by HUGH D. HALL AOPA 293250



Most aviation journals have a page or two listing upcoming aviation events. Odds are that in these calendars of events one will find a fly-in breakfast, barbecue, airport dedication, or what have you, where antique airplanes are specifically invited. And then there are antique airplane fly-ins sponsored by and intended for the antiquers themselves.

So what makes an antique airplane fly-in different from that of any other specialized organization? Well, friend, it is a sure bet that whatever your geographical area, you will be missing something if you don't try to find out. Many thousands of persons stop every year at the antiquers' local and national historical shrines. If you have a mind to look for it, you can find a great deal of aviation history at one of these events.

To set the mood, take a drive out to your local metropolitan or suburban airport and find a spot where you can sit down with a view of the entire field. Close your eyes and try to imagine yourself out in the open country where the air is clean and a fresh breeze is blowing. Let your imagination carry you back some 35 or 40 years, to a time when there was no FAA control tower, nor anything in its place, at the field. The hard-surfaced multiple runways and taxiways have reduced themselves to nothing more than a grassy open field; the airport office, service hangars, pilots' lounge, etc., in your imagination are no more than a wood or corrugated iron hangar and a couple of small garagelike sheds; the fuel pumps are likely to be a collection of drums; the muchmaligned line boy unheard of. You will then be back to where today's antique planes were in their element.

Got the picture? Okay, but what does it prove? It may not have pointed out anything to you other than that aviation has progressed along with the rest of our industrial civilization. Yesterday's

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CESSNA AIRMASTER (1936), Model C-34, owned by Lawrence E. Brown, Stockton, Calif., at the time this picture was made.

This TRAVEL AIR holds Serial No. 1 of the 2000 series. Shirley B. Wardle (AOPA 121591), Burbank, Calif., owned it when this picture was made in 1960.



old sod fields are gone, replaced by the modern complex necessitated by aviation's mushrooming growth, and for the sake of safety, expediency and efficiency of operation. But the old airplanes, though thinned in rank, are still with us and making a comeback in popularity in ever-increasing numbers.

If you had visited Watsonville, Calif., for a three-day period in mid-May of 1965 or 1966, and were not aware of the activities scheduled at this airport, you might well have wondered if your imaginary trip into the past had suddenly confused itself with the present. Your interest could not help but have been aroused by the sight of some 100 airplanes which today are classified as antiques.

The latter-day barnstormer and FBO's workhorses of the late twenties and early thirties were present in such planes as the American Eagle, Waco 10, Fairchild (Kreider-Reisner) KR 34, and Brunner-Winkle Bird. These three-place biplanes took many a passenger on his first flight, taking off from a farmer's field for an aerial view of his home town.

Other biplanes also made their marks in service of the FBO, but because their load was that of pilot and one passenger, they were little used for passenger hopping. The New Standard, Waco NF, Fairchild KR-21, Fleet and Great Lakes were popular with sportsmen pilots, as well as making fine training ships. Even today, the KR-21 and Great Lakes are highly prized for their nimblefooted aerobatic capabilities.

Larger aircraft were being used at this time for hauling small freight and cargo loads, and for air taxi and charter work. Representing what is now termed the medium class aircraft, is the Stinson series of high-winged monoplanes capable of carrying four, plus a quantity of baggage. This ship, with a lot of horses up front, was one of the early "bush-type" aircraft. Airline travel was the coming thing, and the Ford Tri-Motor was one of the early workhorses in this business.

Although of a smaller scale, but also a high-wing monoplane of the late twenties, the three-place Curtiss Robin was one of the ships which participated in the period of transition from the biplane to monoplane configuration. A versatile craft, the Robin was fitted with power plants ranging from the 90 h.p. water-cooled OX engine, up to 300 h.p., enabling the ship to be used for economical training or for carrying heavy loads into and out of small fields. The Robin also participated in many of the "stunt" flights of the late twenties or early thirties era. It set endurance records and distance records. Many of us remember Douglas "Wrong-Way" Corrigan and his flight to Ireland.

By 1932, biplanes and open cockpits for the most part were being phased out of the majority of manufacturers' lines, although Davis at this time was enjoying moderate success with his high-wing open two-place ships. Fairchild also used this configuration with their Model Forefathers of today's general aviation planes are viewed with affection rather than as relics

of a bygone age in aviation

PHOTOS BY THE AUTHOR



MEYERS OTW 160 (1942), powered by a 125 h.p. Warner engine; top speed rated at 120 m.p.h.; service ceiling 17,500 feet.

