

# *Culver's* **GOING PLACES**



▷DART◁



**CULVERS GOING PLACES**  
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**DISCLAIMER NOTICE**

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**GOING PLACES**

Another year, another *Going Places*. We have finally garnered enough material to put a newsletter together thanks to the following folks:

Henry Gauntt, whom always keeps us up-to-date on work and modifications to his Cadet. See "Tech Talk" pages 6, 7, 10 and 11.

Jim Fisher, for his continuing contributions on the technical side, page 10, even though he recently sold his LCA.

Carl Badgett, for a fine article about goings on out East at his Culver factory, page 12.

Al Eygabroad, for his support of Darts, Dart owners and *Going Places*, see the cover story on page 3.

To A. C. Anson and "Aero Plans", 8931 Kittyhawk Avenue, Los Angeles, CA 90045, for permission to reprint "Theme and Variations" from *Air Wars* #28.

And to all the rest that write, call and send photos for use in *Going Places*.

I would like to remind our readers out there that the Airpower Museum has the remaining parts inventory of the Helton Lark Factory and these parts are for sale to help owners of the Helton Lark and Culver Cadet. Call 515-938-2773 and ask for Brent Taylor.

We hope you enjoy this issue of *Going Places* and that it will inspire you to sit down write and send some photos for the next issue.

Brent Taylor

**MAY 23 AND 24** - Greater Kansas City Area Chapter, 31st Annual Fly-In, Amelia Earhart Memorial Airport, Atchison, Kansas. Potluck dinner for registered guests provided on the field Friday night, May 23 and Saturday, May 24 will be flying and fun with a catered Awards Banquet held that evening. Contact: Stephen M. Lawlor, 3280 S.E. McQueen Road, St. Joseph, MO 64507, 816-238-2161 or Gerry Gippner, 14810 West 159th Street, Olathe, KS 66061, 913-764-8512.

**FIFTH ISSUE PUBLISHED**

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Editor.....Brent Taylor  
Advisor, Cadets.....Burke Bell  
Advisor, V's.....Mark Trimble  
Advisor, Darts.....Al Eygabroad  
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Al Eygabroad, Brent Taylor, Neal LaFrance, Don Gibson, Bill Owen, Al Gross, Richard Loftis and Harold Sutherland.

**BACK ISSUES:** Culver Club *Going Places* back issues available \$1.00 per issue, four issues available. Issue #4 in short supply, so order today from *Culvers Going Places*, Box 127, Blakesburg, IA 52536.

**NEW CLUVER MEMBERS**

Donald H. Smith, 61 Hemlock Drive, Glen Mills, PA 19342. No mention of aircraft.

Rudy Wohn, 126 Jameson Road, Easley, SC 29640, is currently restoring a Culver Cadet LCA, 1940, N-29250, S/N 118, with a Continental A-75.

Carl McGinnis, 1905 Old Post Road, Edin, OK 73703, has a 1946 PA-12.

Roger Vian, 531 Main Street, #529, El Segundo, CA 90245, has a 1941 Cadet, N-41617, S/N 376, 90 h.p. Franklin.

Ken Freeman, Route 1, Box 30-14, Rhome, TX 76078. He is a partner with Jess Shryack, with a 1941 Culver, N-34791, S/N 243, 85 h.p. Continental.

Dennis L. Taylor, 44 Vista Drive, Harwinton, CT 06791, is restoring a 1941 Culver, N-41630, S/N 389, with a 90 h.p. Franklin.

Jim Corbitt, P. O. Box 752, Zellwood, FL 32798. No mention of a Culver.

Carl R. Walston, 7 Oakwood Lane, Greenwich, CT 06830-3908, is currently restoring a Culver Cadet LCA, N-29398, S/N 191, with a 75 h.p. Continental.

Mallory Selfridge, 125 Pifershire Road, Eastford, CT 06242. No mention of aircraft.

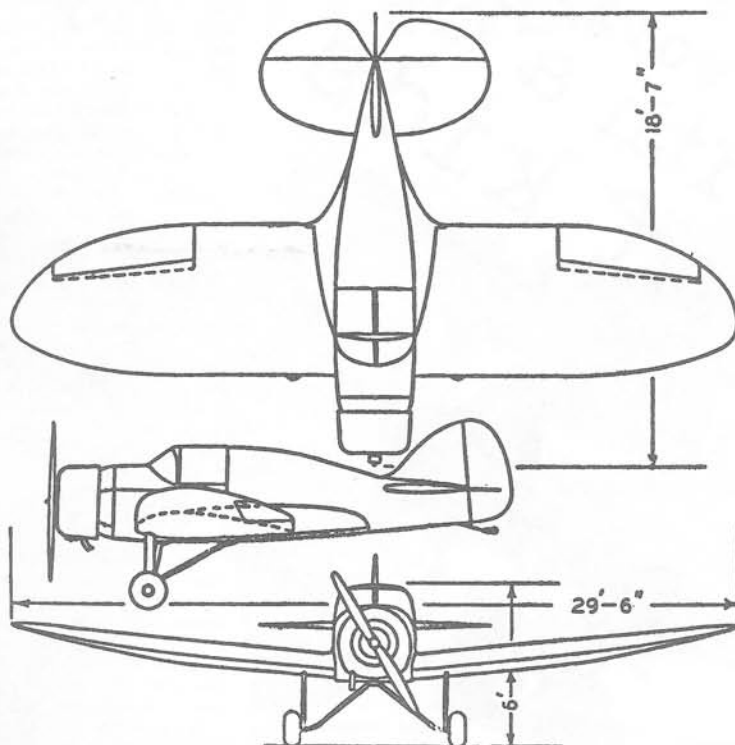
Joe Deruytter, 252 Huntley Drive S., Lake Placid, FL 33852, owns Culver N-37828.

Bryant Otto, 1010 Front Street, Conway, AR 77032, has a 1941 Culver Cadet, N-37841, S/N 345, 85 h.p. Continental.

Don Thomas, 3130 Soquel Drive, Soquel, CA 95073, has a Culver project.

# COVER STORY

AIRCRAFT YEAR BOOK



THE CULVER DART GW

A two-place plane with a Warner engine. This private owner machine is manufactured by the Culver Aircraft Corporation.

Our cover airplane, Dart NC-18064, is perhaps the most well traveled Dart in the country over the past couple of years.

In 1994 Al Eygabroad, 118 Fox Run, Sparta, IL 62286-1012, purchased 18064 in Arizona and promptly flew it to Atchison, Kansas for the Annual Kansas City Chapter AAA Fly-In. Since that time Al and the Dart have been seen at many Fly-Ins such as our National AAA/APM Fly-In here at Antique Airfield, the Texas AAA Chapter Fly-In at Denton, Indiana AAA Chapter Fly-In at Shelbyville, the Monocoupe Fly-In in St. Louis, etc. Al also uses the Dart as a transportation machine.

This particular Dart has an interesting if confusing history. It was originally built by Monocoupe as a Monosport G, S/N G-2. When Knight Culver purchased the Monosport G rights and moved them to Columbus at least four airplanes were included, G-2, through G-5. G-2, NC-18064, was a flyable aircraft while the rest were as yet unfinished. Hence NC-18064 is both a Monocoupe and a Dart.

It is not known for sure but assumed that G-1, NC-11791, also went with the Dart package to Columbus and it does appear in early Dart ads with a Columbus address. On page 14 of this issue is a reprint of an early Dart ad. While we can not make out any N-number it may be possible that this is 18064, Al's Dart.

18064 has passed through approximately 30 owners in its life. It was restored and converted to a Lycoming 0-290 in 1978 by Al Pfoutz. The aircraft was then based in New York and attended one of the AAA/APM National Fly-Ins here at Antique Airfield. Sometime later with another ownership change it made its way to Arizona where Al purchased it.

Al has been quite generous in sharing this fine aircraft with others. Several pilots, including your editor, have had the opportunity to strap on the Dart and explore its flying characteristics.

