

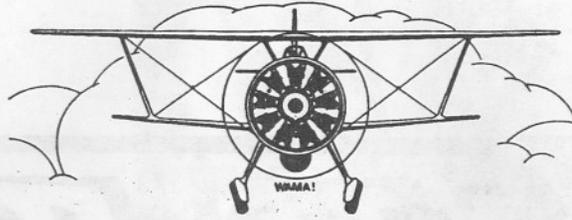
Starduster

MAGAZINE



Dedicated to the
ACTIVE Homebuilders

OCTOBER 1994



COMMENTS FROM
THE "PREZ"

OCT 94

ANOTHER GREAT MEETING OF AIRPLANES AND PEOPLE AT WAUTOMA, WI. THE TURN OUT OF STARDUSTERS WAS 15 WITH 4 VISITING AT OSHKOSH ONLY. SORRY THEY MISSED THE GREAT TIME WE HAD ENJOYING THE WEATHER, FLYING, GOOD FRIENDS, RELAXED ATMOSPHERE, AND CAMADARIE BUT BEST OF ALL THE WARMEST OF WELCOMES FROM THE PEOPLE OF WAUTOMA. OUR THANKS TO ALL THAT CONTRIBUTED TO MAKE OUR VISIT ANOTHER MEMORABLE ONE.

THIS YEAR WAS SPECIAL FOR ME. GOT TO FLY A STARDUSTER FROM FLABOB TO WAUTOMA. A LONG TIME HAD GONE BY SINCE I'VE ENJOYED THAT! LES HOMAN CAME DOWN FROM LIVERMORE, CA TO LEAD THE WAY AND WATCH OVER ME - THANKS LES!

THE HIGHLIGHT OF MY VISIT AT WAUTOMA, WAS THE ARRIVAL OF MY 5 BROTHERS - 1ST BROTHER REUNION OF THE CLOUSE FAMILY - THE SISTERS STAYED HOME.

LES HOMAN WAS THE MOST ACTIVE FLYING - 17 SORTIES IN ONE DAY (SUNDAY) LES AND OSCAR BAYER WILL PROBABLY BE WRITING OF THEIR TRIPS SOON - BOTH VERY INTERESTING AND WILL LET THEM TELL IT ALL.

CANNOT REMEMBER EVER ENJOYING MYSELF AS MUCH AS I DID THIS YEAR. A "SPECIAL" ONE FOR ME!

AS MOST OF YOU ARE, AM LOOKING FORWARD TO "95".

BC "PREZ"

B.C. Prez

Stolp Starduster Corp.

4301 TWINING
RIVERSIDE, CA 92509
(909) 686-7943

FAX (909) 784-0072

WATS 1-800-833-9102

HOMEBUILT AIRPLANE PLANS
SUPPLIES · COMPONENTS · MATERIALS

BILL CLOUSE

a.k.a. "B.C." Prez

OCTOBER 1994

OCTOBER 1994

THIS MAGAZINE USES MATERIAL SUBMITTED BY IT'S READERS. SOME ARTICLES OR STATEMENTS MAY NOT BE IN AGREEMENT WITH STOLP STARDUSTER CORPORATION OR IT'S EDITOR. INFORMATION AND ARTICLES USED ARE AT THE READERS RISK AND STARDUSTER MAGAZINE ASSUMES NO LIABILITY.

TABLE OF CONTENTS

PRESIDENTS COMMENTS	2
ODDS & ENDS FROM YOUR EDITOR	4
SAFETY ADS AND THE LIKE	6
STARDUSTER SONG	11
TECH TIPS	12
STARDUSTER HISTORY - N639PK	14
TRIP TO OSHKOSH/WAUTOMA 1994	16
LETTERS	24
SEAT BELTS AND BUCKLING UP	31
YOUR EDITOR FLIES WITH NORMA GRANVILLE	32
OSHKOSH '94 BY GLEN OLSEN	34
STARDUSTER 15TH ANNUAL OPEN HOUSE MAY 1995	36
CLASSIFIEDS	38

We would like to thank all of this issues contributors and respond to one and all for some interesting information and photos.

FRONT COVER - Your editors N96576 with N357DS owned by Don Fauth, Box 306, Port Townsend, WA 98368. Picture taken at port Townsend enroute home from NW EAA fly-in, Arlington, WA, July 1994. Airplane was originally built by Dude Statiam of Stayton, OR.

BACK COVER - N626CW and N750X owner and builder on N626CW is Charlie Wolf, 4595 SE Dixie Hwy, Stuart, FL 34997. N750X is the Starduster built Acroduster Too now owned by Paul Bellefeville, picture taken at North Florida Aerobatic Championships May 1994.

SUBSCRIBE TO STARDUSTER MAGAZINE. PUBLISHED FOR PEOPLE BUILDING OUR AIRPLANES. TECHNICAL INFORMATION, NEWS & PICTURES. PUBLISHED FOUR TIME A YEAR. SUBSCRIPTION RATE IS \$12.00 PER YEAR, \$16.00 PER YEAR OVERSEAS MAILING (EXCLUDING CANADA). SEND CHECKS TO STARDUSTER CORP., 4301 TWINING AVE., RIVERSIDE, CALIF. 92509

THE EDITOR IS ALWAYS LOOKING FOR TECHNICAL AND EDITORIAL CONTRIBUTIONS TO THIS MAGAZINE, WHICH IS DEDICATED TO THE HOME BUILDER AND SPORT AIRCRAFT ENTHUSIAST. PLEASE INCLUDE YOUR NAME, ADDRESS, TELEPHONE NUMBER AND YOUR "N" NUMBER ALONG WITH THE ARTICLE SUBMITTED.

ODDS & ENDS FROM YOUR EDITOR

After returning from a very enjoyable and uneventful trip to Oshkosh/Wautoma, I would like to take this opportunity to congratulate Lyle Taylor on his first flight and subsequent trip with me to Oshkosh, in his recently completed Starduster Too. Lyle, for not having much recent flight time, and little Starduster Too time, did quite well, even with the problems that normally come with a new airplane. It barely had the required 25 hours of flight time when we left from Yakima, Washington.

The airplane, N312LT, also had no radio or navigation equipment. Which required him to keep a close eye on me all the time. It is wonderful to see this happen, after 13 years of hard work, as Lyle is not a young guy, and for a pilot who had up to that time, never been east of Boise, Idaho, he and his airplane performed admirably. Again Congratulation!

This also brings me to the point of attendance at Oshkosh/Wautoma. Although no better or worse than last year, the overall attendance did not significantly increase. Weather, with the exception of the southeast, was very good compared to previous years. I'm not sure exactly what the problem was. Maybe not enough promotion? I am somewhat disappointed in that over 50 airplanes are currently registered in Minnesota, Wisconsin, Iowa, Indiana, and Michigan area. Which would mean only a short 1 or 2 hour flight for most pilots. I would also like to remind you that if Lyle Taylor can fly across a vast portion of this country the way he did, so can you! So lets plan on making the effort next year.

There are several things I have noticed during my travels this year. A few FBO's that have always been there in the past are now gone. Although fuel prices currently remain consistent, the EPA's new proposal for less pollution, will in the near future, require more efficient engines and unleaded fuel. The additional cost to convert and increased fuel costs will certainly follow.

The decline of the general aviation fleet, along with fewer student starts certainly adds to the problems we are currently facing in general aviation. After recently attending the NW EAA Fly-in's at Arlington, WA and Oshkosh, plus the NW Antique Fly-in at Evergreen Airport in Vancouver, WA, we can see that at least the home built, classic and antique aircraft movements are still alive and well. As attendance to these functions surpassed previous records.

Also during my recent trip to Oshkosh, I noticed that most of my contacts with flight service, in route, center and approach control and tower personal was generally good. Boise FSS was more than helpful, suggesting that the best advise he could give us was to stay with friends in Nampa, Idaho. As the forecast read for moderate to severe thunderstorm and turbulence in our path, and it was confirmed when we stopped for fuel the next day.

However, on several occasions elsewhere this was not the case. When we were on approach to Salt Lake and a week or so later with Cedar City FSS, my contact was less than pleasant, almost to the point of being nasty!

I don't know whether or not these two individuals were just having a bad day or had just been hammered by their superiors. But to have him say, your going to get two 737's in your face if you don't get down to the next assigned altitude, was in my opinion uncalled for. The other controllers for Salt Lake center and approach control were more than helpful and professional in the handling of the traffic that day.

The other incident was with one of Cedar City's flight service specialists. He was rude and offended that I asked him the same questions and in the sequence I ask all weather briefers. I had to question him about each item, rather than N number type of briefing, aircraft type, route of flight, time off, winds, Notams and IR and VR routes. When I specifically asked about Notams, he said there were none, and had I not been monitoring centers frequency while inbound to Elko Nevada. I would not have heard center tell a King Air to go to Elko tower. Which as of July 15th was a fully functioning control tower and is in the Notams, but not on the current sectional map!

This brings me back to my topic of SAFETY! We just recently had another serious accident. N11TG went down along a highway in Tennessee. Richard Miles informed me that the pilot was seriously injured and remembers nothing about the crash. Post accident investigation revealed the engine was not running when the aircraft touched down in trees next to the highway. So we can only speculate as to the cause.

But these accidents should serve to remind us to stay current, pre flight, flight plan, maintain our aircraft and don't do anything stupid. This will help aviation in general and Stardusters in particular.

On the lighter side one of our Starduster pilots, Oscar Bayer of Arryo Grande California is flying around the borders of the United States. When he stopped at Oshkosh/Wautoma he had already been up the west coast and across Washington, Idaho, Montana, North dakota and Minnesota and after his stay there was off across the north east and over to the east coast to Maine and then down to Key West before heading west along the gulf and back to California.

My good friend Les Homan and his son-in-law Mike were planning a trip down the Hudson, around the Statue of Liberty and from there onto Kittyhawk and then home. They were unable to do the Statue of Liberty because of the weather, but did manage to make it to Kittyhawk before heading home.

Both Oscar and Les have promised to send me pictures and information about their trips. Which I will hopefully print in an upcoming issue.

Last but certainly not least I would like to congratulate our President, Bill "Prez" Clouse for his recent flight from southern California to Oshkosh/Wautoma, WI, Les and Bill made it in TWO days! Many of us have forgotten that Bill is a knowledgeable and proficient pilot as well as the President of Starduster Corporation. I wish that I could have continued on to the east coast with one of these guys. But time, money, and weather keep it from happening. Maybe next year.

D.C.B. Editor

GREAT PLANES & MORE ITEMS OF INTEREST

We at Starduster Magazine would like to once again congratulate Larry Sittauer for his recent win at the NW EAA Fly-in held at Arlington, Washington. He was awarded "Best of Fly-in, Tube & Fabric". He also picked up another award at the Evergreen Antique Fly-in held at Vancouver, Washington. Great job and well done for his beautiful 180 HP red and maroon Starduster Too N115WS, made in America.

Also, at Oshkosh we would like to congratulate Tom & Susan Tchida of South St. Paul, Minnesota, for outstanding workmanship (plans built) for their beautiful green and white O-470 powered Starduster Too. Beautiful airplanes and wonderful people, its an unbeatable combination.

D.C.B. Editor

SAFETY NOTE

Caution should be excercised when considering exhaust curaps. A number of exhaust system failures, (cracks) have gone undetected because of covering. A Mr. Davis of "Tube Tech" advises against using any period.

My advise is if you have to use it to control heat problems, inspect it at each annual or sooner.

B.C. PREZ

REMINDER : SUBSCRIPTION RENEWAL

Please mail your checks to Stolp Starduster Corporation. They are due by the first of January 1995. Subscriptions run from January to January of each year. Those who subscribe during the middle of the year will receive all 4 issues for that year.

Current subscription rates are \$12.00 per year for 1995. I don't know how much longer we can do this, due to postage, printing and handling costs. By 1996 we will more than likely have to raise the cost of a subscription.

Checks should be made out to Stolp Starduster Corporation, and sent to : 4301 Twining St., Riverside, California, 92509. Thanks.

D.C.B. EDITOR & BC PREZ

N11TG

June 25 ♦ Chattanooga, Tenn.: A witness said a homebuilt Starduster Too was in a steep left turn when it stalled and entered a spin. The pilot was seriously injured in the subsequent crash.

FOR YOUR INFORMATION

FCC RAISES FEES FOR AVIATION RADIO LICENSES

The Federal Communication Commission (FCC) delivered a double punch to private radio users - including aircraft radios - in the form of new and increased fees for radio licenses. The cost of an aircraft radio license increases from \$35 to \$115, effective July 18th.

The first punch is the implementation of a regulatory fee.

