY IN
TAIWAN. PILOT CHUCK S.



← BILL BERNARD (TN)
TEST FLYING BEFORE THE
WINGS ARE ON. NOTE THE
GRIN.

← BILL'S FAMILY AND HIS
COMPLETED HAWK



HAWK FLYING IN
TAIWAN. THIS IS
PART OF TONY WEI'S
AIRPORT.

THIS IS ME EARNING SOME
EXTRA MONEY FOR PLANE
FARE HOME.

