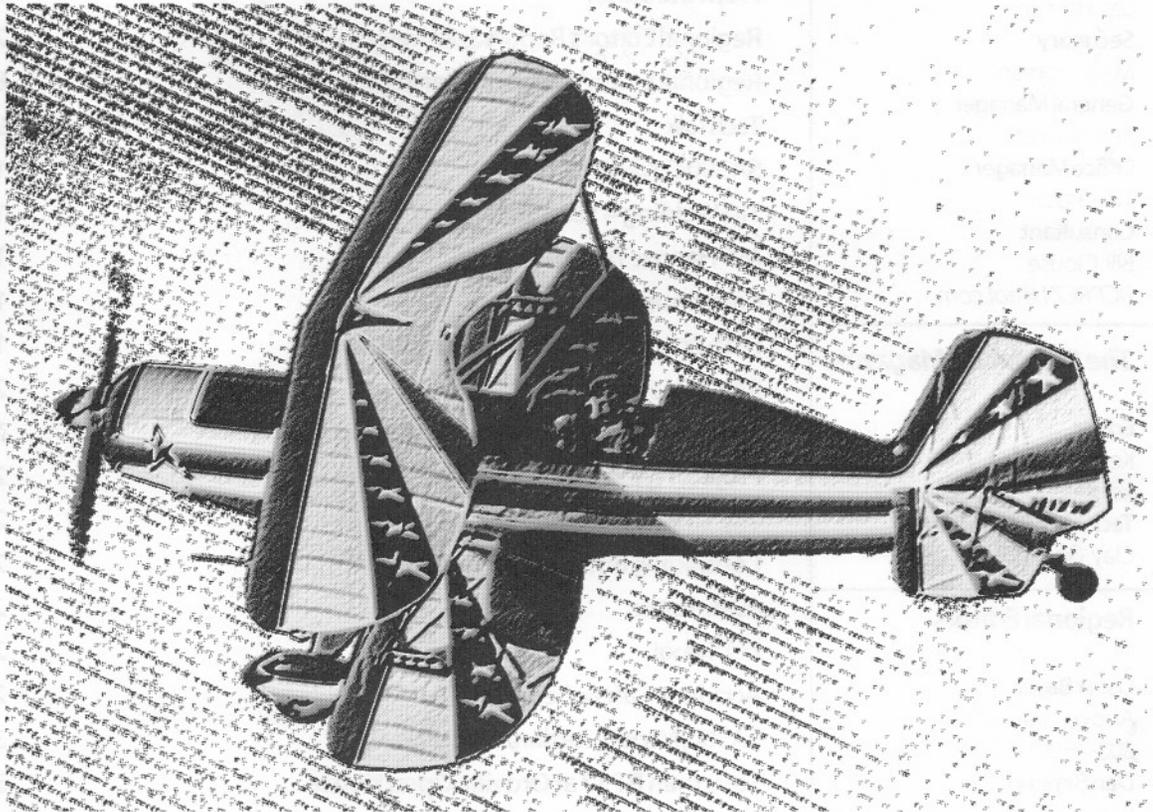


# The *Starduster* Magazine

April 2001



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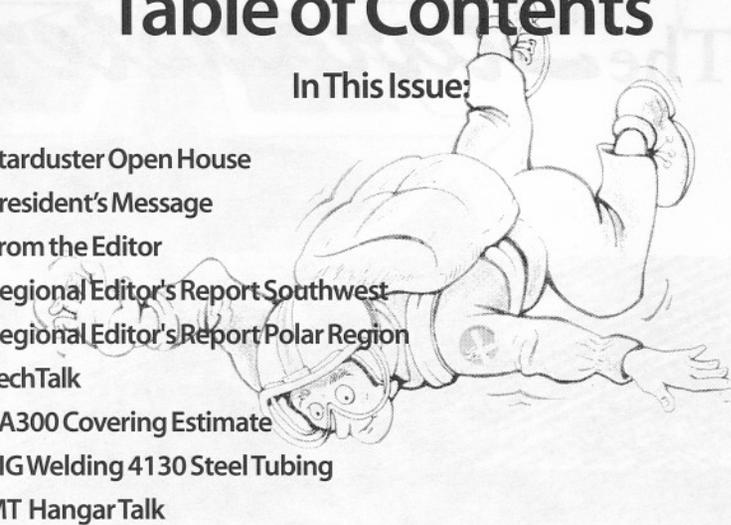
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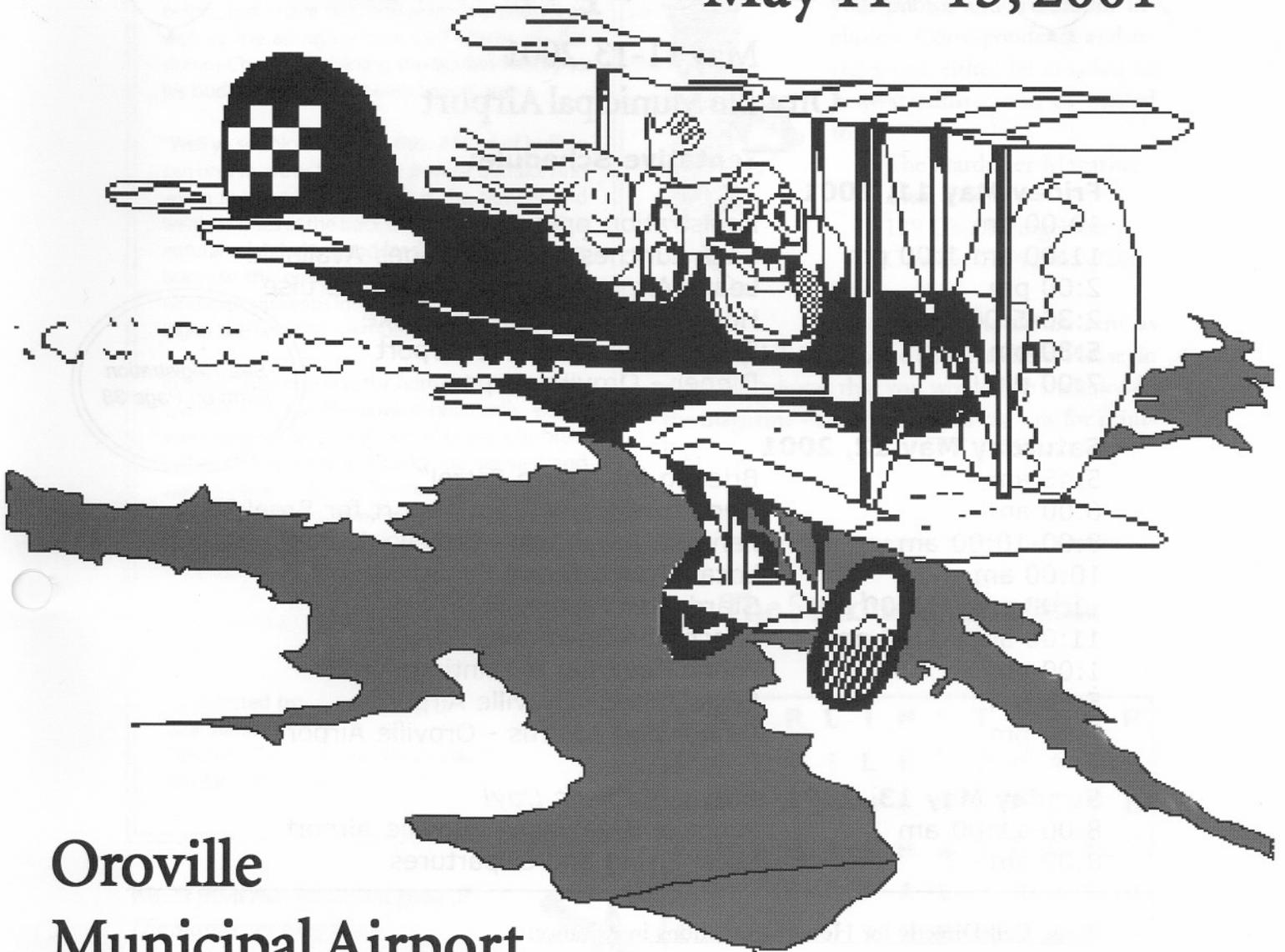
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<p><b>Stolp Starduster Corp.</b>                  129 Chuck Yeager Way                  Oroville, Ca 95965-9200                  530-534-7434                  530-534-7451 FAX                  takeoff@starduster.com</p> <p><b>President</b>                  Les Homan</p> <p><b>Secretary</b>                  Mary Homan</p> <p><b>General Manager</b>                  Ken Nowell</p> <p><b>Office Manager</b>                  Tina Rosan</p> <p><b>Consultant</b>                  Bill Clouse                  BCPREZ1@aol.com</p>	<h2 style="text-align: center;">Table of Contents</h2> <p style="text-align: center;">In This Issue:</p>  <p>Starduster Open House 4</p> <p>President's Message 5</p> <p>From the Editor 6</p> <p>Regional Editor's Report Southwest 7</p> <p>Regional Editor's Report Polar Region 8</p> <p>TechTalk 9</p> <p>SA300 Covering Estimate 11</p> <p>TIG Welding 4130 Steel Tubing 12</p> <p>MT Hangar Talk 13</p> <p>Correspondence 15</p> <p>First-time Builder..Pitts or Acroduster Too? 19</p> <p>Ribs'R'Us! 20</p> <p>CNC machine cutting Acroduster Too ribs... 20</p> <p>Project Flying Gibbon Update 22</p> <p>The SMA SR305 Engine 23</p> <p>Continuing an Aviation Tradition 24</p> <p>eStarduster 25</p> <p>Bi-Diving! 28</p> <p>Accident Safety Reports 29</p> <p>SA300, Mickey Jordan, Arlington, GA 32</p> <p>Stearman PT 17 at Oroville Open House 32</p> <p>Hot Dog N9212N with Lyc. R680 at Oroville Open House 33</p> <p>BT-13 at Oroville Open House 33</p> <p>SA750 Ready-to-Paint, Anthony Kovschak, Fort Worth, Tx 34</p> <p>N363J - The Gold Duster - at Tyndall AFB Airshow 34</p> <p>CLASSIFIEDS 35</p> <p>STARDUSTER OPEN HOUSE 2001 REGISTRATION FORM 38</p>
<p><b>The Starduster Magazine</b></p> <p><b>Editor</b>                  Ken Nowell                  ken@starduster.com</p> <p><b>Technical Consultant</b>                  Clay Gorton</p>	<p><i>This magazine uses material submitted by its readers. The articles printed do not necessarily represent the views or opinions of Stolp Starduster Corporation or The Starduster Magazine. The Corporation and the Magazine assume no responsibility nor liability for the accuracy of the printed material.</i></p>
<p><b>Regional Editors</b></p> <p><b>Oscar Bayer</b>                  Arroyo Grande, CA                  805-489-0915</p> <p><b>Dan Benkert</b>                  Rapid City, SD                  605-393-2270</p> <p><b>Max Bennett</b>                  Buffalo, NY                  716-634-2107</p> <p><b>Bob Dwyer</b>                  Tucson, AZ                  520-722-3117</p> <p><b>Charles Glackman</b>                  Evansville, IN                  812-867-3103</p> <p><b>Chuck Krabbenhoft</b>                  Sabin, MN                  218-789-7250</p> <p><b>Fred R. Myers, III</b>                  Conyers, GA                  678-422-6806</p> <p><b>Harry Mackintosh</b>                  Wimbledon, England                  181-94-62571</p>	<p><b>Front Cover:</b>  <i>A Modified Picture of Ray Siefker's Starduster Too</i></p>

# Starduster

Open House & **EAA** Fly-in  
May 11 - 13, 2001



## Oroville Municipal Airport

*Friday May 11 Noon - 9:00 p.m.*  
*Saturday May 12 6:00 a.m. - 9:00 p.m.*  
*Sunday May 13 8:00 a.m. - ?*

*Hosted by:*

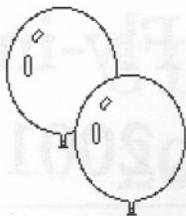
**EAA "City of Gold" Ch 1112**

**Stolp Starduster Corp**

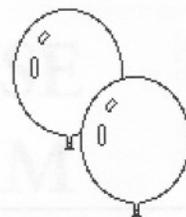
**Info: 530-534-7434**

- ◆ HOUSEBOAT CRUISE FRIDAY
- ◆ STARDUSTER TOUR
- ◆ PANCAKE BREAKFASTS
- ◆ BBQ FRIDAY & SATURDAY NIGHTS
- ◆ AIRPLANE EXHIBITS