Statements from the FCC say Congress mandates the increases under the Omnibus Budget Reconciliation Bill of 1993. Under that law, the FCC must collect "small" fees in advance of a full license term. That term for aviation radios is 10 years, at \$7 per year. The regulatory fees recover the costs of enforcement, policy and rule making, user information services, and international activities, according to FCC officials.

The FCC assesses regulatory fees annually for Common Carrier, Mass Media and Cable TV Service licenses. However, fees for all private radios, including general aviation radios, will be collected in advance, "because of the relatively small fee amounts levied for the Private Radio Bureau Services," according to FCC news releases.

The other punch is an increase in processing fees, also effective July 1. The FCC raised the fees charged applicants, licensees and permittees to reflect changes in the cost-of-living increases. Those increases are based on the Consumer Price Index-Urban (CPI-U).

The cost-of-living allowances are pursuant to the Communications Act of 1934 as amended in the Omnibus Budget Reconciliation Act of 1989. The Act requires adjustments to the fee schedule every two years after Oct. 1, 1991, although this is the first adjustment to the fee schedule since that time, according to the FCC notices.

Reflecting the change in the CPI-U between December 1989 and August 1993, the FCC calculated the increase to be 14.8%, which sets the processing fee at \$45.

All revenues generated by processing fees go to the general fund of the treasury.

The two fees are lumped together and collected at the same time, which brings the previous fee of \$35 to a total of \$115, both for new licenses and renewals every 10 years.

AOPA is voicing opposition to the fee increases. Organization officials note that the fee increases DO NOT APPLY to government operations, amateur "ham" radios or non-profit organizations. It is AOPA's position that aviation's use of the radio frequency spectrum merely ensures the safety of flight.

"This price increase for an aircraft radio station license is outrageous," said Melissa Bailey, AOPA's associate director for technical services. "Considering the minimal amount of paperwork and regulatory action involved in administering a license, this borders on extortion."

Courtesy of "General Aviation News & Flyer" - 2nd July 1994

Owners of Lycoming engines brace for AD on oil pumps

By KAS THOMAS

The FAA is trying to decide on the wording of a proposed Lycoming oil-pump airworthiness directive that could, in theory, affect tens of thousands of Lycoming engine owners.

The AD is intended to supersede and update a 1981 AD (81-18-04) on sintered-iron oil-pump impellers. It would require Lycoming operators to remove and replace not only sintered-iron oil-pump gears but P/N 60746 steel driving gears and LW-13775 aluminum driven gears as well. Under the new AD, the only approved gear combination would be nitrided steel against carburized steel (the so-called "NC" configuration).

The proposed AD was published as a Notice of Proposed Rulemaking (Docket No. 93-ANE-48) in the Federal Register earlier this year. (The comment deadline passed in March.) As of earlier this summer, the FAA was still tabulating public comments and deciding on whether the compliance deadline for removal of aluminum gears should be 750 hours (as originally proposed) or a longer period, such as 2,000 hours.

According to Pat Perotta in the FAA's Aircraft Certification Office, "There is some concern as to the need for calendar deadlines as well as life limits in terms of hours." Asked why aluminum gears were being targeted, Perotta merely replied: "There have been failures." He did not cite actual numbers. A Lycoming spokesman implied that the whole thing may revolve around two failures.

Lycoming's Rick Moffett said: "Last year, during the course of the year, we were made aware of two aluminum pump gear failures. The FAA made us aware of this; it did not come through our SIR system."

(The Service Information Report system is Lycoming's in-house equivalent of the FAA's Service Difficulty Report system, through which all warranty complaints are channeled.)

"One failure was on an engine that was near TBO, but which had some 18 or 20 calendar years of operation. The other engine had suffered more 800 hours after overhaul, and at the overhaul the gears probably were not replaced."

Lycoming Service Bulletin No. 240L, the "mandatory replacement parts" list for major overhauls, mandates replacement of obsolete pump gears at overhaul time.

According to Moffett, "The FAA said to us, 'Don't you have a better gear combination available?' And we pointed out that we had been selling the nitrided and carburized steel gear pumps for about the past six or eight years. We have never felt that the aluminum gears offered a problem, as such, but the nitrided and carburized gears have a better service record."

Superior Air Parts, which has sold a PMA (parts manufacturer approval) version of the steel/aluminum oil pump, has voiced its strong opposition to the proposed AD. In a letter sent to the FAA in March, Superior pointed out that service experience with the PMA gears has been excellent.

"There have not been any warranty claims or complaints (against Superior pump gears) in the past two years," Superior's John Lauer states, adding that "the Service Difficulty Report data from January 1986 to April 1993

reveals only one possible SL13775 aluminum impeller failure."

Lauer admits that he does not know the failure rate of the Lycoming-made pump gears, and therefore does not know if an AD is warranted against the OEM gears.

"But we object strongly to our parts being included in this proposed AD," he said. "Just because a type certificate holder has a problem with a particular part, or decides because of product liability concerns to request an AD does not mean that all PMA parts should be included in that AD action."

According to Lauer, Superior was not consulted before the NPRM was issued. Yet the NPRM did specifically include PMA pump gears in the proposed AD action.

Lauer said he believes there is nothing wrong with aluminum pump gears. "Our investigations have revealed that when failures have occurred, they have been related to assembly errors, oil starvation or failure to comply with Lycoming Service Instruction No. 1341, which makes provisions for extra oiling of the oil pump impeller idler shaft. If any of

these conditions occur, it's questionable if the new hardened gears will save the pump."

Although the participants in this drama disagree on many things, all agree that the FAA's estimate of the size of the affected fleet is seriously understated. In the original NPRM, compliance was estimated by the FAA to affect 2,400 airplanes and involve only nine man-hours of labor.

Lauer disputes that. "We estimate that the fleet size that would be affected by this proposed AD would be much larger than the 4,000 engines stated by FAA," he said. "The fleet of O-320 engines alone numbers almost 33,000. There also are large numbers of Lycoming O-235, O-290, O-360, and O-540 engines that use the aluminum impeller."

Superior has manufactured and sold more than 16,000 of the aluminum SL13775 gears. Lycoming has not disclosed its production numbers.

Copies of Service Bulletin No. 456F, on which the AD will be based, are available from Textron Lycoming, 652 Oliver St., Williamsport, PA 17701; phone: 717-323-6181.

PROPOSED NATIONAL PARK OVERFLIGHT REGULATIONS DISCRIMINATORY

Proposed regulations severely restricting general aviation flights over national parks are unfair and discriminatory, AOPA President Phil Boyer told the Seaplane Pilots Association meeting in northern New York State's lake-studded Adirondacks. One model proposed in the advance notice of proposed rulemaking is based on a Special Federal Aviation Regulation for the Grand Canyon, which imposes narrow flight corridors and requires specific routes and altitudes—some as high as 14,500 feet msl. Boyer added that new overflight rules at other national parks would unfairly single out general aviation. The ANPRM was issued after National Park Service officials complained that overflights were diminishing the quality of visitors' national park experience, damaging park lands, traumatizing wildlife, and causing structural damage. In its official ANPRM comments, AOPA objected that such Park Service claims were made without scientific study or investigation. AOPA said restrictions would adversely affect the efficiency of air navigation and unduly burden interstate commerce. Surveys indicate that nearly 90 percent of national park visitors do not notice aircraft noise.

• Newly installed emergency locator transmitters must now meet TSO-C91a standards, following publication of a final rule on the standard June 21. The issuance of the final rule, first proposed in 1985, also means the manufacture of ELTs under older TSO-C91 standards must stop. The FAA estimates the newer ELTs will cost \$125 more than those built to older standards. New-standard ELTs are available on the market for under \$300. Units built to older standards have a history of activation failures following an accident. An aviation rulemaking advisory committee will recommend how best to retrofit the new ELTs into the entire fleet.

HARTZELL PROPELLER INC.

One Propeller Place
Piqua, Ohio 45356-2634 U.S.A.

HARTZELL

July 1, 1994

SPECIAL NOTICE

TO: USERS/INSTALLERS OF HARTZELL PARTS

SUBJECT: SUSPECTED UNAPPROVED PARTS

We write to share with you some of our concerns about certain parts that are being offered for sale by Aerocess, Inc. of Vandalia, Ohio. These parts are being offered as if they were Hartzell-supplied or Hartzell-approved parts but they are not, and in some cases the component materials do not conform to Hartzell's material requirements. The specific parts that have generated our concerns are the following:

1. Quad Seal O4339. Aerocess is offering certain products as Hartzell Q4339 quad seals that have not been acquired from Hartzell and do not satisfy our certification requirements. Furthermore, Aerocess has distributed a certification form which purports to certify this part as meeting application requirements, but with the name of the certifying company deleted. This certification was not provided by Hartzell.
2. Part No. A-880-1. Aerocess is offering certain products as Hartzell Part A-880-1 that have not been acquired from Hartzell, that are made of a free machining grade of steel rather than of the special alloy steel grades required by Hartzell, and that do not have our required lot code number.

Users/Installers of Hartzell Parts

July 1, 1994

Page 2

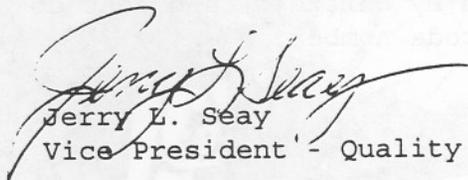
3. Part No. B-3359. Aeroaccess is offering certain products as Hartzell Part B-3359 that have not been acquired from Hartzell, that are made of a free machining grade of steel rather than of the special alloy steel grades required by Hartzell, and that do not have our required lot code number.
4. Part No. B-3807. Aeroaccess is offering certain products as Hartzell Part B-3807 that are made of a free machining grade of steel rather than of the alloy steel grades required by us.
5. Part No. A-2043-1. Aeroaccess is offering certain products as Hartzell Part No. A-2043-1 that have not been acquired from Hartzell. Aeroaccess purchased these parts directly from the manufacturer. They were purchased to a catalog part number and only coincidentally were they provided from the correct material. Had the manufacturer not provided overruns from a Hartzell order, the material could have been from a leaded grade of steel.

The use of commercial grade materials, particularly commercial grades having a significant lead content, can have metallurgical weaknesses and present safety problems with use. As we are sure you know, leaded material contain lead inclusions to a part's microstructure and thereby creates possible fatigue points.

In the interest of safety, we urge that you satisfy yourself, each and every time, that any parts you acquire are in fact properly authorized and certified parts.

We have reported our concerns to the FAA.

Yours very truly,


Jerry L. Seay
Vice President - Quality Assurance

JLS:sz

STARDUSTERS IN THE SKY

Instrumental intro.....

Am C
A bold fly-boy went flyin' on a dark & windy day

Am
His airspeed bleeding lower as he buzzed a house in play

Am
When suddenly a bent biplane and wild eyed pilot appeared

F Am
A-snapin' through the ragged sky and grimacing in fear.

Am C ↑C ↓Am F Am
Yippie Yi Yaaa, Yippie Yi Yoooo, Stardusters in the sky.

Am C
Its stacks were belching fire and its wires were shrieking loud

Am
Its ailerons were fluttering as it punched into a cloud

Am
A jolt of fear when through him as it thundered through the sky

F Am
For he saw the pain and terror in the biplane pilot's eye.

Am C ↑C ↓Am F Am
Yippie Yi Yaaa, Yippie Yi Yoooo, Stardusters in the sky.

Am C
That biplane pilot's face was pale and his shirt was drenched in sweat

Am
He's workin' hard to control that plane but he ain't done it yet

Am
For he's cursed to fly forever in that biplane in the sky

F Am
From the smokin' open cockpit he could hear that pilot's cry.

Am C ↑C ↓Am F Am
Yippie Yi Yaaaa, Yippie Yi Yoooo, Stardusters in the sky.

Am C
The biplane looped around him and the pilot called his name

Am
If you want to save your soul from hell this flyin' ain't no game

Am
Fly-boy keep your airspeed up and with altitude be wise

F Am
Or you'll be flyin' in your twisted wreck across those endless skies.

Am C ↑C ↓Am F Am
Yippie Yi Yaaaa, Yippie Yi Yoooo, Starduster in the sky.

F Am
That Starduster in the sky!

Fade out.....

-TRIMMING YOUR BIPLANE - BY JIM OSBORNE

After years and months of waiting, your biplane is finally finished. The F.A.A. has signed it off for flight. Taxi tests are completed, and the first few flights are relatively uneventful. Your creation flies. How well does it fly?

Almost always, some trim changes are indicated. Some of these changes are more easily made than others. The most common conditions which may need correcting are as follows.