I found the airplane to be easy to fly but quite sprightly. The controls are quick and effective and reminiscent of a Monocoupe. The Dart loops and rolls with ease and will run along side a 145 h.p. Swift on 20 less horsepower.

It is a shame there are not more Darts around. Look for Al and his orange, white and dark blue Dart at a Fly-In near you.

Brent Taylor

## CULVER OWNERS ATTENTION

There is another brand of airplane that you might find of great interest as well. The book, *Rearwin, A Story of Men, Planes and Aircraft Manufacturing During the Great Depression*, is now off the press and is now available.

Yes, some of those Darts built had a Rearwin connection as the Dart model GK utilized the LeBlond 90 5F engine. This engine became the Ken/Royce engine when the LeBlond Company sold their engine company to Rearwin in 1938.

For detailed and engrossing history of the Rearwin family, the company and its products, order your copy of this fascinating book of 300 pages, 385 period photos and illustrations. Hardback is \$34.95 plus \$2.50 shipping and handling. Well researched and written by author Bill Wright with the collaboration of Ken and Royce Rearwin. It is a must for the antiquer's library. For ordering information call 800-258-1232.



# I'm working with a bunch of kids

By Walter Beech

YOUR GUESS is just as good as mine as to what the Culver Kids were doing on that particular day—not too many years ago—when I was saving Mrs. Franklin D. Roosevelt's life.

By "Culver Kids" I mean the bunch of youngsters in Wichita who are now designing, building, and launching fast, safe Culver ships for use by the United States Army and Navy. My personal guess on the past history angle is that some of them were unfastening the pins in their three cornered pants by means of monkey wrenches, some were toddling a mile for a glimpse of an aeroplane, and still others, slightly older, were thumbing their little-boy noses at the law of gravity and jumping off garage roofs with homemade wings pinned to their shoulders.

They'd have to have had some such early start to know as much about planes as they do now, while they're still just kids!

In the past two years the United States Air Forces have taught Americans from nine to ninety that piloting planes is a young man's game, that this is a young man's war. But does the average citizen realize that producing planes is also a young man's field? You can take my word for it that it is, or if you're a "Showme" from Missouri, you can look at the following record of an actual company. I choose Culver, naturally, because I know all about it. I work with the kids who run it.

The general manager and the designer, both vice presidents, the general purchasing agent, the manager of sales and service, the manager of production control, the chief engineer, the head of the jig and tool department and of the plant foremen are all in their twenties or early thirties, the chief test pilot is a shaver who may see twenty-one by the time these words are in print.

Here's some detailed data on these youngsters. Al Mooney, chief designer, and the lad responsible for the Culver plane from its earliest inception to its present fleet shape, is still almost a stranger to the 30's midmark. In any other business he'd be known as a "promising young man." In aviation he's a veteran. By point of service the youngest and newest employees could call him "Grandad." They could, but you can bet what's in your pocket they don't. Even the greenest hand knows Al by reputation and accords the designer the admiration which is his due.

Al's first commercial success occurred some sixteen years ago when he was a greybeard of nineteen. He sold his first plane design to the Alexander Aircraft Company. In 1927 when the United States Department of Commerce took over the Aeronautical Branch, Al was selected as a member of the five-man board that wrote the new regulations. He still serves as a member of the engineering committee and is active in the Aeronautical Chamber of Commerce.

He's a human dynamo. He works like a house afire when he's in the throes of creating a new design, grudging the time required even for food and sleep. They had to furnish a room for him over his office at Culver to get him to sleep at all. You can pass the otherwise dark office building almost any night and see the lights gleaming in Al's office. He'll work until two, three, or even later, drop into bed for a few hours' sleep, then up and at it full speed before the sun gets very high.

Maybe Al Mooney's enthusiasm for "flying machines" was contagious, or maybe Art Mooney—Al's younger brother—was born with the bug in his veins. Anyhow he has it. As chief of experimental and jig departments at Culver, he's the boy who builds what Al designs experimentally, makes the jigs for production models, and turns the production job over to another "kid"—the plant superintendent. He's a boy of twenty-eight summers named Robert E. Lehman. By mentioning his real christening name I'm giving away a secret almost as closely guarded as information regarding the military secret use of the Culver. Everybody here calls Mr. Lehman, "Hank." He isn't a hard boy to call because he's visible from a long way off. He stands six feet four in his socks.

Charles Jamieson, chief engineer, aged twenty-six, is young even for this business. Since he received his B.S. in Aeronautical Engineering in 1938, he has concentrated on the engineering of military aircraft. Flying the machines he designs is his pet hobby. Even with his present heavy wartime duties he still finds time for going upstairs three or four times a week.

Another boy on the "business end" who keeps his feet on the ground as regards his job but puts his head in the clouds for pleasure, is the production control manager—Monroe J. Paxton, age twenty-three.

A couple of our boys have been flying their own ships since they were fifteen. One of them, Robert C. Faris, devoted himself to flying for five years past that fifteen year mark, then joined Culver as our general purchasing agent and was recently made an officer of the company as assistant secretary. It goes without saying that he has his private pilot's license. He's an ingenious kid who has totaled up thousands of air hours to his credit, as has Earl Hartman, the other lad who started "flying young."

Earl was born across the street from the Vandalia Airport at Dayton, Ohio, and I seriously doubt if there were ever any "choo-choos, bow-wows, or moo-moos" in his initial vocabulary. I strongly suspect that his earliest prattle concerned propellers, altitudes, dihedral, and barnstormers. When he was eighteen he was a CPT instructor, training men twice his age to keep their heads when their hands were on an airplane's controls. At nineteen he joined the Culver staff. If anywhere there is a younger chief test pilot than Earl, I've never heard of him.

Moving on to the front office organization we find another pair of juniors.

William W. Taylor, in charge of sales and service, is twenty-eight years old. In addition to an air record of close to 2000 hours, he's the father of two children. He's on speaking terms with every part of a plane from the prop to the rudder. He sells planes, services planes, and—if the need arises—tests them.

Then there's the boy in charge of the works, the vice president and general manager, T. Bowring Woodbury—but you'd better call him "By." Everyone who knows him does and that means a great many people. "By's" thirty-three years have been spent making friends. He got out of college with one solid ambition—he wanted to get into a young man's business. He had a very understandable desire to have a (Continued on page 5)



Plant Manager  
Robert Lehman.



Chief Designer at  
Culver, Al Mooney.



Chief Engineer,  
Charles Jamieson.



Production Control,  
Monroe J. Paxton.



Vice Prexy, Walter Beech.  
Prexy, Charles Yankey.



Purchasing Agent,  
Robert Faris.

Chief of Experimental,  
Art Mooney.

Chief Culver Test  
Pilot, Earl Hartman.

Sales and Service,  
William W. Taylor.

General Manager,  
T. B. Woodbury.

Group of Foremen  
and Exec picnicking.

# WALTER H. BEECH AND CHAS. G. YANKEY ACQUIRE CONTROL OF CULVER

**Announcement is made that Walter H. Beech and Charles G. Yankey have acquired control of the Culver Aircraft Corporation and have taken over the actual management.**

Mr. Beech has enjoyed national and international recognition as a leading figure in the aviation industry for many years. He organized what was formerly known as the Travelaire Company, which was one of the outstanding successes in the pioneer days of aviation. He also organized and is president of the Beech Aircraft Corporation, which is recognized as one of the leading large aircraft factories in the world today. Mr. Beech personally is regarded as one of the most outstanding and successful men in the industry.