*All Proceeds Benefit the OROVILLE FOUNDATION OF FLIGHT  
a 501(c)3 Non-Profit Organization*



# 21<sup>st</sup> Annual Starduster Open House



May 11-13, 2001

Oroville Municipal Airport

## Tentative Schedule:

### Friday May 11, 2001

10:00 am	Registration opens
11:00 am-1:00 pm	Sack Lunches and Beverages Available
2:00 pm	Leave Airport for Lake Oroville Cruise
2:30-5:00 pm	Houseboat Cruise on the Lake
5:30 pm	Social Time - Oroville Airport
7:00 pm	Dinner - Oroville Airport

See Registration  
Form on Page 38

### Saturday May 12, 2001

5:45 am	Briefing for "Dawn Patrol"
6:00 am	Departure for Willows Airport for Breakfast
8:00-10:00 am	Pancake Breakfast - Oroville Airport
10:00 am - ?	Local Flying, Young Eagles
11:00 am - 12:00 pm	Starduster Factory Tour
11:00 am - 1:00 pm	Lunch and Beverages Available
1:00 pm	Fabric Covering & Painting Forum
5:30 pm	Social Time - Oroville Airport
7:00 pm	Dinner and Awards - Oroville Airport

### Sunday May 13, 2001 *Happy Mother's Day!*

8:00-11:00 am	Pancake Breakfast - Oroville Airport
8:00 am - ?	Local Flying and Departures

## Please Call Directly for Hotel Reservations in Advance:

Best Inn & Suites	800-626-1900; 530-533-9673; 530-533-5862 (Fax)
Travelodge	800-578-7878; 530-5336-7070; 530-532-0402 (Fax)
Villa Court Motel	530-533-3930
Motel 6	530-532-9400; 530-534-7653 (Fax)
Days Inn	800-329-7466; 530-533-3297; 530-533-4809 (Fax)

## For More Information & Registration:

Online Registration	<a href="http://www.starduster.com/ohreg.html">www.starduster.com/ohreg.html</a>
Stolp Starduster	877-534-7434; 530-534-7434; 530-534-7451 (Fax)

# President's Message

Time has flow by and it is time for another newsletter. If I could fly this fast in my Starduster I could pass a few of those plastic planes. Time does fly when you are having fun.

One of many recent accomplishments is getting the ribs for the Starduster Too and Acroduster Too CNC router cut. It took a very large effort and lots of time. I want to thank all those who have made this possible. Everything is on AutoCAD and it is now easy to make an opening 0.005 wider if we want to, it is then stored and the next set of ribs will have the little change. It has been quite a process but well worth it. We are building two sets of wings with the CNC routed ribs; they sure look good and save lots of time. The way they line up on the spars there should be no need for sanding when wings are complete. I remember all the work building my wings back in 1979 and 80. It was not a pretty site. I got here and have been thankful, these new ribs make me want to build a new set of wings and compare them.

We have been making progress on many fronts, but we need to get more help in the welding fabricating area. It amazes me there are so few young people wanting to do things or learn. I believe the younger generation is into doing things that do not get one dirty, involves using the hands, or imagination. What happened the Popular Mechanics generation where working on something was a noble thing to do? Everyone was building something in the garage, working on hot rods, boats, lawn furniture, playing sports, doing something. It appears that television, followed by computers and computer games have converted our nation into do-nothings instead of doers. Is this what the future will bring? I hope not, we should do our best to show younger people the joys of open cockpit flying. Maybe there will be a few who get the idea it is more fun being part of something living and flying.

On a more serious note, the FAA has informed me there is a tired old Starduster flying somewhere, last seen near Albuquerque, New Mexico. Something about the pilot has to clear up his rough and rowdy ways, stay clear of stage four thunderstorms, avoid highway signs in low fog and should land on the runways in place of the sagebrush interstate. They though they had the guy cornered near a bar, way back in the backcountry, far away in the sagebrush and cactus. They had been chasing him from the ground, something about saving taxpayers aviation fuel; anyway he landed at this little bar on a dusty road. Lots of motorcycles parked around and one dust covered Starduster. They went the front; they went in the rear. All they heard was the roar of an engine, the building shook as a plane flew low and a

room full of people singing  
STARDUSTERS IN THE  
SKY.

## Adventure

As you know, adventure can be listed as terror recalled in tranquility. Not all adventures are such but we need to hear more about all adventures. Who flew out to a pancake breakfast, where, what did they do? Who gave a young eagle ride, what was the response? Please write up some of you adventures and send them in. We want to hear about them.

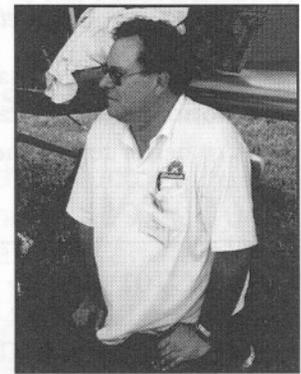
Speaking of adventures: I flew Dan Henry (Project Flying Gibbon) from Livermore up to Oroville last week. Dan was seeing the air from the northern California perspective and the front seat of a Starduster Too for the first time, open cockpit I might add. On the way back, darkness overtook us as we approached the Golden Gate Bridge, just north of San Francisco. Lights were popping out all over, the evening was perfect. Every time I fly from day into night the beautiful lights as they appear are undescrivable. Lights of houses, boats, skyscrapers, bridges, helicopters and airliners provided breathtaking view. It is one of those things you have to experience.

## CFIs For Starduster Check Out

I would like to hear from you about your experiences with CFIs related to check outs in your Starduster. Is there still lots of CFIs that love to get the chance to get time in a biplane or is that about gone? How about stories, is there any good CFI biplane stories? Send them. Let's start a list of recommended CFIs to spread the word and give them some recognition. Check and see if they would write an article for the newsletter so we can see our world from their eyes.

We have got to have fun doing what we love, dreaming, building, flying and then have more fun. Life is short; it does not get better than flying in a Starduster. *Keep your prop turning, your windshields clean, gas tanks full and keep flying.*

*Les Homan*



# From the *Editor*

## Updated Labels

Starting with the February 2001 issue, you may have noticed that we have changed the mailing labels to better reflect the expiration date of your subscription.

OCT01  
STARDUSTER SUBSCRIBER  
1234 ANYWHERE ST  
ANYTOWN CA 95922-1234

OCT01 indicates that your last issue will be the October 2001 issue. As does JAN02 indicates January 2002 is your last, etc.

We hope this will make it clear when your subscription expires so you don't miss any issues!

---

## Today's Pilot

The May 2001 issue of the UK-based magazine *TODAY'S PILOT* will feature kitplanes including a write-up and photos of the Starduster Too.

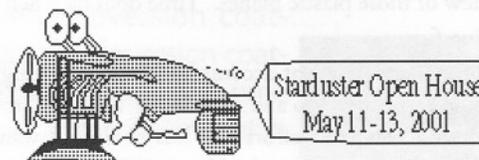
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## Snow in California?

It took Starduster employee Dave Harmacek about a week before he could return to work after a unusual February snowstorm.



## Upcoming Events



The **Biplane Expo 2001** normally put on by the National Biplane Association the first weekend in June in **Bartlesville, Oklahoma** has been rescheduled. A substantial construction project, currently underway on Frank Phillips Field, has run into delays and will not be done in time for the normal Expo start date.

The new dates for the Expo will be **September 21 & 22, 2001** and will be held in conjunction with the annual Tulsa Regional Fly-in, also at Bartlesville.

See you there!



Therefore, the first aviation event we will be attending after the Starduster Open House, will be **Arlington 2001, July 11-15** in Arlington, WA. This event, put on by the Northwest EAA, is always a great time. Look for Starduster in the Main Exhibits Area, **Space 15**.

# Regional Editor's Report

## Southwest

The first day of Spring brings a brighter sky, more daylight and the need to complete the annual on "old" N490B. My machine turned fifteen this year and with slightly less than 1400 hours on the airframe I figured to look in places seldom noticed or required on my "Condition Inspection" check list. One of the areas that caused some concern was the controls, particularly the ailerons. As you Starduster builders/owners know, there is a system of push rods from the control torque tube to the final rod end on the aileron itself. With my so-called "X" wing (23012 airfoil) there are four rod ends and a bearing in-line to operate one aileron along with 5 bolts holding it all together.

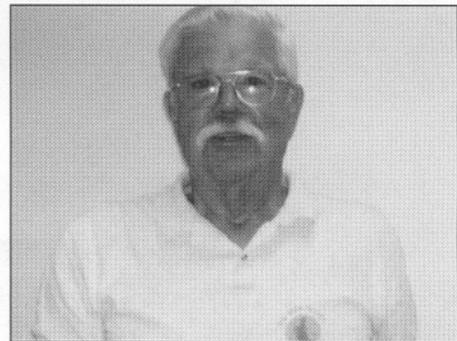
I have, over the years noticed an increase in the "play" of the ailerons but nothing too serious to be concerned with. However this year I vowed to pay more attention to this so I pulled a couple of the bolts to see if I could detect unusual wear. My local IA friend pointed out that, although the bolts were fine, the nickel-cadmium coating was worn away. Only a few thousandths of an inch but when multiplied by 5 indicated the cause of the "play".

The nice thing about having the "Repairman's Certificate" is the ability to do lots of things to your aircraft without having to pay someone else to do it.

*The nice thing about having the "Repairman's Certificate" is the ability to do lots of things to your aircraft without having to pay someone else to do it.*

Another problem I was able to solve was with the throttle control cable. It had been sticking more this last year so I decided to replace it. I ordered the new part from Starduster and installed it myself with a bit of re-routing and a new bracket - works great!

So now I'm ready for the "fly-in" season and more adventure. Hope to see a big turnout at Oroville, plan on making Wautoma again, and the Biplane Expo in Bartlesville which I hear will be in September this year. Sure encourage you Starduster pilots to make 2001 the year to fly more.

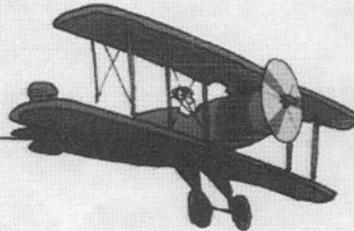


*Oscar Bayer  
Regional Editor  
Arroyo Grande, CA*

# Regional Editor's Report

## Polar Region

*4th Annual Brats, Beans  
and Fly'n Machines*



**Saturday, June 9, 2001**

***Weather Permitting***

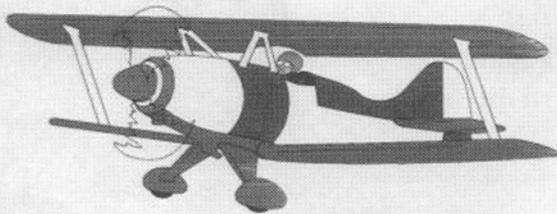
Where: Chuck Krabbenhoft's Farm (2200 ft. Grass Runway\*)

Location: 2 1/2 miles South of Moorhead Airport (JKJ).

Bring your family and join in the fun. We will start bbq'n brats and dogs at 1:00 pm and cook until they're gone.

*Gas available at the Moorhead Airport. CTAF 123.00*

For more information contact Chuck at (218) 789-7250.



*Fly In  
Drive In  
Walk In*

\*Private runway. Land at your own risk. Not responsible for accidents in any way shape or form.

*Chuck Krabbenhoft  
Regional Editor  
Sabin, MN*

# TechTalk

## Aileron Over Center Problem - Starduster Too

In many of the early planes and even some currently being built there are not stops at the ailerons, on the stick or anywhere else and in some situations it is possible for the ailerons to over center and lock. This sounds terrible and it could be. The worst case condition is if you are doing tail slides, the stick gets away from you and an aileron gets over centered. It did happen once, I forget to whom, but it was written up in an early Starduster newsletter. This particular aircraft was at enough altitude and the pilot pointed it to the ground, got enough speed up and they came back over center. One other area of concern would be during ground handling in strong gusts or wind and the stick gets away and they get over centered.