1. A tendency to turn right or left in level, cruising flight. Right or left rudder pressure is required in order to fly straight.

2. A tendency to nose up or down in level flight, with the trim tab in the near neutral position. Requires forward or aft pressure on the stick in order to maintain level flight.

3. A tendency to fall off on one wing during a stall. May, or may not, be correctable with aileron. Almost always will respond to proper rudder action.

4. A tendency to drop a wing in level flight. Requires right or left aileron pressure on the stick in order to maintain level flight.

Condition (1) is usually the simplest to correct. If your biplane has a steel tube and fabric vertical fin, with brace wires both front and rear, then the fixed vertical tail may be adjusted by these brace wires. Suppose your airplane wants to turn left. Loosen the right front brace wire, and tighten the left front wire. This forces the leading edge of the fin to move to the left. Ergo the nose of the airplane wants to swing right. The proper amount of adjustment will cure your left turning tendency.

We find that the above adjustment almost always works, so that no rudder trim tab is needed. Always adjust for cruise. This may mean that you hold right rudder pressure for climb and left rudder pressure in a dive. If this doesn't appeal to you, then you may want to install a cockpit controllable rudder trim system. Dean Hall described such a system in the last issue of our magazine.

Condition (2) is also usually easy to correct, but requires a little more analysis. Let us imagine that your airplane seems to be tail heavy. With trim tab in neutral, and the horizontal tail level, as measured by the top longerons, forward stick pressure is required to maintain level flight. Is it tail heavy, or just out of trim?

First check your weight and balance. If your figures are correct, and the C.G. falls within the design envelope, then, almost surely, you have a trim problem.

Next, check the stability of your airplane. Apply nose down trim until hands off level flight is achieved. Then sharply displace the stick a small amount forward or aft, so that the plane oscillates up and down. In a stable machine the oscillations will diminish, and eventually damp out. In a tail heavy machine, the oscillations will get bigger and bigger until the pilot applies corrective stick forces.

If your biplane has a symmetrical airfoil, one additional check can be made. Trim for level flight. Roll over and fly inverted, at normal cruise speed. Check your stick pressure. In a tail heavy machine, aft stick pressure will be required. In an out of trim machine, forward stick pressure will be required.

12 This test does not apply to non-symmetrical airfoils such as the MB

One reason some builders think they have a problem with aft C. G. is because of the apparent positive incidence of the horizontal tail when compared with the top longeron. This is usually due to the way the basic fuselage box was built. The two side frames are generally made first. Then the top and bottom longerons are bent inward at designated points, and the top and bottom members welded in place. IF THE TOP AND BOTTOM LONGERONS ARE BENT INWARDS AT DIFFERENT FUSELAGE STATIONS, THE LONGERONS AFT OF THE BEND WILL NOT BE LEVEL. If the bottom longeron bend point is forward of the top fuselage bend point, (as is true in all of our airplanes), then the top longerons aft of the bend will kick up as compared to the longerons forward of the bend. Your longeron is then not a reliable indicator of the incidence of your horizontal tail. This condition can be prevented by tack welding side frames aft of the bend points. Complete the fuselage box in a top jig, and finish welding side frames while in the top jig.

A nose heavy airplane will be excessively stable, performance will suffer, and you may have trouble getting the tail down for a 3-point landing. Otherwise, this is not a dangerous condition.

Condition (3). If your biplane drops a wing during a normal, straight ahead reasonably gentle stall, then you have problems with the upper wing rigging. The reason the problem is with the upper wing is that the bottom wing normally never stalls. So a tendency to fall out of a stall on one side or the other is almost invariably due to the top wing being out of trim.

And also invariably, you will find that the wing panel on the dropping side has more incidence in it than the other side. So check your top wing rigging carefully to see which panel is out of rig. In our biplanes the wings should be rigged flat, that is without washin or washout. So eliminate all washin and washout on the top wing and your airplane will then break straight ahead in a gentle stall.

Condition (4) Now that we have eliminated all our other trim problems in a logical straight forward manner, we are ready to deal with any tendency to drop a wing in level flight. We now know that the top wing cannot be to blame because our bird breaks straight ahead in a stall. So we have only the bottom wing to deal with. Check carefully to see that you have the same amount of incidence in both lower wing panels. This is one of the most critical measurements on a biplane. You can put the wings on slightly askew so that one side has the tip further ahead than the other side and you will never know it when flying. But have even the smallest difference in incidence in the wing panels and you will know it real quick. A difference of 1/2 a degree is way too much, HAVE NO DETECTABLE DIFFERENCE, AT ALL. Washin or washout can change the incidence near the tips, and cause the wing to drop. On all our airplanes the lower wing panels have no washin or washout. Check the rigging of the ailerons. They should trail with the wing trailing edge. Finally, if all else fails, install a small aluminum trim tab on one of the lower ailerons and adjust it to eliminate all rolling tendency in level flight. Most biplanes have very little roll stability. This is particularly true of aerobatic biplanes. So, as a practical matter, the trim tab may be the best final solution. At your next flyin check to see how many biplanes have this trim tab on one of the ailerons.

STARDUSTER HISTORY

N639PK

The Third of Three Starduster Toos Built By Lou Stolp

Occasionally you will find ads in a Trade-A-Plane or other such publications, that offer Stardusters for sale that were built by Lou Stolp and or Stolp Aircraft, which is now know as the "Stolp Starduster Corporation". We did, when I worked for Lou, weld, fabricate and build a number of fuselages, gears, cabanes, tail and controls complete uncovered. So as these airplanes change hands over the years, the previous owner tells the new owner that his airplane was "Stolp" built, which is accurate, although not entirely.

As for N639PK, it was the third and last Starduster Too built by Lou Stolp and Stolp Aircraft. It was completed about the time the company was sold to Jim Osborne in 1973.

It was built for Patricia Maylene Kohler. Actually her nickname was Pat, which resulted in the PK in N639PK. She is also the sister of Patric Fitzpatric a Starduster One builder that lives in the Sacramento/Nut Tree area.

Besides Pat Kohler the previous owners of N639PK were: Gary Green of Vacaville, California, and Jack Mays & Stoney Burke were partners in the airplane for a while, with Jack eventually ending up as the sole owner. Jack lives in Livermore, California, and when he retired several years ago he told me he would be unable to keep the airplane due to the expense and asked me to advertize the airplane in Starduster Magazine, which I did.

The airplane was then sold to Frank Paruolo of Englewood, Colorado. Frank is an A & P I.A. and runs his own business Aviation Specialties at the Centennial Airport in Englewood. A copy of his letter to Bill Clouse, regarding the cosmetic and touch up paint work along with a glowing report about his view and feelings of the airplane appeared in an earlier issue of Starduster Magazine.

So after reading the letter, it was somewhat of a surprise to learn that it was up for sale again, and that it had already been sold to a fellow in Arizona this past fall.

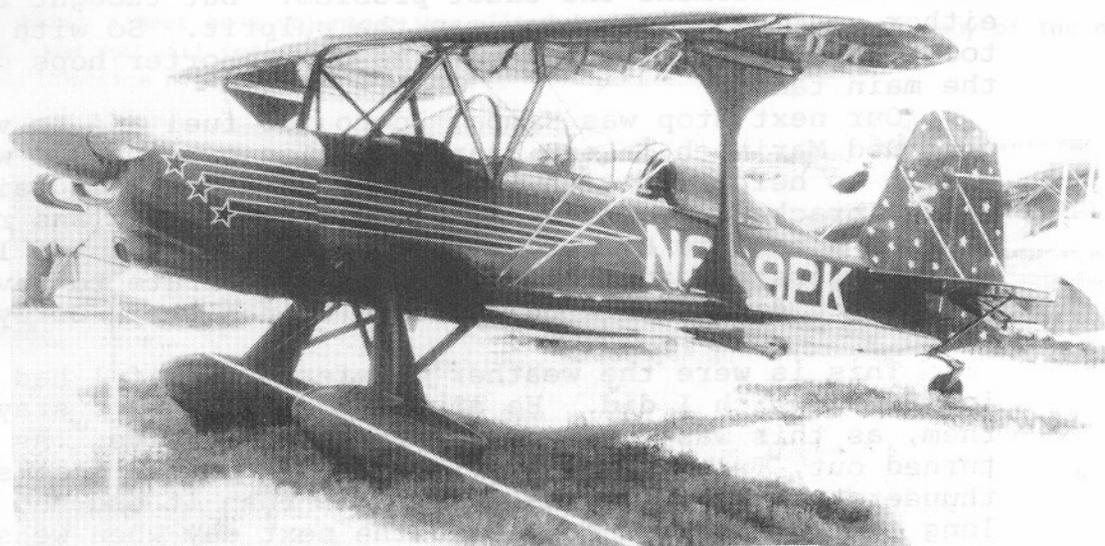
Frank really loved the airplane but due to its weight, power and performance at that altitude, he either had to re-power it or sell it. He choose to sell it and now owns a beautifully restored Cub.

The airplane is somewhat heavy and is plagued with CG problems like many of the early Starduster Toos. The ideal thing for him and other owners with this problem would be to sell the 180 HP Lycoming which are currently in high demand, and repower it with a 260 HP O-540 Lycoming, as there are many of these engines available mid time and for less money. The difference in costs could be used to cover the expenses of installation.

Both Patric Fitzpatric and Dick Waltermire flew the airplane on many occasions, and told me years later that it had unusual flying characteristic, which were disconcerting due to the CG. It was however very well built.

I myself, was never involved with this particular airplane, as I had left the company several years prior to its construction. The pictures that accompany this article were both taken at the Merced Antique Airshow and Fly-in during the mid 1980's. And that is currently the story of N639PK the third "company built" Starduster Too.

D.C.B. Editor



JACK MAYES and N639PK at MERCED CALIFORNIA



WATOMA/OSHKOSH 1994

I hate to keep writing about basically the same trip each year, so I will try to condense it as best I can, with only the highlights.

We left Friday the 22nd of July in record heat, over 100 degrees, which is very unusual for Portland, Oregon. We climbed to 7,500 ft, to a comfortable outside air temperature of 60 degrees and less than 2 hours later landed at Yakima to overnight with Lyle Taylor.

The next morning saw us off with Lyle Taylor enroute to Nampa, Idaho. The weather was good, but once again the temperature was 100 degrees plus, and 7,500 ft was our cruising altitude. Everything proceeded well to around La Grande, Oregon, when Lyle switched tanks from main to wing and his engine quit! So we landed in Baker, Oregon and could not determine the exact problem. But thought that either venting or plumbing was the culprit. So with little tools and no parts, we decided to make shorter hops on just the main tank.

Our next stop was Nampa, Idaho for fuel and to visit with Red Marinoch, a new Starduster Too owner. Red was kind enough to help Lyle with the repair of his broken tail wheel spring bracket. So after lunch, visit and airplane repair, we made a call to Flight Service who informed us of level 3 & 4 thunderstorm activity, along with moderate to severe turbulence directly in our path to Twin Falls & Burly, Idaho.

This is were the weather briefer asked if I had friends in Nampa, which I did. He also suggested that I stay with them, as this was the best advise he could give. As it turned out, Twin Falls & Burly had some of the most severe thunderstorm activity that afternoon than it had had in a long time. This was confirmed the next day when we stopped for fuel at Burley.

Our next stop was Salt Lake #2 Airport, as Lyle did not have a transponder. I had made arrangements earlier with Salt Lake approach to go through their Class "B" airspace as a flight of two. We were up high at 9,500 ft., in an attempt keep Lyle's oil temperature down. But Salt Lake was also experiencing temperatures in the 100 degree plus area.

It is approximately 60 nautical miles across the Great Salt Lake from north to south and at Promitory Point, I contacted Salt Lake approach with a squak and radar contact. The lady handling the sector was pleasant and helpful. However our handoff to the next controller was not. I asked if we could stay at 9,500 ft until we were closer to Salt Lake #2, and was told unless we wanted a couple of 737's in our face we should get down to the next assigned altitude now.

Airplane traffic in Salt Lake is moderate, but nothing like LAX, SFO or SEA-TAC. SO with some traffic call outs and a little vectoring, I don't think it would have been a problem.

Our landing at Salt Lake #2 on Sunday afternoon was uneventful. We parked in front of Weldon Glines hangar, as he and Glen Olsen were waiting for us. Both of these guys own beautiful Acroduster Toos.

Normally we leave Monday for Oshkosh, But since Glen had to work Monday, we waited until Tuesday to leave. This gave us time to check and repair some of the problems with Lyles airplane. Plumbing was indeed the culprit. We also did some minor baffling and spinner repair. But like Lyle said, "I'm a cabinet maker not a mechanic."