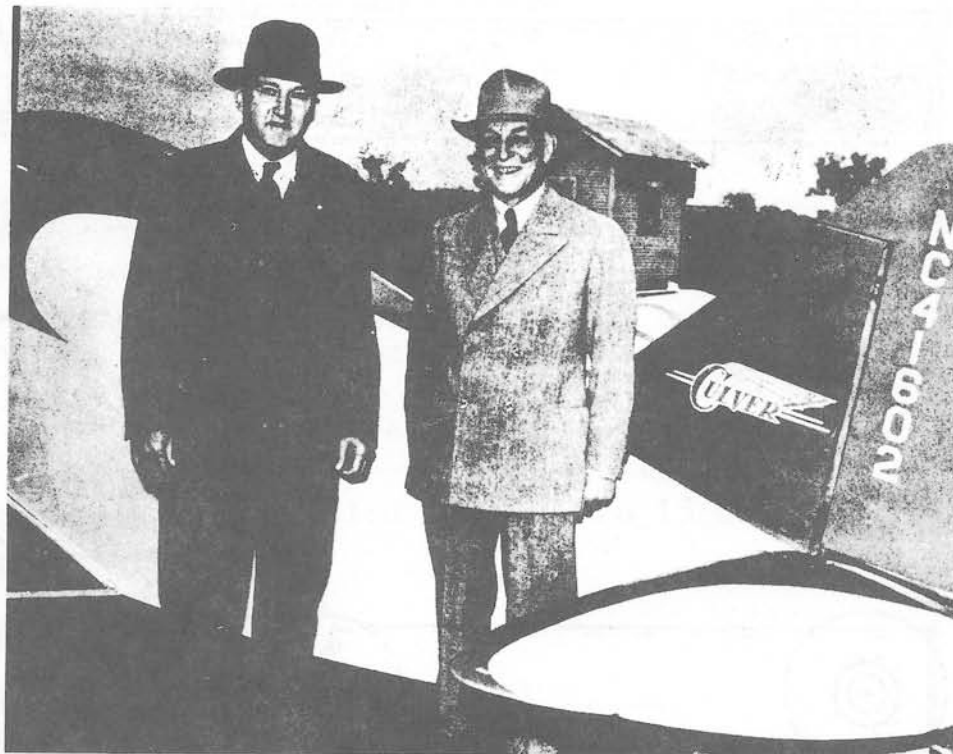
Mr. Yankey has had an active interest and participation in building and selling airplanes since 1925, when with Mr. Beech he organized the Travelaire Company. At present he is Vice President and member of the Board of Directors of Beech Aircraft Corporation.

The entrance of Mr. Beech and Mr. Yankey into the Culver Aircraft organization not only adds financial strength, but brings years of successful experience, which will reflect itself in sound management and assure the success of aviation's leader in the light plane field: The Culver.

At a plant meeting at which the announcement was made, the employees cheered those two pioneers of aviation who had exhibited faith in Culver and its future by coming into the financial and management picture.

And in turn Mr. Beech and Mr. Yankey, in short talks to the employees, complimented them on the splendid work they had done and envisioned an outstanding future for the outstanding light plane.

As a result of new capital, Culver production will be considerably upped to take care of the commercial demand. The Culver factory will be streamlined to accommodate increased production. In fact, Culver will not only do its part in the National Defense program with its government backlog of close to a million; but will catch up on several hundred thousand dollars of commercial backlog and ready itself to meet the ever-increasing demand for the biggest little airplane in the world: The Culver!



Walter H. Beech, left, and Charles G. Yankey, who in taking control of Culver team up for the third time. Their past successes include Travelaire and Beechcraft

## A BUNCH OF KIDS

(Continued from page 4)

voice in the shaping of some industry before that voice had to issue through "store" teeth. He first tried radio, and after four successful years with NBC he realized that aviation offered an even wider field to young men. So he made the switch.

Only youth has the vision to see beyond obstacles that seem insurmountable, only youth has the vigor to batter down stone walls of skepticism and counter-advice.

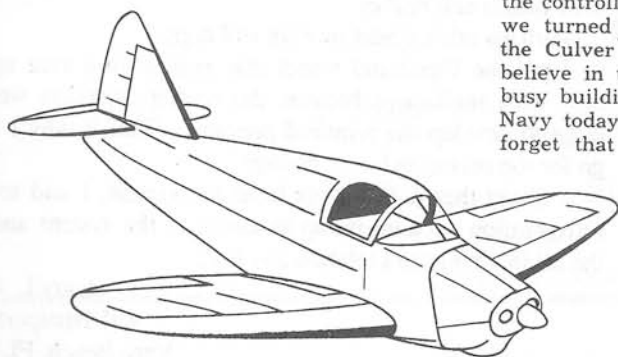
When Charles Yankey and I bought the controlling interest in Culver in 1941, we turned the executive reins over to the Culver Kids. We know these boys believe in the future and while they're busy building planes for the Army and Navy today, they'll never for a moment forget that tomorrow's coming.

Today has produced weather-wise pilots. Tomorrow will produce safe planes—planes as different from the jennies of yesterday as the streamline train is different from a stage coach. What happened on a bleak winter day some twenty years ago will probably never happen to a pilot of tomorrow.

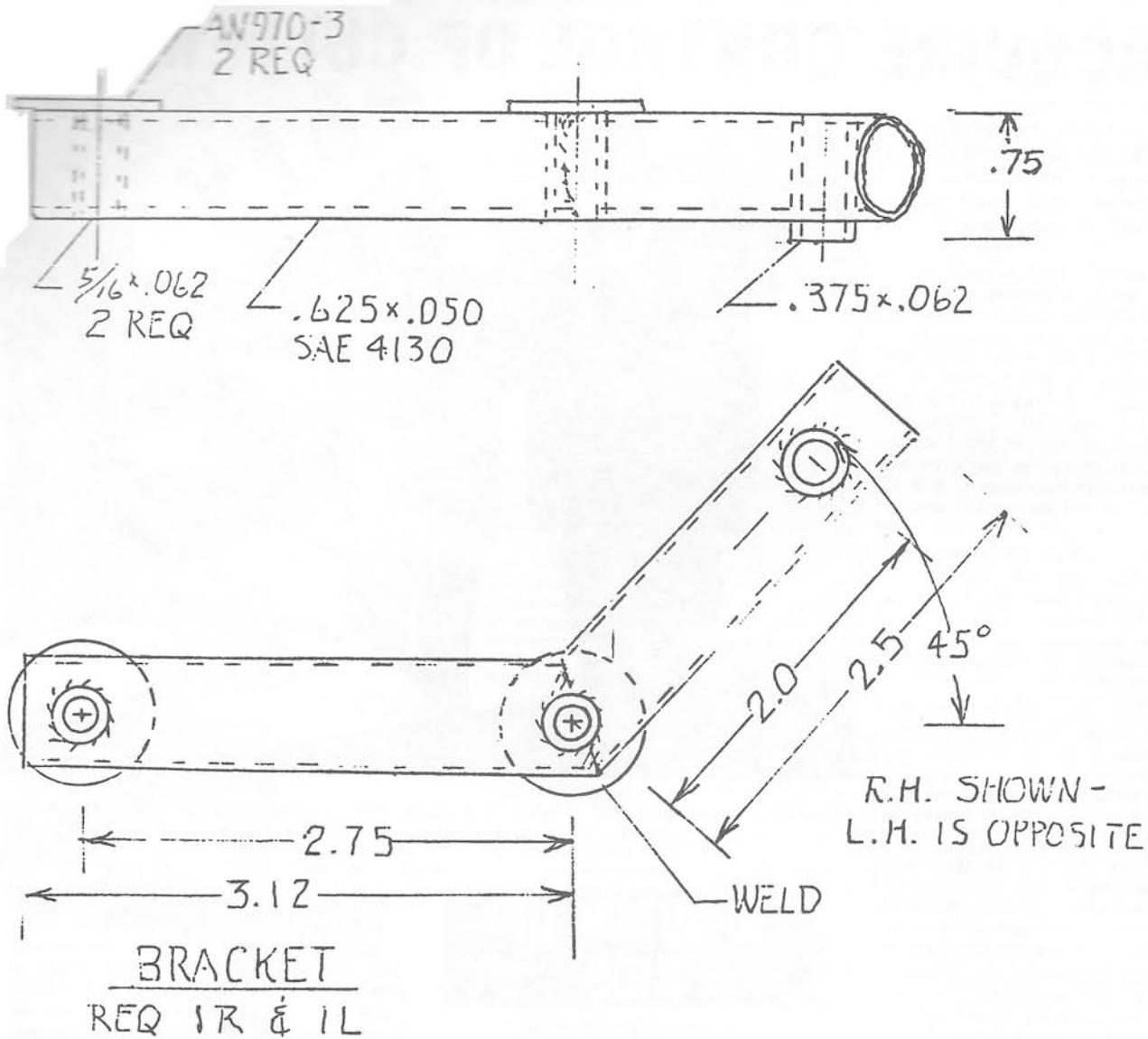
On this day I speak of, a plane filled with passengers was sitting on a New York airfield. The pilot was readying to take off into impossible weather. A stranger approached the ship and warned the pilot it wasn't safe to fly in such weather. "I'm the guy flying this ship and I say it's safe," said the pilot. "I'm the guy who built the ship and I say it isn't," the stranger replied.