**Question:** How do I know if I have the problem? How do I fix it without tearing the fabric off or welding stops on?

**Answer:** With the stick and ailerons unencumbered, no seat belts wrapped around them, or helmets ETC. go to the top aileron on the right side and gently push down on the trailing edge of upper aileron. You will either run out of movement, hit a stop or the aileron will over center. If you run out of movement it means things will no move further down unless something gives, (breaks). In other words there may not be a specific stop but linkages, something rubbing has stopped aileron travel. If you hit a sudden stop it would be the stops, either built in the wings, generally lower wing at bell crank or at stick in aircraft. Repeat the process for top left aileron. The thing you are looking for is the over center and lock with little effort. I flew a Starduster where the upper right aileron would over center with no

effort at all. The right gave the impression if you over centered it something could break.

The fix for this problem does not require fabric removal. The work will be done at the upper aileron slave strut attach point. Observe movements from side of fitting as the slave strut rod end bearing and aileron mounting ears near the over center area. You will notice an area on the top of rod end bearing side, that if it had a plate across the mounting ears, would bump into the rod end bearing and stop its travel before it could over centered. This piece would be a U shape and would be mounted to the 1/4" bolt holding slave strut rod end bearing to aileron mounting ears. It would bump into the rod end bearing before over centering.

I will make up one of these for the next issue so you can have a picture of it.

---

## Buying a Too?

You will want to do all the normal checks you would do in any airplane you may be considering purchase. I will not mention them here. The following are items which are directly related to the Starduster Too.

§ Where is the main landing gear as related to a parallel line down to floor from firewall? If they are back 7 to 8 inches it is good. Early aircraft were 1 3/4" to 2 1/2", could be lots of tail weight and hard to handle on ground, hard to keep tail wheel under control.

§ Engine mount length? For a 4 cylinder Lycoming, it should be in the 20 to 24 inch range firewall to center of biscuits. Early units had 12" or so aft CG problem and coupled with far forward gear is a potential problem on the ground.

§ Weight and balance? Do a weight and balance, if you cannot do it yourself have someone do it you can trust. Nameplates on homebuilts typically show original weight. In some cases they are not updated and I know of at least two cases to use as examples. In the one the plane was 300 +++ pounds heavier than the original nameplate data and the logbooks, fortunately it had been added in about right places. The second case everything was fine, they had just changed the engine mount from about a 12" to a 22" and moved the landing gear aft from 2 3/4" to 7 1/2" without an update to weight and balance data.

§ Tail wheel? Take a close look at the tail wheel area, springs, leaf springs, fuselage on bottom longerons and lower rudder. Is anything broke, bent, shows sign of repair? Is the tail wheel king bolt straight up and down or even a few degrees forward.

§ Check flying and landing wires for wear or rub marks where they enter wings.

---

## Props?

**Question:** What propeller does my Starduster Too need?

**Answer:** If you have a Lycoming with a 4 cylinder 200 HP version, fixed pitch, you will need something in the area of a 76" x 60" pitch. For the 180 HP you will need something like a 76" x 56". For other engines and props the best thing to do is either have us put it on the bulletin board or you put it on the bulletin board or ask a prop shop. There are many combinations and you need help from someone who specializes in this area.

*I believe the joy of owning your own aircraft is getting to know it. Get to know every sound, vibration, smell and any other perceptions of your aircraft. Learn what the gauges are telling you, what the wires are saying and listen to it. It is all there, just waiting for you to interrupt and use - **Les Homan***

## Starduster Too 100-Hour & Annual Checklist

It is time for an annual or a 100-hour inspection on your Starduster Too or one that you are buying? What do I want to have the mechanic pay special attention for this aircraft?

√ Inspect the landing gear bungee truss tower and all its attachments. You are looking for signs of cracks, typically at welds, or bending.

√ Inspect the bungees and the safety cable. The safety cable should have enough slack to let the landing gear go into the sheet metal before it gets tight. Things to look out for are too tight, not enough looseness, not mounted on end of landing gear, near center of aircraft at center of bungee truss. Mounted in the mid point of landing gear beam will cause the landing gear to buckle if cables pulled tight and folding up the gear. If there is not enough looseness it can yank the gear against the bungee truss and cause damage. Better loose than tight.

√ Look at all attachments for main landing gear: bolts, welds, etc.

√ Study the tail wheel area, fuselage, lower longerons, leaf springs, mounting. Make sure tight and well fitted to mountings.

√ Flying wires for any rubbing or wear. Look at the flying wire attach fittings at I struts, top and bottom, especially if aircraft has been doing snap rolls. Look at all flying wire fittings and wing attach points.

√ Check for looseness in ailerons. Have someone hold stick and move ailerons up and down, should not be over about 1/4" to 3/8" movement. Have someone hold ailerons on one side and move ailerons on other side. Should not be over 5/8" combined movement. Less is best. Check bell cranks in wings. With stick neutral the stick to bell crank arm should be 90 degrees to spar.

√ Landing gear alignment. Check main tires to make sure they are parallel and check tail wheel to make sure it is pointed straight. Roll forward on flat smooth surface and make sure aircraft tracks straight.

√ Check weight and balance and up date logbooks, make sure it is operating in the 18 to 27" CG range.

√ Check exhaust pipe mounting brackets and supports.

√ Check for things in bottom of fuselage.

√ Check all fuel and oil lines. There has been far too many cases where aircraft that has recently been annualed, sold to a new person and he finds a fuel or oil line cracked or broken, while flying it home. Not the best way for a new pilot to become familiar with his new plane. Take the time to trace out all fuel and oil lines, every place they go and don't give up. The life you save may be yours.

## SA300 Covering Estimate

Item Description	Color	Quantity	Unit	Price Each	Total
Ceconite 102 - 2.7 oz - 70" width		50	Yds	\$ 8.29	\$ 414.50
2" Ceconite Finishing Tape - Pinked - 50 yd roll		7	Roll	\$ 27.73	\$ 194.11
3" Ceconite Finishing Tape - Pinked - 25 yd roll		1	Roll	\$ 22.21	\$ 22.21
3/8 " Ceconite Polyester Reinforcing Tape		2	Roll	\$ 34.81	\$ 69.64
Flat Rib Lacing Cord - 250 yds - Mil-T-43435B		1	Spool	\$ 15.97	\$ 15.97
Multi Purpose - Anti Chafe Tape, 60 yd		1	Roll	\$ 11.17	\$ 11.17
Inter-Rib Bracing Tape, 36 yds		2	Roll	\$ 12.99	\$ 25.98
Inspection Rings		20	Each	\$ 0.33	\$ 6.60
CecoBond Cement		1	Gal	\$ 144.00	\$ 144.00
CecoBond Cement		2	Qt	\$ 39.60	\$ 79.20
Cecofill (UV Protection)		3	Gal	\$ 128.00	\$ 384.00
One-Part Polyurethane Wood Sealer	Clear	1	Gal	\$ 74.48	\$ 74.48
Two-Part Epoxy Primer	White	1	Qt	\$ 37.18	\$ 37.18
Aluminum Etch Cleaner		1	Qt	\$ 16.70	\$ 16.70
Two-Part Polyurethane Topcoat	Insignia White	3	Gal Kit	\$ 177.20	\$ 531.60
Two-Part Polyurethane Topcoat	Insignia White	2	Qt Kit	\$ 53.37	\$ 106.74
Two-Part Polyurethane Topcoat	Firethorn Red	2	Qt Kit	\$ 74.96	\$ 149.92
			<b>Total</b>		\$2284.00

prices subject to change without notice

# TIG Welding 4130 Steel Tubing

Richard Finch

Performance Welding - MBI Publishing Company

Like the proverbial foot journey that begins with one step at a time, TIG welding 4130 steel tubing begins with starting the arc, making a very small molten puddle, adding one dip of welding rod to the puddle, the pulling the rod out of the heat of the arc. If you do this arc welding process four or five times, you have made a tack weld. If you have done this welding process 15 or 20 times, you have welded halfway around a tubular joint. Repeating the process thousands of times means that your "journey" is complete: You have assembled a tubular frame by TIG welding it.

## Preheating?

Here is another old wives' (old welders'?) tale that keeps being passed on by word of mouth: Chrome moly assemblies must be preheated by

subjecting them to the flame of an oxyacetylene gas torch just before you begin welding them. This is incorrect, and doing so is just one more way to "hurt" your 4130 (chrome moly) structure. First of all, the experts say that preheating is not necessary for 4130 steel under 1/4-inch thickness. Then, the next reason to not torch-heat 4130 steel is that you really do not know what temperature it is heated to if you are just passing a flame over it. It could be any where between 100 degrees F to 1,000 degrees F, which is no way to preheat for welding. A third reason for not preheating your tubular 4130 steel structure is that it would be cooled back to ambient room temperature before you could complete the first 20 percent of the welds. So you gain nothing by trying to preheat a tubular structure before welding, and you take the chance of harming it by application of an open-air flame.



It is certainly not a wise idea to weld a 4130 steel structure in a freezing workshop in the wintertime. The welding workshop should be shirtsleeve comfortable, with a room temperature of 75 degrees F to 95 degrees F, even in winter. If it isn't, put a heater in the workshop. Welding cold metal *is* hard on the metal. But normal room temperature is acceptable for welding thin-wall tubing.

# MT Hangar Talk

John Hanson

Hello everyone out there in Starduster land!

**M**y name is John Hanson. Ken Nowell has asked me to write a few technical articles for *The Starduster Magazine*. I would like to take this opportunity to tell you a little bit about myself. I have been an A&P mechanic for 16 years, with Inspection Authorization for the past 12 years. I have worked throughout the Northwest and Alaska for various fixed base operators including flight schools, charter operations, aerial applicators, float plane operations, and fishing lodges as well as some major rebuild centers. I served as technical advisor and field service representative for a radial engine overhaul facility for 2 ½ years traveling all over the world troubleshooting engines and learning every aspect of the overhaul shop. I have served as President of the Montana Antique Airplane Association for the past two years. I currently own and operate Nostalgia Aero Works Inc. in Marion, MT, a restoration shop specializing in antique aircraft.

**When they pulled the packing out of my sinus cavities after surgery,  
I could have sworn that they were trying to drag a football out!  
Not a lot of fun.**

I am also a coatings technical advisor, participate in research and development and instruct covering and coatings application courses for Aircraft Finishing Systems of Missoula, MT.

*I hope you will help me with this column by submitting questions and suggestions for topics as well as submitting ideas that have worked for you. Together we can have a great time and all learn something.*

We'll start out describing some of the safety precautions and techniques that should be followed while painting and working on your project.

Let's get right into it. We are going to discuss protecting ourselves from basically 2 types of contaminants: **particles and gases**.

Particles are easily detectable; we can usually see them. Common particles are overspray, sanding dust, grinding dust, sandblasting material, etc. Gases are usually invisible and sometimes difficult to detect which in essence makes them the most deadly type of contaminant. My goal is to make you aware of the personal protection you need when working on your project and to help you to identify contaminants in your work area that pose a safety threat. Someone once told me that "Safety is mostly a state of mind". I couldn't agree more!

**I will cover particle contaminants in this issue.**

**L**ike I said before, it could be sanding dust, overspray or a multitude of other sources that we're dealing with. The most obvious hazard that particles pose is breathing them into your lungs. I don't know how many

times I have walked into a shop and observed someone sanding or grinding and not wearing a respirator. What they are unknowingly doing is coating their lungs with the by-product created by grinding or sanding. If it's a chemical such as paint or primer, although the dust might not affect you immediately, you will pay the price for breathing the particles in later. Our lungs are so very vital to our existence, why would we ever subject them to this type of abuse? Not only are these particles made up of some pretty nasty

chemicals, they also have sharp little edges and actually embed themselves in the walls of your lungs and sinus cavities. This leads to some pretty serious respiratory problems later in life. Trust me, I'm coming from personal experience here. I used to think I was young and bulletproof (remember those years?) and I sanded and shot paint and primers without a mask. But, I paid the price when I had to go through sinus surgery a few years ago. After that experience, I am very cautious (and much smarter)!! When they pulled the packing out of my sinus cavities after surgery, I could have sworn that they were trying to drag a football out! Not a lot of fun.

So, a mask is in order, but just what type of mask do we need and how much can it do? I always recommend a NIOSH-approved mask (it will say right on the filters). It may not be as comfortable or look as cool as some of the others on the market, but this type of mask provides excellent respiratory protection. Purchase a good mask, follow the fitting instructions that are included with it, and change the filters according to the manufacturer's instructions so that it will function properly and most of all - WEAR IT!!!!

