



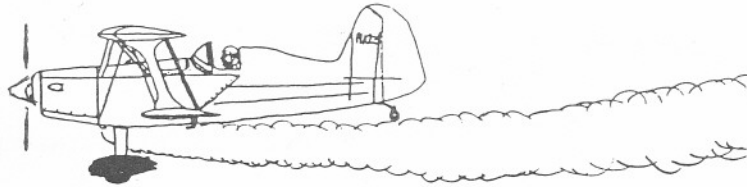
Starduster

MAGAZINE



Dedicated to the
ACTIVE Homebuilders

OCTOBER 1992



OCT 92

PREZ'S COMMENTS:

OSHKOSH-92 THOSE OF US THAT HAD THE TIME, DESIRE AND MONEY FOUND THE WEATHER GOOD, MANY, MANY AIRPLANES AND AS USUAL AT LEAST 100 PEOPLE PER AIRPLANE. AND ALSO, AS USUAL, THE EAA'ERS RESPONSIBLE - DO A FANTASTIC JOB OF KEEPING EVERYTHING TOGETHER AND RUNNING SMOOTHLY. WE HAD FOUR STARDUSTER TOO'S AND ONE V STAR AT THE CONVENTION - WAS A LITTLE DISAPOINTED AT THE LACK OF STARDUSTER AIRCRAFT - AT THE CONVENTION - DO NOT THINK WE CAN BLAME IT ALL ON THE ECONOMY. MOST DUE TO THE HUGE SIZE OF IT ALL. IT IS IMPOSSIBLE TO TAKE A LEISURLEY FLIGHT OR DEMONSTRATE YOUR AIRPLANE. ONE HAS TO CONSTANTLY WATCH OVER THEIR MACHINE TO PROTECT IT FROM WUFFO'S [PEOPLE WHO ASK, "WHAT FOR YOU DO THIS OR THAT", ENDLESSLY]. SO----- I'VE MADE ARRANGEMENTS, FOR THOSE INTERESTED, TO MEET AT A SMALL AIRPORT 40 MILES WEST OF OSHKOSH, WATOMA. SEE INSIDE ARTICLE FOR DETAILS.

HAD A GREAT TURNOUT AT THE "ACEE DUCCE" - 60 GUESTS INCLUDING "ERNIE". AM ALWAYS VERY BUSY AT THE DINNER AND DON'T GET TO GREET ALL OUR GUESTS, IF I MISSED YOU AM SORRY - .MAYBE NEXT YEAR?

STARDUSTER HAS BEEN ENJOYING A BETTER YEAR AND IF IT KEEPS UP - WILL NEED MORE HELP- AND SPEAKING OF HELP, I WANT TO THANK ALL OF YOU THAT CONTINUE TO HELP MAKE MY JOB EASIER - AND REMEMBER IT IS YOUR CONTRIBUTION OF MATERIALS THAT WILL CONTINUE TO MAKE THIS MAGAZINE A SUCCESS. NUFF SAID,

"B.C." PREZ

Stolp Starduster Corp.

4301 TWINING
RIVERSIDE, CA 92509
(714) 686-7943
FAX (714) 784-0072
WATS 1-800-833-9102

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President

OCTOBER 1992

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

FRONT COVER - N107UP. Bob & Renae Ely, Baxter Springs,
Kansas. On the line at Oshkosh 1992. Ford V-6 powered
Starduster Too.

BACK COVER - N186C Acroduster One. Built by Harry Warr,
Riverside, California. At Starduster Open House, May 1992.

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BUILDING OUR AIRPLANES. TECHNICAL INFORMATION, NEWS AND
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THE EDITOR IS ALWAYS LOOKING FOR TECHNICAL TIPS 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 ARTICLE SUBMITTED.

ODDS & ENDS FROM YOUR EDITOR

Well it has been a wonderful summer, good old N96576 has, in little over three years accumulated 600 plus hours and has performed quite well, with little maintenance or other problems.

Your editor has been able to meet and fly with some wonderful people. During my recent trip back east I was able to get together and visit with Phil Max N13HX, a Starduster Too owner from Wallingford CT. After corresponding with him for several years the meeting with him and his lovely wife and daughter was very enjoyable. Remember his airplane was on the back cover of the July 1991 Starduster Magazine, [The one on skis].

On our return trip from Oshkosh I got to fly with Bob Ely who owns N107UP the Ford V6 powered Starduster Too. I was pleasantly surprised by its performance. Bob and Renae Ely are wonderful people. More on their airplane elsewhere in our trip to Oshkosh.

I would like to apologize to John Hargrove, Larry Rydberg, and Titus Hayes as on our return trip from Oshkosh we were unable to stop and visit as originally planned due to weather, minor mechanical problems and having to be back to work. On occasion we were within a few hundred miles, oh well perhaps next year.

We at Starduster Magazine would like to congratulate Mike & Traci Mattei on the birth of their twin girls, born July 17, 1992. He calls them the barnstorming twins. This event just might slow down the progress on his Acroduster Too, and I have to admit it is a good reason.

Safety is again my topic of concern after two recent fatal accidents one in southern California and the other in Washington. Several items about buying and selling these types of aircraft should be noted. Be careful who you sell your airplane to. Make sure the buyer is capable and that all items repaired or inspected are done and properly logged. A friend of mine recently offered his Starduster up for sale and probably could have sold it for more money but chose to be selective, because several of the prospective buyers comments indicated marginal responsibility on their part. However, it did not do him much good, as the airplane was substantially damaged in a collision with a 172 after touchdown, shortly after it was sold, and was not the fault of the new owner. The wonderful thing is that no one was hurt, and the airplane will be rebuilt. The other accident was a mid air that took the life of a good friend, and both are described elsewhere in this issue.

The fatal accidents described above were probably due to poor judgement and circumstances. But should serve to remind us that spur of the moment decisions followed by more poor decisions generally results in accidents, and are not solely attributed to Stardusters.

D.C.B. Editor

SAD NEWS

STARDUSTER TOO ACCIDENT
DUAL FATALITIES

NOTE: THERE HAS NOT BEEN AN NTSB FINAL REPORT ON THIS ACCIDENT. WCC JR.

A 40 YR OLD BUSINESS MAN BOUGHT AN OLDER STARDUSTER TOO, POWERED BY AN IO-540 AND HARTZELL AEROBATIC C/S PROP. HE HAD OWNED THIS A/C ONLY NINE DAYS PRIOR TO THE ACCIDENT BUT HAD FLOWN IT FOR EIGHTEEN HOURS - HIS LOG BOOK HAD INDICATED OVER 30 HOURS OF DUAL IN A CITABRIA, IT IS MY OPINION HE HAD A GOOD HANDLE ON AIRBATIC MANUEVERS. BUT, IT IS MY EXPERIENCE THAT THE CONTROL LOADS ARE SIGNIFICANTLY LIGHTER ON A STARDUSTER THAN A CITABRIA:

ON DATE OF ACCIDENT PILOT WANTED TO TAKE GIRL FRIEND TO ANOTHER LOCATION FOR BRUNCH.

WEATHER WAS BROKEN 1700 AGL AND PILOT MADE COMMENT "WILL HAVE TO DO SCUD RUNNING OR CLIMB OVER IT". THE OTHER AIRPORT WAS ONLY 20 - 30 MINUTES AWAY. THE AIRCRAFT NEVER MADE IT TO DESTINATION - ABOUT HALF WAY GROUND WITNESSES STATED "AIRCRAFT SPRIALED DOWN THRU CLOUDS WITH ENGINE MAKING FUNNY NOISE. AIRCRAFT IMPACTED NOSE LOW SPINING TO THE RIGHT.

MY OPINION - PILOT SPUN DOWN THRU HOLE IN CLOUDS - HAD INSUFFICIENT ROOM TO RECOVER. MY EXPERIENCE, IT TAKES 800' MINIMUM TO RECOVER A STARDUSTER FROM KNOWN SPIN. IMPACT SITE WAS 2100' AGL - SO VERY LITTLE, IF ANY, ALTITUDE BELOW CLOUDS AVAILABLE TO HIM.

ON INSPECTING WRECKAGE - IT WAS FOUND THAT ENGINE HAD OIL - FUEL AND WAS RUNNING AT IMPACT. ALL CONTROLS WERE INTACT AND OPERATING PRIOR TO IMPACT.

NOTE: - ELEVATOR TRIM WAS IN FULL NOSE "UP" POSITION. HORIZONTAL STAB HAD A LOT OF POSITIVE INCIDENCE.

MY OPINION / SUSPICION - AIRCRAFT WAS INITIALLY BUILT WITH SMALLER ENGINE AND PROP COMBINATION - WHICH NECESSITATED THE EXCESSIVE STAB INCIDENCE.

AT LATER DATE THE LARGER ENGINE AND PROP WERE - INSTALLED BY A DIFFERENT OWNER AND THE HORIZONTAL STAB WAS NOT RERIGGED BECAUSE ELEVATOR TRIM COMPENSATED FOR IT.

NOTE: - LAST OWNER COULD NOT BE USE TO LIGHTER STICK LOADS - COULD NOT HAVE BEEN INTIMATELY FAMILIAR WITH SPIN RECOVERIES.

MY OPINION IS THAT PILOT COULD HAVE KEPT AIRCRAFT IN STALL/SPIN OR DID NOT LET AIRCRAFT ATTAIN ENOUGH SPEED TO RECOVER BECAUSE OF LIGHTER STICK LOADS AND/OR PROXIMITY TO GROUND.

I AM STILL VERY UPSET ABOUT THE LOSS OF TWO PEOPLE - I STILL BELIEVE HAD THE PILOT CHECKED HIMNSELF OUT FIRST, THEY WOULD BE WITH US TODAY.

IF YOU OWN A STARDUSTER AND SELL IT, CALL ME WITH NEW OWNERS NAME - IF YOU'VE BOUGHT ONE, CALL ME - "LETS COMMUNICATE".

THANK YOU, B.C.

Bill C

MORE SAD NEWS

The aviation community is always saddened by the passing of one of its members, but it is doubly sad when one of those members is a good friend.

I regret to inform readers of Starduster Magazine that Scott Smith known by all his friends as Scotty died along with two other people when their airplanes collided during a Labor Day weekend barbecue Open House in Washington. This has been an annual event and has drawn numerous open cockpit tail wheel airplanes from all over the Northwest.

It is my understanding that Scotty was making a high speed low pass in the normal landing direction and that the other aircraft was landing from the opposite direction. The problem with this airport is, on the east end of the runway there are trees, which on a low pass blank out aircraft approaching from that direction. The collision occurred right over the trees. Neither aircraft made an attempt to avoid the other, no one can say for sure as to exactly what happened. But it seems obvious that they did not see each other.

This airport is an uncontrolled private strip with a vast majority of airplanes being non-radio. I myself have attended in the past and generally do not fly during these events as things tend to get a little crazy, however this was not the case as there were only a few airplanes left that Sunday afternoon when the accident occurred. I only say this because there needs to be some control and organization as to who is going to do what during these events. I do not blame anyone, as, for all involved there is enough to go around.

Scotty was my good friend and died doing what he loved. He had been giving rides over the weekend and was doing so at the time of the accident. He was a great promoter of aviation along with being a responsible pilot. He had retired out of the Air Force several years ago, after 30 years of service. Being on active flying status during most of that time.

He had flown numerous aircraft from Beavers to C130's, but his favorite was the Starduster Too. His pet peeve was seeing an empty seat in an open cockpit biplane. He had many friends among the military, antique and Canadian Powell River Flying bunch.

It was only 5 months earlier that he and his wife and daughter survived a miracle crash landing after engine failure (at night & IFR). His first Navion was totaled during this accident, with only his wife and daughter receiving minor injuries. Perhaps when its your time to go there is nothing you can do to stop it. Who Knows?