One of the passengers, a tall lady, alighted. "If you're the man who built it, I'll take your word," she smiled at the stranger; "my trip can wait."

No one else got off the ship so Mrs. Roosevelt and I stood there and watched the plane take off into the storm—and later crash.



# TECH TALK



## NOTE

PAIN FOR CORROSION  
PROTECTION

I have just finished this work and it is successful - I have hard pedals and brakes.

Perhaps other Cadet owners will copy.

I put the Cleveland wheel disc brakes on a year ago but they were ineffective because the master cylinders were too large to develop the required pressure. That is why I had to go for the master cylinder change.

I found that to bleed air from the system, I had to use a refrigeration vacuum pump to evacuate the system and suck the oil in. You can't tolerate any leak.

Henry L. Gauntt  
495 Nieuport Drive  
Vero Beach, FL 32968

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

1. Replaced original brake master cylinders (1939 Plymouth auto) with Cleveland O-22 Master cylinders (used in Piper Cherokees)
  - A. Fabricated brackets and forks as shown on additional sheet to this report
  - B. Attached O-22 cylinders to brackets, then attached brackets to structure in same manner as original cylinders. Used 3/16 clevis pins from original installation
  - C. Installed small metal reservoir for brake fluid on lower forward left firewall area. Firewall penetration is covered by reservoir (from 415 Ercoupe)
  - D. Connected inlets to cylinders to reservoir via "T" fitting and 1/4" ID MIL H 6000 hose sections and spring wire clamps
  - E. Vacuumed air from system and filled with Texaco 15 oil (red)
  - F. Negligible weight change

2. Bill of Material

Qty	P/N or Spec	Mfgr or Description
1		Reservoir (from Ercoupe)
2	O-22	Cylinder, Cleveland div. Parker Hannifin
1'	SAE 4130	Tubing, 5/8"x.035
.5'	SAE 4130	Tubing, 3/8"x.062
.5'	SAE 4130	Tubing, 1/2"x.o58
2	402x4	Fitting, 90°, Weatherhead
8	AN 970-3	Washer, wood
2	AN 393-17	Pin, clevis
2	AN 24-15	Screw
4	AN 3-15A	Bolt
4	AN 363-1032	Nut
2	AN 363-428	Nut
A/R	MIL H 6000	Hose, rubber, 1/4"ID
6		Clamp, spring wire 5/8"
1		Tee fitting, 1/4"
A/R	MIL 5606	Oil, Texaco 15

3. See attached sheet for additional information

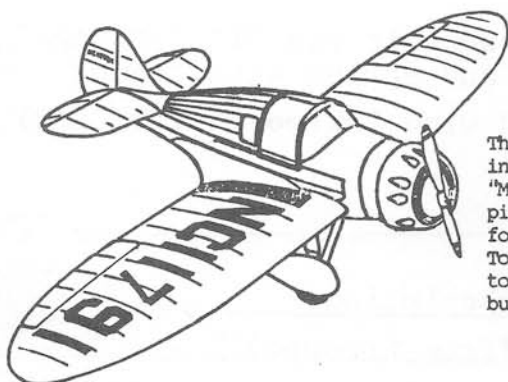
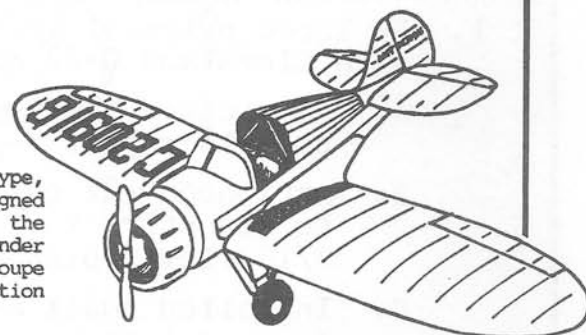
☒ ADDITIONAL SHEETS ARE ATTACHED



## The CULVER DART...Theme and Variations

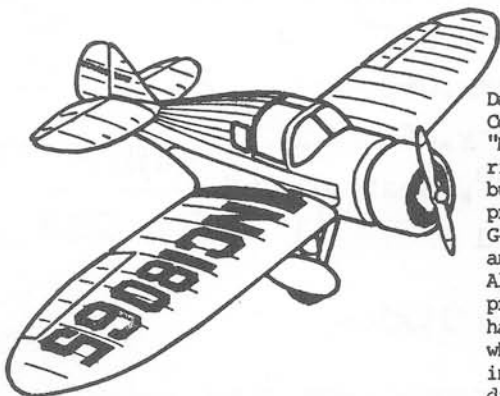


The Monocoupe trainer prototype, "Monoprep Model G" was designed and built in 1935. It used the same Lambert 90-hp, 5-cylinder radial engine as the Monocoupe 90A. There was no production of this open cockpit version.



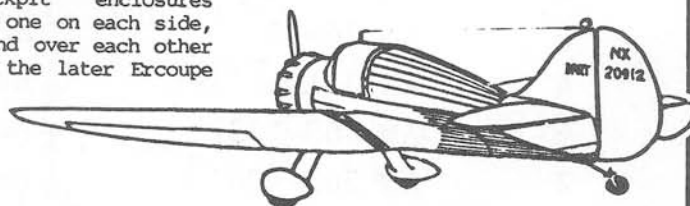
The prototype G-1 was revised in 1937 to become the Monocoupe "Monosport Model G". The one-piece cockpit enclosure slid fore and aft on frame rails. Tooling and parts were obtained to build the first three airplanes, but production was not started.

The first totally Dart-built airplanes began with serial no. G-4. The "D" windows behind the cockpit were eliminated and there were two additional engine choices available- the Ken-Royce or the Warner Scarab Junior, both of which were also 90 hp, 5-cylinder radials. The Lambert and Ken-Royce engines had smooth cowlings, but the Warner had cowlings bumps. The serial no. prefix became GK- for Ken-Royce planes and GW- for the Warners. Wheel pants were optional on all. Four of the Parks Air College planes were Warner-powered and were flown open-cockpit during the summer, as pictured here.

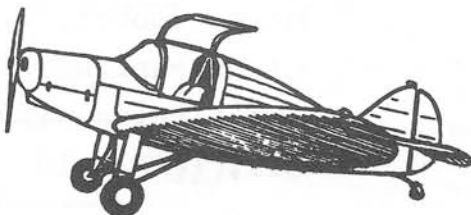


Dart Manufacturing Inc., (from Columbus, Ohio) purchased the "Monosport" prototype, design rights, tooling, and parts to build three planes. The first production airplane, serial no. G-2, was built late in 1937; G-3 and G-4 followed early in 1938. All were Lambert-powered. The production cockpit enclosures had two panels, one on each side, which slid up and over each other in channels (as the later Ercoupe did).

There were two factory-built Dart specials, one with the 125 hp, 7-cyl. Warner Scarab and another, pictured here, with the 145 hp, 7-cyl. Super Scarab.



After WW-II, Applegate and Weyant of Tecumseh, Michigan, bought the rights to the Dart and put the Dart back into production. They changed the cockpit enclosure to a hinged, gull-wing type and switched over to a Continental 100 hp, 6-cylinder horizontally opposed engine. The serial no. prefix for these planes was GC-.