Another hazard I notice people missing when it comes to dust protection is our hands. I dislike wearing gloves as much as the next person, but like I said before, dust can contain some nasty stuff and if it's on your hands it can get into your blood and travel all through your body. I also strongly recommend some type of safety goggles when working in dust. Your eyes are moist and a natural attractant to dust. We all know what it feels like when you get something in your eye. That's your body trying to tell you to "dummy up" and not let those irritants get in your eyes. I used to constantly rub my eyes with my hands (which were covered with whatever I was working on) and then walk around for days on end with red, sore eyes. But perhaps the most ignored area to protect from dust is usually your body. I'm talking from the top of your head to the ends of your toes. One picture that springs to mind is of a guy that I saw in WA one summer sanding epoxy primer and

polyurethane paint while wearing shorts, a short sleeved shirt and sandals. He was doing as much as he could, short of drinking the stuff, to get those chemicals in his body. Spend a few dollars and get a paint suit. They are comfortable, breathe and offer a lot of protection. They even keep your clothes cleaner, are washable, come in all sizes and usually have a hood attached. You're going to need one later when painting so why not get it now and save yourself some grief? I think I paid \$25 for mine and I've tried to wear it out for almost 3 years now. I love it... it even stretches in all the right places so I'm comfy all the time.

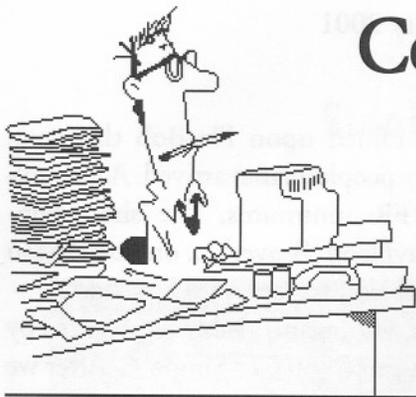
One other suggestion that I have for everyone is to please, please, ventilate your work area. We use shop air cleaners to remove the dust from the air - they are worth their weight in gold! The mess to clean up is so much less because the dust isn't all over our tools and the rest of the shop. The air cleaners will clean an amazing amount of dust from the air. The unit we use incorporates a furnace filter to trap small particles. Not only are you breathing better air, but you can see what's going on, and who knows... if the environment that you work in is nice, you might just get some volunteer help.

**M**y last suggestion to everyone is to just keep yourself clean. Get up and shake off the dust periodically, wash your hands and face often, go outside and breathe some clean air and let the dust settle if you will. Wet down the floor if possible. Just try to keep it off and out of your body.

Next month, I'll touch on some of the hazardous chemicals that are in common use and the gases that they can give off. In the meantime, please start to think about saving yourself a lot of grief and start protecting yourself.

Take care,  
John

# Correspondence



3 Mar 2001

Ken, now that my smoke system is done.. I will send you an article and some pics on how I did it.. for the magazine.. (I'm sure you have read all the posts on the board).. it was a nightmare project.. Recovering the lower wings this month (had to replace some worn aileron bellcrank bushing) and should be back in the air come April 15th. Will see you in May at the Open-house.

Gary DeBaun  
B747Inst@aol.com

---

Dear Circulation Dept.

Three of us bought Charlie Wherlen's Starduster II N19PW and flew it up from Leeward Air Ranch, Florida two weeks ago.

It flies great but is awfully slow. It indicates only 95 MPH in Florida and 100/105 in New Jersey at 2400 RPM on a IO 360 with a fixed pitch metal prop.

We are going to check the rigging and all flat wires for alignment. Do you have any suggestions.

I got your address from the Starduster webpage and enclose \$18 for a year subscription to your magazine.

Yours truly,

Bill Moore  
Lebanon, NJ

Ken,

I have been promising you some digital pictures of my project. Please note that the rudder has a different shape to it. This was my own preference. I think I have offended some people with changing the shape of the tail. Also, the pilot and co-pilot have both been given an additional 6 inches longitudinally, and 6 inches vertically to provide more room in the cockpit. I thought some of these pictures would help other builders. Also the horizontal tail was made in two pieces to reduce the amount of warpage during welding.

Question: Does Starduster sell 0.050 5052 AL for the tanks? If so, can I send you measurements of the size I need the pieces cut? I have access to a local break. Talk to you soon.

Chris Shearer  
Melbourne, FL

---

15 Feb 2001

Just happened to be playing with this machine, and guess what Google Search came up with?

Bought my prints from Lou Stolp back in 1958 or 9, fifty bucks, and he air mailed them to me. Got all revisions, and started construction in 1954, I think. Finish the center section, cover the finished, signed off wings and fly. Drain 9 gallons of oil out of the brand new O 360 A1A, first.

Are any of the old guys still around? Lou Stolp, Jim Osborne, Bill Clouse? Last time at Oshkosh only one Starduster, a SA750. Very sad, the prettiest biplane in existence. RVs sweeping the field.

I live on an airport, about 30 miles south of Memphis, 3400 ft. turf, 100 LL available, possi-

bly a good stopping point for Starduster cross country fliers. Hanger construction starts this spring, soon as the rain stops, Anybody interested?

I sure was glad to see this site, and would appreciate someone taking the time to answer this e-mail. Flabob still open, or closed by urban sprawl? I've got a lot of the old Starduster Magazines (Jim Osborne) if you want them Hoping to hear from someone.

Jess Denison

JessDenison@aol.com

EAA#6902, N374JD, 374 being the serial number of the plans. SA300.

---

19 Feb 2001

Hello Les,

Just wanted to say hello, you may not remember me but we met in Oshkosh a few years before you bought Starduster from my brother Bill.

Your Web Page looks great, Wish I had time and cash to build a Bird, My wife and I may stop by to visit your display at the EAA this year.

Be Well

John Clouse

bubba@wnyweb.net

---

15 March 2001

Just for fun I'll attach several Starduster airborne shots we (my stick, my son's camera/talent) took last Sunday up at Ozark, AL. The plane's owner/pilot is Mickey Jordan from Arlington, GA.

Cheers,

Frank Gorham

*ed: see picture on page 32*

28 February 2001

Les,

The gods rained upon Fla-Bob this year. Drats! Not many people/planes arrived. A few stalwarts braved VFR minimums, The 'show-stopper' was a de Havilland 'Beaver'..... on floats! Man ..., I got a nosebleed just looking UP at it!

'Starduster' was (again) visibly represented by Yours Truly and Jim (N50TT) Simpson. After we gave up on Fla-Bob, I followed Jim into Corona (AJO) to take a peek at his recover job on N50TT. Superb!

Naturally, I couldn't get away from Fla\_bob without dropping into Bill Turner's 'Palace of Metal Magic'. Progress on the replica LTR-14 has "soon" written all over it.

Ever the audacious one, I whipped out some pictures of MY benchtop English Wheel, showed them to Mr. Turner. He smiled, patted me on the head, said I was a pretty sharp kid.....

Well, maybe next year will see a plethora of Stardusters at Fla-Bob?

Sincerely,

Craig Phillips, Rancho Mirage, CA

Oh, about those wing-root fairings of mine? I'm glad you asked.

---

This decal was designed by "Crash McPhearson" a popular supporter of the Starduster magazine in '83 & '84. He owned an SA-300 with a round engine - a 165 HP Kinner.

Bill Clouse  
Molino, FL



Hello Clay and Les,

I am an avid fan of Starduster Magazine after getting some 75 editions upon acquiring my SA 300 from the USA (copies dating back to +- 1974 !!!) Read them all cover to cover and picked up on hundreds of valuable tips which I need, but are not easily accessed from this part of the world. I imported N248DW late last year to South Africa and this is the second only type flying in the country. (Plus one under construction by Vic Dobson) Reregistered as ZU-CIS in SA now and flown some 18 hrs since. She is a beautifully built a/c and flies great, generating a lot of enthusiasm and the possibility to bring over some more a/c to SA. Please give me an update as to the mag. Look forward to hearing from you.

Regards,

Richard Chase, Cape Town, South Africa

For Your records:

Stolp Starduster Too SA 300 Serial No 13,  
Total Time Flown since new 178 hrs + Engine  
SMOH 178 hrs Completed 1990. Built by Dick  
Waltermire. Engine Lyc. 0360 C2C. 180 hp. Fixed



Pitch Mac. 60/72.5 Prop. Professionally welded structure Built to Plans spec 100%inc. all engine mount, u/c and aileron stop mods. Ceconite covered + Stitts Polytone Paint

Les,

Thanks for the response on the BB. When you were flying with the gear 13.5 inches aft of the firewall, where was the CG? I understand most Stardusters fly in the aft range, is this common? I am extremely familiar with doing W&B calculations, I rework aircraft configurations every day. With my aircraft (the U-2), I move hundreds of pounds of lead around to tailor the CG. I think most people misunderstand that a Starduster (or any airplane) with a 180 horse Lycoming and a wood prop could have the same CG (%MAC) as one with a Continental O-470 and constant speed prop, for instance. It all depends on how long of an arm the engine is hanging on. I intend to build my airplane to a particular CG, not "end up" with one. My thoughts on tailwheel weight are the lighter the better, within reason. I have never flown a taildragger that you could get on the brakes with the tail in the air, so your earlier caution has me a little confused. Was your 'Duster excessively touchy?

Thanks for the time,

Michael Robinson

toobuilder@hughes.net

Michael,

Regarding the CG. limits are 18" to 27". I have flown my Starduster and others as far back as 32", I do not recommend anyone at any time fly this far back. The 27" aft limit has not been a problem. I would suggest designing the aircraft in worst case CG limits at 27". To get this limit would take min oil in engine, no fuel in top tank, very little fuel in main tank, heaviest normal passenger with parachute, heaviest normal pilot with parachute and no baggage. During aerobatics there should be no fuel in top tank and no baggage. I will have to check empty CG but as I recall it is in the 14.5 inch range. The firewall is used as ref. for all calcs.

Les Homan

Hi.

I've got a SA-100 with a Lycoming O290-D2 (140 HP). Great plane that has appeared in your excellent magazine. I recently discovered some hidden propeller damage and elected to get a new propeller. The original prop was a Sensenich

### **Sensenich calls today and found a bullet in the tip of my prop**

wooden (experimental) 74/54. It flew really well but I felt it was a little under pitched because it would really wind up whenever I put the nose down. I originally ordered a Sensenich 74/55 to replace it a month ago. Sensenich calls today and found a bullet in the tip of my prop as they were doing the final sanding (no kidding - it was in the tree apparently). They offered to cut two inches from each tip and try to increase the pitch to approx. a 57 so I will wind up with a 70/57 vs. the original 74/54. What do you think? Do you think it will be safe to fly the airplane at least for a few test flights? Anxiously awaiting your reply.

Timothy Hudson, Greensboro, NC  
dusterman1@msn.com

*Timothy,*

*I would put it on and run test on the ground. As in any prop vibrations ETC should at an acceptable level. If it feels good I would see no reason not to try it. If the pitch is too much you will not get to full RPM and if it is not enough you will over RPM. Watch the rpms on takeoff. I would be concerned if you were using a high altitude airport on a hot day. Take it easy and stay in pattern or within gliding distance of the airport. You may find out this prop will provide better performance.*

*Les*

Hi,

I write tonight because I have some trouble with the inverted vent of my Acroduster Too fuel tank; Each time I get up side down (normal flight with such a plane), fuel flows through the vent. Maybe the problem is due to a hole in the inside tube. If somebody has an idea about it...

An other problem comes from variations of my oil pressure indicator ("Bourdon tube") but only when flying during descent and landing pattern. On ground, indications are pretty good. Strange, isn't it? I believe this problem is due to the Christen inverted oil system, and especially to a ball of the Christen 802 oil valve. This ball has been damaged; and I 'd like to know if you could provide me with that item (reference in the Christen description book is "ball, corrosion resistant, Christen P/N 50023-043 , located in the Christen 802 Oil Valve". If not, could you indicate a point of contact to get this ball (Christen adress or Email or any other information).

Waiting for your answer,  
best regards

François HEBRARD, France

*Regarding the fuel tank problem. It sounds like he either has crack in vent line internal to tank or more likely inverted vent is connected to normal upright vent.*

*Regarding oil pressure. If he has a damaged ball in the inverted valve this needs to be replaced. Try Aviat in Afton Wyoming.*

*Les*



# First-time Builder... Pitts or Acroduster Too?

By Lee McGee

reprinted from - *rec.aviation.homebuilt* - 22 Jan 1999

There have only been about 150 (?) Acroduster SA-750s (Acroduster Too) ever built, I believe. Somebody correct me if I'm wrong. So there is indeed one heck of a lot more Pitts experience out there.