I then flew his airplane at Salt Lake Airport #2 and with cooling temperatures, spinner, tail wheel and wing tank now operating normal, we called it a day.

Tuesday morning, early departure with Lyle Weldon and I to meet Glen east of Salt Lake. Finding another airplane even when you can talk to each other is something very difficult, but this proved little challenge for Glen.

Our first stop was Rawlins, Wyoming, elevation 6,813 ft. above SL and with a traffic pattern of 7820. Loaded airplanes at this altitude can be quite a challenge. But it was early and all airplanes got on and off okay.

Our next stop was Scotts Bluff, Nebraska. If you think that all of the U.S. is paved over with people everywhere, I can assure you this is not the case. Because our route between Rawlins, WY and Scotts Bluff, NE the only sign of populated life was a little place called Medicine Bow, WY and even this was not much.

At about 30 miles out from Scotts Bluff my Loran first gave me a 30 degree and then almost a 90 degree right turn correction, which was taking us south. Up until then it had worked perfectly. I have had problems with it before while working the north central USA chain. Lyle of course followed me faithfully, not suspecting any problem. A quick call to Glen, who was just landing at Scotts Bluff and about 15 minutes ahead due to the faster cruise speed (Starduster 120 mph - Acroduster 140 mph). He came back with "Look for the bluffs at about the same time I returned to my original compass heading. After about 10 minutes was rewarded with the sight of Scotts Bluff off to our NE.

For some reason, while working this Loran chain, it has problems in this area. If I stay on the west coast or switch to the Great Lakes chain, it seems to do much better. I can't really complain, as this is the only area where I have had trouble. Obviously a GPS would solve the problem. But for the most part my 604 Apollo is everything I need, simple, accurate and I love those big LED readouts.

My wife Donna is usually great at following along on the map, but there was little difference in terrain and features from 100 miles out, and Torrington, Scotts Bluff and Alliance are laid out approximately 60 miles apart on a NW to SE line. At any rate we were safe and sound and on the ground.

Lyle's passenger, Cecil, had a sister in Scotts Bluff that was waiting for us so that we could all have lunch together.

The next leg of our journey was Scotts bluff to O'Neil, NE. This was also another big stretch of barren country. But it gradually changed to more and more farmland. A safe and uneventful landing was made at O'Neil. I have several good friends in the O'Neil/Orchard, NE area.

Greg Fletcher was gone on a trip and his dad Bruce had company. So we moteled it. However, Bruce was on hand to see us off the next morning, as he had flown over in his RV-4. We did make a low approach to his farm duster strip. The visibility was not all that great. So after my pass I turned east and Lyle who was following me kept going straight. But Glen and Weldon kept him in sight, advising me as to his whereabouts. A 360 degree turn to the right had us back together. This was the only time during the trip that we were separated.

Our next stop was Forrest City, IA we have some friends who run the airport there. Then it was one more hop to Wautoma, each leg of the journey was about 2 hours. On the first leg we went right over Le Mars, Iowa which is right on course and our second leg required us to watch for a tall tower (2,799 ft MSL) around Osage, Iowa.

Glen and Weldon landed their usual 15 minutes ahead of us, and I could hear them on Unicom. We would take off first, then they would pass us and be about that far ahead.

Lyle Taylor and I circled the field, landed on the grass. Early arrivals were: Bill Clouse, Les Homan and Oscar Bayer. It was now Wednesday afternoon. We did some visiting and renewed friendships. We were on our way to Oshkosh to overnight with our good friends the Franks.

Thursday morning found us at Wautoma to spend the day awaiting more arrivals. Not too much going on, most Starduster/Acroduster enthusiasts spent the day at Oshkosh.

Friday we cranked up and flew over to Oshkosh, I like to spend at least one day there with my airplane. I was happy to see Matt Kerr, N159MK of Bay City, MI and Tom & Susan Tchida, N369TT of St. Paul, MN.. There was also a Starduster Too N19EW owned by Elmer Walters of Hilton, NY, but I was unable to meet the pilot.

Oshkosh was its usual self. If you haven't been you need to go, if you have you don't need to go anymore. I generally stay around my airplane, so as to meet other owners and builders. I also spend some time in the Fly Mart.

Saturday morning we packed up and flew back over to Wautoma. I missed the fly by, as they practiced on Friday when I was at Oshkosh, and unless you practiced, you couldn't fly. It did however turn out to be better than last year. Again there were more arrivals, some rides. Dick Larson did his usual Barb-B-Que hamburger trick for the Starduster crowd as well as for other Oshkosh bound arrivals.

Sunday was spent taking pictures and giving rides. I myself gave at least 8 rides. Glen, Weldon, Larry and Les gave even more. Most of them were young eagles. I was very tired that afternoon.

My good friends Anna, Joe and their dad John Peebles showed up late Sunday just in time to be our guests at the Starduster banquet. It again was held at the Radio Station Restraunt. Good food, drink, friends and conversation. Over 50 people signed the guest list.

The highlight was our president Bill Clouse who had all 5 of his brothers show up, for some kind of family reunion. It certainly made Bill Happy, as it proved to them that he really does have lots of friends.

The door prize tickets were drawn by Anna Peebles and the much awaited rewards were presented. Grand Champion Best overall was awarded to Weldon Glines for his beautiful Acroduster Too N31DW. The best Starduster Too was awarded to Richard Miles for his award winning Starduster N7301R, and the best Acroduster was awarded to Glen Olsen for his beautiful award winning Acroduster Too N34LG. The True Grit award was again given to Les Homan, although heavily contested by Larry Rydberg, because Les wouldn't get up and sing the Starduster song with him in public. So Larry had to do it alone. He did admirably, the song is published elsewhere in this issue and is sung to the music of Ghost Riders in the Sky.

THOSE STARDUSTER PILOTS & CO-PILOTS ATTENDING OSHKOSH/WATOMA

N2LS	Steve & Cas Neic	Clio, MI
N12DP	Doug Shoup	Luddington, MI
N19EW	Elmer Walters	Hilton, NY
N31DW	Weldon Glines	Sandy, UT
N34LG	Glen Olsen	Sandy, UT
N76GS	Max Bennet	Buffalo, NY
N76NP	John & Mary Jane Reed	Evansville, IN
N159MK	Matt Kerr	Bay City, MI
N312LT	Lyle Taylor & Cecil Vinson	Wapato, WA
N369TT	Tom & Susan Tchida	So St. Paul, MI
N458	Bob Koenig	Sun Prairie, WI
N49OB	Oscar Bayer	Arroyo Grande, CA
N530LR	Larry Rydberg	Albq., NM
N4226Y	Les Homan	Livermore, CA
N5464	Russ Lawson	Fox Point, WI
N7301R	Richard Miles	Rome, GA
N81582	Bill Clouse	Riverside, CA
N96576	Dave & Donna Baxter	Lake Oswego, OR
N14658	Bob & Diane Johnston	Mountain Grove, MO

OTHER ENTHUSIASTS ATTENDING

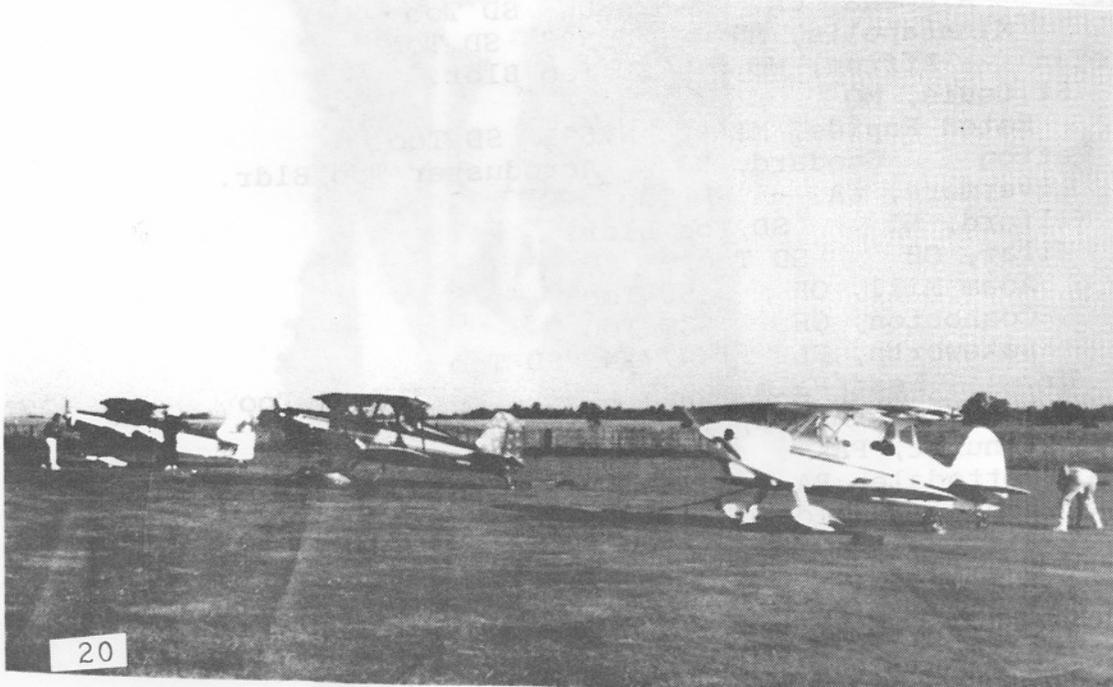
Dick & Darlene Larson	Geneva, ILL	N1566H Cardinal
Dick Waltermire	Alameda, CA	N248DW SD Too
Jim Struthers	Minneapolis, MN	N5393 SD Too
Mike & Marty Stojan	Affton, MO	SD Too Bldr.
Marty Owen	St. Louis, MO	
Terry Thayer	Eaton Rapids, MI	N7691 SD Too.
John & Debbie Hatton	Goodard, KS	Acroduster Too Bldr.
Mike Rowan	Livermore, CA	SD Too
Buck Rado	Milford, MI	SD Too Bldr.
Don Emsile	Wilaf, OH	SD Too
John Garrett	Adam Mill, OH	SD Too
Dean Garrett	Coshocton, OH	SD Too
Al Tomlinson	Lakeworth, FL	N77AN SD Too
Neil Reyngoupt Jr.	West Palm Beach, FL	N77AN SD Too
J.C. & Jerry Dawald	Nothwood, IA	N17187 Cardinal
Ron Menhorn	Armhurst, PA	SD Too
Chru Hufhes	Scottsdale, PA	SD Too
Alan & Donna Warzecha	Holding Ford, MN	N766CB Citabria



BEST OVERALL
GRAND CHAMPION
WELDON GLINES N31DW
FROM SANDY UTAH



BEST STARDUSTER TOO
RICHARD MILES N7301R
FROM ROME GEORGIA



BEST ACRODUSTER TOO
GLEN OLSEN N34LG
FROM SANDY UTAH

FAR RIGHT AT
ONEIL NEBRASKA

(Oshkosh/Watoma Cont...)

Larry Frazier	Lincoln, NE	N15021 Arrow
Tom Benton	Harrison, AK	N6588J Cherokee
Joan Thomas	Rockwell City, IA	N4242H Starlet
Larry & Jan Dorgan	Davenport, IA	SD Too Bldr.
Roland Olm	Chilton, WI	SD Too
Don & Mary Sullivan	Coon Rapids, MN	C-172
John Helton	Winter Haven, FL	Numerous Acro + SD Toos
Dave Heal	Windsor, CA	N292EP SD Too
Ed Marinoch	Cherry Hill, NJ	SD Too Bldr.
Thomas & Cheryl Wait	Milwaukie, WI	2 + 2
Steve & Denise Farringer	N Manchester, IN	SD Too Bldr.
Hank & Bill Brandenberger	Kresgville, PA	SD Too Bldr.
(And My Good Friends)		
Anna, Joe and John Peebles	Greenlake, WI	SD Too N96576
(Bill's Five Brothers)		
Larry Clouse	Daytona Beach, FL	
John Clouse	Angelica, NY	Warrior 47701
Herman Clouse	Akron, NY	"
Tom Clouse	Charkee, NY	"
Dick Clouse	Fillmore, NY	"

After the banquet we stayed overnight with Anna, Joe, and John Peebles in Greenlake, WI. John took us back to Watoma airport early Monday morning. I had originally planned on leaving Tuesday. But Glen & Weldon had already left earlier, and both Lyle and Cecil needed to be back.