I had planned on attending this event, but had to choose between conflicting interests. I wish I would have gone now. Perhaps my being there may have moved the circumstances enough so that he would have escaped this tragedy.

We had attended numerous fly-ins and had flown together on many occasions. I had talked to him only weeks ago at the Evergreen Antique Fly-in when he invited me to attend their get together.

He will be sorely missed. I console myself with the thought that maybe this is better than dying of cancer in some hospital bed with IV tubes stuck in you. But to his family and friends it is of little consolation. My heart goes out to his family.

D.C.B. Editor & Friend

N4316 - Scotty and his Starduster Too are gone forever, but he and the memory of his airplane will live for a long time. This airplane not only brought much pleasure to Scotty, but to all the pilots and owners who flew it. N4316 was originally built by Jim Snodgrass of Racine, Ohio and Dolan Smith of Addison, Ohio. They finished and flew the airplane in the early 1970's. Geoffery Norcross of Berlin, Maryland owned it from the late 1970's to the mid 1980's, and Mark Aarhaus of Elma, Washington owned it for several years in the mid 1980's. It was bought by Scotty at this time and was owned by him until his demise. He was a great guy and it was a beautiful airplane. I am proud to have known and flown with him.

Scott (Scotty) Smith 1934-1992, and N4316.



NTSB URGING REPLACEMENT OF WORN MAGNETOS

The National Transportation Safety Board (NTSB) has cited worn magnetos as the primary cause of engine-failure accidents that resulted in dozens of fatalities and injuries during the late 1980's and early 1990's.

"Since 1985, the safety board has cited magnetos as a cause factor in 92 accidents involving 22 fatalities and 21 serious injuries," wrote acting FAA Administrator Barry L. Harris in a safety recommendation.

The recommendation cited several serious accidents in which obsolete, deteriorating magnetos had resulted in a total loss of power in-flight.

After analyzing many of the accidents, the NTSB concluded that magnetos generally are not receiving adequate maintenance and inspection and they may require replacement well before engine TBO.

"The safety board believes that periodic inspection, overall replacement of critical components are important fundamental facets of magento remedial maintenance. However, perusal of accident reports and SDR's (Service Difficulty Reports) makes it clear that the current level of magneto inspection, maintenance and service is much too infrequent. Magnetos are often viewed as integral ignition modules and are inspected, serviced, overhauled or replaced only when (a) gross malfunction or failure occurs."

Although maintenance personnel are required to run the engines during annual and 100-hour inspections to determine satisfactory performance in accordance with manufacturer's recommendations, they are required only to determine that the engine rpm using both magnetos does not drop excessively when individual magnetos are selected and that the variance in rpm drop between magnetos is not excessive. Magnetos are generally not removed unless there is a problem, eventually resulting in the loss of integrity of the magnetos' components.

The NTSB went on to say that although airworthiness Directives (AD's) have been issued for direct remedial action, there is no specific regulatory requirement for the routine, periodic removal, overhaul or comprehensive inspection of magnetos.

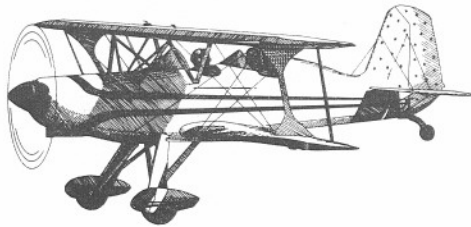
Teledyne Continental Motors (TCM) recommends that all magnetos in their product line be disassembled and inspected at 500-hour intervals. TCM also recommends magnetos-to-engine timing checks at 100-hour intervals, 500-hour impulse coupling inspections and complete engine overhaul at TBO or four years, whichever comes first, including magnetos.

The NTSB concluded that all old magnetos "should be replaced subsequently inspected at conservative intervals of calendar and flight time. Therefore, the safety board believes that all obsolete Bendix ignition coils and rotating magnets that still are in service should be replaced at the next appropriate maintenance interval, irrespective of total flight time."

The board also recommended issuing an AD, applicable to all Bendix S-20, S-200, S-600 and S-1200 series magnetos, requiring compliance with SB 560A, "Replacement of Magneto Transformer Coils and Rotating Magnets," at the next annual or 100-hour inspection, whichever comes first.

The NTSB also recommended issuing an AD, applicable to all ICM, Bendix and Slick Aircraft magnetos, that they be disassembled and inspected at the next annual or 100-hour inspection and at every 500 hours of flight time thereafter.

In addition, the safety board recommended publishing an advisory in the "General Aviation Airworthiness Alerts" [AC 43-16] emphasizing the importance of periodic aircraft magneto maintenance, service, inspection and overhaul in accordance with the magneto manufacturer's maintenance guidelines and detailed overhaul procedures.



FAA PUBLISHES AD ON LYCOMING PISTON PINS

The FAA has issued an airworthiness directive that potentially affects a range of horizontally opposed Lycoming engines with piston pins made by the company between June 18, 1991 and August 5, 1991.

Substandard materials had been used on the LW-14077 piston pin produced in this time period.

For engines with fewer than 75 hours time in service since overhaul, remanufacture, or replacement with the suspect parts, complete removal and replacement is required before accumulation of 100 hours total time.

For engines with more than 75 hours since overhaul or replacement of the pin, the AD requires replacement within the next 25 hours.

A list of factory overhauled or remanufactured engines is included in Lycoming Service Bulletin Number 501 revision B; copies of the SB can be obtained from Lycoming at 652 Oliver Street, Williamsport, Pennsylvania 17701.

This AD affects the 320, 360, 480, 540, 541, and 720 engine families.

Pay For Carburetor Float Replacement, AOPA Tells Manufacturer

AOPA has asked Consolidated Fuel Systems of Montgomery, Alabama, to pay the labor cost for replacement of the company's carburetor floats [batch number 10.91] declared defective by Emergency Airworthiness Directive 92-15-16 issued by the FAA on July 9. Consolidated's floats were installed by many owners of aircraft with Marvel-Schebler [Precision Airmotive] MA-3 and MA-4 carburetors in compliance with a Precision Airmotive service bulletin last year. Consolidated, which produces floats under FAA parts manufacturer approval, has offered replacement parts at no charge. Douglas C. Macnair, AOPA's director of aviation standards, told Consolidated, "The labor involved to remove the float and inspect or replace it averages four hours, AOPA believes this is an unjust expense for our members because they already have paid for installation in accordance with the manufacturer's service instructions." Macnair told the company, "We request that Consolidated reimburse the owners at the average rate of \$55 per hour." Floats manufactured by Precision Airmotive are not affected by the emergency AD.

DOT Regulatory Review Overturns Mode S Requirement

The Department of Transportation recently ruled the manufacturers of Mode A/C transponders may continue to produce units beyond July, overriding an FAA regulation that was to force manufacturers to cease production. The effort came as part of a moratorium/regulatory review. The transponder issue was among five of 21 "high priority" regulatory relief actions affecting general aviation - all five of which had been advocated by AOPA. Also included were new FAR Part 107 airport security regulations, adoption of primary aircraft certification, simplified airworthiness/certification standards, and increased use of simulators in pilot training. Steven J. Brown, AOPA's Senior Vice-President for government and technical affairs, commented, "With an additional regulatory moratorium/review period of 120 days, AOPA will continue to suggest reductions in the burden of costly unnecessary regulations affecting general aviation."

FAA Shows Wisdom On Mode-S

The FAA has postponed the implementation of its prohibition against installing any mode-A or mode-C transponders after July 1, 1992. The rule would have required only mode-S transponders be installed in Part 91 airplanes.

In a rare statement of common sense and fact, the FAA said it was delaying mode-S requirement because installation of the system needed to read the mode-S transponders is behind schedule and will not be on-line until sometime in 1993. Because of that delay, the mode-S transponder could not be used until some later time.

Industry and industry associations have been pointing this out to the FAA for some time. Thankfully, someone had the common sense to admit to the logic behind the requested delay.

DID YOU KNOW...

That the FAA will require pilots to deliver a full readback of any runway "hold short" clearance beginning October 15th? The procedure is aimed at reducing runway incursions. The automatic terminal information service will include reminders to pilots of this procedural change. Reply to hold short instructions with only a "roger" or a call sign will not suffice.

That all latitude and longitude coordinates in the National Airspace System will be changed beginning October 15th? The congressionally mandated change from the North American datum of 1927 (NAD27) to the 1983 datum (NAD83) reflects the requirements of technological advances like GPS. Greatest impact will be on coordinates in Alaska and Hawaii. For more information contact the National Ocean Service at 1-800-626-3677.

The local FCC office indicated that to get caught operating an aircraft radio without a station license is an automatic \$7,000 fine! I didn't mis-type that. They really said a \$7,000 fine.

It costs a one time charge of \$35 for a station license and the forms are actually free at the local FCC office. Thirty-five goes into seven thousand, two hundred times. You could figure the next 200 hours of flying time at \$35 hour just for the radio! If you get a station license it comes out to 17.5 cents an hour for the next 200 hours, and think what you'd save in money.

With the threat of more active enforcement the message should be clear!

AOPA Stresses Continuing Need For 50- and 100-kHz Radio Channels

AOPA has asked the FAA to reassign some 270 existing ATC frequencies to low-altitude sectors, where they are most needed by aircraft with 360-channel radios unable to tune newer 25kHz-spaced frequencies. "It makes no sense to allocate 50- and 100-kHz channels to high-altitude sectors and have low sectors working only 25-kHz frequencies," said AOPA President Phil Boyer. Specifically noted were low-altitude sectors served only by 25kHz channels is Salt Lake City, Denver, and Indianapolis Center airspace, despite FAA assurances it is trying to accommodate general aviation's continuing 50- and 100-kHz requirements. The Federal Communication Commission has authorized use of older 360-channel radios with 50-kHz channel spacing until 1997. Boyer said AOPA is taking every opportunity to encourage members to upgrade their avionics to 25-kHz capable 720/760-channel equipment as soon as possible, but said reassigning the 50- and 100-kHz channels would not involve costly changes to FAA centers.

FAA RELEASES NEW NPRM ON TERMINAL
AIRSPACE RECONFIGURATION

As reported previously by GANews & Flyer, the FAA has issued a Notice of Proposed Rulemaking (NPRM) for terminal airspace reconfiguration, part of the overall airspace reclassification project.

The proposal seeks to modify approximately 3,000 areas of controlled airspace.

Control zones associated with Terminal Control Areas (TCAs) and Airport Radar Service Areas (ARSAs) will become more compatible with the surface areas of the more restrictive airspace (i.e., the TCAs and ARSAs). The FAA no longer will chart control zones for TCA and ARSA airports because the zones for TCA and ARSA airports because the zones will cease to exist after September 16, 1993.

At all but two of the 156 TCAs and ARSAs in the country, all extensions of the basic control zone beyond the surfaces of the TCA and ARSAs will become Class E airspace. Class E airspace is below 18,000 feet MSL and above the tops of the magenta (700 feet AGL) and blue zones (1,200 feet AGL) on the aeronautical charts. The magenta and blue zones will be reclassified as Class G airspace.

Two TCAs - Seattle, Washington and El Paso-Biggs AFB, Texas - will carry Class D airspace extensions. Class D airspace goes from the surface to 2,500 feet AGL.

The proposed actions also will convert all airspace designations previously based on statute miles to nautical miles.

Another 464 control zones with operating control towers will be reconfigured as Class D airspace. The vertical limits of the airspace will be 2,500 feet AGL, converted to and charted in mean sea level.

Approximately 41% will have their lateral dimensions reduced, 18% will stay the same and 31% will increase by one mile or less, and except for Bloomington Illinois, the remaining 10% will increase by more than one mile but not more than two.

Extension necessary to contain instrument approaches will become either Class D or E. Extensions of two miles or less will remain part of the Class D surface area. For extensions of more than two miles, the entire extension will become Class E airspace.