Stolp Starduster Company is still in business, in fact rejuvenated, up in Oroville California, and they provide excellent support, will do kits for all major airframe components, and can even build and sell you completed components, e.g. welded fuselage, landing gear, tailfeathers, whatever. <http://www.starduster.com>

I don't believe there is much of a difference in construction difficulty or time between Pitts, Skybolt, Acroduster. These tube and fabric types are all built the same way using similar techniques and time.

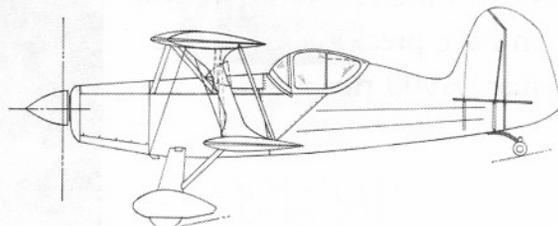
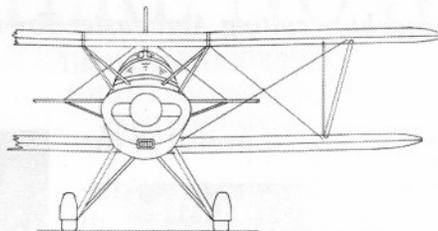
Some of the differences:

- \* Starduster and Acroduster have an elliptical wing planform, so you build a lot of different-sized ribs! This is not as bad as it seems, however.
- \* But Starduster/Acroduster gets a lot of mileage out of using common 2024-T3 aluminum U, T and L shapes for wing fittings, and this eases the fitting fabrication game as you don't have to figure out how to fabricate them out of 4130. I took me about 20 months part time to build all five wing sections for the Acroduster Too. I am not a fast builder.
- \* Skybolt wingspan is 24 feet, and the upper wing is one-piece. Watch the size of your workshop! The Acroduster Too upper wing is three piece and you can build this in a small garage.

\* Pitts and Eagle also have single-piece upper wing, but much shorter, only 19 feet or so on the two-place designs, shorter even still on the S1.

Finally, if you want to build a great Acro ship, why not try the Pitts Super Stinker S-1-11B? The performance is far, far superior to the others. I have seen the plans for the Super Stinker and they are lovely; looks like an easy build for this type of airplane.

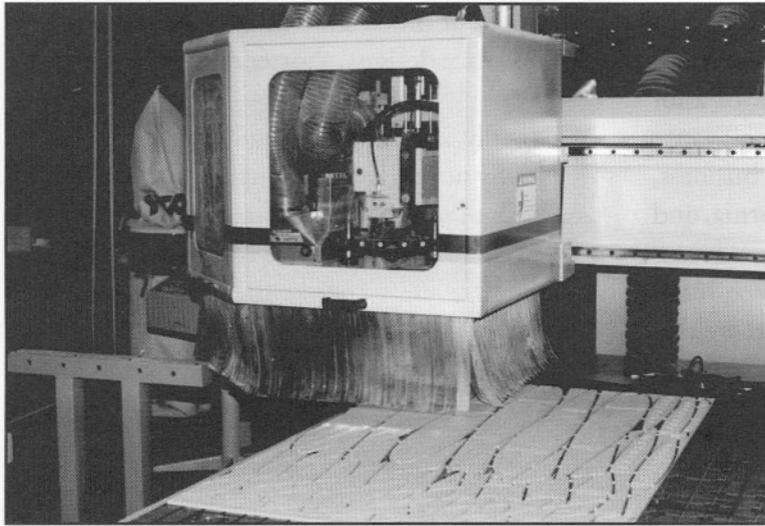
BTW, I've been building my own Acroduster Too project for three of the last four years.



# Ribs 'R' Us!

All Starduster Too SA300 and Acroduster Too SA750 Rib Kits (included in all Wing Kits) are now computer-controlled precision cut using a CNC router.

Gone are the days of hand-routing the numerous ribs and plywood stiffener required to construct the beautiful elliptical wings of the Starduster-type aircraft.

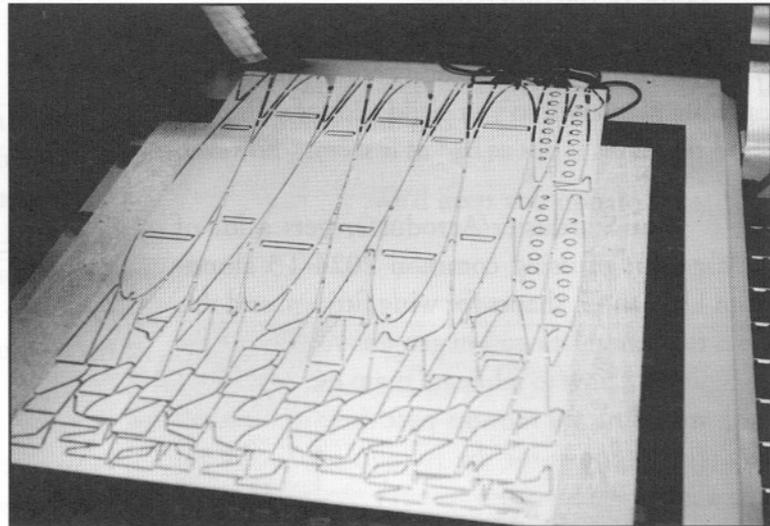


*CNC machine cutting Acroduster Too ribs...*

Machine cutting of the ribs became possible as Starduster Corporation began converting the hand-drawn plans into AutoCAD. Currently the Starduster Too plans are completely in AutoCAD but only the ribs of the Acroduster Too have been converted.

Machine cutting of the ribs became possible as Starduster Corporation began converting the hand-drawn plans into AutoCAD. Currently the Starduster Too plans are completely in AutoCAD but only the ribs of the Acroduster Too have been converted.

Anticipating the approval of the "Sport Pilot" category as we discussed in the last issue, we will soon have precision CNC-cut V-star SA900 ribs available.



*One sheet of Acroduster Too ribs...*

# Painters Don't Always Need Sprayers

Extracted from *Sport Aviation* March 2001  
"Letters to the Editor"

December's "Aircraft Building" on painting presents an excellent description of the various types of paint spraying equipment and states that, "You can give your airplane a professional paint job even if you have no experience because today's paints and application equipment make the process much easier.

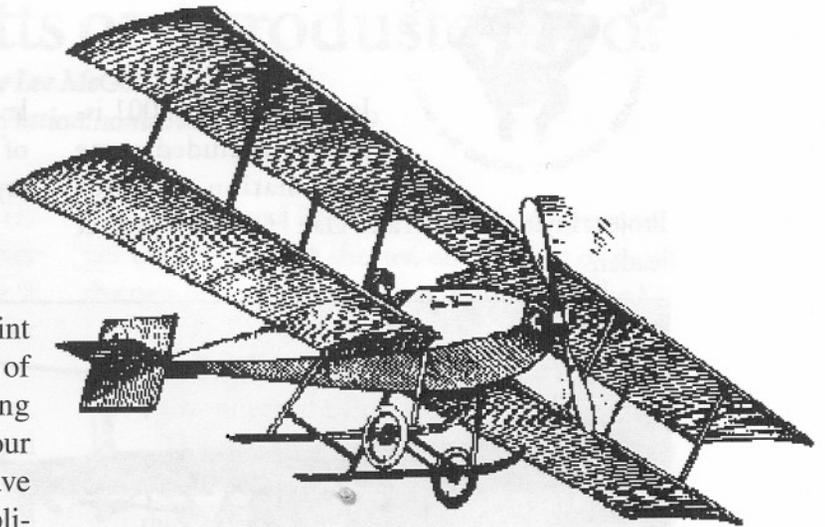
This is quite true, but the article's last paragraph of the article says that, "To get a good finish, spray equipment is mandatory, and..." This is not true.

I painted my GN-1 Aircamper ("What Our Members Are Building & Restoring," September 1998) using a catalyzed polyurethane, (waterborne) paint from Aircraft Finishing Systems in Ennis, Montana, using a foam roller and foam brush. This paint is nontoxic and nonflammable and can be applied in the presence of any type of heater or stove.

Boat builders and repair shops have used a foam roller brush to apply all types of paints and varnishes on all types of surfaces such as wood, metal, plastic, fabrics, and composites for some time with beautiful results. In fact, the proper foam roller covers can only be obtained from boat supply houses.

With a little practice, a finish can be easily obtained that cannot be differentiated from a good sprayed-on job, and the equipment is extremely inexpensive.

Warren H. Timmerman  
Danville, Indiana



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# Project Flying Gibbon

## Update

In the February 2001 issue we included some information about

Project Flying Gibbon and Dan Henry, the project leader.



**Dan Henry, Flying Gibbon Project Leader at Oroville**

On March 16, 2001, Dan arrived at Starduster HQ via Les Homan's V6-powered Starduster Too. Dan had flown into San Francisco the previous evening, making a special layover on his trip from London to Sydney, Australia. Les picked Dan up the next morning and flew him to Oroville. Notwithstanding a sore "bum", Dan made the trip alive!

Dan's visit was to give us all a chance to meet face-to-face and get more details on the project's around-the-world in a Starduster venture.

Dan gave us more details about the IDTG, the charity they will raising funds for. One of the trip's goals is to make donations at the grassroots

level at each of the stops along the way. All of this of course will be documented by film ala Discovery Channel, PBS, etc.

We have been able to locate a Starduster Too for Project Flying Gibbon to use in their journey. We'll keep the name of the very gracious owner confidential for now until all details are final. This owner is willing to see his aircraft be refit with a new engine (see the SMA SR305 diesel on the next page), repainted, and new advanced instrumentation put in. Hmmmm, maybe that doesn't sound too bad...

Military air transport is being negotiated to get the SA300 to England from the U.S. for the start of its adventure. Also, it is planned that Team Flying Gibbon engineers will spend some time in the near future at Starduster Corporation to see and learn how Stardusters are built so they will be able to apply that knowledge if needed during the trip.

We'll keep you updated!

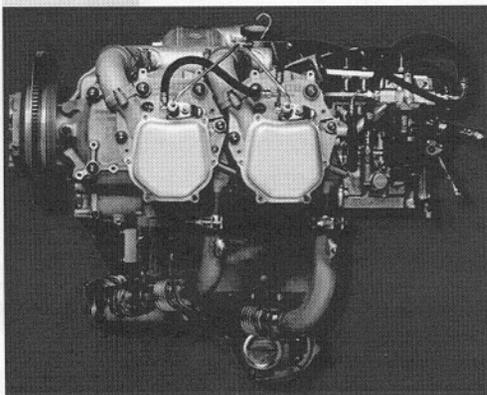
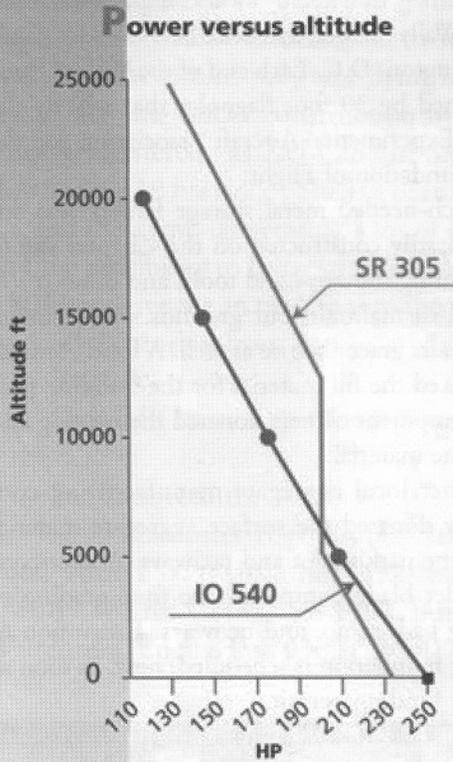


HRH Charles, The Prince of Wales, Patron

"We need to make technology our servant and not our master; and also to help ordinary people to choose what works best for them, within their own particular environment, which is really what 'sustainability' is all about. "I have been a huge admirer of what ITDG seeks to do: to create better lives, to protect the environment in which poorer people have to live. I am very proud and honoured to be Patron of this particularly effective organisation. "I am hoping that as we move into a new millennium the work of ITDG will become even more appreciated. I believe it is the only way we are going to have a future."