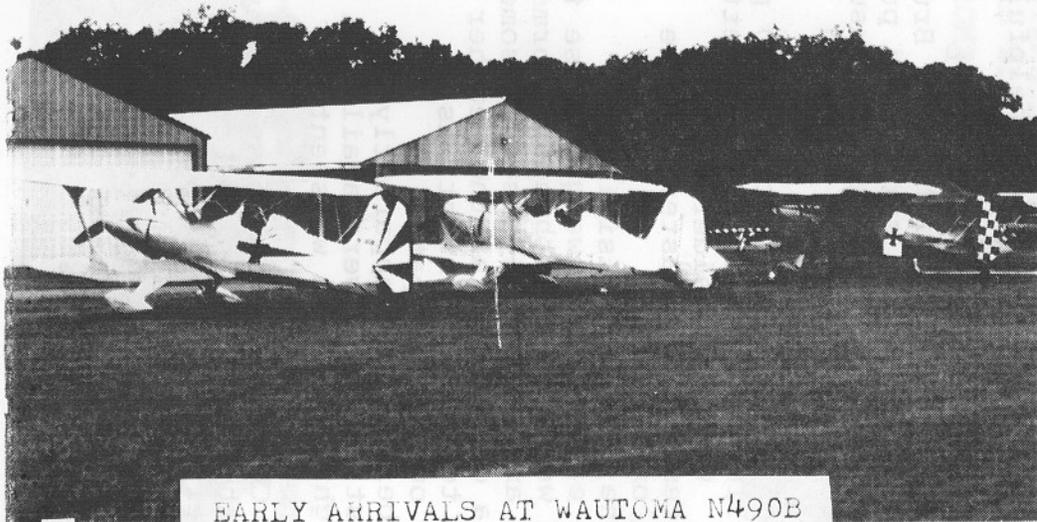
So we packed up. Flight Service was not very helpful, with marginal ceilings and visibility off and on all morning. We finally got out about noon. We stopped at Mason City and then Orchard Nebraska to overnight with Bruce Fletcher. This time we landed on his Duster strip, and put the airplanes in his BIG hangar. There we enjoyed the usual Fletcher hospitality. Nice place to stay, good food and conversation.

The next morning Bruce fueled us up for about \$1.30 per gallon 100 LL. We did this while we were waiting for better weather, as Ainsworth was IFR. We did consider staying another day. But the same system was forecasted for the rest of the week, so we pushed on.

Once we were past Valentine, NE good visibility prevailed. Not much out there either until we got close to Chadron, NE. As we approached we could see thunder storms starting to build to the north and west. We also saw some lightning. After fueling and a quick look at the weather monitor, the decision was made to stay the night, as moderate thunderstorms were in our direct path.

We had stayed in Chadron before, but apparently something was going on as almost no rooms were available. Finally got one for \$65 per night, the most we spent anywhere.

The next day we went from Chadron to Converse County Airport in Douglas, WY. From there it was on to Rock Springs 6,760 ft above sea level with a TPA of over 7,600 ft, and in the middle of the day 100 degree plus temperatures. At this high altitude and temperature you sure find out quick what works and what doesn't.



EARLY ARRIVALS AT WAUTOMA N490B
N490B, N4226Y, and N81582 L to R



R to L N76GS, N76NP, N312LT, N2LS, N31DW
N34LG, N490B, N4226Y, and N81582 on line



N5464 and N96576



N7301R and N96576

We had lunch at the terminal, and this is wher we said goodbye to Lyle and Cecil. They headed for Burly, ID., Baker, OR and then to Wapato, WA their homebase. We headed for Heber, UT., to spend several days with our good friends Bryant and Jean Anderson. Bryant is building a Starduster Too and is getting very close to finishing it. I helped some with the plumbing and wiring. This is great country and more wonderful friends. Bryant & Jean live in Midway, UT at the NW end of the Heber valley. Bryant has built several homes in the area, including his with a Swiss Alps based theme.

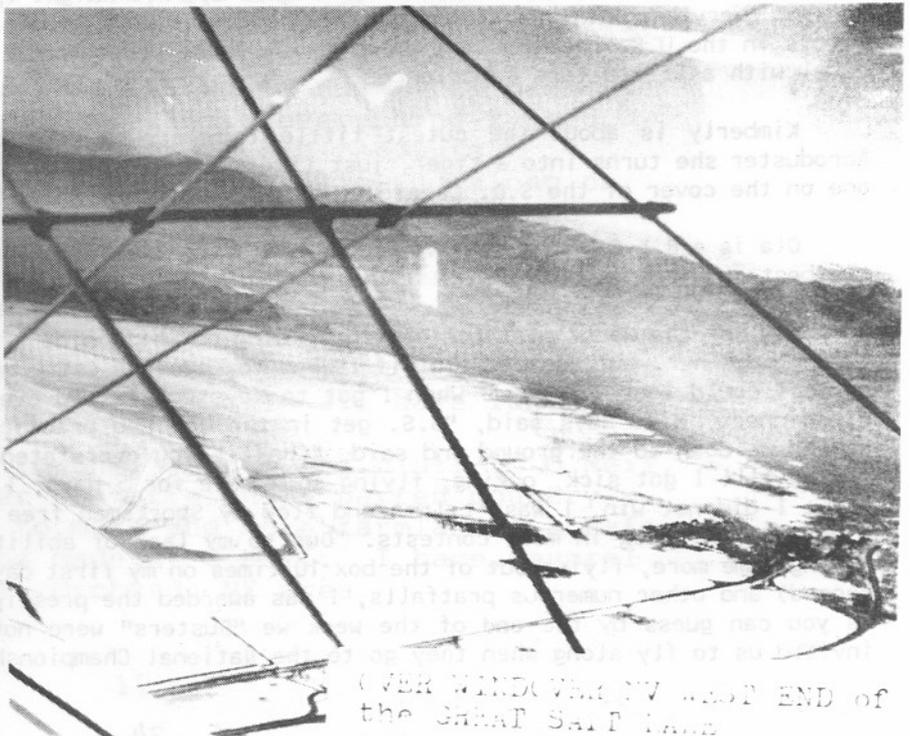
Friday morning early we departed circling the Heber Valley and circling again east of the Salt Lake at 10,500 ft. We called Salt Lake approach, overflying Salt Lake International enroute to Elko. Quite a sight the Great Salt Lake, Bonnieville Salt Flats, Wendover, NV clear and beautiful. At Elko we decided to overnight, due to hot temperatures and high altitude. Gamblers special, good food good rooms, and inexpensive.

Saturday our route of flight took us to Alturas, CA. There was much smoke due to forest fires in the Reno area. Alturas is also a very pretty place but not much to see between there and Elko though. From Alturas it was up past Kalamath Falls, OR over to Medford and landing at Grants Pass OR to visit and lunch with Bob Caravas a Starduster Too builder who is also almost ready to fly, beautiful airplane.

Our last leg was from Grants Pass, OR to Hillsboro, OR and ended with 47.5 hours on the clock.

D.C.B. Editor

GOOD FRIENDS at WAUTOMA WI
JCE and ANNA PEEBLES



OVER WINDOVER NW END of the GREAT SALT LAKE

Dusters "Dust" the Competitors in Aerobatics Competition

Since I was (very unexpected) awarded the "Best Effort Award for 1994" at the recent Stardusters Convention I must now get off my butt and write an article for our magazine. During the final party in Sedona, Bill mentioned the possibility of more Stardusters and Acrodusters taking part in aerobatics competitions. Since the original intent of the Starduster design was not towards aerobatics, most assume that they are a disadvantage in competition. NOT TRUE! In fact I feel that a well prepared Starduster/Acroduster has an advantage for Basic and Sportsman competition and is equal to the 2 place Pitts in Intermediate.

In competition the agility of the plane is not graded, only the accuracy of the figures flown, and their placement in the aerobatics box.

The advantages the Starduster/Acroduster have are as follows:

1. Usually less expensive to purchase.
2. The lines of the airplane are straight and present figures to the judges better.
3. Easier to land.
4. Smoother in flight.
5. Spin recovery on a well balance Starduster is excellent.

During the recent North Florida Aerobatics Competition a total of 8 awards were given to 5 Duster pilots. All of the pilots are newcomers to the sport and learned aerobatics in Stardusters/Acrodusters.

2nd Competition	Kimberly Chapman Bellefeville	Acroduster	1st	Basic
1st competition	Dale Evans	Starduster II	4th	Basic
2nd competition	Ola Nelsson	Acroduster	1st	Sportsman known
			3rd	Freestyle known
			1st	Sportsman overall
2nd competition	David Wolff	Starduster II	2nd	Sportsman known
			2nd	Sportsman overall
1st competition	Charlie Wolff	Starduster II	Highest First Time Competition Recipient of 1994 "Drop your meat in the Sand Award"	

As you can see all of the above are beginners at Aerobatics. This was a very competitive Sportsman category as Ola and David beat two Aerobatics instructors and a very good air show pilot in his Rans - 9.

Like any new kid in town when we first started attending competition we were a little on the outside, but the aerobatic community is made up of the nicest bunch of people you will ever come in contact with. David's first 3 times in an aerobiotic box he was critiqued by Phil Knight (present U.S. team member), Clint McHenry (Clint has won everything there is in Aerobatics) and Mike Mays (owner of Southern Aerobatics, one of the top advanced pilots in the U.S. and also one neat guy). These people, not only worked with David, they treated him as an equal with a little less experience.

Kimberly is about the cutest little lady around, but once behind the stick in her husband Pauls', Acroduster she turns into a tiger, just like the paint job on the Acroduster. (By the way, their plane is the one on the cover of the S.D. Catalogue and was built by President Bill Close).

Ola is a B.Y.S. (blond young stud) in his twenties with limited experience but the competition brings out the best in him. We will watch both he and David to move up over the next few years.

Now for the worst part (or best depending on which side of the fence you are standing). I, the author am a rank beginner, but decided that if I went to Keystone (site of North Florida Aerobatics Championship) 5 days early I could learn to fly. When I got to Keystone I told everyone that my abilities were limited and I was a beginner. Mike Mays said, "B.S. get in the box and practice". I went up and after about 5 minutes Mike called me down to the ground and said, "Charlie you overstated your abilities. you can't fly at all!" After flying till I got sick, puking, flying some more for 5 days, I finally learned the Sportsman routine. While I did not win, I wasn't last and flew my Sportsman free program with a score of 74%. This is usually middle of the pack in most contests. Due to my lack of ability when we first got there, puking, flying and puking some more, flying out of the box 10 times on my first day (the meet director claims this a new nat record) and other numerous pratfalls, I was awarded the prestigious "Drop your meat in the Sand" award. As you can guess by the end of the week we "Dusters" were not only accepted, but a group of Pitts drivers invited us to fly along when they go to the National Championship in Texas.

How to get started in Aerobatics

- A. Find local instructors to learn, rolls, loops, spins and Hammerhead turns.
- B. Practice.
- C. Join EAA and IAC International Aerobatic Club 1 800 322-2412 for membership.
- D. Practice.
- E. Attend a competition, explaining to officials that you are starting aerobatics and want to assist in any way you can.
 1. Record for judges
 2. Be a line judge
 3. Be a runner
 4. Help in set up and tear down
 5. Watch tech inspections
- F. Practice

You will find that after a meet as a volunteer you will know how things work, meet many of the nicest people you have ever met, and you will feel "at home" when you first compete.
Good luck and always practice high and near an airport.

Charlie Wolff

P.S. If you have any questions concerning modification to your Starduster to better perform aerobatics, feel free to call 407 286-5395

Charlie Wolff
2785 S.E. St. Lucie Blvd.
Stuart, Florida 34997



left to right
CHARLIE WOLFF, DAVID WOLFF,
KIMBERLY BELLEFEVILLE, and
OLA NELSSON TOTAL of 8 AWARDS

PHOTOS TAKEN at NORTH
FLORIDA AEROBATIC
CHAMPIONSHIPS MAY 1994

June 18, 1994

Dave Baxter
5725 S. W. McEwan Rd.
Lake Oswego, OR. 97035

Dear Dave,

Thanks for your note of 6/2/94.

N6573E was assembled by Frank Voshell, an A&E with his own airstrip and maintenance facilities known as "Stony Acres". (20 miles west of Lansing Mich.)

Frank installed an IO 520 310 HP Turbo charged engine from a damaged Crop Duster. It had only 105 hrs, but Frank gave it a complete Major.

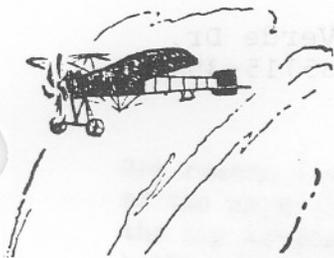
When I purchased the plane it had 131 TT on the engine, 26 on airframe. I have been flying over 55 years, (am approaching 75) and with that engine, it is exciting to fly.