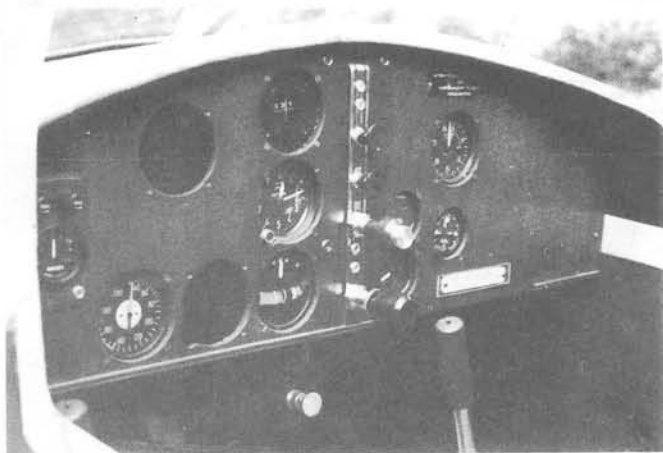


In 1939 the company name was changed to Culver Aircraft Corp., and the airplanes became Culver Darts.

Note that all of these perspective drawings show the correct number and location of the structural members which are visible through the fabric covering, so they can be used in conjunction with a three-view outline drawing to create an accurate scale model if desired. (Drawings by Jim Alaback ©.)



## MEMBER'S CULVERS



Instrument panel of Al Gross's Cadet, S/N 241.



Al Gross's Cadet from Hopedale, MA.



Instrument panel of NC37828.



Joe Deruytter of Lake Placid, FL, owns this LFA, NC37828, formerly owned and restored by Joe Lively in Arizona.



Culver V, N3099K when owned by Bill Owen in 1960.



Current appearance of N3099K, now owned by Harold Sutherland, Mackinaw, IL.

The following listing of Culvers used by the Civil Air Patrol in WW II was provided via Mirwood Starkey. If your aircraft appears on this list it is qualified to receive a "Certificate of Appreciation" from the CAP.

If you think your Culver may have been used by the CAP in WW II contact; Lt.Col. Gregory Weidenfeld, CAP, National Historian, 514 13th Avenue, Belmar, NJ 07719-2434, 908-681-7981.

N29258, Robert L. Hedlund, Lompoc, CA, Culver LCA, OH Wing. N29271, Betty J. Stone, Midland, TX, Culver LCA, PA Wing. N32471, Arrelations, Palo Alto, CA, Culver LCA, Ind. Courier. N37826, Eugene C. Severa, Postville, IA, Culver LCA, TX Wing. N41634, Bennie R. Blalock, Washyington, OK, Culver LCA, Ind. Courier. N41701, Dan B. Dahl, Jr., Ontario, CA, Culver LCA, TX Wing. N34863, Matthew A. Halper, Oxnard, CA, Culver LFA, Costal Patrol Base. N41616, Ernest M. Freeman, Springville, CA, Culver LFA, TX Wing. N41625, Sale Reported, Oregon City, OR, Culver LFA, IL Wing. N41627, Sherman E. Fredrickson, Duncan, OK, Culver LFA, KS Wing. N41729, William H. Lawson, Sonoma, CA, Culver LFA, Ind. Courier. N41730, Burke A. Bell, Erie, CO, Culver LFA, TX Wing. N41732, Robert H. Mauri, Port St. Lucy, FL, Culver LFA, Mil. Courier.

If you own or operate a Culver Cadet there is one common thread that ties you to other Cadet pilots and that is an interest in efficient speed. Al Mooney did an excellent job in designing perhaps the most efficient light plane ever developed but he did leave a few other areas for others to try and improve upon.

Mooney knew that there were basically two ways to improve performance; by increasing power or improving aerodynamics. Many owners decided to install a larger engine, convinced that horsepower alone is the answer to their dreams. Only problem is that they forget about the downside, i.e., more weight, increase fuel consumption, center of gravity changes, etc.

On the other hand, improving airflow across the airframe can yield noticeable results with relatively no penalty other than a little personal effort and time. One often overlooked area of drag is the cooling airflow across the cylinders and out through the lower cowl which can contribute up to 30% of the total drag acting upon the aircraft. Examination of any Cadet lower forward firewall area reveals the installation of a curved metal baffle-like assembly, described by some as an air dam or heat shield.

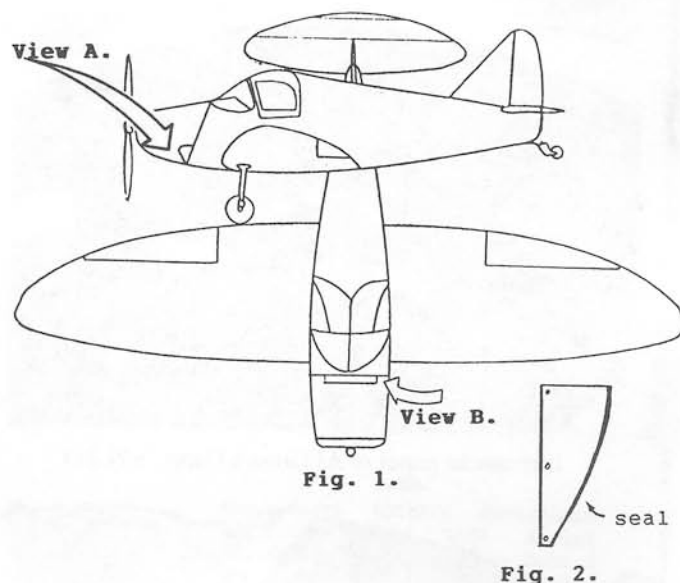
Figure 1, view A indicates that the airflow exit space between the air dam and the lower cowl is shaped in a manner similar to a venturi. A venturi is based upon Bernoulli's Principle, which states that velocity will increase and pressure will decrease most at the narrowest point in the venturi. This has the effect of speeding up the air departing the cowl and also creating a low pressure area which gives a vacuum or suction effect to the air leaving the cowl.

View B provides a vertical view and shows that the air dam stops short on each end, leaving open the possibility of airflow disruption which could negate the venturi effect. Extending the baffle to the cowl is easily accomplished by fabricating and installing tapered aluminum covers which help funnel out the air at the lower end rather than let it swirl around inside the cowl.

As shown in Figure 2, cut two pieces of .032 aluminum to approximately 14"x4"x1" and rough taper one side. Hand fit with the lower cowl installed and modify tapered edge as needed. Next, attach your choice of rubber seal to outer edge to prevent chafing, place cover over existing air dam and attach using three self-tapping screws per side. You may have to remove the lower cowl in order to drill and attach the narrow lower part of the cover. Finished installation will have the rubber seal just touching the cowl. Dimensions shown are approximate and may be different depending on aircraft.

Don't expect miracles with only one small modification, it usually takes several before any noticeable airspeed increase appears. This easy project can be done by most people and combined with gear doors, stingers, or other fairings might help you to squeeze a few more knots from your machine.

Jim Fisher  
2640 Marilyn Road  
Ottumwa, IA 52501



## CADET SPRING INSTALLATION

I sure appreciate your help in getting me the Helton Lark "C" springs. I finished putting a pair on my Cadet and retraction test about an hour ago. The following information will help other doing this chore.

1. You must prepare the leaves by removing the oxide and then grinding the big "hollow" place in one end of each master leaf. Then paint.

2. Fabricate and install the clamps that bind the leaves. I used .050 SAE 4130 and installed with 3/16 hardware store screws and nuts.

3. Fabricate 4 eccentric bushings using a #12 drill bit. The minimum edge distance should be about .06". The hole axis must be fairly true with the bushing axis and this means using a lathe with a 4 jaw chuck unless you are luckier than I with a drill press. I sawed a 1/2" soft bolt into 4 sections 1 1/4" each.