# TECHNICAL SPECIFICATIONS



*The SMA SR305 Engine*

TYPE	SR 305
Displacement (cubic inc)*	305
Power at sea level	230 hp
Power from 5,000 to 12,000 ft	200 hp
Isa conditions	125 hp
Number of cylinders*	4
Fuel	Kerosene Jet A1
Injection method	Direct
Turbocharged	Yes
Cooling system	Air and Oil
Reduction gear*	No
Propeller rotation speed (Rpm)*	2,200
Engine Control	Electronic Single Power Lever
Target TBO (hours)	3,000
% of flight cost reduction*	30% to 40%
Jet A1 consumption* (lb/Hp.hour) at full power	0.32
Forecasted dates** of European certification (JAR "E")	End 2000
FAR 33 certification will be issued just after European certification	Summer 2000

# Continuing an Aviation Tradition

EAA Chapter 1112, Oroville, California

*Ron Turner*

California's Oroville Municipal Airport, home to EAA Chapter 1112, was built in 1941 as a U.S. Army Air Forces training base, and many now-famous pilots, including Chuck Yeager and Bud Anderson, received their training there. After World War II the government awarded the airport to the city.

In time, several old-time aviation enthusiasts and pilots began meeting at Dix Mackey's business hangar (Aero Specialty) at 227 Chuck Yeager Way. Reviewing each other's past experience and aviation background, they decided that the community and future generations could benefit from their knowledge, and there was no better way to share that knowledge than by forming an EAA Chapter.

Elected president, Cal Combs chose the Chapter's property site and with Dan Cook presented a plan to the city of Oroville to better the community by creating the facilities capable of sharing various aspects of aviation with the public. The plan also requested a lease for some airport property. The city of Oroville granted the Chapter the property and accepted its proposals.

To give people access to the chapter site, a gate was installed, along with an entry drive over a 30-inch culvert. Clean up, mowing, and trimming of existing trees followed, along with laying out the building pad site and future taxiways. The following season found many Chapter members participating in constructing the building pad, parking lot, and picnic/campground areas. This area is used frequently for summer evening meetings, barbecues, and other public events.

A separate organization from EAA Chapter 1112, the Oroville Foundation of Flight receives support from a variety of sources, including volunteer time and resources from the Chapter. The Oroville Foundation of Flight's goal is to help train people who have a desire to work in the aircraft industry. Upon graduation, students will be prepared for employment in airline maintenance, aircraft manufacturing, or other jobs requiring aviation-related skills. Donors to the Foundation can have their names permanently engraved on the Donor Wall for all visitors to see. The Wall of Fame's

two panels are joined by a 40-foot flagpole that flies an American flag, donated by local Congressional Representative Wally Herger, that once flew over our Capitol in Washington, D.C. Each end of the Wall of Fame will be framed by 30 foot flagpoles that will fly the flags of the Experimental Aircraft Association and the Oroville Foundation of Flight.

A much-needed metal storage facility was donated and hastily constructed on the Chapter site to house our riding mower, hand tools, and other materials needed to maintain our grounds. Picnic tables and lawn chairs grace the site as well. A local contractor contributed the fill material for the building pad, and local equipment owners donated the hauling and placing of the material.

Another local aggregate manufacturing company donated the surface aggregate material for the parking lot and taxiways. A laser-controlled Grader blade completed the final grading of the building pad, ramp, and taxiways. Excavation of the building foundation is scheduled, next, as soon as weather and funding permit.

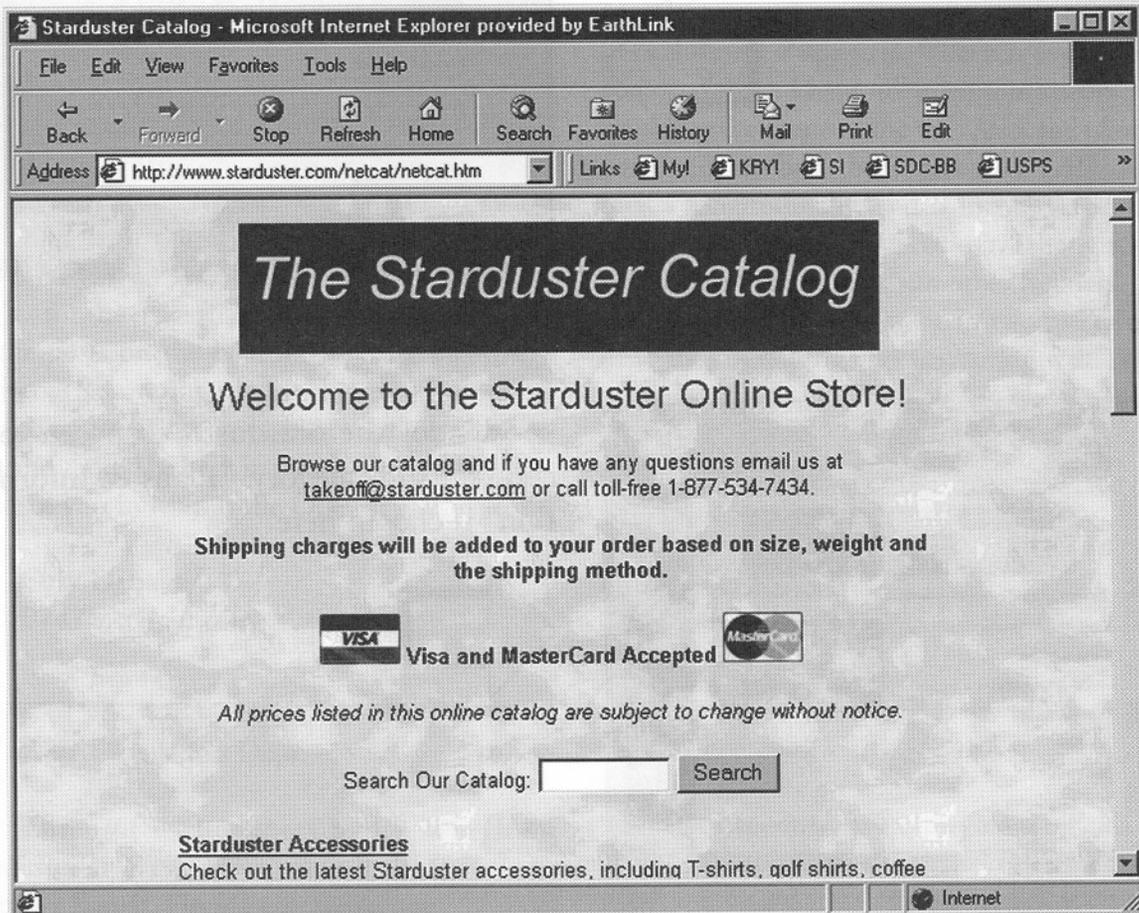
The City of Gold Chapter 1112 has successfully staged four "Starduster Open House" fly-ins, hosted the EAA B17 *Aluminum Overcast* in its four-day tour stop here, and has held a fly-in breakfast each month for three years. These activities have boosted our membership to 76, and the Chapter recently hosted a Northern California Chapters joint leadership conference, which was geared to help each other out and combine our efforts to further aviation to the youth and citizens of all Northern California communities.

***The Oroville Foundation of Flight is a  
501(c)3 Non-Profit Organization***

# eStarduster

Starduster Corporation Online

[www.starduster.com](http://www.starduster.com)

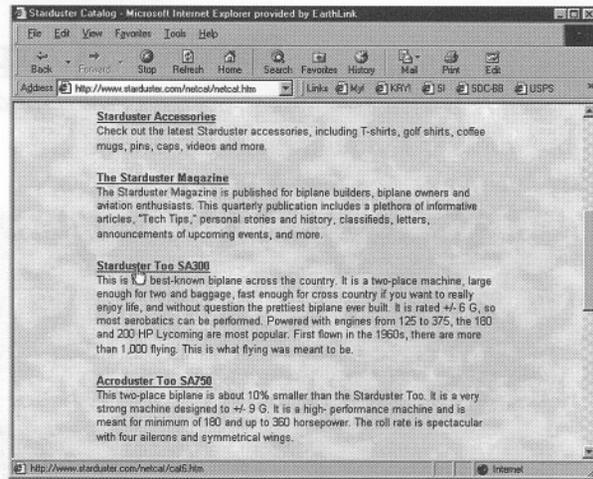
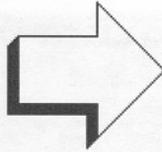


The Starduster web site offers customers the opportunity to order a variety of Starduster products online through *The Starduster Catalog*.

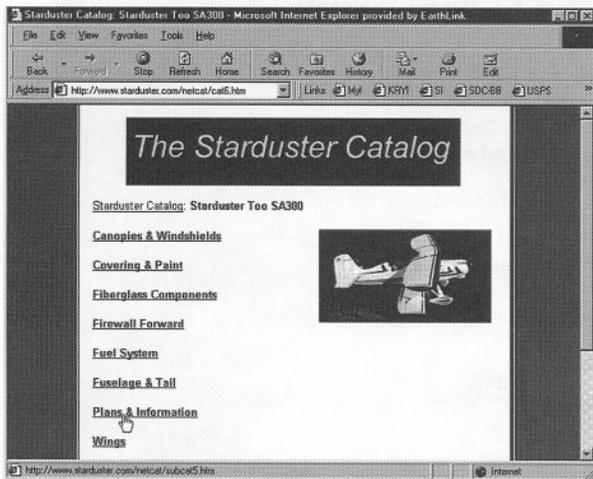
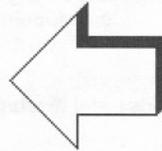
Products includes accessories like caps, t-shirts, coffee mugs and books to aircraft kits and manufactured parts.

From the Home Page, click on the CATALOG button. Then click on the catalog cover to enter the Online Store's Welcome Page (above).

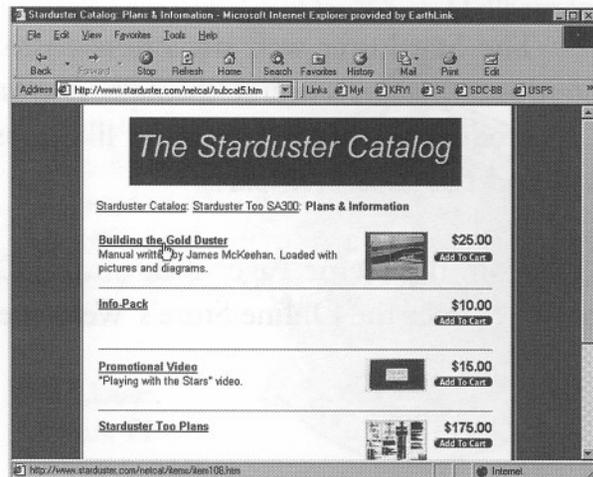
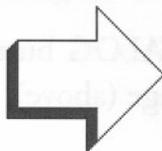
Then choose the category you wish to browse. In this example "Starduster Too SA300" is clicked on.

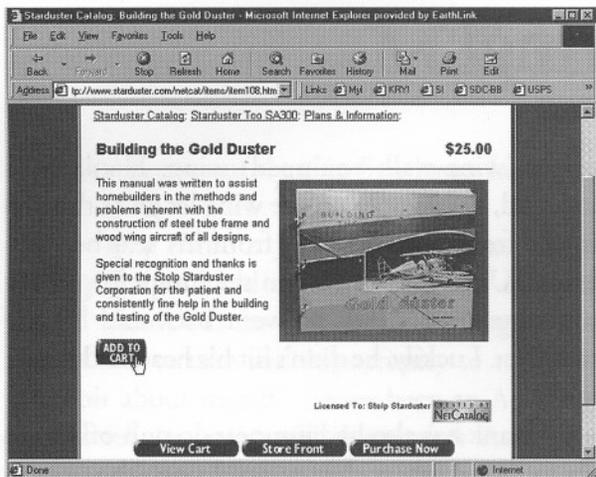


Under the Starduster Too category, choose a sub-category. "Plans & Information" is chosen here.

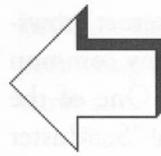


Let's get a book about construction methods by clicking on "Building the Gold Duster".





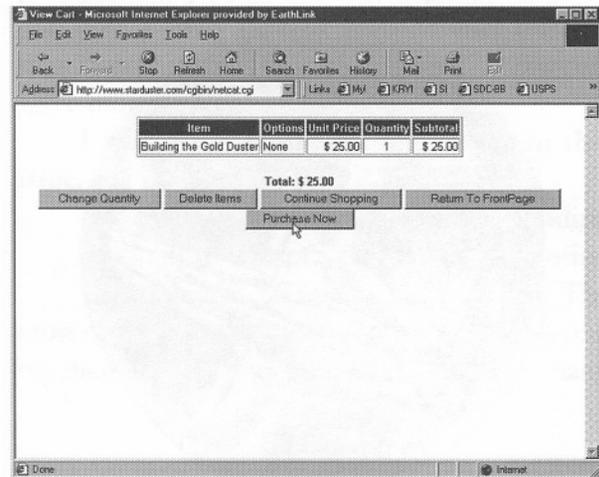
Read a bit about your selection then click on "ADD TO CART" to place the book in your shopping cart.