Thanks for the info and pictures.

Sincerely,

Bill Bailey
Bill Bailey
1917 Lynbrook Dr.
Flint, MI, 48507





James M. Patton, Jr.
Flight Test Pilot & Consultant

11684 W. Bayshore Drive
Crystal River, Florida 32629-34429

August 31, 1994

David C. Baxter
5725 S.W. McEwen Rd.
Lake Oswego, OR 97035

Dear Dave:

Enclosed is my check for \$12.00 for a subscription to the Starduster Magazine. I bought my Starduster Too, N2498, in February 1993 from John Ashley of Baton Rouge. He had installed a Continental 185 in 1992. I'm preparing for a cross-country to Texas in September; it happened that early on the morning of August 19 I met Oscar Boyer, N490B, as he was about to launch from Crystal River, having circuted about 3/4 of the U.S. from California. In the short time we had to talk, I gathered he was doing what I intend: Extra jeans and a pup tent, and just enjoy the country.

Since I retired from NASA in 1987, I've done occasional flight testing as an independent consultant. The Starduster has been valuable to me for general proficiency and especially for spin currency prior to projects involving spin testing.

You do a good job with the Magazine; keep up the good work.

Sincerely,

July 4, 1994
2941 N. Rio Verde Dr.
Tucson, AZ 85715-3544

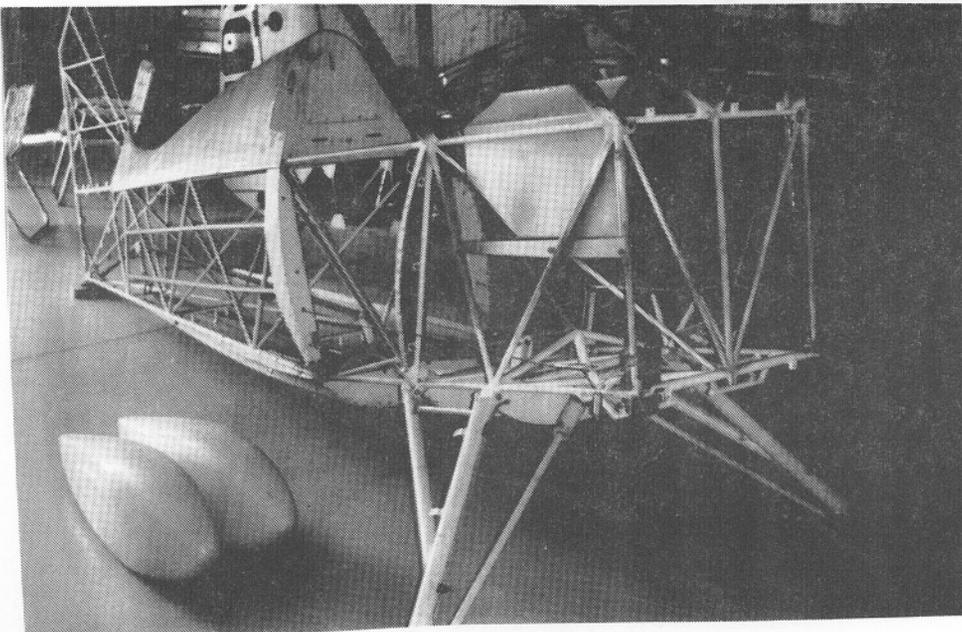
Dave Baxter
5724 SW McEwan
Lake Oswego, OR 97035

Dear Dave,

Not long after talking with you about a single place Starduster project, my son and I drove to Dallas and bought it. It is one of the Stardusters you inquired about in the April '91 magazine and pictured in the July '85 issue. This particular aircraft was started by Don Brookshier who passed away before it could be completed.

There are a number of interesting modifications to the aircraft. The landing gear bungees were replaced with spring cartridge units utilizing "die springs" (resemble solid nylon thick wall tubes) in compression. The airfoil has been changed to a 2412 with a slightly longer chord. The cross member between the top longerons aft of the seat was moved back 4 inches to allow the seat to better accommodate tall pilots (Yeah!!!). Probably the most interesting item are the plans. They appear to have been professionally redrawn from the originals by Mr Brookshier and are labeled "Geezer Grabber, GG-1!" I talked to Charles Grant who was sort of the leader of the pack that built all these Stardusters. He said the name had to do with the fact that most of the builders were rather "senior." Charles Grant is a tool and die maker and his expertise shows in a number of beautifully machined fittings and the fact that the weldments were obviously done in some well-designed tooling. I have seen some of the original single place Starduster drawings and the plans appear to follow them faithfully with the above mentioned modifications separately annotated.

I feel very fortunate to have acquired a good quality Starduster project. Now I just have to keep my hands off it while I finish my "family model" lest my bride kill me!



Sincerely,

Bob

Bob Dwyer
N28LJ Starduster
NXXXX Starduster

Dave.

VINTAGE FESTIVAL



To All
Vintage Festival Pilots

September 16, 1994

The predicted low ceilings and some marginal visibility delayed arrivals on Saturday morning, and some of you just could not make it. To those who did, we thank you. To those who didn't like the conditions, we respect your good decisions. With overcast skies, the jumpers elected to stay on the ground so we left the field open until noon by which time everyone who could get in was on the ground. By noon, the sun was out, the vendors were busy with their displays, and the air was filled with the smells of good food and the sounds of people having fun.

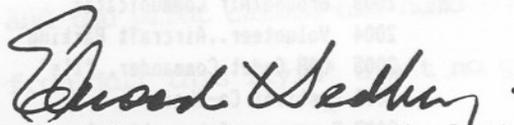
Twenty of the 35 aircraft on the enclosed final list were able to attend. Over 100 classic cars were joined again by classic motorcycles, bicycles, boats and unique this year several Land Yachts. The 1929 Ford Tri-motor brought in by Evergreen International was parked on the pavement near the north end of the field. The 20 passenger model T Ford bus offered rides up and down the runway during the day.

Since all the invited show planes are "award winners", there was no formal judging again this year, but there was special recognition for three attending planes and pilots. Metal airplane banks obtained from the EAA Aviation Foundation were presented to: Jane Phillips for her beautiful 1941 Interstate 51A Cadet, to Dave & Pam Clark for their outstanding 1948 Luscombe Silvaire Sedan and to TV Ridgeway & Fred (the one with the floppy ears) for their 1931 Fleet Mod 2.

Walking through the area during the day, the conversation seemed to indicate that each of you enjoyed the Festival. The presence of your aircraft, and your willingness to let the public "get close" was a major factor contributing to the success of this event. The committee is making plans for next year, and hopes that when the invitations go out, you will again respond.

If you have thoughts about the day, how you were treated, or of ways to make subsequent events even better, please let me know. A REMINDER...if you haven't cashed your fuel voucher, don't forget it is valid only through the end of October.

The committee extends best wishes for the continued good health of you and your airplane during the months ahead.....be sure to keep your tail up in the turns.



Elwood Hedberg, Vintage Festival Aircraft Committee
7903 SW Ruby Terrace, Portland, Oregon 97219
(503) 246-7611

cc Bob Ficker

Your plane is always a crowd pleaser.

Newberg Area Chamber of Commerce
115 N. Washington
Newberg, OR 97132 29
(503) 538-2014

VINTAGE FESTIVAL 1994 FINAL LIST of PLANES, PILOTS and STAFF in ATTENDANCE

09-15-94

Codes: F94*=Those Invited, F94**=Those Attending

Pilot Name	Year MFR	Aircraft Type	Reg.#	Home Base	Home Phone	Code
Penn STOHR	1928	Ford Tri-Motor	N 9645	Tigard, OR	(503) 639-5806	F94**
Carol BELL	1929	Fleet Mod 2	N 331K	Portland, OR	(503) 221-0779	F94*
Dale DeTOUR	1929	Waco ASD	N 4W	Vancouver, WA	(206) 254-5702	F94*
Walt WRIGHT	1929	8K Bird	N 1116M	Lake Oswego, OR	(503) 636-1703	F94**
Paul LAURANCE	1930	Travelaire 12-K	N 11715	Portland, OR	(503) 286-8221	F94*
T.V. RIDGEWAY	1931	Fleet Mod 2	N 794V	Portland, OR	(503) 284-3051	F94**
Art. ARMSTRONG	1932	DeHavilland Tiger Moth	N 4030E	Vancouver, WA	(206) 256-5260	F94**
Clyde. DEARDORFF	1938	Cessna Airmaster	N 19459	Vancouver, WA	(206) 254-9026	F94*
Ron ENGLUND	1940	Aeronca	NC31432	Eugene, OR	(503) 342-5575	F94**
Jerry WALLIN	1940	Beechcraft Staggerwing	NC 2801	Kent, WA	(206) 631-9644	F94*
Ron OCHS	1941	N3N (Nav Aircraft Fact)	N 44707	Madras, OR	(503) 475-6927	F94*
Jane PHILLIPS	1941	Interstate Cadet S1A	NC34939	Eugene, OR	(503) 461-4952	F94**
Carol & Hal SKINNER	1941	Interstate Cadet S1A	N 37262	Springfield, OR	(503) 746-3387	F94*
Don GENERAUX	1942	Meyers OTW	N 34324	Vancouver, WA	(206) 892-8636	F94**
Sandy & Tom DALTON	1943	Stearman	N 1067N	Newberg, OR	(503) 537-1196	F94**
Dave McEWEN	1943	Aeronca L3B	N 49176	Gaston, OR	(503) 662-3323	F94**
Cliff SCHROCK	1943	Cessna T50 BambooBomber	N 58542	Portland, OR	(503) 221-0779	F94*
Art & Patty Whitney	1943	Stearman "Breezy"	N 61419	Milwaukie, OR	(503) 659-0240	F94*
Tom YOUNG	1943	Stearman	N 66144	Battleground, WA	(206) 587-5904	F94*
Larry KRULJAC	1944	Beechcraft Staggerwing	N 248E	Independence, OR	(503) 838-6465	F94*
Elwood HEDBERG	1946	Fairchild 24	NC81265	Portland, OR	(503) 246-7611	F94**
Bill LEBOLD	1946	Aeronca 7AC	N 84756	Salem, OR	(503) 399-7327	F94*
Jose' & Paola MARIN	1946	Taylorcraft T-CMT	N 95731	Beaverton, OR	(503) 645-8002	F94**
Roger STARR	1946	Piper J3 Cub	N 7116H	Aurora, OR	(503) 266-4282	F94**
Don THOMSON	1946	Globe Swift	N 80971	Independence, OR	(503) 362-3519	F94**
Bill HEWITT	1947	Stinson 108-2	N 9692K	Brush Prarie, WA	(206) 896-8037	F94*
Dave CLARK	1948	Luscombe SilvalreSedan	N 1642B	Yelm, WA	(206) 894-3343	F94**
Tuck WILSON	1948	Stinson Station Wagon	N 918C	Portland, OR	(503) 775-7003	F94**
Colin POWERS	1953	Cessna 195B	N 2113C	Independence, OR	(503) 838-0329	F94**
Bert & Steven ZIMMERLY	1961	Bucker Jungmann	N 1318Z	Hillsboro, OR	(503) 648-5111	F94**
Jan HEDBERG	1973	Corben Baby Ace EXP	N 79WR	Corvallis, OR	(503) 754-7315	F94**
Ted DVORAK	1979	Baby Great Lakes EXP	N 22872	Newberg, OR	(503)	F94*
Dave BAXTER	1989	Starduster II EXP	N 96575	Lake Oswego, OR	(503) 639-8792	F94**
Larry BECK	1989	RV4 EXP	N 37LB	Canby, OR	(503) 266-9188	F94**
Rex HUME	1989	Falco FBL EXP	N 660RH	Williams, OR	(503) 846-6620	F94*
Sam & Claire WHITNEY	2001	FBO Sportsman Airpark		Newberg, OR	(503) 538-2134	F94**
Roger GILES	2002	Aircraft...Co Chairman		Newberg, OR	(503) 538-8040	F94**
Charlie HANCOCK	2003	Ground/Air Communicator		Newberg, OR	(503) 538-9170	F94**
Chet RUNYON	2004	Volunteer..Aircraft Parking		Newberg, OR	(503) 538-8243	F94**
Les PETERSON	2005	CAP Cadet Commander.. "X's"		Newberg, OR	(503) 472-2353	F94**
Sonja HAUGEN	2006	Festival Co-Chair		Newberg, OR	(503) 537-1000	F94**
Del SMITH	2007	Evergreen International		McMinnville, OR		F94*

THE BUSINESS ON BUCKLING UP

BY JOHN S. YODICE

The regulations regarding safety belts and shoulder harnesses are very important for pilots, and are worth reviewing. These rules are contained in FARs 91.105 and 91.107, and I have found that they are much easier to understand if we parse them out into three separate areas: briefing, notification, and use.