RYAN SCW 145 (1938), powered by Warner Super Scarab engine; top speed 152 m.p.h.; service ceiling 19,400 feet.



22. A year or two later the 22 was sidelined in favor of the Model 24, which put two occupants side by side, with a third in a single rear seat, and in an enclosed cabin. Capacity was soon enlarged to four, which became standard for the line.

Double-wingers were not to be denied, however. Waco stubbornly held to the biplane configuration, but granted a concession to passenger comfort in the form of an enclosed cabin. Right or wrong, their four- and five-place cabin models became a common sight on airfields throughout the country. Thinking along similar lines was Walter Beech, who cut his teeth in the biplane tradition and continued it into his Model 17 line of unique enclosed cabin aircraft. Beech "staggerwing" aircraft are coveted even today, and compare favorably, with their extremely clean lines, with any comparably powered fourplace business airplane of modern manufacture. Closely following the Waco and Beech and Fairchild fourplace aircraft was Clyde Cessna's series of high performance Airmasters. Utilizing a high cantilever wing over an extremely drag-free airframe, the Air-master boasted great speed-to-power ratio and was billed in its heyday as the most efficient aircraft ever produced for the commercial market.

Although the economic depression of 1929 spelled doom to many budding aircraft manufacturers, in a sense this catastrophic situation was responsible for the direction taken by our light aircraft industry in the years to come. Cost being a major factor in any manufacturing business, and particularly in a nonessential product, the lower the cost the easier to sell. Development of small, low-powered engines led to small, light aircraft that were within the limited means of the flying public of the early thirties.

Ultra-light airplanes, such as the *American Eaglet* and Aeronca C-3, were typical of the early examples of today's oft found two-place high-wing light-planes. Neither the Aeronca nor *Eaglet* protected pilot or passenger with an enclosed cockpit, although the former did, in later models, provide a removable enclosure for winter flyers.

Evolution of a series of airplanes can be seen in four models of the Aeronca line. The C-3 was followed by the "K" series, the *Chief* and the *Champ*.

The Rearwin family is also a familiar sight at antique airplane fly-ins. The *Sportster* enjoyed a fine reputation in the lightplane market of the mid- and late thirties, and had not World War II burst upon us, their *Sky Ranger* and *Cloudster* would have been equally popular.

Of course, no light airplane is more of a household byword than Mr. Piper's venerable J-3 *Cub*, and no single airplane was produced for civilian consumption in greater numbers than this make-flying-fun ship. The J-3 had its origins in a Taylor design, and went to Piper with control of the Taylor organization. Taylorcraft, however, made its comeback a few years later with another series of fine airplanes, the mainstay of which as the "B" series. This ship was manufactured, and still is in evidence, in great numbers.

Although Piper and Taylor probably put more airplanes in the air than any other of the builders, there were others around which were extremely popular. To note one in particular, the name *Monocoupe* stands out as a prime example of aircraftsmanship. Many airplanes are said to have personality, but few have the character—to go along with their individuality—to make them as outstanding in performance as they are in appearance. The *Monocoupe* was an airplane that made a name for itself in all sorts of ways. It was flown in cross-country races and closed-course races. It set distance records. For a small, low-powered ship, it had a big, high-powered reputation. The first *Monocoupe* was introduced to the flying public in 1927, and ushered in the commercially successful "personal" cabinplane era.

One of the "greybeards" seen at antique airplane fly-ins in northern California is the one flying example remaining of the St. Louis *Cardinal*. This ship was manufactured in 1924, and is one of the oldest of the old-timers, barring the few World War I types seen



DART GW (1939) is powered by a 90 h.p. Warner engine. It's owned by Erv A. Trunk of Torrance, Calif.

1929 deHavilland GYPSY MOTH, owned by Ed Clark, Jr., of Hawthorne, Calif., powered by a 100 h.p. D.H. Gypsy inline inverted engine.



outside museums. This sporty little cabin monoplane was produced in limited quantities by—of all people the St. Louis Car Company, makers of streetcars!

The early thirties saw the biplane all but discarded as a continuing model for the personal airplane market. The high-wing monoplane was enjoying great popularity, but there were also a few low-wingers in the picture. A great one was the Ryan ST. One of the first to incorporate a metal monocoque fuselage construction, the ST became a favorite of the sportsman pilot. As a platform for the stunt flyer, the ST was immortalized by Tex Rankin.

One of the last of the open cockpit monoplanes produced to attract the "sporting" group was the Sportster, marketed by Kinner, maker of the engine bearing the same name. With two seats side by side over the big wing, the Sportster had a specially designed baggage compartment in the root of the wing which was roomy enough to carry golf bags, camping and fishing equipment.