Now you have the opportunity to **CHANGE** Quantity of any items you've ordered, **REMOVE** items, **CONTINUE** Shopping or **PURCHASE** Now.

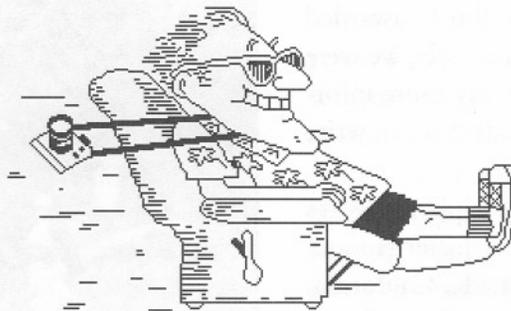


When you click on **PURCHASE NOW** you are taken to a secure web server where your contact and credit card information is entered and transmitted to Stolp Starduster Corporation.



See you in Cyberspace,

*Ken*



# Bi-Diving!

Ken Nowell

One day while I was on the Internet browsing eBay, I typed in one of my common search terms: "starduster". One of the items the search returned was for a "Starduster Jump Patch". Intrigued, I clicked on the link.

Back in my college days, I was known to jump out of an airplane or two and earned my "C" (Advanced) license and "Jumpmaster" rating from the USPA. Also, I knew ex-pres of Starduster Bill Clouse had been a jumper. So, the combination of Starduster and Skydiving had to be a good story.



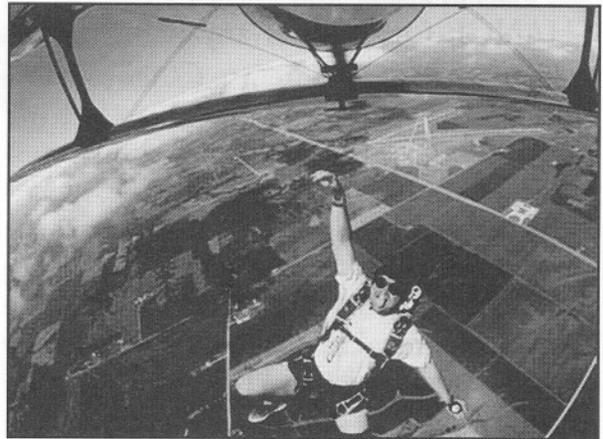
Bill Clouse tells me there was a fellow, Marty Klett, in Perris Valley, California who used to turn his Starduster Too inverted and drop the jumper. The Starduster Jump Patch was thusly awarded the jumper after landing. Unfortunately, we were not able to contact Marty to get any more information. maybe someone who reads this can write in and update us.

Of course, jumping from a biplane has it's unique difficulties. Long-time Starduster fan and builder Hank Schmel from Riverside, California, has had guys jump off his Stearman. Once for an opening event at a show at Loveland, Colorado, he took up two U.S. Army Golden Knights. One jumper was in the front seat, the other on the

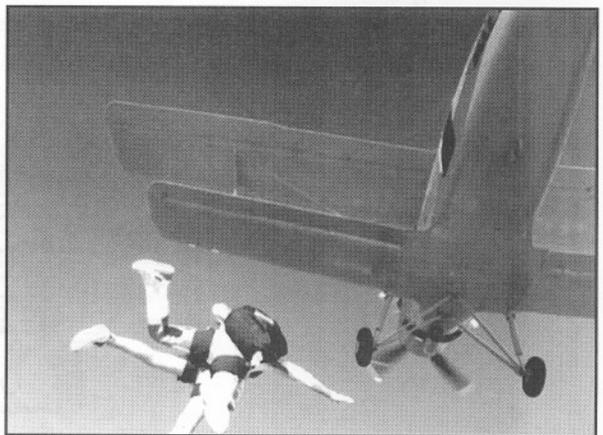
upper (wing-walk equipped) wing. Hank went inverted, the jumper on the wing let go as the one in the front seat, hanging from his seat belt, released. Unfortunately, when the jumper from the top wing pushed off, he went back and hit the stabilizer. Luckily, he didn't hit his head and wasn't hurt.

Hank has also had jumpers do pull-offs from his top wing where they popped open their chute and were "pulled off" into thin air.

Cowabungaaaaaa!!!



*Jumping from a Pitts S2A*



*Is that a Starduster Executive they're jumping from? No, that's an Antonov AN2 YL-LEN over Bali...*

# Accident Safety Reports

NTSB Identification: FTW00LA177

Accident occurred Wednesday, June 07, 2000 at SPICEWOOD, TX

Aircraft: Starduster Too SA300, registration: N1011Z

Injuries: 1 Uninjured.

The pilot executed a 'three point landing' on runway 35. During the landing roll, the tailwheel-equipped airplane's right main landing gear departed the right side of the runway. The airplane pulled to the right as the 'wheel bogged down' into the mud. The pilot was unable to bring the right main landing gear back on the runway with the use of left rudder and left brake. As the airplane decelerated, it nosed over and came to rest inverted.

The National Transportation Safety Board determines the probable cause(s) of this accident was:

The pilot's failure to maintain directional control of the airplane during the landing roll. A factor was the muddy terrain condition.

Full narrative available below:

FTW00LA177

On June 7, 2000, at 1530 central daylight time, a Starduster Too SA300 tailwheel-equipped experimental airplane, N1011Z, was substantially damaged when it nosed over during the landing roll at the Spicewood Airport near Spicewood, Texas. The private pilot, sole occupant of the airplane, was not injured. The airplane was registered to a private individual and operated by the pilot. Visual meteorological conditions prevailed for the 14 Code of Federal Regulations Part 91 personal flight, and a flight plan was not filed. The local flight departed from the Spicewood Airport, approximately 1500.

According to the pilot's statement, he executed a "three point landing" on runway 35. During the landing roll, the right main landing gear departed the right side of the runway. The airplane pulled to the right as the "wheel bogged down" into the mud. The pilot was unable to bring the right main landing gear back on the runway with the use of the left rudder and left brake. As the airplane decelerated, it nosed over and came to rest inverted. The left upper wing, rudder, and vertical stabilizer sustained structural damage.



*When we remember that we are all mad, the mysteries disappear and life stands explained.*

**NTSB Identification: LAX00LA338**

**Accident occurred Saturday, September 16, 2000 at N. LAS VEGAS, NV**

**Aircraft: Stevens STARDUSTER II AS300, registration: N27CG**

**Injuries: 2 Uninjured.**

*This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.*

On September 16, 2000, at 0900 hours Pacific daylight time, a Stevens Starduster II AS300, N27CG, ground looped after landing on runway 12 at the North Las Vegas Airport, North Las Vegas, Nevada. The airplane, owned and operated by the pilot under the provisions of 14 CFR Part 91, sustained substantial damage. The certified flight instructor (CFI) and commercial pilot/owner were not injured. Visual meteorological conditions prevailed for the instructional flight and no flight plan was filed.

In an interview with an investigator from the Safety Board, the pilot/owner stated he had purchased the airplane about a month prior to the accident, and was receiving conventional gear instruction that was to conclude with a checkout over the weekend. They had been conducting touch-and-go takeoffs and landings for about an hour prior to the accident. This was the last landing of the day and they had planned on a full stop landing. There were no discrepancies on the previous landings or the final landing. On the landing roll, the tail wheel started to "wobble" and the airplane "snapped around," and veered to the left off the runway and ground looped. After inspecting the tail wheel section, the pilot noted that the tail wheel spring was broken.

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**NTSB Identification: NYC01LA015**

**Accident occurred Sunday, October 15, 2000 at ERWINNA, PA**

**Aircraft: Moore STARDUSTER SA-300, registration: N3168**

**Injuries: 1 Serious.**

*This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.*

On October 15, 2000, about 1748 Eastern Daylight Time, a Starduster SA-300, an amateur built airplane, N3168, was substantially damaged during a forced landing after takeoff from the Vansant Airport (9N1), Erwinna, Pennsylvania. The pilot was seriously injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight conducted under 14 CFR Part 91.

The pilot stated that he intended to return to his home airport, Sky Manor Airport, Pittstown, New Jersey. After departing 9N1, about 1/4 mile from the airport, the engine lost all power. The pilot

performed a forced landing into trees, and did not recall any events after the impact. The pilot added that he flew the airplane earlier that day, and did not experience any problems.

A Federal Aviation Administration inspector examined the engine. He rotated the propeller and confirmed camshaft and crankshaft continuity. He was not able to attain thumb compression on the number three and number five cylinders. The inspector stated that the number three cylinder had impact damage, but he did not know why thumb compression could not be attained on the number five cylinder.

The inspector added that fuel was present, and he did not observe any fuel contamination. Due to impact damage, the inspector was unable to access the magnetos.

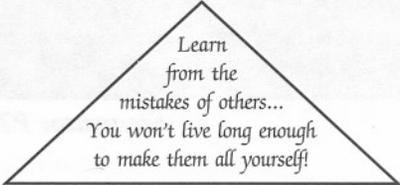
The engine manufacturer was notified about the accident, and planned to further examine the engine.

**NTSB Identification: LAX01LA104**  
**Accident occurred Friday, February 23, 2001 at Chino Valley, AZ**  
**Aircraft: Schneider Starduster SA300, registration: N1173**  
**Injuries: 1 Uninjured.**

*This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.*

On February 23, 2001 at 0845 hours mountain standard time, a Schneider Starduster 300 SA300, N1173, sustained substantial damage when it veered to avoid a truck, struck a bush, and came to rest inverted while taking off from Williams Valley Road, near Chino Valley, Arizona. The airplane was operated under the provisions of 14 CFR Part 91 by a private owner, and flown by an airline transport pilot, who was not injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight, which was departing at the time of the accident.

The pilot was interviewed by National Transportation Safety Board investigators. He stated he had landed the previous day on the road, due to a broken throttle linkage. On the morning of the accident, the pilot, airplane owner, and a mechanic returned to repair the linkage. When the repairs were completed, the owner and mechanic cleared the road for takeoff. During the takeoff one of the vehicles drifted into the road, the pilot realized he would be unable to clear the vehicle, and veered right to avoid it. The right wing struck a bush on the side of the road, the airplane nosed over, and came to rest inverted.



Learn  
from the  
mistakes of others...  
You won't live long enough  
to make them all yourself!



