

Starduster

MAGAZINE



**July
1997**

Dedicated to the
ACTIVE Homebuilders



Comments from the new Prez, Les Homan JULY 1997

As a friend of mine likes to say when we are ready to roll, "AND HERE WE GO". Another great adventure has started. I and Dave Baxter have started a new great adventure in buying Stolp Starduster Corp. from Bill Clouse. Dave and I have known each other for years, made many trips to Oshkosh/Watouma together and flew countless hours across the country together. We first met at a Starduster Open House way back in the mid 1980's. Dave's first involvement with Starduster was in the mid 1960's when he worked for Stolp Starduster for a couple of years. Mine was in 1978 when I bought a set of Starduster Too plans. I finished the Starduster Too in 1981 and now have over 2,600 hours on it. I finished the first plans built Super Starduster in 1996 and raced it at Reno.

I started a business in the San Francisco Bay area of California about the same time Bill Clouse bought Stolp Starduster Corp. I have always had a bit of envy for Bill with a flying related business. When I heard Bill wanted to sell Stolp Starduster my interest was peaked. Dave and I have talked more than once about Starduster, his dreams and mine. Late last fall I started to talk to Bill about possibilities. Time was going to be one of my biggest problems because I will have to keep involved with my business for a while. Early this year Dave called Bill and Bill told him to call me. Dave was getting ready to retire, he had the time. We talked together and then we talked to Bill.

The official announcement was made at the Starduster fly-in at Oroville. Dave will be taking care of the day to day operations, answering the phone, taking orders, ordering materials, working with employees, getting parts made up and shipped, all the hard work (working in the business). I will be updating the catalog, getting the plans put on Autocad, setting up builders manuals, working to get videos available for promotion and construction, surveying Starduster builders, owners and pilots, EAA chapters, setting up a computer system to track inventory and invoicing and all those fun things necessary for a business to operate in today's environment, (working on the Business). We have set a goal to have our new catalogs available in July, for Oshkosh/Watouma. We are reintroducing the Starduster One plans. We have set up some serious goals to get Starduster back in the forefront of aviation. Our Mission statement is to "Service, Support and Expand Starduster". A business plan has been written and put in place and we are in the process of updating jigs and fixtures. We are checking catalog and kit pricing to make sure prices are current.

Starduster will again be at the Reno Air Races to give the Pitts something to think about. We will be attending the major air shows this year and studying what's best to present for 1998. In 1998 it is our goal to have a booth or display at Sun-n-Fun, The National Biplane Fly-in, Arlington and Oshkosh. Anyone interested in being part of these adventures please let us know.

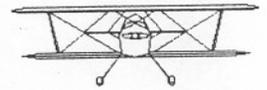
In 1998 we will have our open house in Oroville, California in early May. We will have a midwest Starduster Fly-in at Bartlesville during the National Biplane Fly-in and will have the Oshkosh/Watouma fly-in. We have many other things in the works and in the next edition, more will be disclosed.

It is our goal to help all those with Starduster aircraft realize their dreams and to keep those dreams alive.

Les Homan

Stolp Starduster Corp.

4301 TWINING
RIVERSIDE, CA 92509
(909) 686-7943
FAX (909) 784-0072
WATS 1-800-833-9102
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JULY 1997

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

FRONT COVER - N5317Q owned by Harvey Newman, Walnut, CA. Grand Champion Starduster Open House, Oroville, CA also best biplane at Porterville, CA and Merced, CA.

BACK COVER - N22TF Tom and Barbra Nash of Salem, Oregon. Tom is the new owner of this airplane and is getting it figured out.

REMINDER : SUBSCRIPTION RENEWAL

Please mail your checks to Stolp Starduster Corporation. They are due by the first of January 1997. Subscriptions run from January to January of each year. Those who subscribe in the middle of the year will receive all four issues for that year. Current subscription rates for 1997 are still \$12.00 per year. I don't know how much longer we can do this, due to postage, printing and handling costs. By 1998 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 & L.H. The New Prez

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

Summer is well on it's way and the flying, and flying season has just begun. Many of you have suspected that something new is in the works for Stolp Starduster corp. And you would be right. As of the first of may, 1997. Starduster has a new owner and president. His name is Les Homan, many of you already know him. He owns a Starduster too and a Super Starduster One. He also owns Homan Engineering a commercial Heating and Air conditioning engineering firm. Located in the central California town of Pleasanton. So this is where I fit into the picture. As I have just retired (early out) from my job at the Fire Department.

Les could not leave his firm on a daily basis and needed someone to run Starduster. So I was the logical choice. We both care about Starduster and have a number of ideas and goals that are consistent with each other.

Bill Clouse former owner and past president will be staying on as a consultant and mentor. His help is definitely needed and is very much appreciated. We as owners, builders, and pilots want to thank him for his many years of service to Starduster. Now at over 22 years. We wish Bill and Brenda the best and most enjoyable time on their new adventure in motor homing. The first phase will begin in late July with a trip to Oshkosh.

As for myself I have a substantial learning curve with prices, sales tax, customer relations, parts inventory, and fabrication. Many of you know I am a builder and current owner of N96576 a very well used Starduster too, and that I was a former employee of Starduster Corp. when it was known as Stolp aircraft. I learned to weld here over 30 years ago. When Lou Stolp then owned the company. I was an employee then and am now a managing partner. That encompasses every phase of the business our goal is to help builders, finish and fly their aircraft. To make their airplanes safe and to see that those who choose to fly these fine airplanes can do so safely and proficiently. We will be here to help with those problems and questions So please if we can help feel free to contact us. Please note we are looking for pictures and videos of all Starduster aircraft. Starduster Too, Acroduster Too, V-Star, Starlet, and Starduster Ones for our new catalog and promotional video. Send us your best.

DCB Editor

6/3/97

ACCIDENTS SAFETY AND ADS

Dear Dave,

Enclosed is another NTSB printout for May identifying a Starduster. I missed this one because it is listed as a "SH-300", not a SA-300, and probably never would have found it if my curiosity hadn't gotten the better of me. 3 Starduster accidents in one month caught my attention, and especially two in the Salt Lake City area! Thank God they were uninjured in all three cases. I'm sure Glen Olsen knows both people involved in the Salt Lake City accidents. Anyway, I thought you might like to know about these.

Heard from Hap that last Friday was your final day with the Fire Dept.-Congrats on retiring and welcome to the first day of the rest of your life! I doubt I will see you before you head down to Riverside, but I'm sure I'll talk to you soon enough when I place an order (Bill has me on back-order for a new type of gascolator that you may be carrying and for windshields and installation kits, I believe).

I don't know how to thank you enough for all the help, support, and guidance you've given me over the last few years, and I probably never will be able to. Without your help, this project would never had gotten this far and have a good chance of being finished, but would have probably ended up sitting and rusting or eventually sold to the next person who could finish it. **THANK YOU !!!**

Hap and I were lamenting that things would not be the same around here without you, and it won't be. But I can't think of a better person to be running *Starduster*, so it is a small price to pay. It was too bad the company couldn't have ended up at Scappoose, but Oroville isn't that far by air.

Well enough for now, as you probably have a million things to do. Say bye to Donna for me, and I'll see you at Oroville next year! (PS., see if you can't light a fire under Danny to get to work on his project-I'm nearly finished with my first wing panel)

Take care, and the best to you always.



Bob Wampler

THREE STARDUSTERS IN THREE WEEKS!

May 5— Ed Jeppson, recently retired pilot for Delta airlines, flew to Florida to bring back a Starduster that he had just purchased. Landing at Deming, NM, the plane veered off to the right of the runway. As Ed steered back to the runway, the right wheel rode the edge of the runway surface. The plane ground looped, damaging the lower right wing. Damage was also sustained by the right wheel and brake assembly and by the tail wheel assembly. A mechanic at the scene concluded that Ed had landed with a flat tire, which pulled the plane to the right and prevented its recovery to the runway. No injury to pilot.

May 11— Dave Silfast suffered an engine seizure while flying south of Airport 2. His only option was to dead

stick into a nearby wheat field where the soil was quite soft. The landing impact broke the bungee cords on the landing gear and the plane nosed over. Rudder and landing gear damage, and slight damage to the fuselage at the point of attachment of the cabane struts. No injury to pilot.

May 20— Clay Gorton was practicing touch and goes at Skypark airport when the right wheel entered a water puddle left by recent rains. The drag from the water pulled the plane off the right side of the runway. When the right wheel hit the soft mud the plane nosed over. Extensive damage to propeller and to top wing, top of rudder damaged and slight damage to the fuselage at the point of attachment of the cabane struts. No injury to pilot.

NTSB Identification: **MIA97LA157**

Accident occurred MAY-02-97 at LAKE WALES, FL
Aircraft: Thacker STARDUSTER TOO SA300, registration: N14525
Injuries: 1 Uninjured.

On May 2, 1997, about 1415 eastern daylight time, a Thacker Starduster Too SA300, N14525, registered to an individual, nosed over during an aborted takeoff at Lake Wales Airport, Lake Wales, Florida, while on a Title 14 CFR Part 91 personal flight from Lake Wales to Jacksonville, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the airline transport-rated pilot was not injured. The flight was originating at the time of the accident. The pilot stated that during takeoff on runway 6, the aircraft started drifting to the right while still at low speed. Application of left rudder did not correct the drift and the right main landing gear tire went off the edge of the runway. The aircraft was at about 30 knots at this time. The aircraft continued to drift right and he aborted the takeoff. After closing the throttle he applied left brake and rudder in an attempt to turn the aircraft back onto the hard surface of the runway. Immediately upon application of the left brake the aircraft nosed over.

NTSB Identification: **SEA97LA110**

Accident occurred MAY-11-97 at SALT LAKE CITY, UT
Aircraft: Silfvast SH-300, registration: N78DS
Injuries: 1 Uninjured.

On May 11, 1997, approximately 1242 mountain daylight time, N78DS, a homebuilt Silfvast Starduster Too, sustained substantial damage when the engine lost power after departure from Salt Lake City Airport 2, Salt Lake City, Utah. The pilot, who was the registered owner of the airplane, was uninjured in the ensuing forced landing. Visual meteorological conditions prevailed at the time of the accident. No flight plan was filed for the flight, and there was no report of the ELT actuating. The landing gear sheered off on landing and the aircraft nosed over when the pilot landed on a field four miles south of the airport.

NTSB Identification: **SEA97LA122**

Accident occurred MAY-27-97 at BOUNTIFUL, UT
Aircraft: Starduster SA-300, registration: N1923S
Injuries: 1 Uninjured.

On May 27, 1997, approximately 0930 mountain daylight time, an experimental Starduster SA-300, N1923S, nosed over after departing the side of the runway at Bountiful Skypark, Bountiful, Utah. The private pilot, who was the sole occupant, was not injured, but the aircraft, which was owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 local personal pleasure flight had been in the air about one hour at the time of the accident. No flight plan had been filed, and the flight was being conducted in visual meteorological conditions. According to the pilot, he executed a full-stall landing, and during the landing roll, the aircraft's right main gear hit a pool of water on the runway surface. This pulled the aircraft to the right, and the pilot was unable to keep it from departing the right side of the runway. After departing the runway, the aircraft entered an area of soft dirt and flipped over.

The durability of your mounts depends on a number of factors

By HAROLD A. KOSOLA

ALBANY, Georgia — In my younger years, we kids always knew that a good landing was called a "three-point landing." This holds true today, but only for conventional airplanes, the ones with the wheels in the back that we still call "taildraggers."

The modern invention is putting a "train-ing wheel" on the front of the single-engine airplane. It's commonly attached to the engine mount and called a "tricycle landing gear" airplane. Although three-point landings are proper for taildraggers, they are often improperly accomplished on tricycle-gear airplanes.

For those of us who repair and manufacture engine mounts, three-point landings on tricycle-gear aircraft are good for business. Also (tongue in cheek), I encourage all flight instructors to train their tricycle-gear students to push forward on the control wheel while landing so the airplane stays on the ground with all its wheels. This may be profitable for my line of business, but it's hard on aircraft owners and insurance companies. Really and truly, the best landings happen when tricycle-gear airplanes touch down on their two main wheels, and taildraggers do the three-point variety. The proper technique for tailwheel aircraft (but not trikes) includes landing at or near full stall.

Engine mounts are the structural aircraft parts that support the engine. Commonly referred to as engine barriers, engine trusses or engine frames, they are often confused with the rubber engine vibration isolators manufactured in the United States, mainly by Lord Corporation and Barry Controls Aerospace.

Construction

Most engine mounts manufactured in the United States are constructed of 4130 condition N steel tubing. Prior to 4130N tubing, engine mounts were made of 1025 steel tubing. That material was much weaker, and its use came to an end in the 1960s.

Due to its weak characteristics, 1025-constructed engine mounts were often heat-treated to increase the structure's strength. A heat-treated tubular steel engine mount is not repairable in the field because welding reduces strength and mandates repeated heat treating in rigid steel fixtures. Characteristically, a heat-treated mount is very brittle and has a tendency to crack in service. Therefore, a much stronger alternative, 4130N, was introduced as a replacement for 1025 steel tubing.