The 227 control zones at non-towered airports will become Class E controlled airspace beginning at the surface (there is no VFR radio communications requirement for operations in a Class E). Sixty-three percent of these control zones will be reduced in dimension, 19% will stay the same, 15% will increase by one mile or less and the remaining 2% will increase by more than one mile but less than two. All arrival extensions will be designated Class E airspace as well.

FAA'S NEW AIRSPACE CLASSIFICATION SYSTEM

AIRSPACE FEATURES	CLASS A AIRSPACE	CLASS B AIRSPACE	CLASS C AIRSPACE	CLASS D AIRSPACE	CLASS E AIRSPACE	CLASS G AIRSPACE
Current Airspace Equivalent	Positive Control Areas	Terminal Control Areas	Airport Radar Service Areas	Airport Traffic Areas and Control Zones	General Controlled Airspace	Uncontrolled Airspace
Operations Permitted	IFR	IFR and VFR	IFR and VFR	IFR and VFR	IFR and VFR	IFR and VFR
Entry Prerequisites	ATC clearance	ATC clearance	ATC clearance for IFR Radio contact for all	ATC clearance for IFR Radio contact for all	ATC clearance for IFR Radio contact for all IFR	None
Minimum Pilot Qualifications	Instrument Rating	Private or Student certificate	Student certificate	Student certificate	Student certificate	Student certificate
Two-Way Radio Communications	Yes	Yes	Yes	Yes	Yes for IFR operations	No
VFR Minimum Visibility	Not applicable	3 statute miles	3 statute miles	3 statute miles	* 3 statute miles	** 1 statute mile
VFR Minimum Distance from Clouds	Not applicable	Clear of clouds	500 feet below, 1,000 feet above, and 2,000 feet horizontal	500 feet below, 1,000 feet above, and 2,000 feet horizontal	* 500 feet below, 1,000 feet above, and 2,000 feet horizontal	** 500 feet below, 1,000 feet above, and 2,000 feet horizontal
Aircraft Separation	All	All	IFR, SVFR, and runway operations	IFR, SVFR, and runway operations	IFR, SVFR	None
Conflict Resolution	Not applicable	Not applicable	Between IFR and VFR operations	No	No	No
Traffic Advisories	Not applicable	Not applicable	Yes	Workload permitting	Workload permitting	Workload permitting
Safety Advisories	Yes	Yes	Yes	Yes	Yes	Yes

* Different visibility minimums and distance from cloud requirements exist for operations above 10,000 feet msl.

** Different visibility minimums and distance from cloud requirements exist for night operations, operations above 10,000 feet msl, and operations below 1,200 feet agl.

Say goodbye to TCAs, TRSAs, ARSAs, ATAs and PCAs. All those wonderful abbreviations and acronyms are going to be phased out in September 1993 when the FAA changes over to single-letter designations to label different types of special-use airspace. The FAA decided to simplify its airspace labels and created six classes of airspace, lettered A, B, C, D, E and G, to replace all the special-use airspace designations currently in effect.

Class A airspace is the most restrictive and it corresponds to the current Positive Control Areas. Classes B, C and D airspace include the Terminal Control Areas, Airport Radar Service Areas and Airport Traffic Areas associated with airports. Class E airspace is a catchall for most other controlled airspace, including the Continental Control Area, federal airways, Control Zones and Control Areas. Class G airspace is uncontrolled airspace. □

STARDUSTER HISTORY

N2314C

This airplane was one of several airplanes that left a lasting impression on me. I saw it for the first time at Flabob Airport just after Lou had moved from Corona. It was not painted at the time, however the landing gear had been extended and the traditional gear fairings along with Cherokee type wheel pants had been installed giving it a very racey appeal. This airplane was just being painted and finished when I went to work for Lou. It was the second airplane to have what has become the traditional Starduster paint job. Of course N94505 was the first Starduster to sport the paint job.

I remember hand propping N2314C on several occasions. Glen Beets flew it to Lancaster California to be filmed in a Raweligh cigarette commercial. I remember this because Glen had told me later that he had parked next to Linns mini-Mustang, and him thinking it looked like a kids toy, because the little Starduster was very big compared to the Mustang.

This airplane along with N1300S [the second prototype Starduster Too] made the annual trek to the EAA convention held in Rockford Illinois during July of 1968. So that the entire line of Starduster aircraft would be on display there. The single and two place Stardusters [N2314C & N1300S] and the original Starlet N501S. I don't recall the single place having had any problems during that trip.

N2314C is powered by a 150 HP O320 Lycoming it weighs 740lbs empty. Its top speed was 165 mph, and it cruised at 135 mph. Its climb was 2,000 feet/per minute, and its landing speed was 50 mph.

Lou owned the airplane for several more years and in the early 70's traded it off for an Auburn Classic automobile. Bud Pedigo was the new owner and I believe both he and his wife flew it in their travels. As I saw it again in the late 1970's at Evergreen Airport in Vancouver, Washington during their Antique Airshow. In either the late 1970's or early 1980 it was sold to Bud Phillips of Red Bluff California. He had previously owned and built several types of airplanes and was intrigued by the little Starduster. Bud owned the airplane up until his death in the late 1980's after a long bout with cancer. His lovely wife Barbara has recently offered it for sale. I talked to her at Oshkosh 1991 during the Starduster banquet held at the Acee Ducee, and she was quite surprised to find that I knew so much about the airplane. So if any of you guys are interested in one of the few airplanes built by Lou Stolp; now is your chance as an ad for this airplane appears in this issues classifieds.

D.C.B. Editor



AT PLEASANT 1966

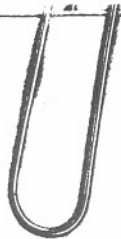


AT PLEASANT 1968



AT EVERGREEN 1977

N2314C



THE BIG
Celebrate gre... OF HAWAII



Hawaii Trop Botanical Ga

4 Mile Scenic Drive

Papa'ikou

Hilo Bay

Onekahakaha Beach

James Kealoha Park

Laleiwi Beach Park

Richardson Ocean Ce

Hilo International Airport

Gen. Lyman Field

Kea'au

Kaloli Point

Kapoho

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EDITOR'S NOTE

N1457 the Starduster Too that Lee Darrah saw in Hawii, was built buy Gus Sayer of Bishop, California during the late 1960's. Its serial number is #59. Unknown to its earlier life, but it was owned by Mike Hill of Redondo Beach, California in the early 1980's as I took a picture of it at Flabob Airport in 1984. It was very sad looking at the time, needing much T.L.C..

In 1985 it was aquired by Paul Goodrich of Southgate, California who spent quite a bit of time and money bringing it back to flying condition.

It was offered again for sale in 1986, as your author once again took pictures of it at the Starduster Open House.

I believe sometime during 1986, it was sold to Derrick Salmon, P.O. Box 1653, Kamuela, Hawii. Who after purchase shipped it there, and by the way Derrick is a subscriber of Starduster Magazine.

D.C.B. Editor

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RAL LYMAN

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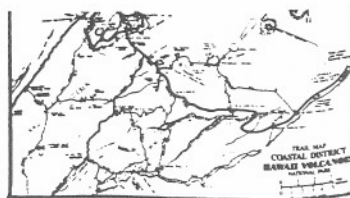
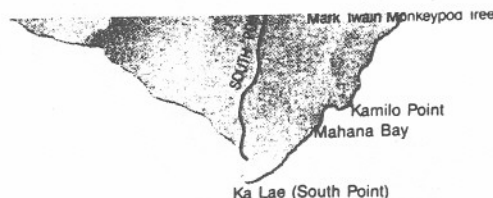
190 65 (104)

19 55 (88)

11 28 (45)

11 73 (117)

19 54 (86)



Recent lava flows have covered parts of the Chain of Craters Road in Hawaii Volcanoes National Park. Please check with the Park Services personnel or call 967-7977 for lava information.

From

LEE DARRAH JR.

David C. Baxter
5725 S.W. McEwan Rd.
Lake Oswego. Oregon

June 14, 1992
Las Vegas, NV

Dear Dave:

Just returned from a vacation in Hawaii--never been there before but had Air West Frequent Flyer points, so wife and I visited for two weeks. We spent our time on Oahu, Maui, and the big island of Hawaii.

It was on the big island that that we spent one long day driving around from the Kona Coast. About dusk at the north end of the island on the Parker Ranch I spotted a sign --airport-- so went off in that direction.

It was there that I found a Starduster Too - N 1457. White with rust-red trim and what looked like a home made, but similar to a Starduster turbuledeck. It had a white canvas canopy cover tied on it, so I did not look inside, but the tires were pumped up and airplane looked in good shape.

Although the airport is paved and listed as a carrier type airport, there was no-one at the field at that time, so I did not get to ask any question. Name of airport is --WAIMEA/KOHALA AIRPORT.

Hope this info can be of help. Good Flying.
No, no pictures. I don't take camera's on vacation.

Lee Darrah Jr.
LEE DARRAH JR.



David Baxter
% Stolp Starduster Corp.
4301 Twining
Riverside, Ca. 92509

June 11, 1992

Hello David:

I'm enclosing a brief piece on my first purchase and return flight to Santa Monica in Starduster N27CG.

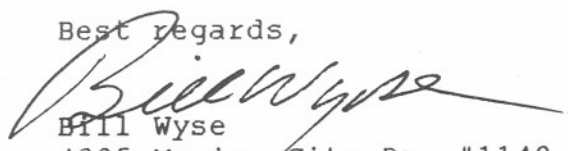
I bought the aircraft in Eugene, Oregon last September and flew it to Santa Monica, California over a two day period with an overnight stop in Sacramento, California.

Since last September, I've logged almost 100 hours on the plane, had my usual share of mechanical glitches and am looking forward to another 100 hours.

Bill Clouse was most helpful during my "freshman" period learning about the aircraft.

Thanks for your newsletter.

Best regards,


Bill Wyse
4335 Marina City Dr. #1140 ETS
Marina Del Rey, Ca. 90292
310-822-2442

CAMPING OUT WITHOUT SLEEPING BAG AND TENT AT 7500 FEET AND 140 MPH...OR IN YOUR FACE FLYING.

After hundreds of flying hours in comfortable cabins of Arrows, Bonanzas, Commanches, 304's, 172's and 182's, a few months ago I suddenly met and challenged certified In Your Face Flying at 7500 ft. with Mt. Shasta directly off my left wing, or more accurately, left wings. I say In Your Face Flying since the open cockpit hugging this pilot sported only a token windshield as modest buffer against the 140 mph Continental driven hurricane howling past my aging cracked leather helmet and modern Dave Clarks. I was wearing camouflaged hunters gloves against the penetrating cold. Although an insult to any airman's public image, these hunters gloves prepared me to acknowledge the Pirep warnings of possible enroute flying deer.

The pristine panoramic sweep surrounding me was forever awesome. Visibility was limited only by my 59 year old eyes. The virgin cobalt blue skydoom climaxing all horizons was punctuated by a fanfare of scattered superwhite cumulus clouds serenely promenading above. My course takes me South from Eugene to Red Bluff to Sacramento for landing, fuel and overnight stop. Slightly to my right as viewed through the sparkling stainless flying wires, titanic columns of harsh rocky mountains violated my safe heading. The Grand Teton's would be jealous. A left ten degree turn prompts me towards a wide serpentine highway offering some security across the lower mountains. I've flown this experimental biplane 4 hours and not yet matured a trust that the 260 HP Continental will happily continue to perform with enthusiasm. Please, Mr. Continental, respect my lack of a gliding rating.

I also fly the airframe gently, encouraging Ceconite, aluminum, stainless steel and varnished wood to enjoy compatibility with aerodynamic harmonization by arriving simultaneously in a 10 + three point landing at Sacramento Executive.