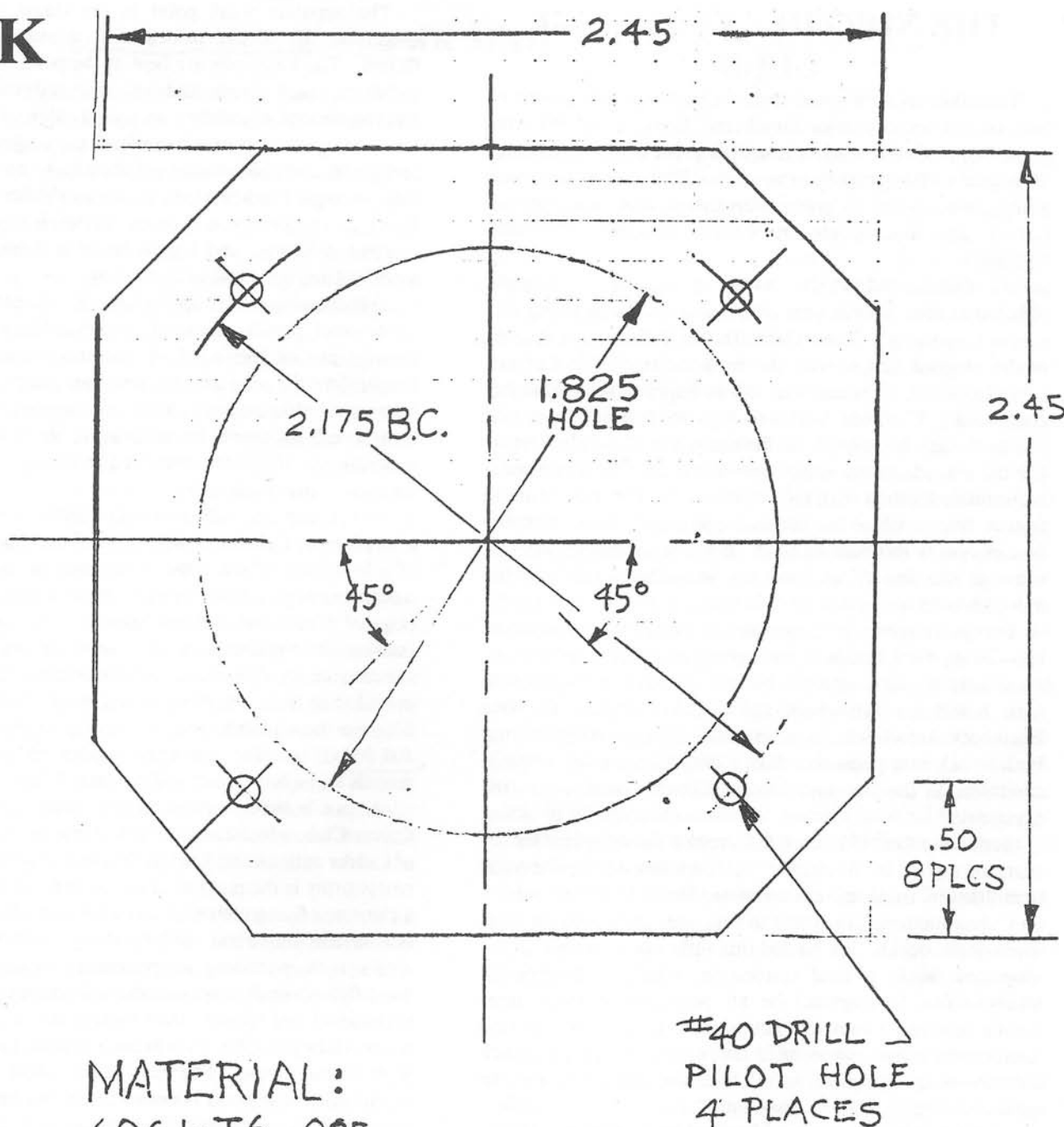
4. A large (12 inch) "C" clamp is essential for putting them on the jacked plane.

The springs seems to be stiffer than the others. I hope they will loosen up some when I make a few bad landings. Anyhow, I can fully retract the gear now.

Hank Gauntt  
495 Nieuport Drive  
Vero Beach, FL 32968

**AUGUST 29, 30, 31 AND SEPTEMBER 1 - AAA/APM Invitational Fly-In for AAA members and their guests only, Antique Airfield, Blakesburg, Iowa. Special event set for the 1997 AAA/APM Fly-In, a Fly-In of Corbens coordinated by Paul Poberezny (one time owner of the Corben Company) now Chairman of the Board of the EAA and Bob Taylor, Editor of the *Corben Courier*. All Corben owners and enthusiasts are welcome. For more information contact: Bob Taylor, AAA, Inc., 22001 Bluegrass Road, Ottumwa, IA 52501, phone/fax 515-938-2773.**

# TALK



I am happy to say my Cadet is flying good now - the Lark springs are great - now if I only had brakes.

While working on the Model A fuel gauge in the Cadet, I found less than 2 threads held the assembly in the tank. I could imagine my terror if it fell out in flight, so I designed this retainer for just in case.

The #40 drill holes are to be drilled approximately 3/8" into the tank and then tapped 6-32. Then the holes in the retainer are enlarged.

This might be worth publishing in the Cadet O Gram or *Going Places*. The drawing is twice the size and could be reduced for the usage.

Henry L. Gauntt  
495 Nieuport Drive  
Vero Beach, FL 32968



## THE NORTHEAST CULVER CLUB

Tucked away in a small town in the northwest corner of Connecticut, located in an old carriage house circa 1896, this gathering of Culver Cadets is visible proof of the resurgence of interest in this great little airplane. There are no less than four active restoration projects underway, two more not yet started, and more pilots are finding out about our little "factory".

My Culver, NC-41726, #444, is nearing a complete restoration after a three year effort, and should be flying this summer, sporting a Forest Green/Dallas Yellow color scheme in the original design with the triple stripes. The Culver's previous owner, Clarence Felt, will be happy to see the project completed. Clarence lost both legs to diabetes, and was unable to see his dream of finishing the Culver a reality. Charlie Hart, from Syracuse, New York, has just completed a beautiful restoration with the Franklins, having worked at the factory, and much of the original equipment from Aircooled Motors is now in Charlie's shop. If you're a Franklin nut like some of the rest of us, and you need help, call Charlie, 315-652-4405.

Dennis Taylor, a corporate pilot, recently acquired NC-41630, #389, which is undergoing a complete restoration. This little Cadet was Cole Palen's personal transportation until his death two years ago. Cole's legacy, the Old Rheinbeck Aerodrome, lives on under the leadership of John Barker. Dennis plans to return Cole's Cadet to its original condition, in the Burgundy/ Diana Cream scheme, with the triple stripe.

Serial number 191, an LCA, rested in seclusion for 25 years in a shed in Wallkill, NY. Carl Walston, a financial consultant by trade, in turn consulted Brent Taylor for advice on Culver matters, like where to find one, and ended up here. The system works. We hauled this little machine back to the shop and began a total restoration, which is progressing nicely. The fuselage is, for all practical purposes, new, having received a complete new skin. The mice had to find another home after we evicted them from the wings, which are now ready for cover. Carl likes the Burgundy also, so maybe we'll get a quantity discount.

Mallory Selfridge, recently featured in the Cadet-O-Gram, acquired NC-37382, #336, from Greg Phiel. It needed a bit more work than was first contemplated, but it's all better now. Mallory is a perfect example of how the Culver inspires great quantities of enthusiasm among those seeing a Cadet for the first time.

On the technical side, each of the fuselage rebuilds have included an additional member added behind the cockpit bulkhead for installation of shoulder harnesses, which is nothing new. What is new are the addition of long tapered gussets in front of the bulkhead to transmit crash load to the stringer system and the structure aft. The bulkhead would just fold and pop forward without the gussets, in the event of a sudden stoppage. Other modifications include gussets at the lower longerons and the heavy diagonal member which is located between them, on the sides under the seat. After dissecting five fuselages, and finding the same glue joints open in all of them, it is obvious that some additional bracing is necessary.