Briefing. The rules impose a briefing requirement on pilots. Prior to takeoff, the pilot in command is responsible to ensure that each person on the aircraft (except some balloons and airships) is briefed on how to fasten and unfasten the safety belts and shoulder harnesses. Of course, some aircraft are not equipped with shoulder harnesses, in which case the briefing requirement applies only to the safety belts.

We tend to become casual about the briefing because we often carry people who are familiar with the operation of safety belts and shoulder harnesses. But we shouldn't be so cavalier. There are accidents on record where a person in a panicky situation had difficulty releasing the seat belt. Be especially careful with inexperienced or first-time passengers.

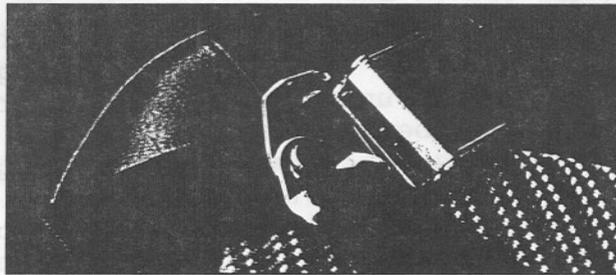
Notice that the requirement is to "ensure." The pilot need not personally conduct the briefing so long as he is assured that the briefing was conducted. The situation familiar to us all is the airline briefing that is routinely conducted by a flight attendant, not the captain. The regulations allow you to delegate this responsibility to another person.

This is a one-time requirement. It applies only prior to takeoff. It need not be repeated during the flight. That's different from the notification requirement.

Notification. In addition to the briefing, the pilot in command must ensure that each person on board the

aircraft (except those same balloons and airships) has been notified to fasten his safety belt and shoulder harness (if installed) prior to taxiing, prior to takeoff, and prior to landing. So there are at least three times that this must be done, and this too is a responsibility that may be delegated. As we discuss later, the pilot is not required to ensure that the passengers use the seat belts/shoulder harnesses, only to notify.

Use. In understanding the use



A pilot must use a safety belt at all times that the aircraft is moving.

requirements, it is helpful to distinguish between crewmember and passenger use.

Crewmember use. In general, a pilot must use a safety belt at all times that the aircraft is moving; on the other hand, a shoulder harness need only be used during taxiing, takeoff, and landing. A shoulder harness need not be used enroute. Specifically, the rules require that a flight crewmember must keep the seat belt fastened while at his station, and the crewmember must be at his station during taxi, takeoff, landing, and while enroute.

There are important exceptions regarding shoulder harness use.

If the shoulder harness interferes with the pilot's performance of required duties, it does not have to be used during those times.

For seaplane operations, the person

pushing off the seaplane from the dock and the person mooring the seaplane at the dock are exempt from the seating and safety belt/harness requirements. This exception also applies to float-equipped rotorcraft.

There are two limited exceptions to the requirement that the pilot be at his station, but these don't typically apply to small aircraft certificated for single-pilot operation. A flight crewmember may be absent from his station to perform duties in connection with the operation of the aircraft. A pilot also may be absent from the duty station to attend to physiological needs.

Passenger use. Although the pilot has a duty to the passengers to ensure that they are briefed and notified, he is not required to ensure that the passengers are using their seat belts and shoulder harnesses. But the rules go on to impose a direct requirement on the passengers themselves. Passengers (remember that they could be other pilots) are required to use their safety belts and shoulder harnesses during taxi, takeoff, and landing. Passengers are not required to use their seat belts while enroute. It is probably a good idea to insist that your passengers stay buckled up while enroute even though it is not required.

There are other exceptions that are useful for a pilot to know.

A child under two years of age need not be fastened in a seat belt if held by an adult who is properly secured by a safety belt. A child restraint system is a better idea.

There is also an exception for parachuting. A person may use the floor of the aircraft as a seat, provided that the person is on board for the purpose of engaging in sport parachuting. That person must nevertheless use a safety belt.

The rules regarding safety belts and shoulder harnesses are not complex for general aviation pilots, but they should also not be overlooked. □

YOUR EDITOR FLYS WITH
NORMA GRANVILLE

This past summer, at the NW EAA Fly-in, that is held each year in Arlington, Washington, your editor had the distinct pleasure of taking Norma Granville for a ride in my airplane. Who is Norma Granville you ask? She is the daughter of Zanford Granville, the main principle in the design and construction of the Gee Bee racing airplane of the early 1930's.

She was in the announcing booth during the airshow and asked if any one would be interested in giving her a ride in a open cockpit biplane. I of course know Steve Wolf and Delmar Benjamin quite well, I did however ask Delmar if it was okay.

Norma is in good shape for being 70 years young, she had no trouble getting into my front cockpit and seemed to enjoy her flight. Later she told me that she had not been up in an open cockpit biplane in over 60 years. The last flight had been with her father shortly before his death.

It was wonderful to have the opportunity to do this and I was happy to do so.

Norma also gave me some words of wisdom that I will pass along to you. She said "Dave find something you like to do and do it, don't wait until everything is right, because if you do it will be to late."

Delmar and Steve have done a wonderful thing for the Granville family. They have proven that the Gee Bee, in capable hands, is not the killer airplane its reputation has eluded to these past 60 years. And if any of you have seen the video tape that Delmar produced about the Gee Bee, you will note that it will bring tears to your eyes. Just like it did to Pete Miller the only surviving member of the group that designed the Gee Bee.

The terrible reputation that those people had to endure all those years, was dispelled several years ago when Delmar purposely went to Hartford, CT. and flew it for him. This flight is on that tape.

This truly is a piece of history, and I am happy to be involved, if only in some small way.

D.C.B. Editor



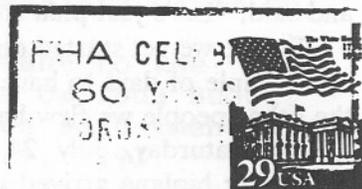
YOUR EDITOR WITH NORMA GRANVILLE
AT NW EAA FLY-IN ARLINGTON
JULY 1994 ALSO WITH N96576

Starduster Too N96576
Guest Registration

To Dave:

I have just been & returned from
heaven in a beautiful Starduster. This
was the first ride in an open cockpit
in over 40 years when I flew in the model
"A" Bee biplane with my father, -
Yaxford Granville. I thank you
for a thrill of a life time.
Norma B Granville

8.10.94



Dear Dave,

I have finally stopped
traveling & ready to send
a few notes.

I do want to thank
you a big bunch for my
super ride in your
gorgeous "Starduster". It
was a huge treat indeed.

I guess you left early the
next day for I looked &
your plane was gone.
Again many thanks.

Sincerely,
Norma Granville

Mr David Baxter
Editor, Starduster
5725 S.W. McEwan Rd.
Lake Oswego, OR.
97035

The Weldon Glines and Glen Olsen Story
OUR FLIGHT TO OSHKOSH-'94
by Glen Olsen

Weldon and I have been planning our trip to Oshkosh for over a year. Doing last minute touch-ups on our airplanes has been fun, like putting our names and Acroduster Too signs on the tails. You never know when someone might mistake us for a Starduster. Anyway, getting the right tent, the right sleeping bag, that special rain gear you might need back East where it really rains is very important. How about the clothes, the extra socks, and don't forget the flashlights. Now shove all this into your old Army duffel bag, strap it into your front seat like it was your passenger, and you're ready to go!

Weldon and I also got together so we could plan our route. We put the map out on the floor and got on our hands and knees and drew out our course in red pencil. When we finished, we looked at the map and looked at each other and said, "Let's just plan stops as we go."

Before we get started on the trip, let's back up a couple of days to have you meet some of the other people we flew back with.

On Saturday, July 24, a beautiful blue Starduster biplane arrived at Airport #2 from Oregon carrying two passengers, Dave and Donna Baxter. Dave is the editor of the Starduster Magazine. He is also a brother-in-law to Lance and Trudy Andrewson of our chapter.

A very sharp red, white and blue Starduster flew in from Wapato, Washington along with Dave and Donna. The pilot, Lyle Taylor, had just finished building his plane and had just flown off his 25 hours and was on his way to Oshkosh. He had a very good friend by the name of Cecil Vinson to ride with him as copilot. These are two very fine men. We enjoyed their company here and in Oshkosh.

Now that you have met everyone, lets head for Oshkosh! Tuesday July 26 at 5 am, I got up to a beautiful morning. The weather was just perfect. Loretta and I got to Skypark airport and pushed the Acroduster out and got ready to

go. I could feel the excitement and anticipation building. The day had finally arrived when I would be flying back to Oshkosh in my own home-built airplane. I'm sure Weldon was feeling the same way.

I waved at Loretta on the ground and took off at 6:45 am, hoping to meet Weldon and the other two Stardusters that had taken off from Airport #2, in the air. We met, and we were on our way to Rawlins, Wyoming, which was our first stop. We had good smooth weather all the way. Landed at 9:01.

We met a man at Rawlins headed for Oshkosh named Tom Helton. He was from southern California. We departed at 10:05 for Scotts Bluff, Nebraska.

It's funny how the mountains disappear when you head east. It seems strange at first to see all flat country, but very beautiful just the same. Landed at 12:05 and fueled our planes. I always use one gallon more than Weldon. I wonder why? On second thought, I know why. Left at 2 pm for O'Neil, Nebraska. Arrived 4:15 pm. Tied the planes down, went into town, got a motel and went to bed.

In the morning we walked around town. It felt really good to get some exercise. We left for Forrest City, Iowa at 9 am. Dave stops here because he has friends to visit. We got here at 11:30 and left at 12:55 for Wautoma, Wisconsin. The scenery was just beautiful and so very green.

We flew over the Mississippi river and what a sight it was! The ceiling was low at this time so we really had a good close-up view of the river. Weldon was wondering why we flew over the widest part. We were flying low so we did watch out for those towers that everybody warns you about. There is a lot of moisture in this part of the country so there is a lot of beautiful green foliage.

We arrived at Wautoma at about 3 pm. Yea! We made it! Wautoma is a beautiful little town about 40 miles West of Oshkosh. The

airport is all surrounded by green trees and bushes, etc. Quite a bit different from our asphalt airports at Skypark and Salt Lake #2.

We had a great welcome from all the Starduster pilots. This is where all the Stardusters and Acrodusters gather and then everyone commutes to Oshkosh by car or plane each day.

Bill Clouse president of Stolp Starduster, from Flaybob, CA, also greeted us.

We also had a big surprise. The man we met in Rawlins, Wyoming, Tom Helton, was there. We didn't know that he was flying into Wautoma. Also, Warren Barber and Bill and Fran Reich stopped in Wautoma. They came by car. Their airplanes were at the Madison, Wisconsin airport. All the other nearby airports were full. It was good to see them.

We met so many good friendly people. A man from Fond du Lac, Wisconsin, let us use his car for the week. That really helped us out.

On the first night we set up our tents. This was quite an experience in itself. Mine went up fairly easy, but it took a little more thought for Weldon's. This was O.K. for the first night, but not something I would like to do very often.

We were quite happy when the city asked Weldon and me to run the airport in the evenings. This gave us an opportunity to look around and find a vacant room in the back of the airport office. We moved all our things inside and even had cots to sleep on. Boy! All the comforts of home. The next evening we even had someone bring mattresses for the cots. This was really living.

The next three days we stayed most of the time in Oshkosh. All the activities and airplanes were great. Saturday the FAA allowed us to make 3 fly-bys over Oshkosh. But we all had to practice so it would look good. Weldon and I had practiced flying formation so much at home that we didn't need the practice. How's that for team work? The controller at Oshkosh said we looked really good and allowed us to land if we wanted to, but we decided to fly around and look at the scenery.

Saturday we went to the Theater in the

Woods and attended the Young Eagles program. We arrived back in Wautoma about 11:30 pm. Boy, were we tired!

Sunday we stayed in Wautoma and had a Young Eagles day. The Kiwanas Club served breakfast and lunch and it was very good food. The whole town of Wautoma supported us and came to see all the Starduster and Acroduster airplanes. We took up 21 Young Eagles.

That evening we had our Starduster banquet and awards program. Weldon received the Grand Champion award, and I got the First Place award. What a surprise for both of us. Especially with all the competition that was there.

What a great time we had. We hated to leave, but knew we had to get started back to Salt Lake.