Two months earlier I had ravaged photographs of this airplane. Thereafter, whenever my lady went out, I repeatedly slinked into the bathroom, photos in brown wrapper, for an aviators trip into fantasyland. The Great Voice From the Sky understood my passion and said, "Buy It!" Now I'm flying this beautiful Starduster Two SA-300 at 7500 ft with Mt. Shasta promenading beyond two graceful elliptical wings, one stately tail and one cute little tail wheel.

What am I doing up here? I'm doing what thousands before us have done, experiencing the thrill and wonder of powered flight in a machine with modern engine and avionics time warped into aviation history, pioneering, nostalgia and pure adventure. A few moments after radar contact, Sacramento Approach asked what I looked like. For a quick answer, how about Bleriot, Beachy, Lindberg...wait a minute, we're dealing with the FAA and that's reality!

Why fly an open cockpit biplane? Challenge? Adventure? Of course, but there's more. I'll tell you what I told Sacramento Tower. After making a "my old instructor would be proud of me" approach into Sacramento Executive I trashed the actual touchdown (Remember, the Starduster and I are still getting acquainted) and executed a go around. In response to this maneuver the tower kindly asked if I intended to make another touch and go. I replied with spontaneous honesty from a downwind position, "I don't know yet!"

There was silence from an understanding tower.

Now, where did I put those goggles?

Bill Wyse
Marina Del Rey, California



TECHNICAL TIPS

Cooling Your Oil

After three years and over 600 hours of flight time on N96576 there are several things that I would like to improve upon, and oil temperature is one of them.

During my recent trips back east and while operating at high outside temperatures my oil temperature runs higher than I would like (220 degrees plus). My solution has been to change the air inlet location from back of baffle to outside airscoop, and then to add an additional cooler piggyback to the existing one. Both of these items have helped but have not solved the problem entirely. So I am going to attempt to pass on ideas that I have received that may be of some help.

First - You must determine that your oil temperature gauge is accurate, you need not go any farther until you do. I prefer mechanical gauges over electrical ones. But what ever you use make sure it is accurate.

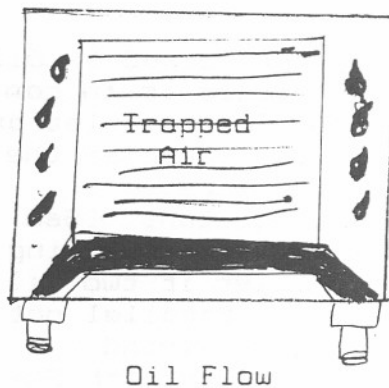
Second - Make sure you are getting air to your cooler, do not assume that by its mounting location it automatically gets enough air. An easy way to do this is to take an old airspeed indicator, stick it in your cockpit, temporarily duct tape it in a location that can be seen during flight. Then take some plastic line 1/4 inch in diameter, route it up to your oil cooler air inlet area, put a short piece of aluminum tubing on the end, clamp, tape or safety wire the aluminum tube in the area that you think is positive pressure. Your aircraft airspeed indicator and your test airspeed indicator should be close to the indicated airspeed. If your inlet location is on the back baffle, it could be substantially lower. But in any case it should be positive pressure. If you get no indication you might try a vacuum gauge. If you get "0" pressure or a (vacuum, low pressure area) this can be one of the major areas of poor oil cooler operation. So again you MUST get positive pressure to your cooler to adequately cool your oil.

In homebuilts and factory airplanes you will find oil coolers mounted in just about every location imaginable. This does not mean they are efficient. So just because he did it and it works for him does not necessarily mean it will work for you.

Some of the things I've found that work or don't work are the ducting to the standard 4 x 6 cooler. It should be no smaller than 4" in diameter. By just adding another cooler will not necessarily solve your cooling problem.

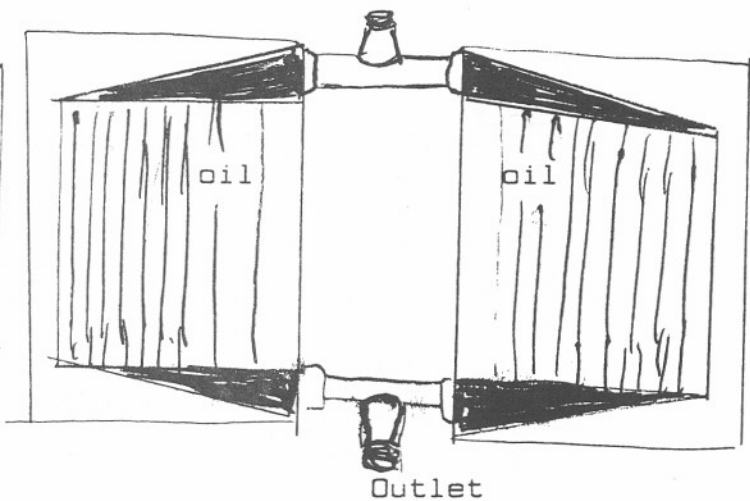
If your cooler is mounted on the rear baffel it could effect cooling on the cylinder nearest the cooler if you have an inlet to your cooler off the rear baffel to a remotly mounted cooler. It could still effect the closest cylinder. I believe an outside source from positive pressure is the best. A cooler mounted on the front of the baffel in the air inlet is probably okay, but a positive pressure test should be done to confirm a suitable location, along with the length of the oil cooler lines routed up to the front of the engine can be a problem if not secured properly will chaffe. If a double oil cooler is used it should be plumbed in parallel as opposed to series.

FIGURE #1



Oil cooler mounting
can be critical

FIGURE #3



Double oil cooler installation
should be plumbed in parallel
as shown above. NOT in series

Lycoming engine manual states
that maximum oil temperature
should not exceed (245 C).

I used a windshield washer pump from NAPA Auto Parts, Its
part number is 665-1594 and it lists for \$36.

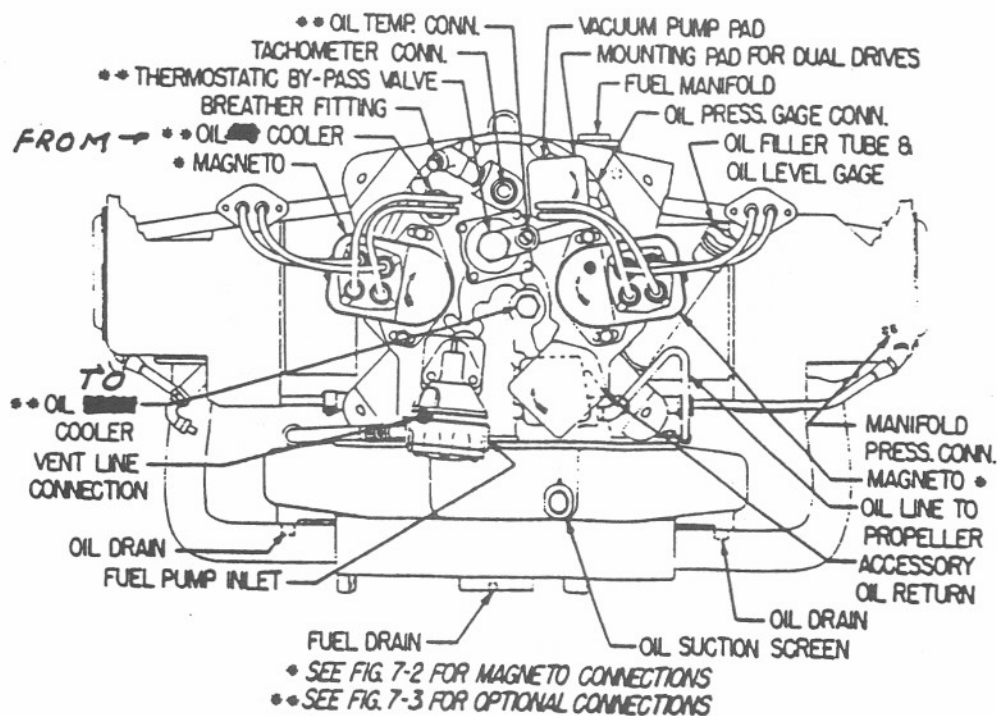
We have received notice from LYCOMING that there is an error in their OPERATOR'S
MANUAL, regarding O-360 and associated model engines-

Figure 7-8 Installation Drawing-10-360-A Series needs to be corrected as shown-

7-12

NOTE CORRECTION

FIGURE 2



SECTION 7

AVCO LYCOMING OPERATOR'S MANUAL

O-360 and ASSOCIATED MODELS

Third - One item that is normally overlooked is oil cooler mounting. The position the oil cooler is in can dictate efficient flow. [See figure #1] If the inlet and the outlet fittings are on the bottom of the cooler the possibility of trapped air is a real consideration.

Fourth - Oil line routing is also important. [See figure #2] For inlet and outlet connections on Lycoming accessory sections, and as mentioned earlier if two oil coolers are used they should be plumbed in Parallel not series [See figure #3] All other aircraft related installation practices should be in accordance with FAR Part #43 as to properly secured hoses and should be covered with fire sleeve..

Fifth - Last but not least, the idea of spraying water into the inlet of the oil cooler to lower the temperature seemed like a good one so I tried it, and it works. The oil does not go to the cooler until 85 degrees C is reached at the thermo bypass. So spraying water into the cooler before this temperature is reached does nothing. However, from [100 C or 212 F] and above, spraying water into the oil cooler inlet at approximately 20 second intervals will lower the temperature 10 to 15 degrees or more as long as your water lasts. This works quite well during operation at high outside ambient temperature and during the climb to altitude.

Where I am based here in Oregon at 200 feet above sea level and at standard temperature most of the time oil temp is not a problem. But when I go cross country and have to operate at high altitude and in hot weather, having this option while climbing to altitude when fully loaded is wonderful.

D.C.B. Editor



NORTHWEST EAA FLY-IN

ARLINGTON 1992

I'm sure many of you read my comments about Arlington last year in Starduster Magazine. I am very happy to announce that this year they have made great improvements as to how it was set up, and managed, along with reasonable attendance fees for all participants.

I still do not think they need an airshow on all five days, three I think would be plenty. This in it self would help with the expenses.

As for new things, there was really nothing that caught my eye. The Gee-Bee flew, and on Sunday did an inverted ribbon pick up, Wow. So much for a killer airplane.

My good friend Larry Stittauer won Reserve Grand Champion again this year. Although his Starduster Too award was in the kit built catergory. So much for judging or mix-up in awards. I only attended Thursday night, all day Friday and Saturday and left Sunday morning for the Bremerton Airshow.

As far as weather goes for this event, it rained on Friday with low ceilings and IFR conditions. Only a few airplanes arrived on that day.

Also only a few Stardusters attended. Myself in my Starduster Too N96576, and Larry Sittauer in N115WS, and Dave Mahre in N480DM. But attendance was low, in general probably due to problems in the past, along with weather and other events being held at the same time.

It is a pleasant laid back Fly-in compared to others and if the weather is good, makes for an outstanding event.

D.C.B. Editor



OSHKOSH 1992

It is very enjoyable looking forward to and planning our trip to Oshkosh each year. The questions of who to visit, where to stop and of course the weather. It is one thing to fly your airplane locally, but it is quite another story to load it up and fly halfway across the country. It is always challenging and very rewarding.

Well this year we, my wife Donna and I, left Friday July 24th after work, from our home base Hillsboro, Oregon. Our first stop was Walla Walla, Washington to overnight with our good friends Del White and his wife. He has a Starduster Too almost ready to fly. After a great dinner, Del and I stayed up and looked at pictures and videos. After breakfast the following morning, I was able to take Del for his first ride in a Starduster Too. We then said our goodbyes and were off.