During the manufacturing process of the 4130N-constructed engine mount, each structure is assembled and welded in fixtures made within ± 0.030 tolerance. Welding is normally accomplished with the tungsten inert gas (TIG) welding method and then stress relieved. Some manufacturers use the less common metal inert gas (MIG) welding method.

Stress relieving is normally done after welding by using a torch rather than putting a fixture mount into an oven. It's quicker, relieves the residual stresses in the material at the welded joints, and achieves the same results. If the engine mount is not stress relieved, it will spring up from the welding fixture. That results in misalignment with the airplane's firewall or engine attach points. In some cases, lack of stress relieving can result in a cracked structure on an in-service airplane.

Common types of damage

Damaged engine mounts come in many forms, some obvious and some not so obvious. Engine vibration, overloads, excessive heat and impact are causes of disfiguration.

Noticeable damage can result from improper landings in Cessna 150 and 152, as their nosewheel support is actually part of the engine mount assembly. Engine mounts without an attached nose landing gear can be damaged as a result of a ground strike by the propeller, high loads due to the weight (inertia) of the engine during abnormal landing, or other causes. When inspecting an engine mount for less conspicuous damage, there are many signs to look for: cracks, chafe marks, heat damage, and dents from poor maintenance practices. Engine mounts should also be inspected in accordance with the manufacturer's and FAA's directions.

If the airplane's design offers an exhaust system in close proximity to an engine-mount tube, damage is highly probable to that tube. This is common in Cessna 180s, 182s and 185s. Heat-resistant paint can be applied to for protection, but repeat inspections and reapplications are required. In addition, a stainless-steel standoff heat shield can be installed. Under no circumstances should asbestos or other heat-resistant material be wrapped around the engine mount tubes for heat protection. To do so will promote rapid deterioration of the tube, which will form rust due to moisture absorption of the heat-resistant material.

Should a design defect or service-related problem develop in an engine mount, such as a cracked tube, the airframe manufacturer will issue a service letter or bulletin. If damage due to service problems is severe and critical to safety, the FAA will issue an airworthiness directive requiring mandatory compliance. The FAA also issues AC No. 43-16, General Aviation Airworthiness Alerts, which lists various problems encountered by the public.

Here are some guidelines to follow when inspecting an engine mount:

Cracks — Inspect tubes for signs of tension failure, including cracks adjacent to the weld joint. Also check tubes for the beginning of "neck down," meaning the outside diameter is shrinking.

Compression failures — Evident by tubes that are bent, bowed, bulging or swelling adjacent to a weld joint. Such tubes will eventually collapse if not repaired immediately. Normally this occurs from impact damage by landing on the nose wheel or by other excessive loads on the engine mount.

Dents — A result of improper use of tools by technicians. They often can be found close to the bolts at the firewall. Caution should be used on not using the engine mount tubes as a pry point.

Chafe marks — They will cause a wear point. Look for this type of damage where control cables, fuel lines, engine baffles, adel clamps or other parts may contact an engine mount tube.

Heat damage — Will occur on engine-mount parts that are close to the engine exhaust system.

Cable clamps — Inspect all clamps that are used to attach cables or other components to the engine mount. They should be in serviceable condition and tightened to avoid movement and vibration during engine operation.

Rust — If any internal rust forms inside the tube, the engine mount should be repaired. Rust can occur even if both ends of the engine-mount tube are completely welded shut, which makes it difficult to identify. A small pin-size hole in a weld can lead to internal rust, which is especially prevalent in aircraft flown in saltwater environments or involved in water normally do not coat the inside of the tubes with a corrosion inhibitor.

Exterior corrosion — Easily removable by lightly sanding the tube and then covering the area with a zinc chromate primer and engine enamel. If pits occur in the tubing, additional repairs are required.

Distortion — Detecting distortion in an engine mount is difficult because no visible damage is apparent. This normally occurs during an accident, when excessive loads are transmitted to the engine mount due to the inertia of the engine. For example, the Cessna 172 is vulnerable to distortion and can normally be noticed when the cowling does not fit the engine correctly. The best way to check the alignment of an engine mount is to remove it from the plane and place it in a rigid engine-mount fixture. During normal airplane operation, distortion of an engine mount should never occur.

Repairing engine mounts

According to FAR Part 43, Appendix A, repairs to engine mounts are considered major. As such, the methods are beyond the scope of this article. I highly suggest that damaged engine mounts be sent to an FAA-approved repair station. Make sure that they have the proper weld and alignment fixtures for your particular engine mount; that they are trained, experienced and certified aircraft welders; and that they are experienced in engine-mount repairs. References are often beneficial.

One final point

When the time comes to overhaul or replace your engine(s), I highly recommend that the engine-mount assembly be sent to a competent engine-mount repair shop for inspection, an alignment check, a manufacturers service update, sandblasting, required repairs, and priming and repainting. The engine vibration isolators should be replaced, along with all engine hoses. Vibration isolators help dampen out the engine vibrations during engine operation. Through time, engine heat, oil on the rubber and engine vibration cause deterioration.

Harold A. Kosola is president of Kosola and Associates, Inc., an FAA-approved repair station. The company's address is 5601 Newton Rd., POBox 3529, Albany, GA 31707; telephone: 912-435-4119; fax: 912-888-

◆ The FAA has published a new advisory circular, AC 20-139, *Commercial Assistance During Construction of Amateur-Built Aircraft*. To obtain a copy, write to the U.S. Department of Transportation, Subsequent Distribution Office, M-483.6, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, Maryland 20785.

AvGroups Say No To AD On Crankshafts

Aviation groups, including the Aircraft Owners and Pilots Association and the National Air Transportation Association, are opposed to a proposed Airworthiness Directive that would require replacing crankshafts in some 10,000 Continental engines.

The FAA recently issued a Supplemental Notice of Proposed Rule Making adding new models to the list of Continental 360-and 520-series engines affected by the original AD. It would require replacing "airmelt" process crankshafts with those made using the vacuum arc remelt (VAR) process, a change that could cost owners anywhere between \$6,700 and \$8,150, claims NATA.

Recommended pitch and diameter propellers for 180hp Lycoming Starduster Toos. A 76-60 Sensenich propeller originally installed on a Piper Cherokee 180 in theory props out to 138 MPH. The Cherokee is cleaner than a Starduster Too and depending on how clean your airplane is and how much it weighs coupled with the actual horsepower it is making might swing it. However we recommend a 76-58. But a 76-56 would work. Also your engine should turn 2750 at sea level full throttle and at this RPM and should run about 130 MPH. Propellers can be repitched and should be to achieve these numbers.

Editor

Plans Correction Item #33 SA-300
Sheet #15 Flight Surface and Rigging
Item #33 should be AN5-20A or 5/16 x 2 bolt

SHEET NO. 15 - FLIGHT SURFACE INSTALLATION

ITEM	REQ.	DESCRIPTION
33	8	HEX HEAD BOLT AN4-20A (1/4 X 2) AN5-20A 5/16 X 2"
34	2	HEX HEAD BOLT AN4-21A (1/4 X 2 1/8)
47	4	HEX HEAD BOLT AN4-12A (1/4 X 1 1/4)
48	25	HEX LOCKNUT AN365-428 (1/4 - 28)
65	4	ROD END BEARING FAFNIR RE4F5 (1/4 X 5/16 - 24 THREAD)
66	4	CHECK NUT AN316-5 (5/16 - 24)
139	8	CASTLE NUT AN320-4 (1/4 - 28)
140	14	COTTER PIN AN380-2-2 (1/16 X 1/2)
144	4	WIRE FITTING (7/8 X 1 1/4 X .095) 4130 TUBING 4' REQUIRED
149	4	LUG - FINBRACE WIRE .070 X 2" X 1"
150	4	FIN BRACE WIRE - 1/4 STREAMLINE WITH 1/4 CLEVIS PIN & CHECKOUT
151	2	LUG - STABILIZER BRACE .070 2" X 1"
152	4	BRACE - STABILIZER (1.349 X .571 X .035) WALL STREAMLINE X 36" 1/2 X .120 X 12" 4130 TUBING
	4	FORK ENDS 5/16 X 1/4

STOLP STARDUSTER CORPORATION

4301 TWINING

RIVERSIDE, CALIFORNIA 92509

Main Tank Support Reinforcement

by Bob Wampler

I started out wanting to build a plane, but like many, I had several choices that I wanted to build. Although I lacked the basic knowledge of how to build an aircraft (outside of building radio controlled models) or anything mechanically beyond changing oil in my car, I decided this was something I would eventually do. The choices that I settled on seem to change almost as often as one would change clothing, often effected by outside influences (articles on flight tests, other's options, what was easier to build, various advice-no matter how well intended). However, I have always like biplanes, in spite of how "impractical" it was for year-round flying. When I got a chance to fly with Dave Baxter in his Starduster Too, I knew I had found my plane ! I had also found (in spite of my inexperience with metal fabrication, welding, and woodworking) that if I had started a project like this one years ago, I would be close to flying, instead of trying to still save money to buy a kit, or still decide which aircraft choice was best for me. No matter what, I was hooked.

Many skills have been learned upon the way so far, and like many builders before me, I also had a different interpretation on how thing should be done compared to the plans, since some things looked like they should be made stronger here and there. Fortunately, I was lucky to have Dave Baxter close buy to remind me that "the aircraft was designed to fly over the mountain, not through it" ! Words to live by if you want it to be light enough to fly like a Starduster should. However, I have encountered one of those rare moments where I think I can add to an already great design.

One of the things I noticed was the difference, if one was building a Starduster with a center section tank, is how much better the center section tank is secured compared to the main tank. Perhaps this is due to the effects on mass under G-loads away from the center of rotation in an aircraft, which require greater reinforcement-I do not know since my college physics was approx. 20 years ago. However, it seems the center section tank is better supported in adverse G-load (four supports on the bottom plus a glued 1/4" plywood bottom, and two support straps on top) compared to the main tank (two .040 inch 4130 angles per plans running fore and aft on each side, with one support strap on top, carrying approx. twice the weight and volume in fuel). It seems in high G-load (landing 15 feet above the runway or a crash), that the main tank supports would fail, causing the tank to be ruptured by impacting on the bungee truss and spilling fuel throughout the aircraft. My understanding from Dave is that this has occurred in some Starduster accidents.

Outside of adding an obvious second strap to hold the main tank in position, was how to better support it in adverse conditions. Dave and his son Dan had increased the size of the main tank support angles by using thicker 2024 aluminum angles for increased support. In my case, where the project I took over had the .040" 4130 angles as called for in the



The two pictures above looking aft and below looking at the left front corner at firewall are different views of the additional 5/8 x 035 4130 installed underneath the fuel tank to keep it from descending into the bungee truss or front rudder pedals during a force landing.



plans, I wanted to strengthen the supports without removing the existing ones. Ideas for various support angles to be placed at different locations were considered, but the best idea was far simpler-weld a support to the tubing that runs behind the main tank to the tubing at the firewall, using the same size tubing (5/8" x .035" 4130). This would be supporting the tank at the same height as the original supports, but be closer in to the center of the tank, which takes some of the load off the support angles (see picture). Like all tank supports, it is separated from the fuel tank by neoprene rubber. This can be retrofitted or simply added if this part of construction is not yet completed. The main tank is better supported in adversity, and the risk of fire due to fuel spewed out from impact would also be reduced. This may add possible increased structural support in this area with very little additional weight penalty.

As Rod Serling would say (from the *Twilight Zone*), "submitted for your approval".

Fly safe (and *enjoy*) !

Bob Wampler

More on Welding 4130

Many aircraft have been built using oxyacetylene torches and mild-steel rod for welding, and these aircraft are as well built as could be. In some of our previous articles we have attempted to show you what the absolute, best and purest product is. It was not our intent to say welding with mild-steel and a torch led to an unsafe condition. Many builders are still welding with mild-steel rod, and aircraft welded with mild-steel and an acetylene torch have stood the test of time for years. Torch welding is an inexpensive way to get set up to weld and also enables you to stress relieve. Electric arc welding is not used for our aircraft. TIG and MIG do work for aircraft use, but are somewhat more expensive. We don't want to give the opinion that exotic craftsmanship is needed to build airplanes or that you have to be superman to weld up a safe airframe.

Neil Sidders, EAA Technical Counselor and machinist from Monroe, LA, says that the mild-steel welding rod he uses is designated RG-45. This is a common designator that is used by many companies to make a mild-steel rod. It is a good rod for use in gas welding. If you go into your local welding shop and ask for their type RG-45 mild-steel rod, you will get a good mild-steel rod. If you use RG-60, for

instance, this is not made specifically for gas and your welds may end up a little rougher than you would like. As for cleaning the metal, polishing the tubing to a bright, shiny finish will give a good indication as to how far the cluster heat relief spreads. In plain words, it defines the heat affected zone. A blue, haze color will appear on the tubing at the point where the temperature was no greater than about 550°F. Considering that the actual welding occurs at under 3,000°F, you could use this to judge the area of stress at the weld. With TIG welding, the blue haze will be very close to the weld bead. If the weld is done with a torch (oxygen/acetylene), the blue haze will be much farther from the weld showing the strain to be spread over a larger area, or much more relieved. For this reason, Neil Sidders only TIG welds parts that are too heavy to gas weld. When the entire structure is welded, he comes back and stress relieves by raising each cluster to a dull red in still air using an acetylene torch.