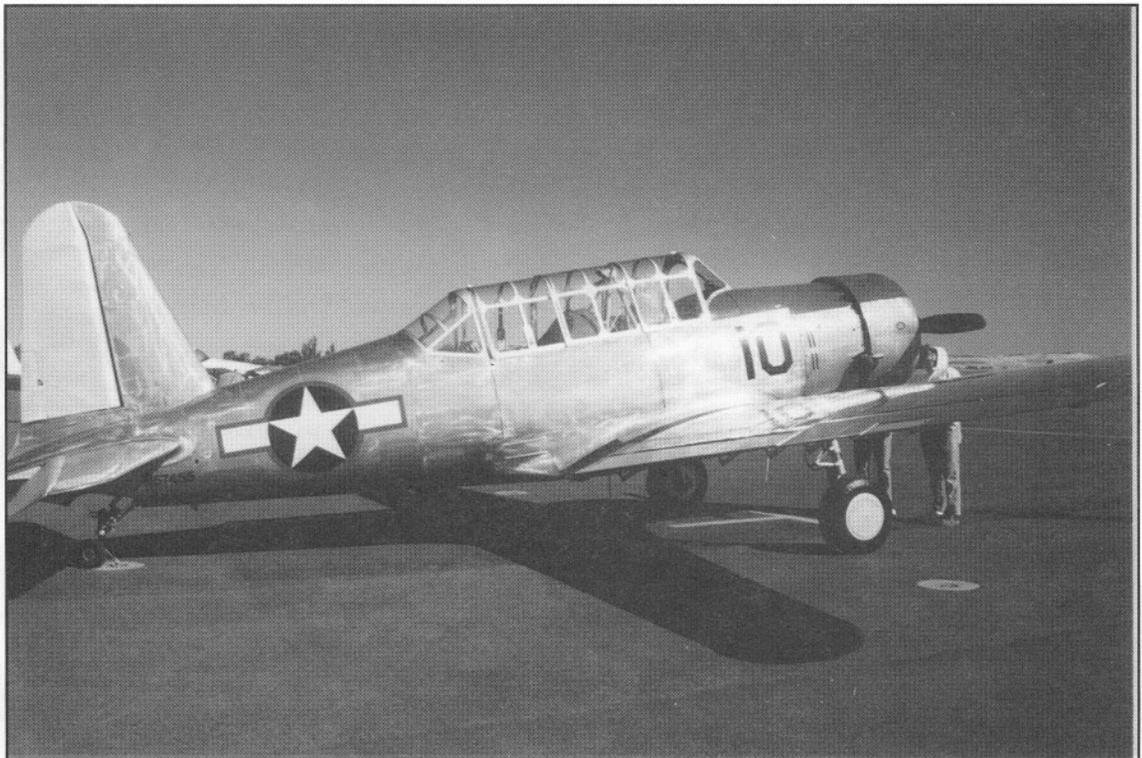
*SA300, Mickey Jordan, Arlington, GA*



*Stearman PT 17 at '99 Oroville Open House*



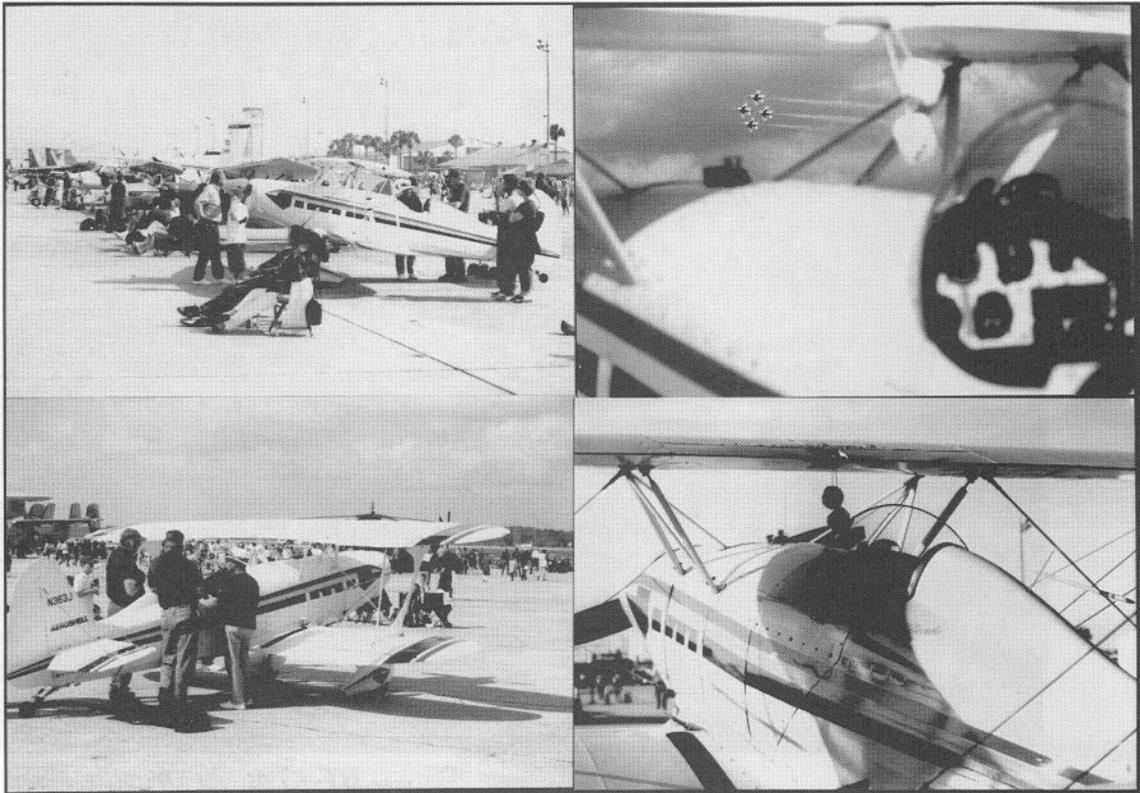
*Hot Dog N9212N with Lyc. R680 at '99 Oroville Open House*



*BT-13 at '99 Oroville Open House*



*SA750 Ready-to-Paint, Anthony Kovschak, Fort Worth, Tx*



*N363J - The Gold Duster - at Tyndall AFB Airshow*

# CLASSIFIEDS

ADVERTISING CLOSING DATES: MARCH 1, JUNE 1, SEPTEMBER 1 AND DECEMBER 1.

CLASSIFIED ADVERTISING RATES ARE \$5.00 PER COLUMN INCH - MINIMUM CHARGE \$5.00

## FOR SALE

**Starlet SA500**, N73KG. Lycoming O-235-C1, 1,100TTE, 255TTAF. Spring Steel Gear. New Cleveland 500x5 Brakes. Warnke 74x44 Prop. Stainless Exhaust. 12 Gal Wing, 17 Gal Fuselage Tanks. May Annual. Sweet flying little bird. See October '99 Starduster Magazine, p. 15, for full pilot report; January 2000, p. 19, for color pic. \$20,000.

John A. Russell, 7215 Brookside,  
San Antonio, TX 78209 (210)826-0045

## FOR SALE

**Starduster Too Project.** Complete, less Flying Wires and Center Section Fuel Tank. All hard work done. 98% Ready to Cover. Engine: E185-1 Continental, 400SMOH. \$9000.00.

Contact Les at 662-746-6824  
(days), 662-746-2339 (eve).

## FOR SALE

I have **Starduster II** project for sale 95% complete, health problems. Will sell with or without 0 time O-360 engine.

717-432-7389

## FOR SALE

**Starduster Too**, third factory built by Lou Stolp, finished in 1974. 1040 hours since new—engine and airframe. Lyc O360-A1A, all ADs done. 760 Collins Com, GPS, ELT, Mod-C-Trans, Intercom, Sliding canopy, instruments both cockpits, original fabric in good condition, always hangared, pictures on request, Cleveland brakes, Scott tailwheel, cockpit heater, located in Arizona, \$29,990

Art Hanson, 520-567-6660,  
hanson@cybertrails.com.

## WANTED

Propeller for Acroduster Too with Continental IO360.  
Contact Richard Heredia  
408-842-3212 (days) or 408-847-0986 (eve).

## FOR SALE

**Starduster Too** project, ready for cover, Cessna spring gear, cleve wheels and brakes, inst both cockpits, controls, fus tank installed, with bubble canopy, wheel pants, wing tank, and IO-360 Cont. inspected needs reassembly, located in AZ. \$15,750

Art, 520-567-6660 or  
hanson@cybertrails.com

## FOR SALE

**Starduster Too** on landing gear, lower wings mostly done, dynafocal engine mount, fiberglass turtleback-nose bowl and wheel pants, controls in, brakes, instruments, windshields, and full canopy, wing tank built, nose tank in, upper wing parts all ready to assemble, everything to complete except engine and canvas.

541-672-8455 days or  
email: mcgee@ramcell.net

## FOR SALE

**Acroduster Too** Project. Wings complete - ready to cover. Includes: Basic Fuselage, Landing Gear, Tail Feathers, Torque Tube, Wheels & Brakes, Cabanes. \$9500.00

Located at Stolp Starduster Corp.,  
Oroville, CA  
Phone: 530-534-7434  
email: takeoff@starduster.com

*(This project is not factory-built. We are selling this as a private party sale.)*

## REUNION NOTICE

**May 5, 2001**

### **Santa Ana Army Air Base Wing**

celebrates its 26th annual reunion and luncheon at Orange Coast College, Costa Mesa, CA. Former S.A.A.A.B. personnel, civilian, military, aviation cadets and guests.

Contact:  
S.A.A.A.B. Wing  
P.O. Box 1764  
Costa Mesa, CA 92628  
(949) 631-5918 Thurs. & Fri. 10 a.m. to 3 p.m., or 24 HR Ans. Mach.  
Please leave Name & Address

## AFS Steel Conversion Coating

AFS Steel Conversion Coating is a very special treatment when compared to similar solvent-based conversion coatings. Our conversion coating has a clear waterborne acrylic paint mixed with it so not only is the rust converted to a dark black ferric iron but the whole surface is sealed to prevent further rusting. This transformed coating can be left as a black clear-coated surface which will stay this way for several years, or it can be topcoated with any of our paint products. This product has no VOCs, is non-hazardous by EPA definitions and can be cleaned-up with water.

rust is  
converted  
to a dark  
black  
ferric iron

For steel tubing that already has a little rust inside, we recommend AFS Steel Conversion Coating. This would convert the rust to black ferric iron and then seal it in a clear acrylic coating.

Before using a primer/sealer on metals, the surface must be free of grease, oil, dirt, and other foreign matter. Oxidation material must be removed or converted with Aircraft Finishing Systems Conversion Coating.



Quart	\$27.19
Gallon	\$98.87

## Beer

I know all of you have read or heard this wisdom before, but I have not seen anyone explain it as well as the almighty wise Cliff Clavin, on the sitcom Cheers, explaining the Buffalo Theory to his buddy Norm. And here's how it goes....

"Well ya see Norm, it's like this...A herd of buffalo can only move as fast as the slowest buffalo. And when the herd is hunted, it is the slowest and weakest ones at the back that are killed first. This natural selection is good for the herd as a whole, because the general speed and health of the whole group keeps improving by the regular killing of the weakest members.

In much the same way, the human brain can only operate as fast as the slowest brain cells. Excessive intake of alcohol, as we all know, kills brain cells, but naturally it attacks the slowest and weakest brain cells first. In this way, regular consumption of beer eliminates the weaker brain cells, making the brain a faster and more efficient machine.

That's why you always feel smarter after a few beers."

Contributed by:  
Dick Starks  
"Le Chien De La Ferraille De La Cour"  
The Junk Yard Dog)



Remember, the success of this publication depends on material submitted by its readers. Please continue to send us your photos and articles for inclusion. Correspondence and articles can either be emailed to [ken@starduster.com](mailto:ken@starduster.com) or mailed to:

The Starduster Magazine  
Attn: Editor  
129 Chuck Yeager Way  
Oroville CA 95965-9200

Photos should be sent as prints via US Mail to the above address. Please do not email photos that you would like included in the magazine - the resolution is too low for printing.

## The Starduster Scramble

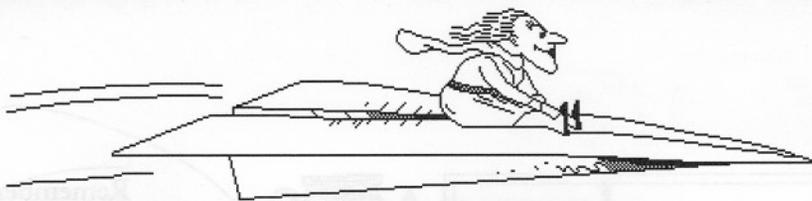


Words from the April 2001 issue of  
The Starduster Magazine



BIPLANE  
ARLINGTON  
CADMIUM  
SKYBOLT  
ACRODUSTER  
AUTOCAD  
GIBBON  
CONVERSION  
THROTTLE

BARTLESVILLE  
TULSA  
AILERON  
STARDUSTER  
PITTS  
ROLLER  
OROVILLE  
HOUSEBOAT  
ELLIPTICAL



# STARDUSTER OPEN HOUSE 2001 REGISTRATION FORM

Let us know if you will be attending! Please complete the following form. When finished, please fold and mail the form to the address on the reverse side. You may also fax the form to (530) 534-7451, or call us at (530) 534-7434.

*See schedule on page 4*

<b>Activity</b>	<b>Estimated Cost per Person</b>	<b>Number of People</b>
Friday Houseboat Lake Oroville Cruise	\$5.00 - \$10.00	
Friday Dinner at Oroville	\$10.00	
Saturday Breakfast at Oroville	\$4.00	
Saturday "Dawn Patrol" at Willows Airport	Menu	
Saturday Evening Dinner at Oroville	\$12.00	
Sunday Breakfast at Oroville	\$4.00	

Name: \_\_\_\_\_ Please list all members in your party:

Street: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

EAA Member?: \_\_\_\_\_ Chapter: \_\_\_\_\_

Are You Flying? \_\_\_\_\_ Type of Aircraft: \_\_\_\_\_ N# \_\_\_\_\_