Our next stops were for fuel at Ontario, Oregon and Twin Falls, Idaho. Landing at Salt Lake #2 after being cleared thru the Salt Lake TCA early that afternoon. There we stayed overnight with sister and brother-in-law Lance & Trudy Andrewsen. On Sunday I went out to the airport to visit with Weldon Glines and Glen Oleson, Acroduster Too owners & builders. Glen has had his Acroduster flying for several years, and Weldon has just recently finished his. We had a wonderful get together, did some flying and took a Starduster Too builder named Bryant Anderson from Midway, Utah for his first ride.

Later that afternoon I started hopping rides for all my nephews, as Trudy has five boys. So I flew all of them plus Trudy & Lance. I only flew 2.4 hours giving rides. So after a pleasant visit and flying with family we left early Monday morning from Salt Lake #2.

Our first stop was to be Rock Springs, but with good tail winds we decided to push on to Casper, Wyoming. Stopping there for fuel and lunch. Making it a long but pleasant trip of 3 hours.

From Casper, the next stop was Chadron, Nebraska. This is the first place I have ever had a hard time starting my engine. I have a pressurecarb and apparently due to the hot weather (100 degrees), had boiled the fuel out of the lines and trying to determine whether it had too much fuel or not enough, I cranked on it longer than I ever have.

From Chadron it was on to Orchard Nebraska to overnight with Bruce Fletcher. I had met Bruce at the Starduster Open House several years ago when he was looking for a Starduster Too, and have become good friends ever since. He is always happy to see anyone on their way to Oshkosh. After good food, friendship, a little work on my airplane, and fuel (by the way he sold it to us cheaper than anywhere else), we had planned on leaving Tuesday morning, but the night before it rained, thundered and lightning all night and the next morning. Bruce remarked that in all the years he had lived there, he has never seen a thunderstorm that went from north to south, horizon to horizon. We probably could have gotten out later that afternoon. But chose to stay another day, and with hosts like Bruce and Zithia it makes staying another day much more enjoyable.



Starduster Too N96576
Guest Registration

a THANKS Dave for
wonderful flight

Your friend

Anna Peebles

7/30/92 Dave,

I have rode in small airplanes before, but
it is so different being in front and being
in the open air! Thanks for this experience!
And thanks to you and Donna for being so
open to us and making us a part of your
family! Love, Barb Peebles

The next morning we woke up to scattered thunderstorms with marginal ceilings, and visibility, we weren't sure if we could even get out. But later that morning Flight Service read a little between the lines saying that they thought there would be a window between 10:00a.m. and 2:00p.m., and with that knowledge in hand we launched. The farther north and east we got the better the weather. Listening on 122.75 we heard other aircraft north & south trying to get over, around or under.

But by the time we were over Le Mars, Iowa it started to clear and just got better and better. We landed at Forest City, Iowa for fuel. We have landed at Forest City several times in the past, and because of the service and friendship we have made it a regular stop.

From Forest City, it was on to Fond Du Lac, Wisconsin, to visit and overnight with Gary Due and Anna Peebles. We landed and fueled at Fond Du Lac Wednesday afternoon. I called Gary Due who almost immediately showed up at the airport. He allowed us to park our airplane in his hangar, and use his motorhome. It was so nice we were afraid to touch anything. He also let us use his S-10 Blazer for transportation.

Later that evening we got together to do some formation flying, as this was the first time Gary had gotten to fly with another Starduster. The temporary tower cleared us for a low approach and commented on how well they could see my landing lights, as we were flying right at dusk.

After putting our airplanes away, we had dinner and retired to Gary's motorhome. The next day, Thursday, we called Anna's mom Barb Peebles at work, to make arrangements for later that evening.

That morning and afternoon we spent time cleaning my airplane and making friends with FAA personnel in the temporary tower. Fond Du Lac was not very busy, with mostly T-34's staging for their mass flight into Oshkosh Friday.

N96576 was quite at home in the company of N12P, Gary's Starduster Too. Later that evening I was again able to meet with Anna, her little brother Joe and her mom & dad, John & Barb. I was able to take her mom and dad flying and of course Anna. This year it was much easier to give our rides at Fond Du Lac. We borrowed cushions from Gary's airplane so she could see better. After seatbelts, intercom, and cockpit check we departed. This year she wanted to fly over her school, her house and the southern end of Lake Winnibago. I also let her fly the plane some, and she did quite well for a very grownup 10 year old.

That night my wife and I stayed with Anna and her family. We talked about our trip and the next morning had breakfast with them, and after hugging and some pictures left for the airport. It was wonderful to see Anna again, but sad to leave such a good friend.

* Editor's Note * For those of you who were not subscribers to Starduster Magazine last year, in the October 1991 issue there was an article about her. Anna Peebles is the young 8 year old girl who wrote to me after seeing a picture of my airplane in Sport Aviation. It was in the "What our builders are doing" column. We have corresponded over the last year and a half, and during Oshkosh last year I was able to take her flying and this year we were able to spend more time together.

We left Fond Du Lac Friday morning and landed at Oshkosh before noon. It was very spooky going into Oshkosh that morning as there were almost no airplanes in bound from Ripon to Fisk and into Oshkosh. At Oshkosh the showplane parking area was full. But we were able to find a parking place behind the IAC building and were very happy to see that N4226Y and Les Homan had arrived. They were the last airplane in before the field closed Thursday night.

As for Oshkosh, again there was really nothing new. Having been to the museum several times in the past as well as the Sea Plane Base, and having the entire showline over a mile long. I chose to mostly lay around my airplane and visit with other Starduster owners and builders. For me this is very enjoyable.

There was one thing that I did see of interest, and that was the Greenland Expedition and the remains of the one P-38 they salvaged. It was mashed pretty good, but would be a good rebuilder as the metal is in very good shape. The airshow was not much of interest as once you have seen the best it gets pretty boring.

So what can I tell you about Oshkosh, if you've been there you know, if you haven't I can't really explain it. I do know that it cannot all, be seen in one week.

The following Tuesday evening, and the Starduster banquet at the Acee Ducee came all to soon. The food and friendship at these events is really what its all about. We had well over 60 people attend this year, and even though Bill presented some beautiful awards this year, it was a little hollow as only four Starduster Toos and one V-Star attended. I received the first place award again this year, Les Homan was second and the V-Star won third. The True-Grit Award was given to Bob Ely for his Ford V-6 powered Starduster Too.

First Place - N96576 S/D Too, Dave & Donna Baxter, Lake Oswego, Oregon.

Second Place - N4226Y S/D Too, Les Homan, Livermore, California.

Third Place - N12XX V-Star, Bob Deutch, Chicago, Illinois.

True Grit - N107UP, S/D Too, V-6, Bob & Renae Ely, Baxter Springs, Kansas.

The other Starduster in attendance was N277DC, from Red Lodge, Montana. Congratulations to all, and lets have some more airplanes next year. Believe me my airplane is getting tired so it will be easy to beat.

Wednesday morning found us packing up and saying goodbye to the friends we stay with, Russ & Carol Frank. This year we departed straight south. Our new wingman was Bob Ely. So with Les Homan leading and Bob Ely and myself at his wingtips we departed. Our first stop was Deklab, Illinois. We stopped there so that I could meet with my 81 year old uncle Harlan Yonker, who I had never met. After breakfast with him and other relatives, it was on to Moberly, MO. There we shared the traffic pattern with a full scale Foker D7 on his way home from Oshkosh. From Moberly it was on to Fort Scott Kansas.



N4226Y OVER THE COLORADO RIVER
BANKING LEFT FOR THE CAMERA



N4226Y & N96576 AT FORT SCOTT KANSAS

Bob's U-6 powered Starduster Too seemed right at home with us. At 2,500 rpm an 105 kts. level at 4,500', Bob's airplane was turning about 4,100 engine rpm. With a canopy and heater Bob and Renae seemed to be quite at home. This was his first long cross-country, and he has about 300hrs on his airplane now.

At about 100 miles out from Fort Scott, Kansas. The weather started going away, ceiling and visibility going down. Also about this time Bob turned south and Les and I went to the southwest. As we progressed the weather deteriorated some more. I was listening to aircraft in the Kansas City area and then the Atis 1800 ft 3 to 5 miles and not getting any better. At about 40 miles out of Fort Scott we were down to 500 ft and 2 to 3 miles visibility. The nearest airports were North or South, so south we went. Landing at Nevada, MO., with Fort Scott only 20 miles away. But not looking "do able". After landing, fuel, and a quick call to Fort Scott Airport, they claimed they were VFR. We launched again for a ten minute flight, followed the road, Loran, and were soon down wind for Fort Scott, Kansas. This is where Les Homan's mother and brother live. So for Les it was almost a family reunion.

The next day we woke up to about 1-200 ft and about a mile of visibility. Thinking that we might be here a few days, we were in no hurry to get up. Les had been having starter problems, so after breakfast we were off to the airport. After Les did some checks, he decided to pull the starter. With a little luck it turned out to be loose bolts on the starter housing. But it was quite a job taking it off and on.

The weather had been getting better all the time, and a quick call confirmed reasonable flying weather for our route. So after saying our goodbyes, we were off again. Our original plan was to stop at Baxter Springs to visit with the Elys. But due to starter problems and weather, we did not get out until that afternoon. So we then headed for Bartelsville, Oklahoma, overflying it and turning west the weather in places along the route deteriorated, but not like it had the day before. The worst was about 1,800 ft and 3 miles and not for that long of a period of time.

Our next stop was Cheyenne, OK., for fuel, soda, and beef jerkey. A call to Flight Service confirmed good flying weather, if you call scattered thunderstorms good. Flight Service had of course told us that there were thunderstorms directly east of Tucumari. But assured us that if we came in from the north we should be alright. We launched into clear skies with wonderful visibility. Les and his passenger Dave, decided to leave the camera and video in the baggage compartment, as Les had said there was nothing out here to take a pictures of. Les later discovered while watching the video, that while the video camera was in the baggage compartment it was in the ON position.

Our trip for the first hour and a half was relatively uneventful. Around Amarillo, Texas, there was a giantic thunderstorm just to the south of our track along with several more in line to the south and west.

As our trip progressed more thunderstorms were in line to the north. Although Flight Watch was still reporting Tucumari as "do able", with dusk and headwinds, night was soon upon us. We could see the lights from Tucumari at least a hundred miles away and with the head winds plus the lightning, it seemed the last hundred miles took about 3 1/2 hours, instead of the entire flight being that long.

Boy, you sure cannot appreciate how awesome and beautiful lightning is at night from an open cockpit biplane. Believe me we kept a respectable distance. Our landing at Tucumari was well after dark, around 9:45; with strong gusty winds, fortunately they were pretty much down the runway. Les got out on a long straight in as the wind "I" lighting was out of service. To determine landing conditions Les made a respectable landing for having no landing lights, and I made a poor one with lights. But after a long flight we were both safely on the ground.

After food, motel, and sleep, the next morning after getting a late start, we were off to Gallup, NM., and Kingsman, AZ., just north of Flagstaff. In retrospect, we probably would have stopped at Sedona, AZ., but our good friend Dick Lucas had told me during Oshkosh, that they would not be back home yet. Boy, in northern New Mexico and Arizona, there sure isn't much out there but beautiful country.

We landed and overnighted in Kingsman, AZ. I tried to locate a Starduster Too builder, also tried to say hello to Glen Beets, an old Starduster employee but was unable to do so. I found out later that he was living with his ex-wife, who I had neither a name or number for.

From Kingsman, it was on across the Colorado River, Barstow, Edwards A.F.B., where the shuttle lands and into Fox Field Lancaster, California. If anyone wants to tell you that all southern California is paved over, they're wrong. From the Colorado River to Barstow there is nothing, I mean nothing.