My opinion from having talked to many aircraft welders is this; coming back and stress relieving after welding is still a practice recommended by many welding supply houses and welding engineers. I do it so I don't strain my wee brain with multiple tasks. First, I do all the welding, make sure it's done right, and then come back and stress relieve, and make sure that's done right. For me, it ensures that each is done thoroughly. Stress relieving relieves the locked up stresses and is sometimes called process annealing.

When using an acetylene has torch and heating 4130 for welding, you do it slowly and you retract the heat slowly after welding. Some professional welders prefer to withdraw heat very slowly to stress relieve right after welding rather than coming back and reheating the entire clusters. This works very similarly to the stress relieving mentioned above. (See Tony Bingelis' comments and opinion on this in his book *Welding*.) There are varying opinions on whether to stress relieve by coming back later or stress relieve at the time you are doing the welding. Here at EAA we had welded up a fuselage and were coming back and stress relieving when the fuselage was heard to groan and push up a ring of metal like a wedding band in the area being stress relieved. This was an obvious case where locked up stresses were relieved by coming back and reheating clusters.

By the way, I use 1/16" rod as it is closest to the thickness of the tubes I weld. How do you tell exact temperature? For a copy of the color temperature chart, information on products to use, and a copy of a color chart to tell how hot the metal is, contact Tempil™ at 2901 Hamilton Blvd., South Plainfield, NJ 07080, 908/757-8300. 4130 steel has .30% carbon and you can use this to make a line on the chart vertically to get a better idea of metal color versus temperature. The chart will also give you information on basic changes that occur in metal as it is heated which is interesting and informative. ♦



AIRCRAFT & MARINE ASSURANCE AGENCY, INC.

2200 E. Evergreen, Vancouver, Washington 98661 (360) 694-1303 (800) 466-4944 Fax (360) 694-8249

March 12, 1997

Mr. David Baxter
5725 SW McEwan Road
Lake Oswego, OR 97035

- 503-625-2497

Re: Starduster-2 N96576

Dear Mr. Baxter:

Thank you for your call concerning coverage for aircraft insurance. We appreciated your time in reviewing the necessary information. Following is our quotation:

Liability:	\$1,000,000/\$100,000	\$292.00
Physical Damage:	\$25,000	\$661.00
	< \$100 / \$500 >	
	Total:	\$953.00

Liability Only: \$336.00

If you are interested in binding this coverage, please give us a call, and we can do so over the phone.

Should you have any questions on this quote, do not hesitate to contact us on our 800 number which is 466-4944. We will be happy to review it with you. Thank you for calling us. We do hope that we can be of service, and that we might be able to extend the same courtesies and prompt attention to you that all of our clients have come to expect.

Happy and Safe Flying!!!

Viviane Hibbler
Viviane Hibbler

Editors Note : Here are some quotes and coverage for hull and liability insurance for the open cockpit, tailwheel pilot. The cost and availability depends on how much tailwheel time and how much time you have in make and model.

RANGER
INSURANCE

AIRCRAFT INSURANCE POLICY
COVERAGE IDENTIFICATION PAGE

RANGER INSURANCE COMPANY

CAPITAL STOCK COMPANY
DELAWARE CORPORATION, INCORPORATED IN 1923
ADMINISTRATIVE OFFICES: P.O. BOX 2807, HOUSTON, TEXAS 77252-2807

YOUR POLICY NUMBER SA14721

Prior Policy No. _____

ITEM 1	NAMED INSURED DAVID BAXTER
2	YOUR ADDRESS 5725 SW MCEWAN ROAD LAKE OSWEGO, OR 97035

YOUR AGENT'S NAME AND ADDRESS
AIRCRAFT & MARINE ASSURANCE COMPANY
2208 EAST EVERGREEN BOULEVARD
VANCOUVER, WA 98661-

3 POLICY PERIOD: 12:01 A.M. STANDARD TIME AT YOUR ABOVE ADDRESS FROM: 3/29/97 TO: 3/29/98
4 LOCATION OF AIRCRAFT: The aircraft will be principally based at PORTLAND-HILLSBORO A/P, PORTLAND, OR.
5 DESCRIPTION OF AIRCRAFT: You have told us that each of the aircraft below (1) has an FAA standard airworthiness certificate unless noted below*; and (2) is solely and unconditionally owned by you unless noted differently in Item 1 and/or 11 or endorsements we issue.

FAA NUMBER	YEAR, MAKE AND MODEL <small>*(Include description if not an FAA standard certificated landplane)</small>	TOTAL SEATS	AIRCRAFT PHYSICAL DAMAGE COVERAGE <small>(If no Agreed Value shown, no coverage is provided)</small>		
			AGREED VALUE	P Not in Motion DEDUCTIBLE	G In Motion DEDUCTIBLE
N96576	1989 STARDUSTER TOO (EXPERIMENTAL)	2	\$	\$	\$

6 COVERAGES AND LIMITS OF LIABILITY: The most we will pay under each coverage we provide is shown below for each aircraft (Where no amount is shown, no coverage is provided)

LIABILITY TO OTHERS	A Bodily Injury Excluding Passengers	B Passenger Bodily Injury	C Property Damage	D Single Limit Bodily Injury/Property Damage including Pass.	DL Single Limit Bodily Injury/Property Damage Limited Passengers	E Medical Expense
each person	\$	\$	\$	\$	\$ 100,000	\$ 2,500
each occurrence	\$	\$	\$	\$	\$ 1,000,000	\$ 5,000

7 PREMIUMS: Your cost for each coverage we provide is shown below. (Where no amount is shown, no coverage is provided)

COV. A	COV. B	COV. C	COV. D	COV. DL	COV. E	COV. F	COV. G	TOTAL FOR A/C
\$	\$	\$	\$	\$ 336	\$ Incl	\$	\$	\$ 336
							TOTAL PREMIUM	\$ 336

8 ENDORSEMENTS ATTACHED WHEN POLICY ISSUED NOS: FORMS: 1238 1521 1410 1512

9 THE PILOT FLYING THE AIRCRAFT: The aircraft must be operated in flight only by a person shown below, who must have a current and proper (1) medical certificate and (2) pilot certificate with necessary ratings as required by the FAA for each flight. There is no coverage under the policy if the pilot does not meet these requirements.
DAVID BAXTER.

10 THE USE OF THE AIRCRAFT: The aircraft will be used for your pleasure and business related purposes where no charge is made for such use and also will be used for the following purposes:
NO OTHER USE APPROVED.

11 ADDITIONAL INTEREST: Payment for Aircraft Physical Loss or Damage under Coverage F or G will be made to you and

NAME AND ADDRESS OF LIENHOLDER	L/I	LOAN BALANCE

Countersigned this 23 day of April, 1997

Authorized Representative
SAU 1102 (06/96)

Approved this 31 day of MARCH, 1997

SOUTHERN AVIATION INSURANCE UNDERWRITERS, INC.
AN ALLIANCE WITH
SIGNAL AVIATION UNDERWRITERS, INC.
S06265 A55170 15000 GR 106363 1 100

January 30, 1997

David C Baxter
 5725 McEwan Rd
 Lake Oswego, OR 97035

Estimated Aviation Insurance Quotation# 111193

NATIONAL would like to insure your aircraft. This is an estimated quote based on average pilot times for your type of aircraft. For an exact quote, please call us at 800-283-5519, or simply correct or fill in missing information and return this form to us in the enclosed envelope.

Aircraft Information

Reg#: 96576 Yr.: 1989 Make & Model: STARDUSTER TOO
 Seats: 2 Value: \$0 Hangared (Y/N): Y Base:
 Current Insurer: Expiration Date:

Pilot Information

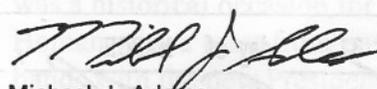
Pilot	Rating	IFR	Age	TT	MM	CSP	RGT	TW	SEA	ME
David C Baxter	P/ASEL	n	54	2000	1280	0	0	1500	0	0

Please Update:

Coverages and Premiums

			Premium
Limits of Liability:	\$100,000	each person, Including occupants	\$425.00
	\$1,000,000	property damage	
	\$1,000,000	each accident	
Aircraft Damage:	\$0	insured value, Excluding in motion	\$0.00
Deductibles:	\$0	not in motion	
	\$0	in motion	
Medical Expenses:	\$0	each person	\$0.00
		Surcharge	\$0.00
		Sales Tax	\$0.00
Total Annual Premium			\$425.00

I look forward to serving you.



Michael J. Adams
 Regional Sales Manager

AVEMCO Insurance Company

Aircraft Insurance Quotation

Quote # 19-111193

Michael Adams

March 12, 1997

Portland, OR

Lienholder Name & Address:

David C Baxter
5725 SW McEwan Rd
Lake Oswego, OR 97035

H /b/7 /7 /5 /H/10/0 /

AIRCRAFT

1989 Starduster Too FAA # 96576 Seats 2
Hangared Y Stored Loan Balance \$ 0 LECE -
Based: Portland-Hillsboro City: Portland State: OR

-PILOTS-

Rating IFR Age TT MM TW
P/ASEL N 55 1890 1400 1600

1-David C Baxter

COVERAGE

PREMIUMS

Liability Including Occupants	Per Person \$100000	Prop. Damage \$1000000	Ea. Accident \$1000000	386
Insured Value Including In Flight	\$25000	Deductibles \$200	Not In Motion \$200	In Motion 905
Medical Payments	\$0	Each Person		0
Endorsement Premium				0
State Surcharge				0.00
Municipal/County Tax				0.00
Total Premium				1291.00

MISCELLANEOUS

Named Pilots Only

Policy issuance is subject to the Company receiving fully completed and signed supplemental information form(s) attached. If the company rejects the information, days' notice of cancellation shall be provided.

LIABILITY ONLY WOULD BE \$425/YR.

ENDORSEMENTS: G1202 F7 G1027

This is an insurance quotation. It is based upon the information you supplied us and the rates currently in use.

If you desire coverage, please call 800-638-8440 to activate coverage.

F81 (11/94)

a Frenchman who knows: User fees are bad business

BY RÉMY BOUIN

A T H I S -
MONS, France — As a Cessna 172 owner and pilot flying in France, I am very interested in the debate over user fees in the United States.

France is one of the most active general aviation countries in the world, with about 10,000 aircraft and 60,000 active pilots among its 57 million citizens. The following testimony on what is happening here and in most other European countries may help U.S. citizens who are fighting users fees.

Since the end of World War II, France has gradually drifted from an aviation system that was funded entirely by taxpayers to one that is almost exclusively paid by users.

The higher costs that must be borne by the aviation community, coupled with taxpayer generosity toward other means of transportation, have had a negative impact. Let me describe how the French aviation system is financed.

DGAC is tasked with approximately the same duties as the FAA, with the exception of technical oversight of aircraft maintenance. DGAC is responsible for ensuring en route control, approach control and tower control at more than 100 airports. Its 1997 budget of \$1.4 billion is almost entirely derived from:

En route fees, which are paid by IFR-flying aircraft with max takeoff weight (MTOW) of more than 4,400 pounds. Both private and commercial operations are assessed, and the fees are based on distance flown and MTOW.

Approach control fees, which are paid by owners of private and commercial IFR aircraft with MTOW of more than 4,400 pounds flying IFR. Flights landing at airports where approach and tower control are provided are assessed a fee based on MTOW. The fund, which supports airport security, is also fed by taxes on airline tickets, pilot licensing, tiedown and hangar space at DGAC-managed airports, and avionics annuals.

Airports, most of which are run and funded by chambers of commerce, with the busiest of



Guest Opinion

them receiving subsidies from the aviation fund. Consequently, those entities are authorized to charge landing fees, lighting fees, hangar fees, handling fees, passenger fees, airport reopening fees and fuel fees.

Oversight of aircraft maintenance and airworthiness. A civil aviation safety agency known as GESAC was established some years back to check aircraft maintenance operations. That agency is authorized to establish fees that aircraft owners must pay each time it signs a paper.

A noise tax, to be paid by aircraft flying out of "busy" airports. The money goes to an environmental protection agency.

Aircraft property tax, which must be paid annually to the general fund. None of that money is invested in the aviation system. Taxes range from \$175 to \$2,650, depending on horsepower.

Fuel, one of the most-taxed items France. A gallon of 100LL currently is priced at between \$5 and \$6 per gallon, excluding fees that airports are authorized to charge. These sky-rocketing taxes go directly to the general fund and are not used for aviation purposes.

Aviation services and products, which are currently taxed at 20.6%, with proceeds going directly to the general fund, with no use for aviation.