Continuing the line of personal aircraft of the middle and late thirties were two very personable ships, both low-wing monoplanes. The two-place Dart sported a jaunty appearance with its radial engine powering a stubby airframe. This ship was stressed for aero-batic work, and was a capable performer. The other in this pair was the Culver Cadet, which used the popular and dependable horizontally opposed engine. This Cadet like Cessna's Airmaster, had an extremely clean configuration, and with a retractable gear -previously unheard of in lightplane circles of the late thirties-was remarkably fast.

Favorites at any fly-in are the training biplanes so familiar to World War II cadets. The one area where the biplane was ideally suited, the Stearman, Waco UPF, Meyers OTW and Navy N3N-3, are typical examples. Also used in quantity for service training were low-wing monoplanes, the Fairchild PT-19 and the Ryan ST-3. In their regulation service colors, these biplanes and the two monoplanes are the object of much attention and reminiscing at fly-ins.

Of course vintage types are not the only aircraft to be seen at an antique airplane fly-in. The progeny of these older airplanes bring many visiting admirers. Nor are aircraft the only things to see at these fly-ins. Often there are static displays of the engines that powered the antiques. On occasion there will also be a special showing of antique automobiles, as well as of the more modern planes.

Despite Madison Avenue's success in turning our eyes and tuning our thoughts in on today's unquestionably highly efficient and reliable aircraft, there is a large segment of our general aviation population that takes the "Spam cans" with as much of a goodnatured grain of salt, as do so many of the well-satisfied owners of Cessna, Piper, Beechcraft and Mooney planes happily tolerate the often nonradio and sometimes practically noninstrumented "rag-bag" aircraft of the antique category.

It is to be doubted, however, that any one of the modern aircraft owners can outdo the possessor of an antique airplane in pride of ownership. Incontrovertable evidence of this can be obtained by looking in on any antique airplane fly-in, and noting the extent of love's labor expended on these beautifully restored and maintained aircraft.

For anyone within reach of Watsonville, Calif., we suggest reserving a weekend in May for a visit there, where, for the past two years, one of the largest gatherings of these vintage aircraft has been hosted by the Northern and Southern California Chapters of the Antique Airplane Association and the Watsonville Chamber of Commerce. Check the coming events calendar in your area when the season starts this spring. You will see names from the prolific and hectic days when general aviation was flexing the muscles of its expanding wings. And, gentlemen, give these ships and their owners a big hand, for they represent today's aircraft industry in the making. Never let these old—in years only—birds be forgotten.



RNF WACO, built in 1930, is owned by Sam and Billie Jo Hailey of Union City, Calif.

Harold Sparks, Mt. View, Calif., now owns this 1937 model RYAN STA. It formerly was owned by Don Carter, California director of the Antique Airplane Association.



See next page for specifications and performance data

Specifications and Performance of Antique Planes Shown With 'They Call Them Antiques'

Ryan STA

| Facine 105 ha Manager | 0.4 |
|----------------------------|------------|
| Engine 125 h.p. Menasco | C-4 inline |
| Gross weight (lbs.) | 1,570 |
| Empty weight (lbs.) | 1,027 |
| Useful load (lbs.) | 543 |
| Wing loading (lbs./sq.ft.) | 12.5 |
| Power loading (lbs./h.p.) | 12.5 |
| Wing span (ft.) | 2911/12 |
| Wing area (sq. ft.) | 124 |
| Length (ft.) | 213 |
| Height (ft.) | 611/12 |
| Top speed (m.p.h.) | 152 |
| Cruise speed (m.p.h.) | 131 |
| Stall speed (m.p.h.) | 38 |
| Initial climb (ft./min.) | 1,220 |
| Service ceiling (ft.) | 19,450 |
| | |

Travel Air 2000

| Engine | 90 h.p. | Curtiss OX-5 |
|--------------------|---------|--------------|
| Gross weight (lbs | .) | 2,180 |
| Wing span (ft.) | | 343 |
| Wing area (sq. ft. |) | 297 |
| Length (ft.) | | 241/6 |
| Top speed (m.p.h | .) | 96.5 |