At the fuel pumps we were happy to see Bob Phillips and his Starduster. After fuel & sodas, we were off over the Techatchips for Harris Ranch, which is a small landing strip located by I-5 in central California near Colinga. They specialize in good food, mostly steaks. Had the best top sirloin I ever had. We fueled again and were off to Livermore to overnight with Les and Mary Holman. For Les & Dave the trip was over, for Donna and I, it was two more flights. The next morning we said goodbye, departing Livermore for Medford, Oregon. Going by Mt. Shasta is always beautiful. After fueling at Medford it was home to Hillsboro, OR. Our trip complete, good old N96576 had 51.6 more hours.

D.C.B. Editor

T-18 Goes Through FAA Courtesy Inspection

By Greg Halverson

Though it might be interesting to relate my thoughts on having my homebuilt T-18 subjected to a recent FAA courtesy inspection. I received a flyer from the FAA as, I'm sure many of you also did. With some natural apprehension I decided it would be worth the experience anyway. This, I believe, was the first experimental they had inspected, locally through this program, so it was an interesting experience for them too. The general portion of this "check" dealt mostly with record-keeping and logbooks. Their checklist included :

- Airworthiness/registration certificate FAR 91.203(a)(1)
- External data plate - FAR 45
- Annual inspection procedures - FAR 91.409
- Airworthiness directives (AD's) and compliance - FAR 39
- ELT/battery compliance - FAR 91.207
- Transponder compliance - FAR 91.413
- Altimeter - FAR 91.411
- Aircraft logbook entries, airframe, engine, propeller - FAR 91.417
- Weight/balance and equipment list -
- Approved flight manual - FAR 91.9
- Safety belts - FAR 91.205 (b)(12)
- Required placards -

My Thorp T-18 needed compliance in these areas:

1. My engine logbook noted all AD's complied with but didn't list the AD's specifically. Since my o-320 E3D is a placarded (certificated) engine, I must enter these outstanding AD's by number and show, in the aircraft log, their compliance. AD's also had to be in compliance with Mags, vacuum pump, air filter, carb, etc. The inspector gave me the appropriate AD's for my equipment.
2. It was suggested that I trigger my ELT manually by tapping it to make sure the switch will activate.
3. It was suggested that I calibrate my transponder/encoder prior to use.
4. My airspeed indicator face did not show the correct performance markings for my aircraft [i.e. red line, flap extended speed white, normal operating green]

Because my AD's were not complied with, in the logbook, I was unable to do the flying portion of the courtesy check. Overall I found the inspectors to be helpful and courteous and they expressed interest in talking to us more about this program and encouraging more experimentals to participate.

Stolp Starduster Corp.

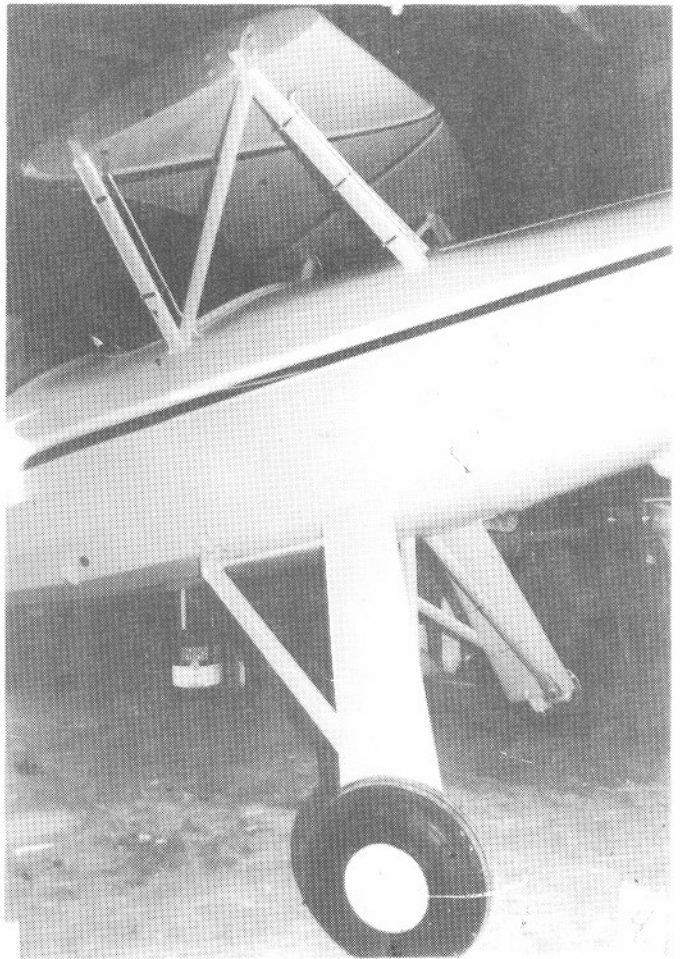
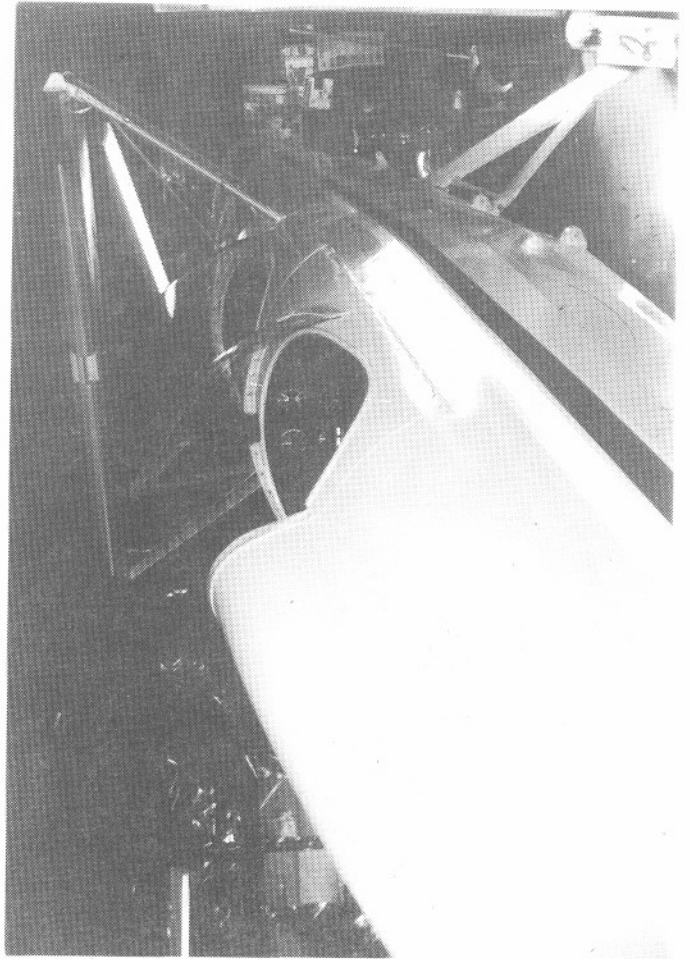
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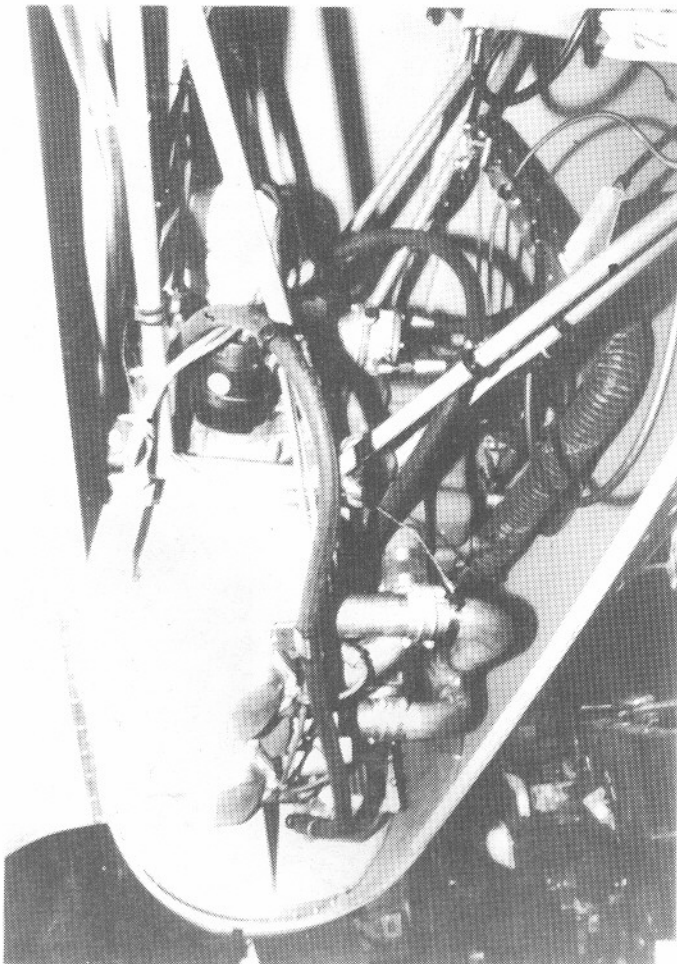
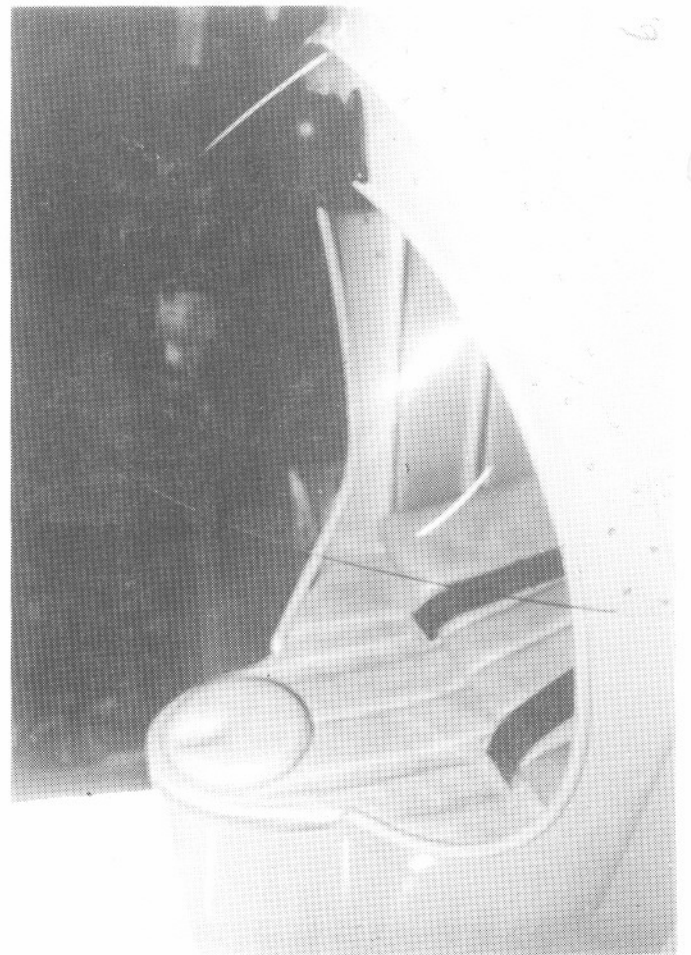
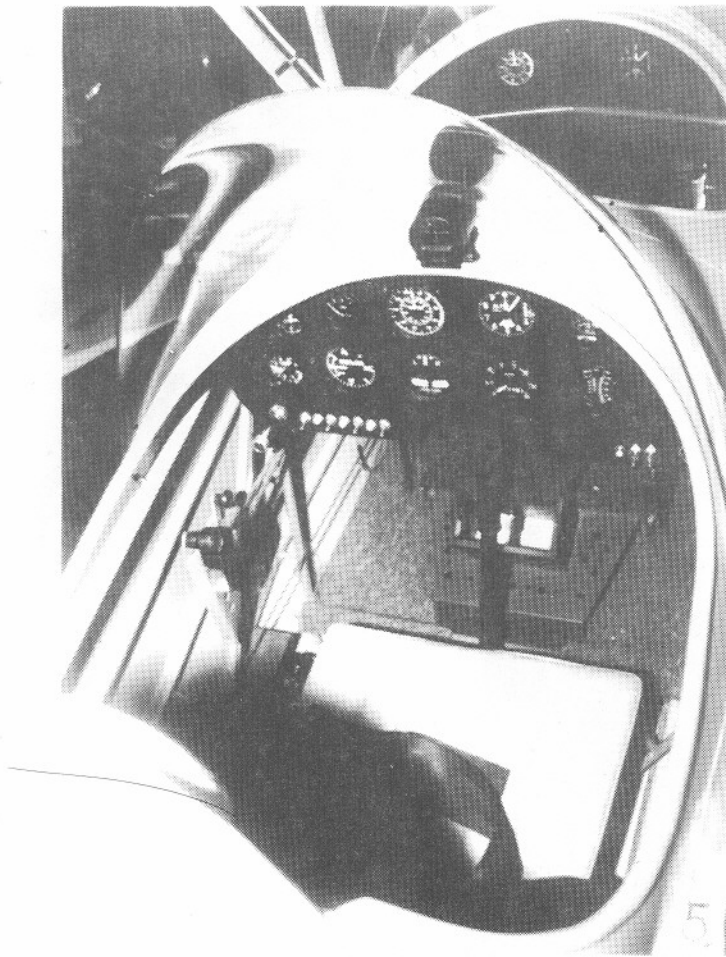
Bill Clouse

Starduster Too Project update June 1992:

Several hard contractions recently would suggest to me the gestation period ~~has~~ nearly been satisfied.