National Weather Service, a semi-privatized agency that has a monopoly on weather information, be it for farmers or aviators. NWS draws money from the aviation fund to maintain aviation weather services. VFR pilots are charged \$2 plus 50 cents a minute to talk to a briefer. IFR users, chief contributors to the aviation fund, are not charged for weather services.

These ever-growing taxes and fees are an unbearable obstacle to the development of general aviation and air commerce in France and Europe. Aviation businesses here are heavily depressed, and pilots, flight schools, aircraft sales and air carriers are disappearing at a dangerous rate. Aviation is more and more reserved for the wealthiest people, and as a consequence it is becoming less popular among citizens.

The fact that VFR and IFR flights using aircraft with MTOW below 4,400 pounds don't pay en route and approach fees is both fortunate and unfortunate.

It's fortunate because it provides relief to a part of aviation that's overwhelmed by taxes.

It's unfortunate because no money is directed toward building and improving general aviation airports. Of the 420 public airports in France, only 30% have an instrument approach, and only 6% are accessible 24 hours.

Airlines want their fees invested only on the few airports where they fly. Moreover, our national airspace system and air-traffic-control system are increasingly designed to meet only the needs of air carriers. IFR routes don't take into account the problems of general aviation IFR flights (icing, low speed, low altitude, etc.), and radar services for VFR flights are virtually non-existent.

New regulations that will soon require B-RNAV equipment, 8.33-khz channel spacing and Mode S transponders don't take into account the burden on general aviation. Our right to fly to busy airports doesn't exist anymore, what with Class A airspace and access for single-engine aircraft prohibited.

Meteorological services are expensive for VFR pilots, and are mainly designed to meet the needs of airlines. This is certainly one of the reasons why general aviation in France has one of the worst accident rates in the world.

Because VFR and light IFR flights are not charged en route and approach fees, general aviation is little more than tolerated here. Of course, this exemption could be terminated at any time. Some airlines are not happy that GA users do not pay ATC fees. They believe that each flight, whatever the MTOW, should pay the same cost for the same distance flown because, they say, the burden on the ATC system is the same.

The implementation of ATC user fees (1972 for en route and 1990 for approach), and the fact that not a single cent of taxpayer money goes to the aviation system has had other negative side effects:

■ The bureaucracy that was implemented to establish the invoices for ATC fees is paid by the users and is extremely expensive. A system of taxes on fuel, ticket sales and freight bills is more simple and cost effective.

■ Pilots prefer to fly VFR to avoid IFR fees, which sometimes has dramatic effects.

■ VFR flight is prohibited in more and more airspace, so users are compelled to pay fees. For example, airspace above 11,500 feet in Northern France has been out of bounds to VFR flights since 1992.

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■ There is no airport-improvement program, which leads to a shortage of runways and terminals. Consequently, development of air transportation is halted by lack of airport slots.

■ Development of air taxi, regional airline, business aviation and low-cost carriers is limited because of the fees.

■ Airlines pay the same fees, no matter the

number of passengers or quantity of freight. So when times are hard, and airliner capacity is down, user fees can literally kill an operator. The ticket tax, by contrast, is fair because it is directly linked to the economic shape of the airline.

During my flight training in the United States, I discovered the extraordinary quality of the U.S. aviation system. It is probably the best in the world, and it seems that the five excise taxes financing the Airways and Aviation Trust Fund are doing an extraordinary job.

Of course, U.S. pilots do have some problems, but they are minor compared to what aviators must deal with in Europe.

I really enjoyed the U.S. aviation system, and I think it would be foolish to destroy something that works so well. The current way of funding aviation is an example that politicians in Europe would do well to emulate.

I hope that Americans understand how important it is to fight hard against proposed user fees. If implemented, you may be grounded sooner than you think.

AOPA asks pilots to rally against user fees

WASHINGTON, DC — AOPA Legislative Action has issued an alert via more than 65,000 Western Union mailgrams asking pilots in key districts to weigh in with Congress against proposed new aviation user fees.

The Clinton administration is asking for \$300 million in new user fees next year. FAA admits at least some of those fees will be imposed on general aviation. And the administration wants more than \$8 billion in user fees — FAA's entire budget — in 1999.

Aviation excise taxes, including a tax on aviation fuel and airline tickets, are the source of 70% of FAA's funding. But those taxes, according to AOPA Legislative Action, have been caught up in an ongoing, two-and-a-half year impasse

between the White House and Congress over balancing the budget. The taxes have been allowed to expire twice, and are scheduled to expire again September 31, 1997.

"If the Administration succeeds in replacing the time-tested user taxes with user fees, FAA could charge a pilot for every weather briefing, every flight plan, and every contact with air traffic control," said AOPA President Phil Boyer. "There are also plans to charge for obtaining a pilot's certificate, adding a rating, renewing a medical, and registering an aircraft.

"And that doesn't begin to cover the ways user fees could contribute to FAA's inefficiency or expand its bureaucracy. The agency could charge whatever FAA officials think they need."

Boyer said the nation's seven largest air-

lines have joined the Clinton administration in asking Congress for a new aviation tax structure. But he said those airlines really want to shift their costs to other segments of aviation and to eventually control ATC. A special House Ways and Means Committee task force is currently considering whether to change FAA's funding system. Boyer asked pilots to help build support for continuation of the current aviation excise tax system.

One pilot wrote Representative Michael Collins (R-Georgia): "I challenge the fat-cat airlines to unroll their money belts and show you that they've been damaged by the present system. There are enough things Congress needs to fix that are actually broken — but aviation funding isn't one of them."

Canadian Pilots Facing User Fees, AOPA Fighting It

AOPA is urging NAV CANADA to permanently exempt non-commercial general aviation aircraft from new air traffic control user fees.

"User fees would have a detrimental effect on general aviation safety in Canada," said AOPA president Phil Boyer. "They would discourage Canadian and U. S. pilots from using safety services such as detailed weather briefings or instrument flight plans."

AOPA was recently admitted as an Associate Member of NAV CANADA, the not-for-profit corporation which now owns and operates Canada's air navigation service. It is developing a user fee schedule for aircraft using the air traffic control system and flight service station services, and electronic navigation aids.

Speaking for its Canadian members and some 50,000 U.S. members who fly into Canada each year, AOPA said user fees would also damage the general aviation industry, ultimately depriving Canadians of important transportation and economic benefits.

"User fees will affect private aircraft owners in ways not yet considered by NAV CANADA," said Boyer in a letter to key NAV CANADA decision-makers. "In Europe, the imposition of air traffic control fees caused a serious decline in general aviation activity."

Commercial aircraft will begin paying user fees later this year. But aircraft with take-off weights below 12,500 pounds — most general aviation aircraft — will be exempt from the fees until November 1998. NAV CANADA will consult later with general aviation organizations to develop a fee schedule for aircraft under 12,500 pounds.

AOPA said the best mechanism for funding the needs of non-commercial aviation — the aviation fuel excise tax — was already in place in Canada.

Boyer said fuel taxes were efficient, fair, and easy to administer, while user fees on private aircraft would require a costly collection process.

Please write or FAX the Commission on your opposition to user fees. Also your Congressmen, Senators and Representatives.
Editor

User Fees Are Taxes

EDITOR:

I picked up my copy of the March issue of PF and read on page A22 where the Clintonistas want three hundred million dollars (\$300,000,000) — it looks worse in number form — in user fees (political correctness for *taxes*) to fund the FAA. This came immediately after I was hit with an 15 cent per gallon "user fee" on aviation fuel.

That tax is unnecessary, because since about 1992, the Department of Defense has had its budget reduced from over three hundred BILLION (\$300,000,000,000) to about two hundred BILLION (\$200,000,000,000). Why not use some of that one hundred BILLION dollars that was saved?

I am sure the Clintonistas and the congress have invested that money so that it would be available for such contingencies. Since the \$300,000,000 is only .3% of the \$100,000,000,000, it could easily be taken out of the interest that is being earned. In fact, I would like to know what happened to that \$100,000,000,000. That is real money that should be available.

Write your elected representatives and ask where that money is. These people are accountable to us, the electorate. If they cannot produce that money then let's impeach them all.

The average American pays 52% of their income to taxes. Contrary to what your government is telling you the issue is not a leaner, more efficient government, the issue is the elimination of General Aviation. If you think a "privatized FAA" will save you money, remember that the Post Office was "privatized" about 20 years ago. Have you noticed that it still takes a five cent stamp to mail a letter? Love your country but fear your government.

Dave Hall

Carlsbad, Calif.

It's worse than that, Dave. The gummint just reinstated in March the federal excise tax on avgas and so for three months the refineries have been collecting a tax that ran out on Dec. 31. Where did all THAT money go?

Educate the commission!

It doesn't take a genius to figure out that the Clinton administration had user fees in mind when it systematically stocked the National Civil Aviation Review Commission with airline-friendly members. We said it last month, and we'll say it again: This is a kangaroo court of the first order.

Any pilot who doesn't shudder about the prospect of European-style lighting fees, en route fees, approach fees, landing fees, ramp fees, noise fees, etc., should read Rémy Bouin's article in the May 16 *GANews & Flyer*. Bouin reports that a 300-mile flight from Paris to Toulouse and back in a Cessna 340 costs \$400.50 in user fees. In a 172 it's \$180.50 — not counting fuel and FBO services.

The Clinton administration, apparently resisting suggestions that the FAA first get its financial house in order, is looking at user fees as an additional funding source. And the large airlines are stumping for user fees as well, the better to drive their low-cost regional-airline competition out of business. Both parties are banking that this weighted commission will agree.

The problem from this corner is that general aviation will get swept up in this shortsighted, profit-motivated, me-first agenda. It has crippled private aviation in Europe, and it very well will do the same in the United States.

With the exception of FBO owner Linda Barker, as well as former congressmen Norman Mineta and Larry Pressler, it's unlikely that the commission has much regard for little ol' general aviation.

That's where you, dear readers, come in. If the prospect of \$180 bills (or \$400 bills) for 300-mile flights gives you the willies, you'll sit down at your keyboard, or pick up pen and paper, and politely and succinctly educate the commission on general aviation.

Tell the members about the utility of flight, the importance of having a vibrant airport in the community, and the jobs and businesses that are affected. Tell them how general aviation is a training ground for the pilots who fly the airliners in which they ride. Tell them how local airports aid communities when disasters wipe out roads. Tell them that we already pay our way every time we buy fuel. Tell them that we are their constituents too, and we fly 98% of all civil aircraft. Tell them that you just plain love to fly, and this plan that Clinton and the airlines have hatched is wrong.

Write them collectively at the National Civil Aviation Review Commission, Nassif Bldg., Rm. 8332, 400 7th St. S.W., Washington, DC 20590. *GANews & Flyer* also has acquired individual addresses, phone numbers and fax numbers. They're listed below.

NATIONAL CIVIL AVIATION REVIEW COMMISSION

Charles M. Barclay, President, American Association of Airport Executives, 4212 King St., Alexandria, VA 22302; phone: 703-824-0504; fax: 703-820-1395.

Mayor Bill Campbell, City Hall, 55 Trinity Ave. S.W., Atlanta, GA 30335; phone: 404-330-6100; fax: 404-658-6158.

Robert A. Davis, Corporate Vice President of Engineering and Technology, The Boeing Co., POBox 3707, MS 13-35, Seattle, WA 98124-2207; phone: 206-655-4488; fax: 206-655-5981.

Sylvia A. de Leon, Partner, Akin, Gump, Strauss, Hauer & Feld, 1333 New Hampshire Ave. N.W., Ste. 400, Washington, DC 20036; phone: 202-887-4016; fax: 202-955-4597.

Robert H. Frenzel, Vice President, United Parcel Service, 316 Pennsylvania Ave. S.E., Washington, DC 20003; phone: 202-675-4240; fax: 202-675-4256.

Mary Kay Hanke, International Vice President, Association of Flight Attendants, 2129 Florida Ave. N.W., Washington, DC 20008; phone: 202-328-5882; fax: 202-328-5424.

Richard B. Hirst, Senior Vice President of Corporate Affairs, Northwest Airlines, Dept. A1100, 2700 Lone Oak Pkwy., Eagan, MN 55121; phone: 612-727-4777; fax: 612-726-0618.

Stephen H. Kaplan, Partner, Cutler & Stanfield, L.L.P., 1675 Broadway, Ste. 2360; Denver, CO 80220; phone: 303-825-7000; fax: 303-825-7005.

Michael L. Lexton, Managing Director, Lehman Brothers, Three World Financial Center, 20th Floor, New York, NY 10285; phone: 212-526-3337; fax: 212-526-3738.

Frederick D. McClure, Senior Vice President, Public Strategies, Inc., 200 Crescent Court, Ste. 1065, Dallas, TX 75201; phone: 214-871-3400; fax: 214-871-3401.

Norman Y. Mineta, Senior Vice President and Managing Director, Lockheed Martin IMS, Transportation Systems and Services, 1200 K St. N.W., Washington, DC 20005; phone: 202-414-3500; fax: 202-289-4880.