The apparent weak point in the Cadet is at the upper longerons, aft of the vertical fin, stemming from several factors. The longerons are bent at the point of the horizontal stabilizer attach points, and with over-tightening of the bolts and the ravages of weather, are usually shot. The Helton Lark later incorporated a web into which the longerons were fitted and glued, and is obviously a tremendous improvement, along with an angle bracket which transmits the horizontal tail load direct to the bulkhead. Brent Taylor is searching for the original drawings, and I will devote a future article to this modification, complete with drawings.

Our shop has succeeded in having new, compound curved, lower cowl panels produced, and new doorskins and door fairings are on the way. These are aluminum, somewhat harder than the originals, because they are made using power hammers. After our requirements are met, and the cost is determined, these will be made available to aid in your own restorations. If you are interested in these, and also in a new nosebowl, drop me a note.

Our group of enthusiasts are particularly interested in returning the Culvers to their original condition, and any bits of information which some of you may be able to contribute would be appreciated. If you were fortunate to have an original Cadet and can tell us what the color scheme and interior combination were, over time we can build a core of information to work from. As a side note, Carl Walston has provided us with a number to call the FAA and get the back files on the Culvers, without having to send in a form, 405-054-3116. They are very cooperative, and will send the records and a bill, which will be about \$7.!!!

A late bulletin, since this was written. The Northeast Culver Club, which has heretofore been an informal gathering of Culver enthusiasts, held its first meeting. What makes this newsworthy is the purpose of the meeting, which is to become a chartered flying club with its own Culver Cadet. Secondary, but no less important, will be the group's activity with the area's youth, providing an opportunity for them to experience "real flying" in an airplane with which they can more easily understand and identify than present day aircraft. The club shop will be available for hands-on exposure through the local high school shops. The idea of providing opportunity and incentive for our youth is nothing new, but this may provide a way for them to connect all the dots, so to speak. After all, the Cadet is nothing more than a model airplane - it just comes in a bigger box!

A final note. Since it has become so simple to obtain historical records on your Culver (many of you already have this stuff, since you're smarter than the rest of us), it would be of great benefit to all of us, and particularly Brent Taylor, who bears the burden of providing the rest of us with these neat *Culver's Going Places*, for you to write - that's right - actually write a short history of your Culver for inclusion in the magazine. After all, we all like to get these neat bulletins, but they don't write themselves, and Brent produces bulletins on all those 'other' aircraft. Till next time.

Carl Badgett  
P. O. Box 180  
Winsted, CT 06098  
860-738-9373



## AIR MAIL

It was my good fortune to have friend, Claude McCullough of Montezuma, sent me a copy of your 50th Anniversary issue of Antique Airplane News in which the Culver plans were discussed. I have been in the process for quite some time of constructing a R/C model of the PQ-8. You wouldn't remember it, but I wrote to your organization some time ago, and was provided with a three view of a PQ-14 since there didn't seem to be any information concerning the PQ-8's at the museum. My idea is to construct a radio controlled plane of a radio controlled plane!

I have numerous pictures, articles, flying manuals, parts manuals, and so forth but have never seen a set of plans for the PQ-8. As you know, most of these planes were flown from Wichita by military and civilian ferry pilots, and the name of one such pilot was given in Mr. Bell's article beginning on page 13. I will drop Mr. Bell a note and see if I can locate Mr. Owen. Somewhere other than the Smithsonian, there must be some pictures of the PQ-8. I have everything the Smithsonian has.

Now, the mention of the term PQ-8 brings me to some interesting information which you may already possess concerning the various Jamieson J-1s listed as A/C numbers N-41781, N-41778 and N-61468. NC41778 (the first of the J-1's) was Charles Jamieson's personal plane, most often flown by his brother George. George recently sent me some pictures of that plane taken in DeLand, Florida, circa 1946. Neither George nor Charles knows what happened to that plane. One of the two J-1's kept by the brothers was totally washed out in a crash (NC41779). It is assumed that you know that the PQ-8A had the Fokker-like rudder while the PQ-8 had the Cadet rudder.

When one looks at the J-1 on page 19, the caption is a bit misleading in that N41781 is a PQ-8A. Of course your article clears that up, and I doubt anyone would even give it a thought unless he or she knew about the difference in the two models.

The Jamieson brothers still live in Florida, and I correspond with George about every ten days or so. I think Charles will bring out a new plane this coming summer.

I lived in San Jose until a year ago. That city is close to Tracy where Col. Helton started on the Lark prior to moving to Mesa. You know, of course, that the Lark was a PQ-8 with retracts and a dorsal fin. I have never been able to trace any owners of existing PQ-8's, PQ-8A's, or Larks. I have the original brochure for the sale of the Larks, and it is assumed that your pictures of the Larks flying were taken from the brochure and not the Fly-In. Also I wonder if the formation flying of the PQ-14's was taken at the Fly-In.

The N-number registry, of course, provides the owners and their addresses, but all my mail to said owners has been returned.

I wonder if you know who has Spinks' data bank? He had promised to send me a copy of the structural details of the Lark but he never did. Also he apparently had a copy of the Jamieson-1 plans which, as you mentioned, was the PQ-8. The brothers bought six surplus PQ-8's according to Charles, but I think he really meant PQ-8A's. Anyway, I'll get to the bottom of this matter if there is enough longevity.

It sounds as if you all had a wonderful time back there. I have not been able to figure out the difference between your group and the EAA Vintage group. Would you please enlighten me on this point when time permits? Thank you. Good luck with your endeavors. How do we go about getting younger people interested in antique-type planes?

L. E. Stephenson  
1244 Paseo Ladera Lane  
Aroyo Grande, CA 93420

I purchased Culver Cadet #191, N-29398, from L. Vivian Mechelke, Wallkill, New York, November 24, 1995. Her deceased husband acquired it in June or July 1974 and picked it up at the Pure Village Court on US 11, five miles south of Harrisonburg, Virginia where it was hangared at a 2000 ft airstrip adjacent to the motel. There are no log books and the plane was not in flyable condition. It was trailered to their home in Wallkill, New York where it has been in storage.

Carl Badgett located this model LCA and after a careful inspection told me it appeared to be in original condition with the exception of paint and fabric. There was damage to the left aileron and there was evidence it had been nosed over. We later found repairs to the rear cabin and windshield and cabin doors and the vertical fin may have been replaced.

Carl Badgett has undertaken a total restoration of my Culver Cadet and I expect it will be completed this summer. I have asked Carl to do whatever is necessary to return the plane to its original condition. Some additional bracing will be added to the tail area, cabin and main ribs in the wings. I plan to install a steerable tail wheel.

Should you have any information about my Culver, please give me a call.

Carl R. Walston  
7 Oakwood Lane  
Greenwich, CT 06830-3908

I got your name from Larry Low of the Culver Club.

I am thinking of building a replica Cadet (plans by Neal LaFrance) or restoring an original Cadet. Because of this I would like to learn as much as I can about this airplane.

Enclosed is my check for your newsletter. I hope that is the correct amount as I am going by what Larry said the cost was.

If you know of anyone who has a basket case (good wings and tail feathers) I would be interested in talking with them. I can't afford the \$18,000 the Stick and Rudder Club wants for their restored Cadet in Trade-A-Plane.

Don Smith  
61 Hemlock Drive  
Glen Mills, PA 19372

**JUNE 13, 14 AND 15** - Texas Chapter 35th Fly-In a.k.a. "Denton Fly-In" is moving to Gainesville Airport, Gainesville, Texas. For more information contact Jim Austin, 1704 Sheffield Place, Ft. Worth, TX 76112, phone 817-429-5385, or Penny Richards 817-482-6175, or Roy Skelton 817-430-4018.

## AIR MAIL



Progress on the Iron Cadet has been slow but sure, during the winter months. The enclosed photos will give you some idea of the progress.

I have the fuselage over at a friends house, who is an expert at fiber glass construction. We will make a new cowling. The nose bowl and the lower cowl are under construction now. We are using a two inch prop extension, which will allow a longer nose, benefiting a better air flow to the engine.