1. Squashing oneself into garage corner reveals most of the project to the camera. Note short wing span which of course will require hyper velocity. High wing loading and sink rate could be ~~exhilarating~~ ^{exhilarating} to some low time pilots. Power is a modest O-320~~43D~~. Wheel pants may come later. Some skeptics predicted it would not go thru the door and they were half right. Ctr. section must be lifted off by two seven foot basketball players, but it will then go thru the door with the engine shut down.
2. Looking forward with camera in approx location of pilots head for optimum forward visibility in landing.
3. Nose on view, shows Sensenic 76 X 58, forward baff~~42~~ with oil cooler (behind prop blade). Fitting belly skins around Ldg. struts and braces produced numerous expletives and other bad words. Mid way back on belly is a tear drop appendage which requires more space than available here to explain.
4. Nothing beats a great pair of legs, in panty hose and in a stiff cross wind.
5. Some cock pitbull, S. L. P., simple-light-practical. Lower left, trim then above is throttle, carb heat, mix and panel. Radio is obvious by it's absence but at least we know where it isn't. Tear drop on top forward cowl is Mogas tank cap.
6. Rear pit and upholstery detail. Headrest hinges down for access to luggage compartment. Luggage defined, one toothbrush and a pair (small size) jockey shorts in a Safeway sack.





7,8,&9. Firewall forward. Most of what you see is familiar to the experienced eye. I will comment on a couple of things. The tag on the white wire on the start solenoid reminds me to connect it and the loose black wire to the plus side of the battery. Some of the notes I've written over the years have made sense later but by no means not all. And they say timing is all important. The day after I timed the mags I decided to put on the adaptor for the oil filter. As you know one bolt from the original installation must be changed to a stud and nut, and to reach it with a wrench requires removal of the left mag. Oh well Murphy is around most of the time.

In conclusion: .

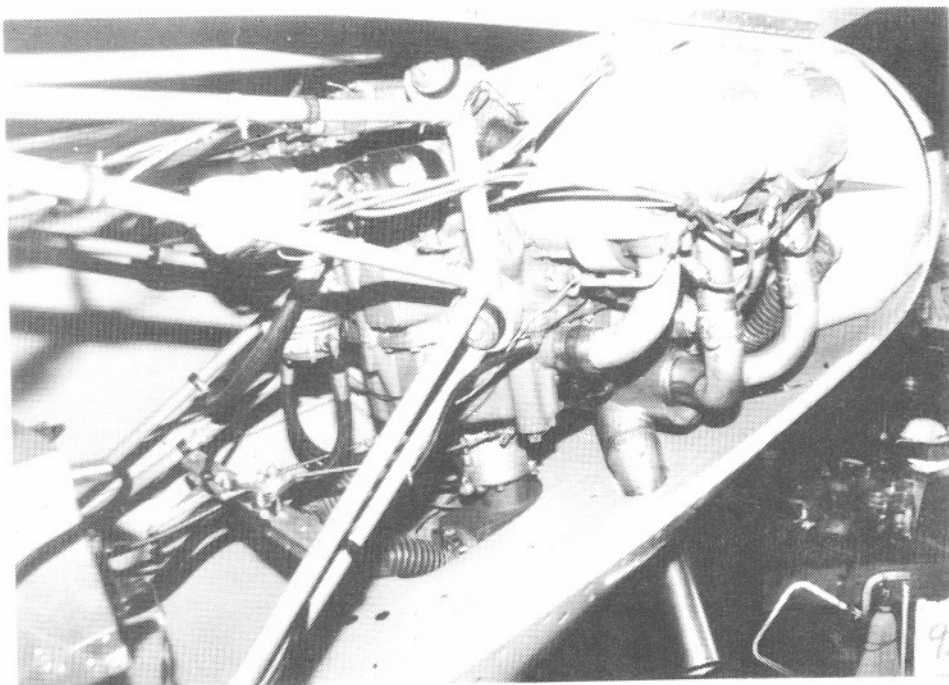
Last November I made a progress report to my E.A.A. chapter and told them the F.A. and A. had reserved N192 RK for me. The 192 stands for Jan. 1992; in Nov. I was sure I would be finished by the end of Jan. Now here it is June, I don't know what I've been doing the past 6 months. Come to think, I didn't know what I was doing the months before that either.

I like photos because they don't reveal all the warts. The project has been a source of great satisfaction and I appreciate the support of the Stolp team. Hope you have found my report of interest. Now to see if it will fly!

Sincerely,

Bob Kaveney
R. (Bob) Kaveney

Novato, Ca.



WATOMA HAS ONE OF THOSE AIRPORTS A LOT OF US CAN ONLY DREAM ABOUT - IT HAS A RUAL SETTING, WITH LOTS OF GRASS AND WOODED AREAS IDEAL FOR CAMPING, GATHERING, VISITING ETC. THE AIRPORT MANAGER WELCOMES US AND IS GIVING US CARTE BLANCHE, AS LONG AS WE CONDUCT OURSELVES SAFELY AND WITHING THE RULES OF F.A.A. --- WE ARE FREE TO COME AND GO AS WE PLEASE, DEMONSTRATE OUR AIRCRAFT, EVEN SKYDIVING WILL BE AVAILABLE IF YOU SO DESIRE. FUEL WILL BE DISCOUNTED .20 PER GALLON, WHICH WILL OFFSET THE 5.00 PARKING FEE.

IF ENOUGH OF US PLAN TO COME, STARDUSTER WILL PROVIDE A LARGE TENT AND TRANSPORTATION TO OSHKOSH. WE ALREADY HAVE 12 AIRPLANES THAT ARE PLANING TO SHOW UP.

THE CITY OF WATOMA IS 2 MILES FROM THE AIRPORT AND ADEQUATE MOTEL ROOMS ARE AVAILABLE. RESERVATIONS SHOULD BE MADE BY MAY 1, 1993.

THERE IS ADEQUATE MAINTAINENCE FACILITIES IF NEEDED.

HARD SURFACE RUNWAY 3500' - SOD 2700'- I HAVE PERSONALLY INSPECTED THE FACILITIES AND WAS THOROUGHLY IMPRESSED.

I AM NOT ADVOCATING THAT ANYONE NOT GO TO OSHKOSH - ONLY PROVIDING AN OPTION - WATOMA WILL BE PRIVATE AND OPEN TO OUR KIND OF FREEDOM, OUR KIND OF AIRPLANES AND OUR PACE.

REMEMBER THE CAMPFIRES - HOT DOGS, MARSHMELLOWS, POPCORN, JOKES, SINGING, YES AND WAR STORIES-

PLEASE LET ME KNOW IF YOUR INTERESTED VIA PHONE OR MAIL - TRY IT YOU'LL LIKE IT!

SEE YA,
B.C.

Watoma/Oshkosh Decision 1993

I too, personally feel that this is a good idea. Even though I love Oshkosh and everything about it. But this year was rather dissappointing in that only four Starduster Too's and one V-Star showed up. Not much of a turn out in contrast to the over 100 RV's, that literally took over the homebuilt area.

Les and I discussed several possible reasons for the low attendace this year. Some of the things we talked about were: The economy, the weather, crowd control, aircraft security, hi-desity traffic area, restricted operations, it being a long distance to travel, not having a top quality "showplane" or an area to park just for us. Do any of these reasons fit you?

The plan would be to attend Oskosh as usual. but leave Monday morning early for Watoma to camp or motel it Monday and Tuesday Night with the dinner and awards being presented Tuesday evening. The other alternative would be to stay there for the entire week. So please let us know if this sounds like a good idea, and you think you might be interested in coming.