Carol O'Clairacain, Visiting Fellow, The Brookings Institution, 315 W. 106th St., Apt. 5B, New York, NY 10025; phone: 212-866-7663; fax: 212-866-6526.

Revis O. Ortique Jr., State Supreme Court Justice (Retired), Airport Board Chairman, New Orleans Airport, 10 Park Island Dr., New Orleans, LA 70122; phone: 504-288-1221; fax: 504-581-5983.

Linda Barker, 3501 Aviation Ave., Joe Foss Field, Sioux Falls, SD 57104-0197; phone: 605-

336-8099; fax: 605-336-8009.

William Bacon, Executive Director, Rapid City Regional Airport, 4550 Terminal Rd., Ste. 102, Rapid City, SD 57701; phone: 605-394-4195; fax: 605-394-6190.

John O'Brien, Director of Engineering and Air Safety, Air Line Pilots Association, 535 Herndon Pkwy., POBox 1169, Herndon, VA 20172-1169; phone: 703-689-4200; fax: 703-689-4370.

Leonard L. Griggs Jr., Director, Lambert-St. Louis International Airport, POBox 10212, St. Louis, MO 63145; phone: 314-426-8020; fax: 314-426-5733.

D. Scott Yohe, Vice President of Government Affairs, Delta Air Lines, 1629 K St., Ste. 501, Washington, DC 20006; phone: 202-296-6464; fax: 202-466-2610.

John O'Connor, President, Day and Zimmerman Infrastructure, 1818 Market St., Philadelphia, PA 19103; phone: 215-656-2718; fax: 215-656-2750.

Larry Pressler, 1050 Connecticut Ave. N.W., Ste. 1250, Washington, DC 20036; phone: 202-887-0981; fax: 202-293-4693.

Richard E. Smith, Executive Director, Golden Triangle Regional Airport, 2080 Airport Rd., Columbus, MS 39701; phone: 601-329-1653; fax: 601-327-6687.

Are We Watching The Death Of Gen. Av.?

As a follow-up to our February feature on what is being done to try to save General Aviation, these statistics from AOPA's recently published 1997 Aviation Fact Card illustrate how dire the situation is.

With both the pilot population and number of aircraft in steady decline, it's no wonder the number of hours flown by GA pilots is down 6.7 million hours in the past five years alone. Only when it comes to accident statistics and the number of aircraft landing facilities do the totals offer any hope.

Ironically, while there are fewer planes and pilots, there are more places to fly. And while there may be fewer people flying, those who are left are flying more safely.

	1985	1990	1995	%+-
Pilot certificates held	709,540	702,659	639,184	-9.9
Active GA aircraft	196,500	188,000	181,341	-7.7
GA aircraft shipments	2,029	1,144	1,077	-45.9
Landing facilities	16,319	17,480	18,224	+11.7
Public-use landing facil.	5,856	5,589	5,415	-7.5
GA hr flown (millions)	31.5	32.1	25.4	-19.4
GA accidents	2,739	2,215	2,052	-25.1
GA fatal accidents	496	442	408	-18.1
GA fatalities	955	765	733	-23.2

National Biplane Fly-in, 1997:

This was my first trip to the National Biplane Fly-in, even though I had wanted to go since the inception. This year it was a must because Starduster was to speak at a Forum and I was it. Wednesday June 4th at 2:30 p.m. Super Starduster 9116Y (DAWN) and I left Byron California and hopped 12.4 nautical miles to Tracy for Fuel. Next stop was Barstow/Dagett 2 hours and 5 minutes later. The final stop of the day was Holbrook Arizona after 2 hours and 25 minutes. It was dark by the time I arrived. Early a.m. found us headed towards Las Vegas New Mexico, then to Woodward Oklahoma. The last stop of the Day was Bartlesville. Just in time to get checked in, and make dinner with a room full of Biplane people. Met Kelly Viets, Roscoe Morten, Paul Poberenzy and Charles Harris.

Friday was Dedication of Memorial Plaza and the Library. Watched Biplanes arrive. Friday evening there was an event at the food Tent, "State of the Biplane Nation". Some experts were to speak and Charles said I should be there. Maybe he thought I would not want to listen in on what these experts had to say. As I walked up Charles waved me over and pointed out a chair I was to occupy on the makeshift stage. Boy I could sure listen from there. I noticed there was a microphone in front of me and Hale Wallace (Skybolt) was on my left and Phil Colson (president of the Waco club) was on my right. Something didn't look right here, I could listen just fine from out in the audience. I asked Charles about this and was informed I was one of the experts and would be talking about Starduster. Talk about not being prepared. I told him if he let others go first I would not panic and run for the hanger. When it was my turn I talked briefly about Starduster and what is taking place and where we are headed for. When I finished they make some noise and did not try to lynch me so I guess it was ok.

I had heard how bad the weather was, well this years weather was the best ever. Clear and calm, couldn't have been better. Saturday found a total of eight Starduster Aircraft on the field. Four Starduster Too's, Three Starduster One's and a Super Starduster. I talked to Don Smith with a Starduster Too, Tom Terhune with a Starduster One, Gary Denning who is building a round engine Starduster Too, Gary Chamberlin with a Starduster One and Tony Simcic who has built a 1/4 scale Starduster Too which looks like Richard Miles Starduster. Tony is thinking about building the full scale version next. Being new at this type of thing I hope those people who I did not get to spend time with will forgive me and maybe we can make up for it next year in Bartlesville. The Forum was at noon and we had 10 people in attendance. Interested in Stardusters all, so the forum was easy for my first.

Saturday evening at the Awards presentation I received the award for furthest distance flown and when I picked up the award Charles introduced me to the audience and talked about what Dave and I are trying to do for Starduster. Lots of applause and after the banquet I was surrounded by people interested in Starduster. Lots more comments on the way to the hotel and at breakfast on Sunday morning.

Sunday I flew up to Fort Scott Kansas and Visited Relatives. Monday morning the weather had deteriorated and fog was the order of the day. My 7:00 p.m. leave

became 10:30 p.m. Fort Scott to Hays Kansas, then to Sidney Nebraska, a spot of lunch, then to Rawlins, Wyoming. Next stop was Brigham City, just north of Salt Lake. Arrived just in time to fill up before everyone left for the day. Last stop of the day was Battle Mountain Nevada. Between Brigham City and Battle Mountain there were thunderstorms to be dodged and rain to fly through, lighting in the distance and generally good flying. Overnighted in Battle Mountain. I can highly recommend this stop. Darrel and Carla who run the FBO are the greatest people. They took me in to the hotel and picked me up the next morning. One of the best airports I have had the experience to fly into. Tuesday morning, Byron California was 2 hours and 15 minutes later, head wind all the way. Final touch down and ready to clean DAWN up and do it again to Oskosh/Wautoma. SEE YOU THERE.

Dave may have placed this elsewhere in the magazine but I will repeat it here. We are looking for pictures to place in our new catalog of Starduster Aircraft. They need to be high contrast pictures with the best being in the air. If you have some please send us copies. We need pictures of all the different Starduster Aircraft types.

We are going to be putting together a promotional video at Wautoma, during the Oshkosh week, and are looking for at least one each of the Starduster Aircraft to use in the Video. These aircraft include Starduster Too, Acroduster Too, V-Star, Starlet, Starduster One, and Super Starduster. Thank You very much and see you in Wautoma and or Oshkosh.

Les Homan and Starduster 9116Y (DAWN). By the way DAWN is, as in, "early morning dawn", not my wife's name, her name is Mary and she is nice enough to let me play with Dawn.

Just to fill up the rest of the page:

This will be the 5th year anniversary at Wautoma. The last year Stardusters flew into Oshkosh there were a total of 3 Stardusters on the entire field. Bill Clouse had talked to several people and they expressed disinterest in flying into Oshkosh. From my experience Oshkosh was not the most friendly atmosphere for taking a person for a ride who was building a Starduster but had never ridden in one. Bill drew a circle around Oshkosh and looked for airports to use for the Stardusters. Wautoma was the place. We have had between 18 and 22 airplanes ever since. The local people are very friendly and flying is like it should be. There is a long concrete strip and a grass strip. We have the Starduster Dinner on Sunday Evening, this year at Peck's Plantation. This aviation gathering has the feel of days gone by with a large dose of barnstorming. Taking off on that grass strip with a passenger up front, someone on their first flight, someone reliving memories long gone by or someone with the thrill of finally getting to fly in the same type of aircraft they have been working on for so long. This is about as close to barnstorming as we get in the latter part of this century.

Happy Flying.

Les Homan The Prez.

David Baxter
5725 S.W. Mc Ewan Rd.
Lake Oswego, OR 97035

Dave,

5-8-97

I thought that I would write you a letter saying that we had a great time at the fly-in at Oroville (hope I spelled that correctly) last week. I took my 9 year old daughter with me in my C172 as we flew up from San Diego . This was her first time at an event like this and she had a great time. Special thanks to all of you, and all of the people of EAA #1112 Oroville for making this a great success . It was especially nice to see most all the Starduster pilots taking time to answer questions and to give rides to other young pilots coming up the ranks a ride or two, sharing information, and of coarse, telling of a few tall tales.

Congratulation to you and Les in your new positions at Starduster. I hope all goes well for you both. This was my first time meeting both of you, and for you not knowing me either, Les was very knowledgeable and was eager to answer my questions about my Starduster.

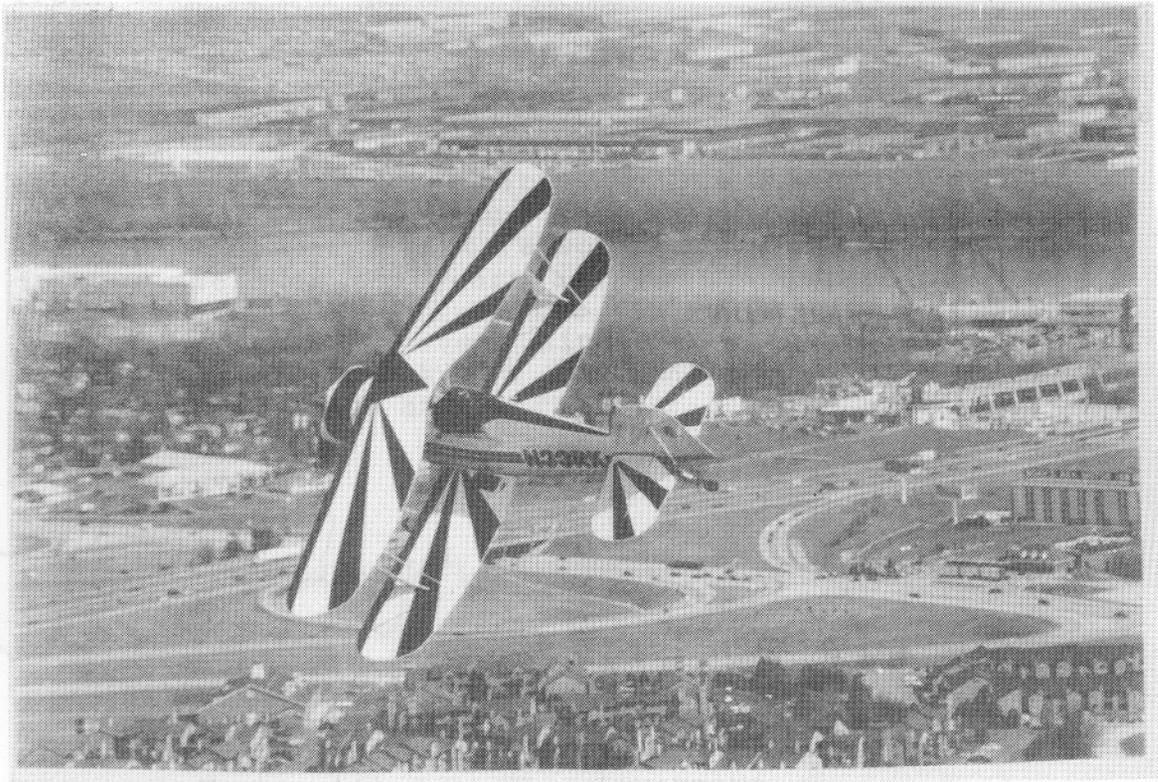
I have, sort of, accuired a Starduster Too project. It is a 1974 model with no motor. It was flying up to about 4 years ago. I have tested the fabric, and although it tests O.K., I have still stripped all fabric off to inspect welds and wood,etc.. besides all that, the surfaces have at least 3 coats of paint. (the last coat looked like someone painted it on a dirt strip.) terrible! it's a shame to see a nice Bi-Plane with a bad paint job. Any way, I hope to have it all together and flying soon. I am looking for a 540 with cs prop, run out preferably, so if you hear of anyone...

Again, thanks for all your hospitality, keep up the good work.

Ron Sawyers
N74RL
3752 Alta Loma Dr.
Jamul, Ca. 91935
619 444-6811



Roger Moores N33RK Above and Below
Letter on next page.