Monday, August 1, Weldon and I got up early to head back, but we had to wait for the weather to clear before we could take off. We left at 7:35 am for Mason City, Iowa with Weldon in the lead. We landed at 9:25 am. We left for Ainsworth at 10:25 am and arrived at 1:10 pm. We fueled up at \$1.65 per gallon and felt that was really a bargain. We left at 1:55 pm and headed for Scotts Bluff, Nebraska. The weather was really good at this time. We got there at 2:30 pm.

We met two people who were heading home and were flying GP4's. They said the weather was bad ahead so we stayed in Scotts Bluff for the night. They had a van so we all went into town and got us a motel.

Tuesday morning we got an early start and left at 6:45 am. We arrived at Rawlins, Wyoming at 8:30 am. It had rained all night. We took a walk around the airport and left at 9:45 with clear smooth weather all the way. At 11:05 over Parleys Canyon Weldon and I parted ways. He headed south for Airport #2, and I headed north for Skypark airport, arriving at 11:15 am.

We had a great trip to Oshkosh and I recommend it to everyone who hasn't been there, and to everyone who has, to go again. Oshkosh is a great place to go to.

15TH ANNUAL STARDUSTER OPEN HOUSE

WHEN : MAY 5th, 6th and 7th, 1995

**WHERE : HEALDSBURG MUNICIPAL
AIRPORT 10 MILE₂ NORTH OF SANTA ROSA CALIFORNIA.**

WHY : FLY, FOOD, FUN AND FRIENDSHIP.

We would like to fill Healdsburg with biplanes, Stardusters, Acrodusters, V-Stars, Starlets or any homebuilt enthusiast. We would love to see you there with your airplane. Come help us celebrate our 15th anniversary. please join us for a weekend of fun. Camping will be allowed on the airport.

Please let us know if you plan on attending.

Bill Clouse 1-800 833-9102

Dave Heal 1-707-838-0261

Bill Cannam 1-707-523-1977

Bob Bruner 1-707-527-5508

If you plan on staying at the Dry Creek Inn, the Fairview or the Healdsburg Inn reservations should be made in advance. We certainly should not have the problem we did at Sedona, rooms here are not in great demand at this time of year.



1995 STARDUSTER OPEN HOUSE

FRIDAY, MAY 5th, SATURDAY, MAY 6th, and SUNDAY, MAY 7th

Wheels are currently in motion to have our open house at Healdsburg California Municipal airport, 10 miles north of Santa Rosa, California.

Several Starduster and Acroduster owners and builders have graciously offered to help put this together.

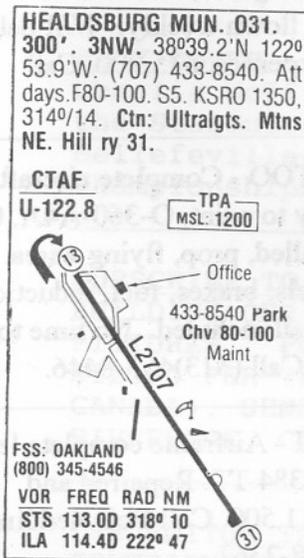
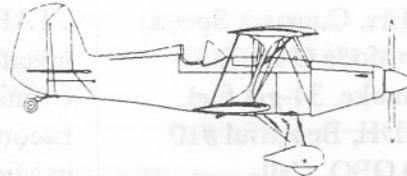
Tentative plans are for Friday arrival. Friday evening, some sort of dinner for early arrivals. Saturday morning, dawn patrol (ala Dick Lucas) to Nut Tree and return. Saturday, more arrivals, local flying, rides, mass flight over Golden Gate Bridge, also have a get together with a local Model "T" Ford club, pictures with your airplane and favorite Model "T". Saturday evening, dinner and maybe a guest speaker(?), entertainment and awards. Sunday morning, breakfast, local flying. Sunday noon, departures home.

The exact details will be worked out over the next several months.

Healdsburg Municipal Airport is approximately 75 miles north of San Francisco International Airport in the beautiful Sonoma Valley wine country.

Weather for these dates should be good. There are well over 50 Starduster type aircraft in the Bay area, so we should have an excellent turn out. So please plan on, and make every effort to attend. These dates should not conflict with : Paso Robles, Camarillo, Corning or Watsonville.

D.C.B. Editor



HEALDSBURG— Healdsburg Municipal (031). Location: 3 mi NW of city. Coordinates: N38-39.21; W122-53.97. Telephone: 707/433-8540, 431-3309. Hours: 8 am to 5 pm. Elevation: 278. Pattern altitudes: 1300 MSL all aircraft. Runways: 13-31 2,707 X 60, asphalt; lights MIRL; road ry 13; hill ry 31. Fees: Parking: overnight. Approaches: (VFR). FSS: Oakland 122.5, 122.2. Comm freq: UNICOM/CTAF 122.8. Charts: San Francisco. Noise abatement: Tgl's lmt'd to four acft dly; observe noise abatement signs. Restaurants: nmrs. Lodging: Dry Creek Inn 433-0300; Fairview 433-5548; Healdsburg Inn 433-6991. Local attractions: nmrs wineries. Notes: Right tfc ry 13; ry 31 downdrafts apch end. Ballooning. American Aircraft Painting: 707/433-5802. Hours: 7 am to 4:30 pm. General services: aircraft painting. Healdsburg Aviation, Inc.: 707/433-8540. Fees: Landing/parking. Hours: 8 am to 5 pm Mon thru Sat; 9 am to 4 pm Sun. Fuel: Chevron 80, 100LL.

CLASSIFIEDS

ADVERTISING CLOSING DATES : DECEMBER 1, MARCH 1, JUNE 1, & SEPTEMBER 1.
CLASSIFIED ADVERTISING RATES : \$3.00 PER COLUMN INCH, MINIMUM CHARGE \$3.00.
MAKE CHECKS PAYABLE TO STOLP STARDUSTER CORPORATION. THANK YOU.

1975 STARDUSTER II, Built by STOLP, 200 HP, radios, lights, Mode C, intercom, invert. oil/fuel, 40-gal, beauty. Call (818)997-0355.

1975 STARDUSTER I, 117 TTAf, 573 SMOH on Lycoming O320, 150 HP, fixed pitch, Scott Tailwheel, built in GPS antenna, wheelpant available. Always hangared, \$13,000. Days Call (209)533-4921 until 5:30, eves call (209)532-2673, ask for Dave. Lost Medical Must Sell!

1975 STARDUSTER II - SA300, O-360-A1A, 180 HP, 55 hrs SMOH, Sensenich fixed pitch prop, \$26,500. Call (206)852-3537.

1991 STARDUSTER II - Showpiece Trophy Winner, Lost Medical, Must Sell. 82 TTSN Cont. O470, 230 HP, 882 Hrs, Constant Speed, Prop Gyro, Panel Xponder Mode C-int-EGT-ELT, Cleveland Brakes, Smoke, 34-gal fuel, strobes, new upholstery, NDH, Beautiful #10 Fresh Lic @ Sale, \$60,000 OBO, Call (619)542-1841.

STARDUSTER SA-100 - 187 TTAfE. O-320 Chrome Lycoming. Inverted fuel and oil. Pitts canopy. PS-5 carb. New tires & tubes. \$14,500 OBO. St.Louis, MO. Call (314)434-7836.

1984 STARDUSTER II - 75 HRS. TT, Hangared. Beautiful condition. \$40,000. Call (810)979-6594.

STARDUSTER II 170 TT, 100 SPOH, 4-YR. Fabric, Nav, pants, intercom, \$28,900. Possible trade. Call (216)499-7046.

1984 STARDUSTER TOO - 205 HP Lycoming HIO-360, fuel injected. TTE-1137, TTAf-212, always hangared. Stits, basic instruments. No radio. Fun Machine! \$25,000. Indiana. Call Jim (219)638-4317 nights, (219)483-3179 days.

STARDUSTER II, 1050 TT, IO-360 200 HP, TTSN, 750 TTSN, C/S, smoke, inverted fuel and oil, new annual. Always hangared, \$28,500. Call (509)935-4852.

STARDUSTER II - BEAUTIFUL. 625 TTAE, O-470, 230 HP, Constant speed, 175 SPOH, \$25950/offer. Call (501)372-3131, eves 835-6703.

STOLP V-STAR Single Biplane - 355 hrs TTAf, 355 hrs SMOH, 135 HP Lycoming, inverted fuel & oil. 4 ailerons, open cockpit, Ceonite, always hangared, full electric with Escort 110 radio, flown weekly. Will deliver in Midwest for expenses. \$15,900. Call (317)293-2383.

STARDUSTER TOO - Complete aircraft, covered and ready to paint. O-360-A4A, 0 SMOH, Lyc installed, prop, flying wires, instruments, wheels, brakes, fuel, induction, exhaust systems, all included. No time to finish. \$16,000. Call (313)455-8446.

STARDUSTER II - Airframe complete less firewall forward, 384 TT. Repaired and being restored, \$11,500. Call Bob Redding, evenings (406)628-2367.

1975 ACRODUSTER II - IO-360, CS Prop, 450TT, \$25,000. Trade for a Bonanza plus cash. Call(414)538-4000.

1993 STARDUSTER TOO - 70TTA, Cont.O470-4, 260 HP, 570 SMOH, constant speed prop, full bubble canopy (both cockpits), 2 tanks, Mode C, 720 radio. \$34,000, firm. Call (801)825-8347.

STARDUSTER II - Just finished! Lycoming O320-160. Inverted systems. MX-11 Com, transponder and encoder. Call (707)938-1465 for details. \$30,000.

1989 STARDUSTER TOO - SA300, O-320 E2A, 175 hrs. SMOH, 175 hrs. airframe, inverted fuel & oil. Narco 810 Com, \$21K. Call (608)725-5719.

PAY UP TO \$30,000 CASH - For best Acrosport II, Skybolt, or Starduster II, delivered to Northern Arkansas. Call (501) 424-2974.

STARDUSTER TOO SA300 - N28HC, serial #399, 100 hrs. SMOH, 240 hrs. TTAF, 150 HP, Stits cover, Scott tailwheel, Cleveland wheels & brakes, Escort 110 Nav/Com, Flitecom intercom. Will trade. Call (509)765-6926.

1988 STARDUSTER - 335 hrs. Factory new Lycoming O360 engine, Sensenich prop, Narco Nav/Com radio, Terra Mode C transponder. \$35,000. Call (619)460-0424.

1970 SA-300 STARDUSTER TOO - \$22,500. Two place biplane, only 485 hrs. total time A & E, 150 HP eng., no damage, one Narco Com 11A (360 Channel), intercom, electrical system, lights, Scott tailwheel, wide spring gear, polished prop & spinner, clean, loads of fun & easy to fly. Call (707)575-0375.

STARDUSTER TOO - 518 TTAF, 518 SMOH, on O-360 Lycoming 180 HP, polished prop, radio, transponder w/Mode C, Garmin GPS full electrics, Cleveland wheels & brakes, full cockpit cover, position lights, baggage compartment, striking red, white and blue paint. Two headsets. Asking \$25,500. Call (612)486-5781 or (612)559-8820 after 6PM ask for Joe.

STARDUSTER TOO - Completed 1989. Beautiful and excellent craftsmanship. 20 SMOH on IO-3601A, 20 since new Hartzell aerobatic prop. Escort 110, Loran, AT50A, Mode C, Hooker harnesses, full inverted, Stits, No cost spared. \$30,000 (\$25,000 with wood prop), will deliver anywhere in North America. Call (909)626-7442.

STARDUSTER TOO - LOW TIME O360 Lycoming, C/S Hartzell prop, basic VFR, Escort NavCom, Dave Clark headsets with intercom, EAA paint scheme, lost medical. Asking \$25,000. Call (716)637-2482, Rochester, NY.

STOLP STARDUSTER PROJECT - Fuselage on gear, wings, tailfeathers, \$2,800 OBO. Also Lyc. O-235C, 100 HP, with accessories, "0" SMOH, \$6,300. Call John at (412)346-2953.

NEW COMMANCHE NOSE BOWL - Will work on a Starduster Too. Make Offer. Call Joe at (606)293-5071.

1968 STOLP STARDUSTER TOO PROTOTYPE Built by Lou Stolp, N1300S, cover Sport Aviation 1968, radio, hi-time 0470 C/S, recent paint, flies good. Own a piece of history, open to any offers. sell \$29,500 trade or terms. Call Jack (714) 639-6594

AS ALWAYS YOUR ORDERS WILL RECEIVE OUR PROMPT ATTENTION. QUALITY PRODUCTS AND WORKMANSHIP AT A COMPETITIVE PRICE.