Cessna Airmaster (1936)

| Engine | 145 | h.p. | Warner |
|--------------------------|------|------|--------|
| Gross weight (lbs.) | | | 2,350 |
| Empty weight (lbs.) | | | 1,380 |
| Useful load (lbs.) | | | 970 |
| Wing loading (lbs./sq. | ft.) | | 13 |
| Power loading (lbs./h. | p.) | | 16.2 |
| Wing span (ft.) | | | 341/6 |
| Wing area (sq. ft.) | | | 180.5 |
| Length (ft.) | | | 243 |
| Height (ft.) | | | 7 |
| Top speed (m.p.h.) | | | 162 |
| Cruise speed (m.p.h.) | | | 143 |
| Stall speed (m.p.h.) | | | 49 |
| Initial climb (ft./min.) | | | 1,000 |
| Service ceiling (ft.) | | | 18,900 |
| | | | |

Waco RNF (1930)

| Engine 110 h.p. Warne | r Scarab |
|----------------------------|----------|
| Gross weight (lbs.) | 1,897 |
| Empty weight (lbs.) | 1,150 |
| Wing loading (lbs./sq.ft.) | 7.87 |
| Power loading (lbs./h.p.) | 17.25 |
| Wing span (ft.) | 291/2 |
| Wing area (sq. ft.) | 241 |
| Length (ft.) | 21 |
| Height (ft.) | 81/3 |
| Top speed (m.p.h.) | 115 |
| Cruise speed (m.p.h.) | 95 |
| Stall speed (m.p.h.) | 32 |
| Initial climb (ft./min.) | 750 |
| Service ceiling (ft.) | 16,000 |

Dart GW

| Engine | 90 | h.p. | Warner | Scarab |
|--------------|--------|------|--------|--------|
| Gross weight | (lbs.) | | | 1,550 |
| Empty weight | (lbs.) | | | 960 |

| Useful load (lbs.) | 590 |
|-----------------------------|--------|
| Wing loading (lbs./sq. ft.) | 10.6 |
| Power loading (lbs./h.p.) | 17.2 |
| Wing span (ft.) | 297/12 |
| Wing area (sq. ft.) | 145 |
| Length (ft.) | 181/12 |
| Top speed (m.p.h.) | 135 |
| Cruise speed (m.p.h.) | 118 |
| Initial climb (ft./min.) | 850 |
| Service ceiling (ft.) | 14,850 |
| Absolute ceiling (ft.) | 18,500 |

de Havilland Gypsy Moth

| Engine | 100 h.p. |
|---------------------------------|----------|
| D.H. Gypsy inline | inverted |
| Gross weight (lbs.) | 1,750 |
| Empty weight (lbs.) | 955 |
| Useful load (lbs.) | 795 |
| Wing loading (lbs./sq. ft.) | 7.2 |
| Power loading (lbs./h.p.) | 17.50 |
| Wing span (ft.) | 30 |
| Wing area (sq. ft.) | 243 |
| Length (ft.) | 2311/12 |
| Height (ft.) | 83/4 |
| (Width with wings folded) (ft.) | 9% |
| Top speed (m.p.h.) | 100 |
| Cruise speed (m.p.h.) | 85 |
| Stall speed (m.p.h.) | 44 |
| Initial climb (ft./min.) | 570 |
| Service ceiling (ft.) | 14,600 |

Meyers OTW

| Gross weight (lbs.) Empty weight (lbs.) Useful load (lbs.) Wing loading (lbs./sq. ft.) Power loading (lbs./h.p.) Wing span (ft.) Wing area (sq. ft.) Length (ft.) | 14.2 30 262 223 |
|--|--------------------------|
| | 20 |
| · · · · · | |
| Wing area (sq. ft.) | 262 |
| Length (ft.) | 223 |
| Height (ft.) | 81/2 |
| Top speed (m.p.h.) | 120 |
| Cruise speed (m.p.h.) | 105 |
| Stall speed (m.p.h.) | 40 |
| Initial climb (ft./min.) | 1,200 |
| Service ceiling (ft.) | 17,500 |

Ryan SCW 145

| | · · · |
|------------------------------|--------|
| Engine 145 h.p. Warner Super | Scarab |
| Gross weight (lbs.) | 2,150 |
| Empty weight (lbs.) | 1,350 |
| Useful load (lbs.) | 555 |
| Wing loading (lbs./sq. ft.) | 10.64 |
| Power loading (lbs./h.p.) | 14.33 |
| Wing span (ft.) | 371/2 |
| Wing area (sq. ft.) | 202 |
| Length (ft.) | 267/12 |
| Height (ft.) | . 7 |
| Top speed (m.p.h.) | 152 |
| Cruise speed (m.p.h.) | 136 |
| Stall speed (m.p.h.) | 45 |
| Initial climb (ft./min.) | 900 |
| Service ceiling (ft.) | 19,400 |
| | |