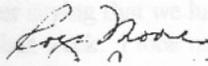


Dear Dave,

Please find both airborne and ground shots of 33RK enclosed. The aircraft is a delight to fly. With an empty weight of under 800#, a 180 H.P. engine and the Acroduster four ailion wing the aircraft performs very well. I had an interesting experience with it last September, while doing a closed pattern around the EAA picnic I had the engine loose about 80% power due to fuel starvation. (I had full tanks).

I reengineered the fuel system and have no further problems.

Hope to see everyone in September.



Roger Moore
1635 Peppaviea CA
Wildwood, MO 63005

Hi Dave,

Enclosed is a tape of the 97 Oroville open house. Since the banquette this year had such significance, we thought you might like a copy.

As always it was a great weekend. Howard, Karolyn and company always do a great job.

Jane and I had a great flight up with John Warwick and John Renquist. John Warwick and I made the return flight with Larry Ryberg on our wing.

Look forward to seeing you at Flabob in June.

Regards and best to family,

Kenny & Jane Ware

10181 Halava

Hunington Bch. CA

92646-2901

Dear Dave,

Thank you again for the copy of the great magazine. N27ED is beautiful (however its not that pretty now- needs a lot of TLC to look the like that again)

I've decided not to buy N27ED at this time, but definitely will be getting a Starduster II in the next year or so, possibly an incomplete project or even a finished one.

My friend and I visited Ken Moir at Van Saut airport in P.A last Sunday to see his Starduster II, and we were very impressed with the plane. It is a really a classic looking Bi-plane and Ken obviously enjoys flying it a lot.

Unfortunately the weather was very bad and we didn't get to see the plane fly, but hopefully we will soon. Thanks again and I'll be in touch with you.

Sincerely

Ralph DeGrootd

31661 Well Bottom Rd.

Galena, MD 21635

(410) 648-5098

2941 N. Rio Verde Dr.
Tucson, AZ 85715

May 11, 1997

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

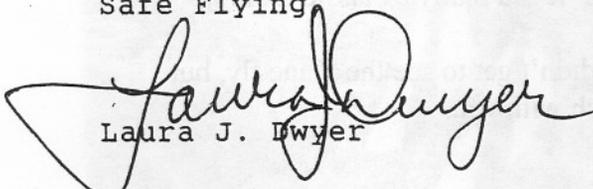
Dear Dave,

As you requested, attached is a copy of the toast from the fly-in banquet. Mind you, I dashed the thing off in my hotel room two hours before the banquet so iambic pentameter and proper rhyme are severely lacking. It did, however, come from the heart. My intention was to honor Bill at his "sawadi" as El Presidente and to acknowledge all the folks who have supported him and the company over the years.

The energy fueling our Starduster dream is renewed every quarter when Bob gets his issue of Starduster Magazine. He usually doesn't read it right away, but waits until he gets settled in to read it all at once relishing it like a fine cigar or vintage port. You may not remember your early conversations with Bob before he started our Starduster Too project, but I do. He was like a little kid approaching the sand lot in a new neighborhood dying to be let in to the front door of his dream. You and your family, Bill and Miss Brenda, the Homans, Good Samaritan Pilots like Larry Rydberg and many others not only invited us both to play, you all made sure we felt included in the Starduster family from the get go.

Your commitment and dedication to Starduster is evident not only through the enormous responsibility you've taken on with the company, but also through your writing and involvement over the years and in the degree to which you and Donna and the rest of the Clan Baxter have contributed to every Starduster event since we've participated in the last 8 years. Thank you for continuing to generate the Starduster heritage and spirit.

Safe Flying


Laura J. Dwyer

cc: Bill Clouse, c/o Starduster Corp., 4301 Twining,
Riverside, CA 92509

Les Homan, 149 Ruby Ct., Livermore, CA 94550

TOAST

May 3, 1997

In the Starduster world there are banks and banks
Of people to whom we owe many thanks.

There's Stolp and Osbourne and Hank and Old Sam,
The writing and history from Dave Baxter's clan,

There's the Flabob aerodrome and the denizens therein
Who helped set the standard for successful fly-ins,

There's the flyers, builders, dreamers, owners and Homans
And the EAA chapters who are primary donors,

There are the singers and crooners and songwriters like Larry
And the backbone support like Donna and Mary.
In some shape or form we're all given our due.

But the really big thanks, muchas gracias, vielen dankes are due
To El Presidente, Bill Clouse, and Miss Brenda too!

We won't say goodbye as you go off on your ride,
'Cause if you left now, Les and Dave'd c'mit suicide!

Instead we'll just say we owe you, Bill, thanks much
And as long as we're flyin', you'll always be in touch.

By Laura J. Dwyer

June 22, 1997

Dear Dave --

In rapid sequence, I've just been triple whammied! And I thought you might like to know....

After too long a time, I've recently been reinvigorated with the need for another Starduster! Twice, I owned a marvelous mistress I called Twenty Three Skidoo. The FAA called it N-1923-S but, as you know, they have limited imagination. I sold the airplane about ten years ago and did not know of its recent history. Then, last week, I called the Starduster Corp to have my magazine subscription renewed. I was flipping through the April issue when I was struck by seeing an old half-forgotten poem of mine in print on page 20.....first whammy! Then, second whammy came when I read pages 18 and 19 and discovered my Skidoo again! It had recently been purchased by H. Clay Gorton, in Bountiful, Utah.

So I called Clay to talk with him about the awesome beast and received the third whammy....Skidoo had been wrecked, totalled, in an April landing accident (with no pilot injuries, thank goodness).

Now what do I do? How do I say good-bye to something that has meant so much to me, after a quarter century of deep affection? I feel compelled. I think I must....I must go to Utah and, quietly, with the broken Skidoo, relive the grandest moments I have had in nearly 74 years of life. Once more, we'll be young again and in our mutual memories, with mutual respect, we'll race the wind past mountain tops and tie the clouds together with silver threads of music.

And then, who knows? Maybe Skidoo will come home with me, to rest and dream in a warm, dry hangar until I am gone.....

The fourth whammy? Maybe so, for dreams are not new to that airplane. In 1973, I wrote my impressions of our early dreams, our fantasies, our fears, our heartache, and joy, when Skidoo was fresh, and I was fifty. That tumble of words are enclosed, if you want to share them with other Starduster lovers who have dreams, and memories, of their own.....

Cordially,

Verne Reynolds

L. L. (Verne) Reynolds
1609 East Broadway
Mount Vernon, Washington 98274

STARDUSTER HISTORY N1923S - SKIDO By Vern Reynolds

COME -- FLY WITH ME....

AND LET TOMORROW WAIT....

Nineteen Twenty Three. Skidoo. Echoes of yesterday! They shimmer and echo of black beaded dresses cut high above the knee; close cropped boyish bobs swept up tight against the cheek; spots of rouge, and garters, and bathtub gin. Something in the phrase calls up firting laughter and the tinkle of some nearly forgotten piano. But the memories are smudged.

Once upon a yesterday, when the children of 1923 were young, a crush of youth flocked to air fields in this country, determined they would learn to fly. Determined they would outfly their German heritage, and cleanse the Pacific of its threat. I was one of them, and in the smudge of memory I still see me standing there, a gawking silhouette, watching those magnificent patient Stearmans cough, and float, and dance at landing time, a slow, wing-bending pirouette. And in the smudge, still I feel the jolt of an inverted seatbelt while toes stretch for rudder pedals just beyond their reach. And I remember helmets, and goggles, and parachutes, and lies we told our girls on Saturday night of our precision daring-do last Friday.

Other men went on to win the war. I went on to chase my own identity through a quarter century of trial and error, shackled to the earth. Then, one day, in a giant leap from friendly pastureland, again I flew, in modern, quiet comfort, with cabin heat and yokes and flaps, and buttons everywhere to make the task of flying commonplace. Oh, to be sure, the joy of earth and sky, and the silver lace of clouds were there, but somewhere in the smudge, I kept remembering that open cockpit, when the wind whipped cold and crisp across my cheek. Something in me yearned for yesterday's simplicity. It beckoned me and flirted with me. And then it happened.

All at once it happened. Unable, because of the limitations on my talent and my time, to build, I had searched and peeked through hangar doors until it happened.

And the happening was 23 Skidoo.

Unimpressed at first, even though the builder had marvelously executed Stolp's experimental design, still there were things I

wanted changed. I wanted cockpit lines re-cut, a cleaner shape for cowl and leggings, a new paint scheme, a new N-Number to identify my special whim.

So, through metalwork, and paint, and registration, Starduster Too 23 Skidoo was born..N 1923 S...mingled with memories of the Charleston, Kay Kayser, and N3N, with bright new metal and Seconite to supplant the tortured welds of yesterday.

As ink dried on my final payment check, and Skidoo rolled from its hanger for that first checkout flight, I knew full well the paradox of buyer's remorse and owner's joy. But the pain of that paradox was short lived.

In anticipation of this strange new mistress, I had flown Citabrias...the only way I could build taildragger time again, but I was to learn that Citabrias and Stardusters have too few things in common. And now, with me strapped securely in the back cockpit, where the final authority is kept, my well-meaning teacher occupying the front...it is time. Too inexperienced to estimate what problems might follow, too rusty with prop pitch and manifold readings, too much pressure to solo from a narrow downhill runway in quiet air with 100-degree temperatures. With too much anxiety, and hope, and fear, and smudge, I began my checkout flight.

My Pilot in Command had a Starduster of his own. Experienced. He knew Skidoo, had flown most of its lifetime hours, but was casually unprepared for what happened on our second landing, when tailsprings flew off during the bounce and rollout! We both knew the other pilot was well able to control the misdemeanor. Of course, I waited for his correction..nothing! Of course he waited for mine... nothing! I jabbed full right rudder..nothing! I stretched to reach the toe brake beyond my full right rudder...nothing! Still a violent, curving left turn toward the ditch! Finally...finally...finally... my mentor slammed on the brakes! We skidded sideways to a stop. But with his abrasive attempts to realign Skidoo back on the runway proper, we blew a tire, split the wheel fairing, lost a legging, damaged the tail wheelbrace. Oh, the anguish..the unspoken questions... the helpless impotence of not knowing how to react to a frightened, first time love. The fears that go with failure...

More time. More money. More remorse. But then, the final bolt was tightened. 1923S flew to Santa Monica for a more systematic checkout.

An uneasy hour in the air, and it was time again for me to fly Skidoo alone.

This checkout pilot, an ancient, confident, and crinkled man, pried himself from the maw of my front cockpit, tied seatbelt and shoulder straps together, and in spite of my earnest protests, walked away.

I taxied Skidoo to the end of the strip, wiped sweaty palms against my sweaty thighs, and waited for tower clearance.

Maybe I should taxi back to the hangar. Maybe I could say the wind changed, or the aelieron felt loose, or I had developed a cramp in my left big toe, or that I had a strange ringing in my ear. "Two three Sierra, cleared for take-off."

Dumb. I had waited too long. Now I had to go. I lined up with the centerline, swallowed my viscera back into place, held the stick all the way forward and, knowing it was time, slowly pushed the throttle to its deepest thrust.

Steady with the nose now...a little more right rudder...hold it steady...straight ahead...that's it...the tail is up...oops! Not too much...there, back again...and better...now...easy...back on the stick...and then the smudge was gone! The ground fell away, and sky rushed between the runway and 23 Skidoo!

Alone...the two of us...Skidoo and me...slashing our way upward with each propellor bite through the haze of Los Angeles, gaining altitude. Drop the nose now..hold it...85...that's good... crosswind turn already? Bank it...hold it steady...keep the climb... and now...downwind at altitude. Ease back the throttle now..back some more...that's about right...18 inches, 100 miles an hour, speeding downwind and opposite the tower.

"Two Three Sierra, number 3 to land."

Number three? Gawd! What if I miss the airport? What if I can't find the other traffic? What if I come in too high, too low, too hot, too slow? What if I bend the wing or break a wheel? Maybe, maybe if I just keep on flying straight ahead, downwind, and never return, I'll never have to land, never have to know. But there's my traffic, now well set up on final, time for me to turn. Ease off the throttle...bank...keep the nose down...not too slow... that's it...stabilize at 90...just a bit. The base looks good, now bank again, and there's the runway straight ahead. Picking up

too much speed, so raise the nose...now the runway disappears!
I know it's down there somewhere straight ahead, but flying from
the back, that long cowl hides everything. Tip it over just a bit...
a gentle slip. Ah, there it is...looks good! Just add a teensy
bit more power now, make sure we've got the numbers made. Looks
good now, kill the throttle, round out the slip...oops! Picked up
too much speed! That's it..that's the right height...now, flare!
Oops! Too much stick! Drop the nose again. Now, flare..hold it
back...you're flaring high, Dummy, but it's settling. Hang on. Here
it comes. Right now! Oops! Where's the ground?!!! WHERE IS...
thrrrrrrrrrrump...THAT'S IT! We're down! Now hold it steady, no
ground loop...keep the stick back...are we going straight?!! I
CAN'T TELL! I CAN'T SEE! I can't tell if we're going parallel to
the line over there! Or if we're angling toward it! Or away!
A little more brake. Slow it up. That's it! It's slower now! Angle
off between the lights. Between the lights, now, not over them!
Watch it...ten miles an hour...five...two...one...a little more brake,
and now it's stopped....