D.C.B. Editor



SUPER 8 MOTEL — WAUTOMA

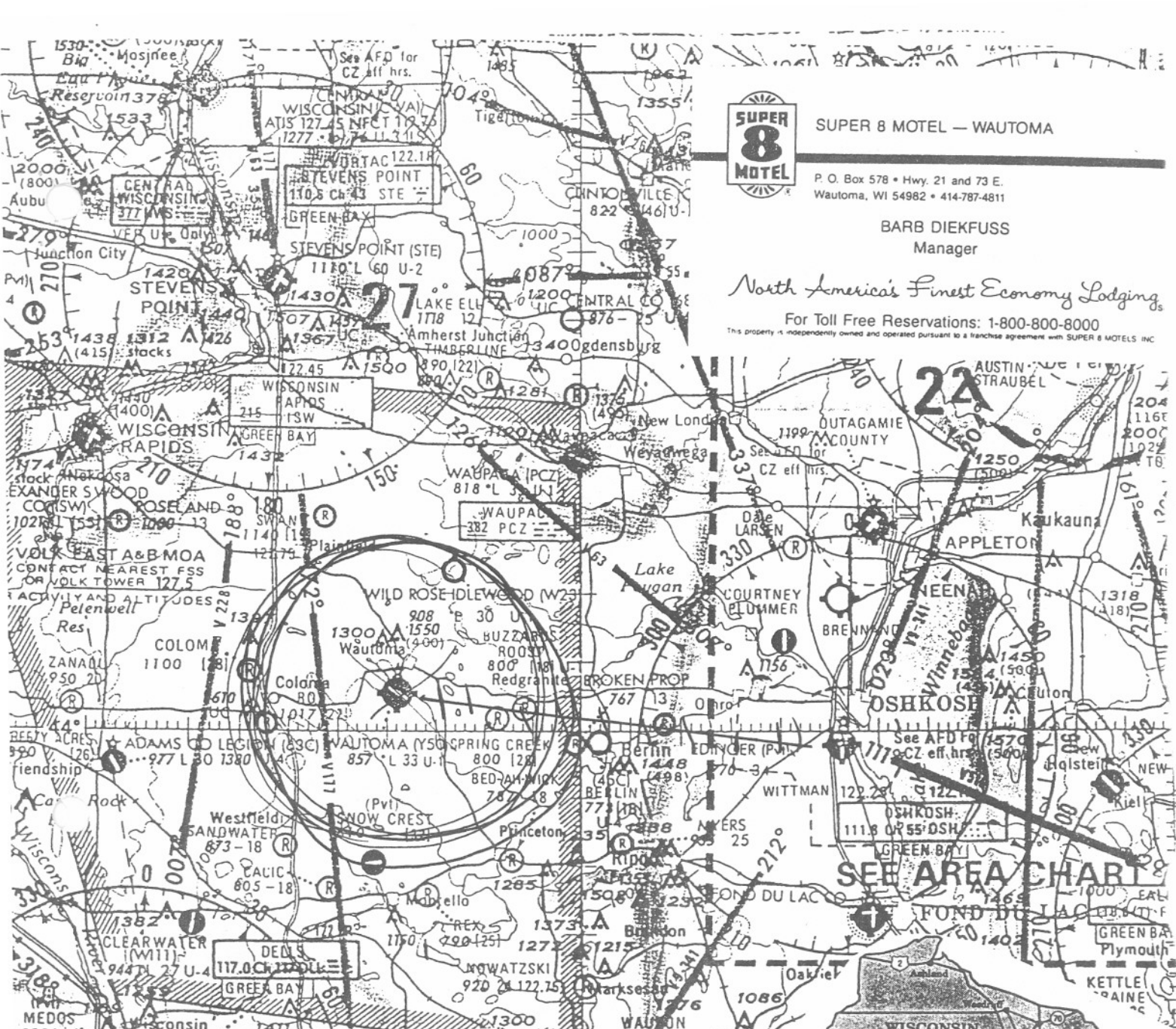
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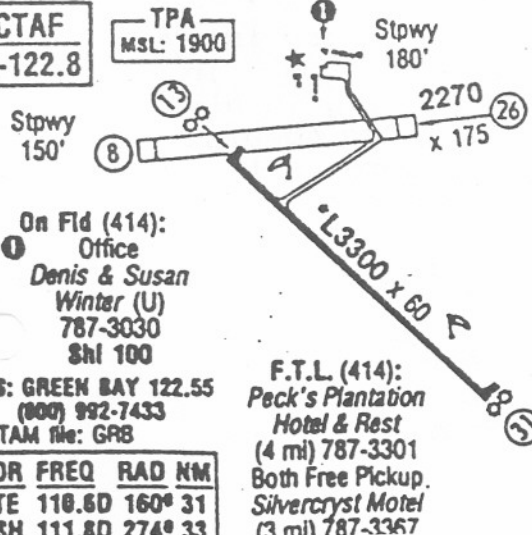
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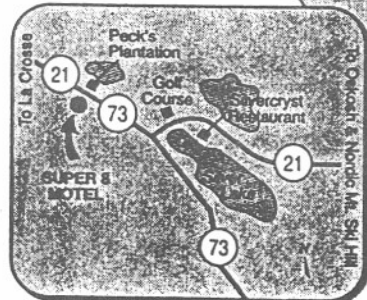


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ARMED WITH A LOADED CAKE

Your Editor Flies With Alex Zuyev Mig 29 Pilot

There was no advanced warning of Zuyev's irrational outburst.

Captain Alexander Zuyev, in fact, personified the image of a Soviet Communist officer. A Top-Gun style graduate of the Mari Combat School. Zuyev had just been selected as a test pilot at the elite Akhtoubinsk Center. Not only was he "staunch in aerial combat," as his superiors noted, but Zuyev was clearly "prepared to give his life for the Motherland and the ideals of Marxism-Leninism." Why then would he throw away a promising career and risk death?

On May 20, 1989, Captain Zuyev presented a cake to the men posted at the duty alert station at Tskhakaya Air Base in Soviet Georgia. But this was no ordinary cake; it was saturated with tranquilizers. Unfortunately, not all the men had a piece. Zuyev made crumbs of one armed guard who stood between him and his plane on the aircraft parking apron. He took a bullet in his body, but made it to his MiG-29, an advanced Soviet combat fighter.

In the jet, Zuyev did not immediately bolt to freedom, but swooped back to strafe the MiGs parked along the runway. He was angry. Forty days before, the Soviet Ministry of the Interior's infamous "Black Berets" massacred the innocent civilians of Tbilisi. Now, Zuyev would avenge the innocent blood. But his cannons jammed. He couldn't get a shot off. With other Soviet fighters in hot pursuit, he had to let it go. Zuyev sped across the Black Sea at transonic speed to Trabson, Turkey - to freedom.

"It was impossible to intercept him," Soviet Airforce General Dimitri Pankin conceded. Only a pilot of Zuyev's skill and determination could not only evade the hot-shot jet fighters sent after him, but survive the heavy concentration of air-defense missiles en route to Turkey.

"We trained him too well," Pankin said, drawing some of the glory of Zuyev's spectacular escape back to the Soviet Air Force. But Zuyev's flight to freedom while in the thick of a brilliant Soviet career in that same air force, was doubly embarrassing for hard-liners.

Alexander Zuyev is now writing an account of his career in the Soviet Air Force. The memoir, entitled >Fulcrum,< will be published next year by Warner Books. The story is both a true-life adventure and a compelling human drama. In the book, we share with Zuyev the pride he took early in his career, as would any young officer, in mastering the complex and demanding skills of a high-performance jet fighter pilot; his growing disillusionment with Communism; his confrontation with the Party; his exciting flight to freedom.

Alexander Zuyev speaks widely throughout the United States, sharing his unique insider's view of the Soviet Union's military elite, and of the turmoil that gripped the Soviet Air Force. In addition to his escape Alex shares:

- The shocking, unpublished truth about the Soviets' shooting down Korean Airlines Flight 007 in September, 1983.

- The existence of a critically placed CIA "mole" designer in the electronics laboratories of the Mikoyan Design Bureau that produced the MiG-29 aircraft, and how Zuyev's fate was sealed early on.

- The deep revulsion of the professional Soviet officer corps at the ruthless massacre of civilian demonstrators in Tbilisi, Georgia, in 1989 - revulsion that turned these officers against the coup plotters two years later.

Look for Alexander Zuyev at the Portland, Oregon Convention Center, October 14-15, 1992.



Starduster Too N96576 Pilot Registration

7/12/92

Dave, thank you for the great opportunity to fly your Starduster. I was thrilled to make safe landing. Keep your hands up! Best of luck.

Fulcrum. driver MiG-29 pilot.

Alexander Zuyev

P.S. Баха Myxa!
It was great!

By?

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CLASSIFIED ADVERTISING RATES : \$3.00 PER COLUMN INCH. MINIMUM CHARGE \$3.00.
MAKE CHECKS PAYABLE TO STOLP STARDUSTER CORPORATION. THANK YOU.

1974 STARDUSTER II. N639PK. one of Lou's. 180HP Lycoming, 930 TTAE, TCA ready. Top shape, nothing spared on this one. I'm retiring so have to grow up now. \$25,000 (\$10) 455-6906 after 6pm.

STARDUSTER TOO 500 TTAE. 230HP. 4/92 annual. recent recover/paint. Fast and beautiful (160mph+), \$26,000. (602) 768-4091 evenings.

1973 STARDUSTER TOO recovered 1987, 180HP Lycoming, 509TTSM, 422 TTST, NavCom, Jeff-Loran, strobes, Cleavelands, Scott tail wheel. Excellent shape w/parachute. \$26,000 (317) 787-8557 after 5pm.

STARDUSTER I 220 TT. NavCom, transponder, --- electric system, nice \$13,500. (303)221-4122

1977 ACRODUSTER I. 860TT. 1050 SNew on 180HP Lycoming, inverted fuel/oil system, Icom portable radio, full tinted canopy. Like new paint, wheel pants, NDH. \$19,000. Will deliver for expenses. (915) 523-6409 or (915) 524-4651.

STOLP V-STAR Aerobatic Biplane, 300 TT, design for +/-9G's. Lands like a Cub at 37mph. Cruise 85-90. Continental C-85-12 with starter, generator, 720 Com. Always hangared. \$9,900. Call (805) 942-0428.

STARDUSTER TOO 50% DONE, 180HP Lycoming A1G6, prop and spinner, full rear panel, wheel pants, new tires. (412) 533-3911.

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STARDUSTER TOO PROJECT, 220TT, new spring gear, one piece canopy, new mount, new wings, no engine. \$9,500. Hensley Aircraft. (615) 639-0624, Greenville, Tenn.

Beautiful STOLP STARLET \$9,950 Cash or Trade (602) 624-5155.

ACRODUSTER 5A-750. IO540 with 3-blade Hartzell, 50TT, & SMOH, Christen inverted, NavCom and intercom, beautiful 9+ in and out. \$47,500. (219)464-1866 evenings & weekends.

ACRODUSTER II IO540 260HP. 250 TTAF. 900 TTSMO. Christen inverted oil/fuel, 2 security chutes, Endo-Aire 720, clean inside & out. \$38,500 OBO. (714) 493-2838 days or (714) 661-8380 nights.

1976 STARDUSTER TOO, Most professional built. Orange/White, TT 1200H. 180HP Lycoming very tight, Christen Inverted, smoke, Loran, much more. \$26,800. (602)768-3684 or 768-3227.

1989 STARDUSTER II, gorgeous, built right and ready to fly! 140 TTAF & E, O-320, 24K. See June Sport Aviation pg.93 Call (815) 654-0682 evenings.

STARDUSTER TOO. 1980. 425 TTAF. 104 SMOH. 180HP CS prop, inverted systems, smoke, radio, intercom. July 92 annual, beautiful white with red & blue trim. \$27,500. Days (804) 528-7025, Evs (804) 525-0590.

1991 STARDUSTER II featured in Jan 92 Starduster Magazine. 10TT. TSIO-520T Cont. 325HP 110 Hrs since new. 3-blade McCauley prop 27 Hrs since new. Nav Its., beacon, wing tank, red w/gold trim. Will consider runout ferriable 150HP Citabria on trade. \$38,500. (616) 868-6544.

WANTED - UNFINISHED STARDUSTER Projects or Starduster parts.
Call (619) 562-7467.

STARDUSTER TOO. TT152. Lycoming O-540. hangered, delivery negotiable. \$25,000. (404) 228-0352

STARDUSTER ONE. Electric start, alternator, Nav Lights. Randolph Sunburst paint, O290 135HP balanced engine, all new just finished. \$12,000. Work (618) 524-4320, Home 524-5388.

STARDUSTER II 1976, 1 Year since professional recover & restoration, beautiful red, white & blue. Pitts type 2-place canopy, inverted system, 180HP Lycoming, constant speed. 675 TT & SMOH, 50 SPOH. \$32,000. Possible trade for Pitts or Bonanza (601) 489-6061.

NEW STARDUSTER II, 180HP, completed professionally, KX99, KT76 with encoder, intercom. \$35,000. (913) 336-6277. (719) 683-2382.

1983 STARDUSTER II, 125HP Lycoming, NavCom, intercom, 290 TTAE, Clevelanda, always hangered. \$18,500. (503) 838-0329.

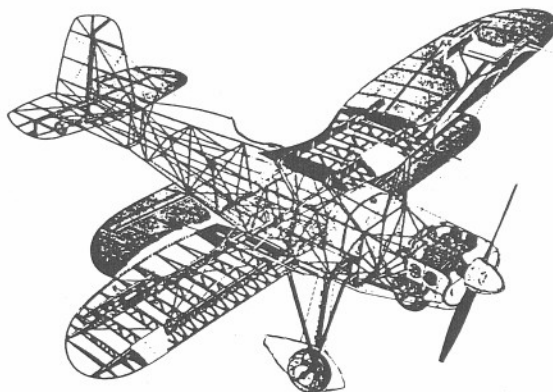
1981 SA-300 STARDUSTER TOO. N180F. 378 TTAF, 378SMOH. Lycoming IO-360. Christen 801 Inverted oil System S/N 851-51, KY-197, NAV-12, KT-76, Intercom, Wheel Fairings, EGT, 2-blade Hartzell, Shoulder Harnesses, Full Panel/rear Cockpit, Nav Lights & Beacon, Brackett Air Filter. \$33,000.

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