You might be interested in the door air inlet vents, also the installation of the head phone amp and head-set, hate to have wires running across my legs. The wheel wells will have a complete close out, see photo of the mold.

Looking forward to your next issue of Culvers Going Places.

Neal LaFrance  
9031 Suncrest Street  
Wichita, KS 67212

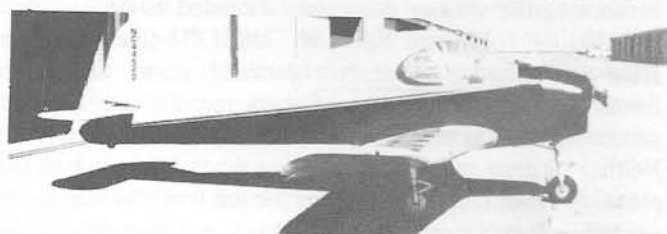
I came across your literature from three years ago about a newsletter for Culver owners. If this publication is still active, I would like to place an ad for Culver V parts.

I have a Culver V, S/N 259, which was badly damaged when the hangar fell in on it. The wooden fuselage and wing are not repairable, and the engine has been sold, but there are many other "V" parts which could be used by other "V" owners. Let me know about your publication, advertising rates, etc. Thank you for your assistance.

Anita J. Yuran  
P. O. Box 217  
Woodstock, NY 12498

Enclosed are photos of my Culver "V". 541 hours on airframe, "O" time on engine. I need some engineering information on the Culver "V" with the 10-360 built for the Navy. There was 13 built, but I can't find any engineering drawings or other information on this. I wish to convert mine to the 10-360 engine as mine is very weak at this altitude (4000').

Don Gibson  
214 Montego Bay  
El Paso, TX 79912



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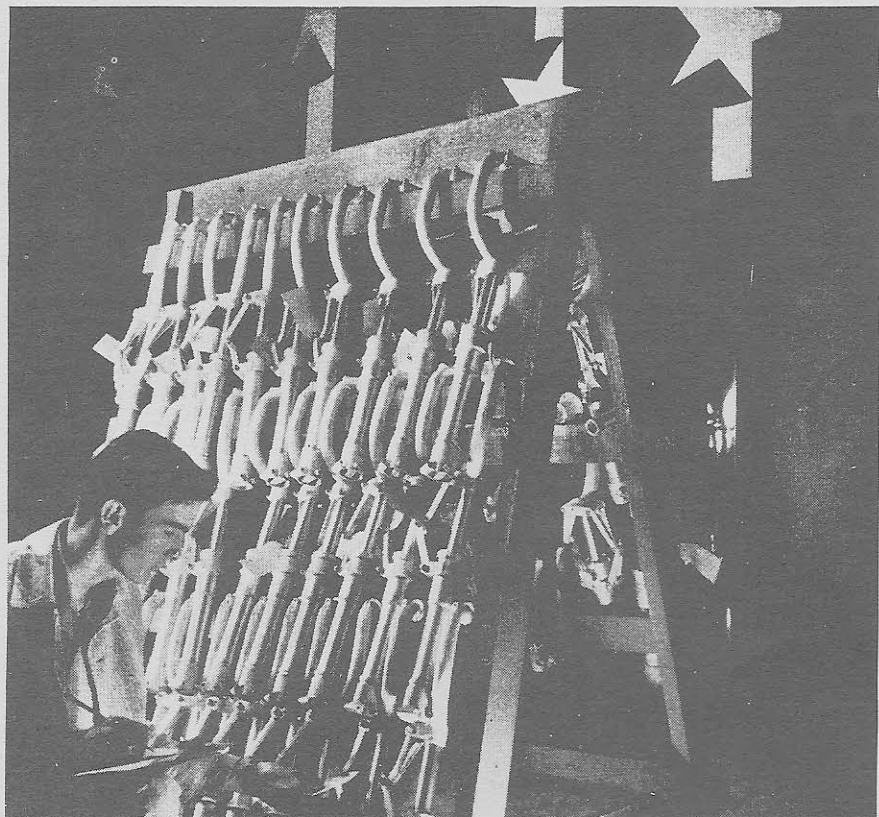




# worth waiting for NEWS

**No. 5 - HOW TIMES HAVE CHANGED** THE FIFTH OF A SERIES OF INFORMATIVE ADVERTISEMENTS ABOUT THE NEW CULVER. PUBLISHED BY THE CULVER AIRCRAFT CORPORATION, WICHITA 1, KANSAS

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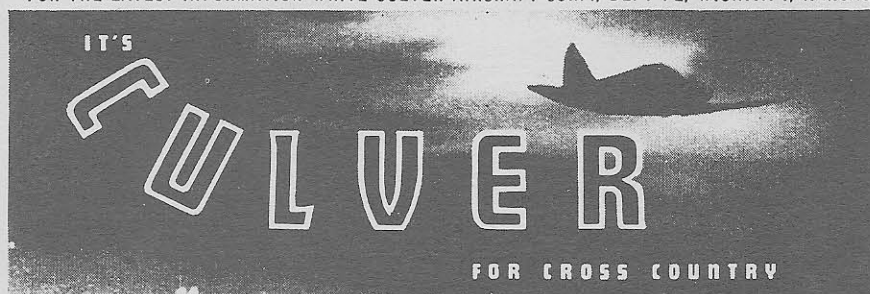
This, we think, is one of the important developments at Culver, for it assures the Culver buyer that not only will the parts fit when they come from the factory; but in our new dealer plan a complete stock of replacement, interchangeable parts will already be in the dealer's repair room.

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2. Employ factory-trained mechanics.
3. Charge standard repair rates.

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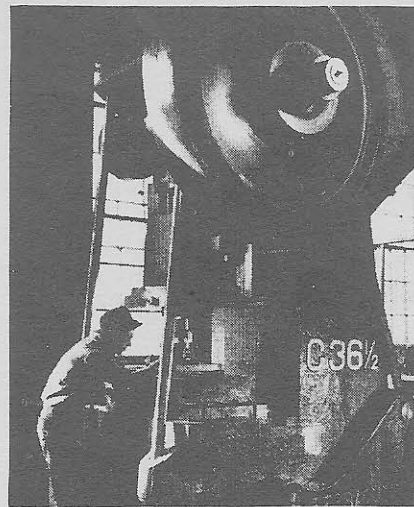
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5. Offer factory one-stop service.

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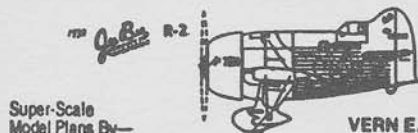


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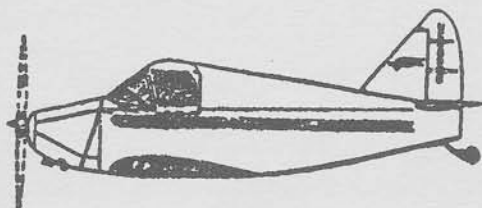


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1932 GEE BEE R-2 }  
1932 HALL "Springfield BULLDOG": plans approved by Bob Hall  
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1955-65 MONOCOUE 110SP N101H: Both from factory plans  
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DATA PLATES: Reproductions Culver Cadet and Franklin 4AC. For information: P. O. Box 2537, Oxnard, CA 93034, FAX 805-487-0533.

## CULVER MANUALS

The following manuals are available from the AAA's Technical Library.

Culver Cadet Parts Catalog and Maintenance Handbook, 29 pages for \$7.25.

Culver V Operating Limitations, 12 pages for \$3.00.

Franklin 4AC-176 Operators Handbook and Parts Catalog, 53 pages for \$13.25.

Franklin 4AC-199 Operators Handbook and Parts Catalog, includes Service Bulletins, Carburetor and Magneto Manual, 114 pages for \$28.50.

Continental C Series Overhaul Manual, 86 pages for \$21.50.

Continental C Series Parts Catalog, 57 pages for \$14.25.

Continental A Series Maintenance and Overhaul Manual, 106 pages for \$26.50.

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