We did it! Just erased 27 years of smudge! The shiver in
my kneecaps and my pounding pulse testify that the smudge is gone.
We did it! We flew! We really did it! We made it work, Skidoo!

That was 200 wondrous hours ago. Two hundred hours of poetry
and song, of learning to respond, developing the touch that lovers
touch, of greeting one another gently, of sharing in the awe when
she first steps up into that front cockpit and tightens straps and
feels the wonder of it all. Two hundred endless hours filled to
overflow.

For two hundred marvelous hours, I have chased the arc of my
propellor and caught the glint of sunset in the crinkle of my eye,
have felt the stinging cold of winter's bite and the rushing warmth
of sun above the temperature inversion of our valley. I have
wheeled and swung and dipped, played leapfrog with the clouds,
raced past the craggy tops of mountains, chased the shadow of Skidoo
across the comfort quilt of pastures and of cropland down below,
wagged friendly waggles at the surfers waiting for their wave,
raced for blue holes within the overcast, looped and snapped and rolled
and screamed down to strafe old friends and innocent cattle, shared

STARDUSTER OPEN HOUSE MAY 1997 OROVILLE CALIFORNIA

Well our usual trip south was warm and uneventful with a stop at Medford Oregon, South past Mt. Shasta and over Redding California. From Redding we could see Sutter Buttes. Almost 60 miles away our landing at Oroville California was well after dark. The next day we were on to the Bay Area to visit our Daughter and Grand Kids.

I was also able to visit with George Haggerman at Livermore California to see how he was coming along with his Starduster Too project. On Wednesday April 30th we found ourselves in Byron for an overnight stay at the home of Les Homan. Plus ideas about Starduster Corp. The next day Thursday May 1st we departed for Oroville over Travis Air Force Base and the Nut Tree, around Yolo Co. where parachuting was in progress, then onto the Buttes about 10 miles South of the Buttes a very peculiar smell occurred like a dead bird on top of a hot engine. Later on the ground after landing it was discovered that the large outlet exhaust pipe out of my muffler had broken almost the entire distance around the pipe and the smell was coming from the super heated red silicone scat tube that went from the heat muff to the air box. I took the airplane apart that evening and repaired it at Aero Specialties (Now run by Elizabeth Bales, as Dix Mackey her partner and former EAA Chapter 1112 President had passed away earlier this year due to Cancer). I certainly appreciated the use of her shop; tools and tig welder. I finally got the airplane back together by mid morning on Friday.

More arrivals, some formation flying for the local cable TV Channel with their normal accuracy in reporting, called us the *SKYDUSTERS!* By late afternoon we had quite a group and headed for Bidwell Marina for the House Boat Trip and later for the Cowboy cookout. Again we had quite a turnout. Great food and conversation with Starduster people, EAA people and some hungry locals. It was a tremendous success.

Early the next morning we found ourselves departing for our second DAWN PATROL to Willows. Again, an uneventful flight with great food, stimulating conversation and a great flight over and back. On Our way back John Renquist flew on my right wing in some of the tightest formation flying I have ever been in. Boy is he good! When we made our pass over the Oroville Airport we looked like one Airplane before the break to downwind.

By the way it is now required that you attend an FAA information seminar on formation flying before you fly formation again. This must be due to a number of accidents that have recently occurred. Make no mistake, Formation flying is demanding and all parties should be briefed as to where and what is expected of them. I didn't give as many rides this year. But one of the last ones I gave was to a twelve year old CAP cadet, and out over the lake on the intercom he said to me, "Flying the Starduster Too is the most fun I have ever had in my life!". Boy, a comment like that really makes your day.

At the awards banquet that evening a number of special events were about to occur, as this was a historical occasion for Starduster. The command of the company was passed to Les and Mary Homan with a toast from past President Bill Clouse. Your Editor and new Managing Partner shook hands with the new President and announced that this would be the new team, and that we would be eventually moving the company to Oroville Airport in Northern California Another wonderful toast to this special occasion

John Renquist in N8331A flying formation with your editor returning from Dawn Patrol Breakfast, Willows, CA.



Cowboy Cookout at Bidwell Marina, after houseboat tour. The people attending. At left



The cook attending
The food at right



Left to Right
Les Homan, Bill Clouse,
Dave Baxter and Laura and
Bob Dwyer.



Left to Right
Harvey Newman, Hank
Schmel and Lou Hagle
Entertainers.

Glen and Loretta Olsen
from Salt Lake City.



was given by Laura Dwyer letter and toast elsewhere in this Issue.

Much has changed since I was an employee of Stolp Aircraft. Lou Stolp incorporated the business as Stolp Starduster Corp. and took the company into the early 1970's. Jim Osborne added the Acroduster One and Too which advanced the company into the 1980's. Each of these past owners faced different challenges at different times. Les and I on the other hand want to take the company well past the turn of the Century. Our goals are much the same as the previous owners, we have a business plan that is more ambitious than in the past. The company has been in business for over thirty years and we think that there is still a slice of the homebuilt market that is still available to us. A large number of people have returned to open cockpit flying; Many of them have discovered that flying to Chicago non-stop at over 250 miles per hour is not where the fun is at. Les and I don't expect to make a fortune, and certainly not off the backs of our customers. We don't want to move to far, to fast. Some low key advertising making our presence known at the major fly-ins is part of the growth plan we have developed for the corporation. Part of the agreement of the changes within Starduster was that Bill Clouse will remain on staff as a consultant for as long as he wishes. We also want to thank him for the great job he has done and mostly by himself. I myself would like to see more Stardusters in the air and more people flying their Stardusters as well as hoping to see fewer accidents I look forward to helping you folks complete your airplanes and see them at the major fly-ins around the country. We ask for your support and patience during the transition.

With all the speech making out of the way, Les presented the awards for the open house May, 1997:

Grand Champion- Was Harvey Newman, Starduster Too N5317Q. He also received a quilt of colorful Stardusters made and presented by Lori Berg... Harv also noticed all the Bob's at his banquet table and had them all stand up.

First Place- Went to John Renquist for his beautiful Starduster Too N8331A

Second Place- Was awarded to Bob Pisani for his beautiful Starduster Too N7989.

Third Place- Was awarded to Patty and Maynard Ingalls for their beautiful Starduster Too N38PM. This Airplane was reserve Grand Champion at Oshkosh in 1980 and 1983. They also flew this airplane to the Bahama Islands.

Longest Distance- Was awarded to Larry Rydberg from Albuquerque, New Mexico. A trip of around 900 nautical miles one way and this is his second year of attendance.

True Grit Award- Went to Hank Schmel for his continued help and support of Starduster Corp. When he could be working on his own Starduster Too.

The Pamper Award- Went to Mike Mattel, Mike is from Bend, Oregon and has had a real problem with to much coffee and long flights. This award was for the numerous times he was unable to wait until the next stop. So keep your distance from his flight suit especially after he lands.



GRAND CHAMPION
Starduster Too N5317Q
Harvey Newman - Walnut, CA



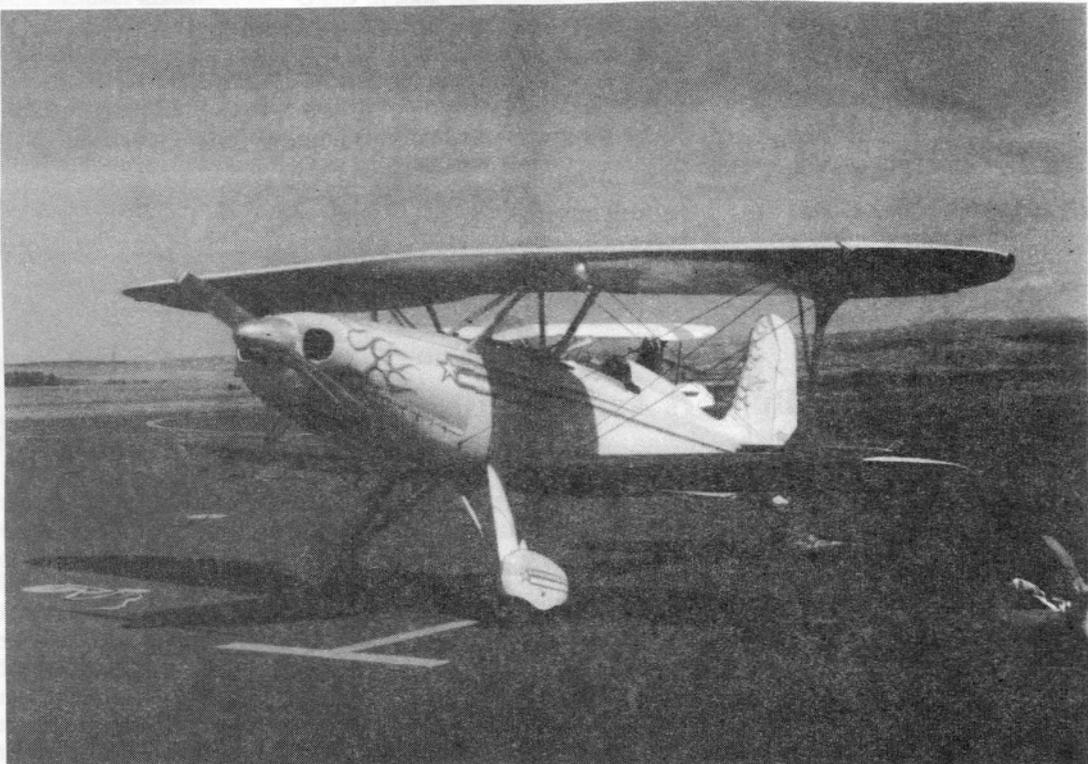
FIRST PLACE
Starduster Too N8331A
John Renquist - Temecula, CA



SECOND PLACE
Starduster Too N7989
Bob Pisani - San Mateo, CA



THIRD PLACE
Starduster Too N38PM
Maynard & Patty Ingalls - Dayton, NV



Starduster Too N530LR
Larry Rydberg - Albuquerque, NM
-Longest distance travelled to Oroville -

The Dinner, the friendship and of course the host EAA Chapter #1112 and all it's members at Oroville, California, City of Gold. We certainly want to thank Howard and Karolyn Fairbanks for their efforts in making this event such an enjoyable one. The only complaint I can think of is that this event wasn't long enough.

On Sunday Morning a few more rides were given, we packed and fueled the airplanes up for the long trip home. Donna and I were in N96526 and Hap Schnase and my son Dan in N26AH. Our trip home included stops at Medford and Salem Oregon and was relatively uneventful.

See you at the next Fly-In
Editor: DCB

Aircraft In Attendance at Oroville 1997

N2ED	Acroduster Too	John Warwick	San Diego, CA.
N26AH	Range Duster Too	Hap Schnase	Scappoose, OR.
N26EB	Starduster Too	Bill Hartman	Yuba City, CA.
N34LG	Acroduster Too	Glen Olsen	Sandy, UT.
N38 PM	Starduster Too	Maynard Ingalls	Dayton, NV.
N53T	Starduster Too	Kelly Scott	Reno, NV.
N94TM	Starduster Too	Tom Morris	Martinez, CA.
N102E	Starduster Too	Don Harrell	Brownsville, CA.
N311JK	Starduster Too	Kenny Ware	Huntington Beach, CA.
N490B	Starduster Too	Oscar Bayer	Arroyo Grande, CA.
N530LR	Starduster Too	Larry Rydberg	Albuquerque, NM.
N5317Q	Starduster Too	Harv Newman	Walnut, CA.
N7989	Starduster Too	Bob Pisanani	San Mateo, CA.
N8121B	Acroduster Too	Mike Mattei	Bend, OR.
N8331A	Starduster Too	John Renquist	Temecula, CA.
N91164	Super Starduster One	Les Homan	Byron, CA.
N96526	Starduster Too	Dave Baxter	Lake Oswego, OR.

Other Builders And Enthusiasts In Attendance

N000	Starduster Too Builder	Hank Schmel	Riverside, CA.
N000	Acroduster Too Builder	Lee McGee	Fremont, CA.
N000	Starduster Too Builder	Ron Sawyer	Jamul, CA.
N337JB	Starduster Too Builder	Dave Mercer	Klamath Falls, OR.
N71RW	Starduster Too Builder	Bob Wampler	Portland, OR.
N96558	Starduster Too Builder	Dan Baxter	Lake Oswego, OR
N000	Starduster Too Builder	Lou Hagler	Langley, WA.
N28LJ	Starduster Too Builder	Bob Dwyer	Tuscon, AZ.
N84135/ C-182	Former Starduster Too Owner/Builder	Bob Phillips	Walnut, CA.

Acroduster Too N2ED
John Warwick - San Diego, CA

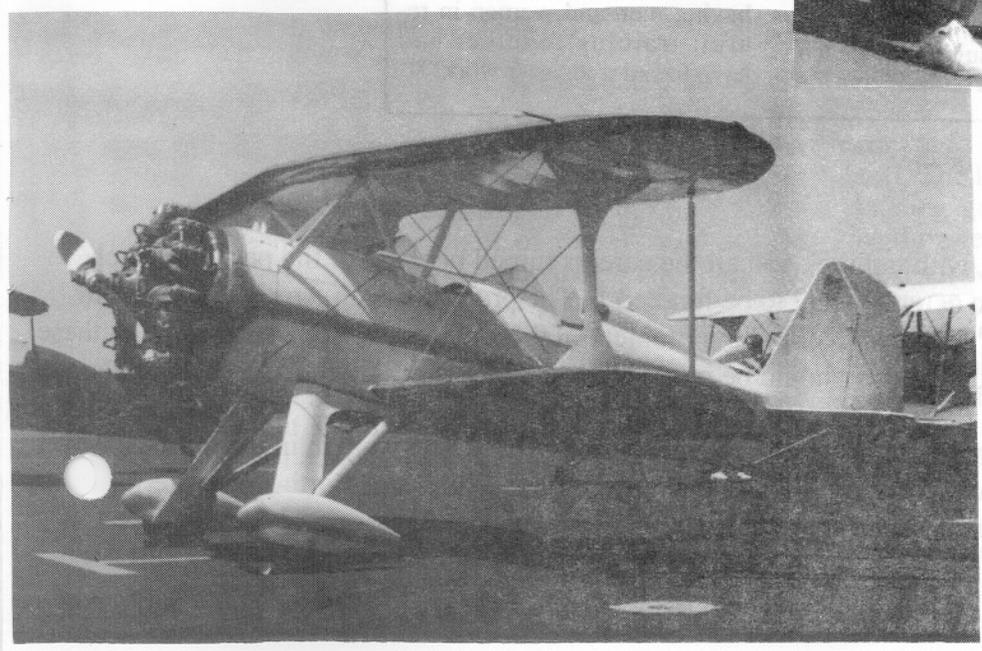


Raffle Winner of ICOM Tranceiver, John Warwick,

N26AH Range Duster
owned and flown by Hap
Schnase, Scappose, OR.
Adding oil to his 200hp
Ranger engine.



Starduster Too N53T
Kelly Scott - Reno, NV



Adultery News

AF 1st Lt. Kelly Flinn was awarded a general discharge under honorable conditions last month for allegedly lying about sexual affairs and disobeying orders from a superior officer to end the relationships.

The nation's first female B-52 pilot faced nine years and six months in federal prison had she been convicted of the maximum penalty at a court-martial. She forfeited her pension and veterans' benefits and must pay back \$18,000, or 20% of the cost of her Air Force Academy education.

She was refused a request to fly in the Air Force reserve or Guard, but has appealed.

Lt. Flinn is **not the only female Air Force officer** in trouble with her superiors for fooling around.

Lt. Crista Davis, like Flinn a member of the Air Force Academy's Class of 1993, could get 55 years in prison if convicted of committing adultery with her Air Force Academy English instructor two years after graduation.

Davis, of Barksdale AFB, La., has a child as a result of the affair. The *New York Daily News* said Davis reportedly did not know the man was married and broke off the relationship when she found out. Two months later, she said she learned she was pregnant.

In addition to adultery, she faces more than a dozen charges, including disobeying orders.

Coughlin Rakes It In From Hilton Hotels

A federal appeals court ruled May 2 that former Navy Lt. Paula Coughlin, 32, who touched off the entire Tailhook scandal, is entitled to at least \$5.2 million in damages from Hilton Hotels Corp.

The 9th U.S. Circuit Court of Appeals also asked the Nevada Supreme Court to review the judge's interpretation of Nevada's limits on punitive damages, possibly restoring the \$1.1 million in award money cut by a federal judge.

The appeals court said in a 3-0 ruling that there was substantial evidence that Hilton Hotels, parent company of the Las Vegas Hilton, acted with a conscious disregard for the safety

of hotel guests.

Coughlin, claiming suffered post-traumatic stress disorder, left the Navy and settled her suit against the Tailhook Association for \$400,000. A federal jury in 1994 awarded her \$6.7 million in compensatory and punitive damages.

U.S. District Judge Philip Pro reduced the damages by \$400,000 to account for the settlement and by an additional \$1.1 million under a Nevada law limiting punitive damages. The appeals court upheld the damages and asked the Nevada Supreme Court to resolve a legal issue on state law limiting damages, the *Navy Times* reported.

Layoffs Due

More than 3,000 civilian workers at McClellan Air Force Base in California have been notified that they will be among the first to be laid off in the fall, the *Air Force Times* reported.

Of the 7,253 workers at the Sacramento Air Logistics Center at McClellan, the newspaper said, 3,246 were being notified. The notifications are the first concrete step toward closure of the base.

The notices allow recipients to register early for the Priority Placement Program, a nationwide job referral service conducted by the Defense Department, and to qualify for retraining funds.

A spokesman said if a private contractor takes over some of the base's workload, some of the recipients of the notices could be offered jobs.

Should The Sexes Mingle?

A U.S. Congressman, Rep. Roscoe Bartlett (Rep., Md.), is trying to force the services to separate men and women in basic training.

Bartlett has 81 co-sponsors for a bill introduced May 8 that would order the Army, Navy and Air Force to emulate the Marine Corps by having gender-segregated recruit training. He has said he will offer the legislation as an amendment to the 1998 defense authorization bill when the House National Security Committee begins writing that bill this month.

Seven of the 16 members of the panel's subcommittee on military personnel are co-

sponsors, including Rep. Gene Taylor of Mississippi, the subcommittee's ranking Democrat, according to the *Army Times*.

Bartlett is bucking House Republican leaders who would prefer to delay changes in law until a task force completes an investigation into military training practices and a spate of current cases involving sexual misconduct have concluded, the paper said.

"We know everything we need to know," Bartlett said. "We have experimented with having men and women in recruit training together and have found it doesn't work."

Editors Note.

So much for women in the Military, with tailhook and all the careers ruined because of the political witch hunt that followed (There were women who actually went to be fondled.) The problems with Army boot camp in non gender segregated recruit training plus the recent Kelly Flinn problem in the airforce. No one is saying that these women are not capable of doing the job and certainly should be paid on an equal basis but there has to be a better and more reasonable way.

If the Clinton Administration continues to close military bases at the current rate women in the military won't be an issue and (my friends) the problems with Eastern Europe, the Middle East, China and North Korea are far over. Without a strong and adequate military we will be at substantial disadvantage, unlike our ability in Desert Storm just a few short years ago.

OSHKOSH/WAUTOMA



WHEN: From Wednesday, July 30th to Tuesday, August 5th 1997

WHERE: Wautoma Municipal Airport, Wautoma, Wisconsin

WHY: Eat, Drink and Share Stories!

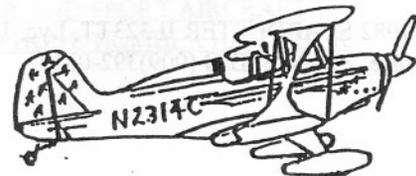
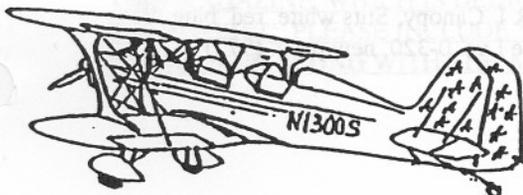
We would like to fill Wautoma with biplanes, Stardusters, Acrodusters, V-Stars, Starlets or any other homebuilt enthusiast. We would love to see you here with your airplane. Come help us celebrate our 5th anniversary. Please join us for a week of fun. Trophies will be rewarded in various categories.

Dinner Sunday August 3rd - 6:00pm no host bar, Banquet 7:00pm at the Pecks Plantation Hotel restaurant in Wautoma, WI.

If you haven't made reservations for Oshkosh or Wautoma by now there probably aren't any, as rooms there are tight; however there are good camping sites available at the airport.

Super 8 Motel	(414)787-4811
	Talk to Barb Diekfuss for alternate rooms. She guarantees assistance.
Peck's Plantation Hotel	(414)787-3301
Birdsong Bed & Breakfast	(414) 622-3770
Berlin (15 miles)	(414) 361-4411 Travelers
Berlin (15 miles)	(414) 361-2383 Riverside
MT Morris	(414) 787-2919

Please Let Us Know If You Plan On Attending.
Bill Clouse 1-800-833-9102
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1982 STARDUSTER II 323TT, Lyc. 180, very nice, 29,500 or B/O (909)392-0314.

STARDUSTER II PROJECT 80% complete 7500 hours, 40 years invested. Truly breath taking craftsman ship. Must be seen. New USA build Franklin 220/6, balanced crankshaft, inverted flight oil pump, Hartzell constant speed prop, w/governor. fuselage narrowed 4" all metal LW construction, enclosed cockpit. NEEDS: wings built, wiring, covering and other details. For photos and details call Rom Lannucci @ (718) 596-0504, FAX (718)596-6443.

STARLET PROJECT. If you are serious about building a Starlet I can save you many many hours of work. If you can scarf a joint or weld a fitting I have what you want. One damaged fuselage and empennage with all controls and fittings. One undamaged, welded up, fuselage and empennage Cessna type gear with Cleveland brakes, wings and ailerons with all fittings, brackets, pulleys compression struts, cables and hinges. Assembled and complete but will require short spar scarf. both fuel tanks, center section, turtle deck, everything but instruments. Over \$10,000 value can be stolen or \$2,700 (206)431-9732

STARDUSTER I 150 HP needs little work \$10,000 (209)532-2006

STARDUSTER II project. 75% complete, '0' time radial eng., Cont. 220 from Stearman (mounted). 3-blade Hartzell prop. Full Skybolt canopy. Rearwin wheel pants. VFR inst. Wings, fuselage, etc. built by Starduster factory. Needs cover/paint, wiring, eng. Installation, radios, etc. No time/money to finish. Beautiful, unique plane. \$25K/offer/trade for Swift, etc. (619) 728-1843.

STARDUSTER II W/0470, been flying, needs exhaust and cowling, reduced \$18,500. Call MI (616) 637-2302 or (616) 866-8711.

STARDUSTER I Canopy, Stits white, red, blue. 9.5/10, low time Lyc. 0-320, new prop. (972) 235-9672, eves.

STARDUSTER II Project, complete airframe ready for cover, cowls to SS firewall, Tig welded sandblasted & primed, on gear with wings, center section, ailerons, rudder, elevator, horizontal stab., instrument panels, turtle deck, controls, 1-struts, slabed struts. \$14,500. (915) 735-3499.

1985 STARDUSTER II 400TT, 400 SMOH, Lycoming 540, recovered in Stits 1994, Imron Starbust paint, canopy rear cockpit, KY97 flip flop, transponder, Mode-C, intercom. A real show stopper. \$32,000 firm. (815) 633-0984, Jesse or (815) 544-3471, Steve.

STARDUSTER II Low time engine, 180HP Lycoming, inverted fuel/oil, pressure carb., radio, transponder, encoder, intercom, beautiful black/silver starbust, \$32,500. (417) 926-4221.

ACRODUSTER II FUSELAGE, turtle deck, rudder, 2 tailwheels, Cleveland master cyls., \$1,700 negotiable. (904) 248-1257.

0-290-D2, 35 SMO, Inc. 1/2" valves. Experimental Only. Flange out of limits, \$1,500. (916) 243-7179.

STARDUSTER II 200hp, inv. System, 1079 TT, K175, txp, outstanding workmanship, \$32,000. (812) 273-3500; (812) 273-1473.

STARDUSTER SA 100, fuse & tail welded, 4 wing panels, Lyc 0-290G, other stuff, single seat bipe, \$1,300. Lee, (509) 522-0158.

STARDUSTER Two seat Biplane for sale, \$19,000 OBO. (208) 448-1080.

STARDUSTER S-1 Biplane, 228 TT, 0-290, electric start, Nav lights, landing light, radio & transponder, blue w/white sunburst, fresh annual, too much to list, lost medical, must sell, over \$25,000 invested, \$14,750 takes. (206)857-9022.

Nose Cowl 0360, rudder pedals, plans built, Starduster II fuel tank. Make Offer. Cecil Whaley (706) 638-7071wk; (706) 638-1944 hm.

STOLP STARLET PROJECT Wood wing is approximately 85% complete to fabric. Ailerons not started. Wing center section requires fuel tank installation and metal cover. Wing fuel tank is fabricated. Fuselage is approximately 90% complete. Instrument panel complete ready for instrument installation. Elevator & rudder ready for fabric. Elevator has electric trim tab. Engine 0-235-C1, 115 HP, zero time since overhaul. Cowling just started. Cleveland brakes installed. Asking \$6,700. Contact LeRoy Alger (801) 399-3100.

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CLIPWING "T" CRAFT engine mount for 150hp Lycoming \$350.00.

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FUEL TANK FOR VP-2 \$200.00.

FIRE SLEEVE 3' lengths \$3.00 each.

Contact Dave Baxter at Stolp Starduster Corp. for more details on above items. 1-800-833-9102



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