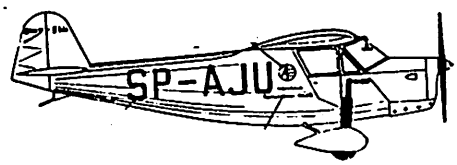
CROSSWINDS 85

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CROSSWINDS

THE JOURNAL OF THE CLEVELAND FREE FLIGHT SOCIETY

No. 85

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Gordon J. Roberts
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Russ Brown

EDITORIAL COMMENT

HIGH WING PEANUTS

This issue examines the status of a much-loved FAC event, the High Wing Peanut contest. In the beginning, when Dave Stott and Bob Thompson began our revolution under the banner of FAC, the Peanut event was conceived as a fun contest, making use of the multiplicity of simple semi-scale jobs of 12" - 13" span that were common before and during WWII. (Of course, in the beginning all the FAC contests were fun events, its only in the last 10 years or so that things have become rather more serious).

The incessant search for subjects with high scale and difficulty points led to the virtual extinction of high wing peanuts in favor of low wings, biplanes, canards, pushers and so on. This led to the splitting off of high wing peanuts as a separate class. At a later date it became necessary to separate out antique aircraft from others, because awful things like the Santos Dumont 14-bis were outclassing the nice conventional aircraft. There is thus some previous history of judicious pruning of subjects to provide a level playing field.

I have been a participant in Peanut events almost since their inception. I well remember in the early days that a 30-second flight was to be envied and that anything over that qualified one as an expert! Everyone built production aircraft, Taylorcrafts, Piper Cubs, Stinsons and so on. Eventually some misguided genius discovered home-builts. These could have wings with the aspect ratio of a barn-door together with ultra-simple boxy construction. Two of these home-builts are plaguing us even today, the Fike E and the Lacey M-10. They have twice the wing area of a production airplane scaled to the same span and can be built lighter because of their simple lines. They fly better, and it is no exaggeration to say that good examples of these elementary aircraft will do a two minute maximum more often than not in reasonable weather.

This has led to the present situation where entries are falling and at least 2/3 of the entrants are Fikes or Laceys. This is not what our founding fathers had in mind, to be sure. I'm making no excuses, I fly Laceys too, because one has to to be competitive. They do get lost often and it is a dreadful chore to keep on turning out the same old unattractive box time after time! I raise my hat to the enthusiasts who persist in building small reproductions of the true production aircraft and fly for fun with little hope of winning.

There is a rumor going round that sanity may be restored in the near future! All the situation needs is to split high wing peanut into two categories - production aircraft and home-builts. The Fike and Lacey experts could have-at-it in their own private battle while the "proper production aircraft" enthusiasts would have their own contest where the

limitations of such aircraft would not mean "no chance" at the hardware.

When one gets down to examining various subjects, the main drawback leaps out - the lack of wing area. Very many aircraft when scaled down to 13" wingspan, possess wing chords of only around 2". With normal rounded tips this means no more than 23-24 square inches of area, of which 2-3 are lost above the cabin area. We may say, therefore, that many nice production aircraft will yield only about 20 square inches of actual lifting area. Compare this to a Lacey, using the same guidelines, which has over 40 square inches. There is no doubt that our production model cannot compete with a Lacey!

Wing area and light weight are both very important for good performance, so for models that will be "in with a chance" we should look for larger chords and simple lines. This is the same set of circumstances that brought home-builts to prominence, but fortunately the range is much narrower, and chords of more than 23/8" are rare. The playing field is much more level once homebuilts are taken out of consideration.

For this issue of Crosswinds I have searched for machines that should have a chance at the hardware and have not been presented before in plan form. This has been quite a project, but I'm pretty happy with what has come out.

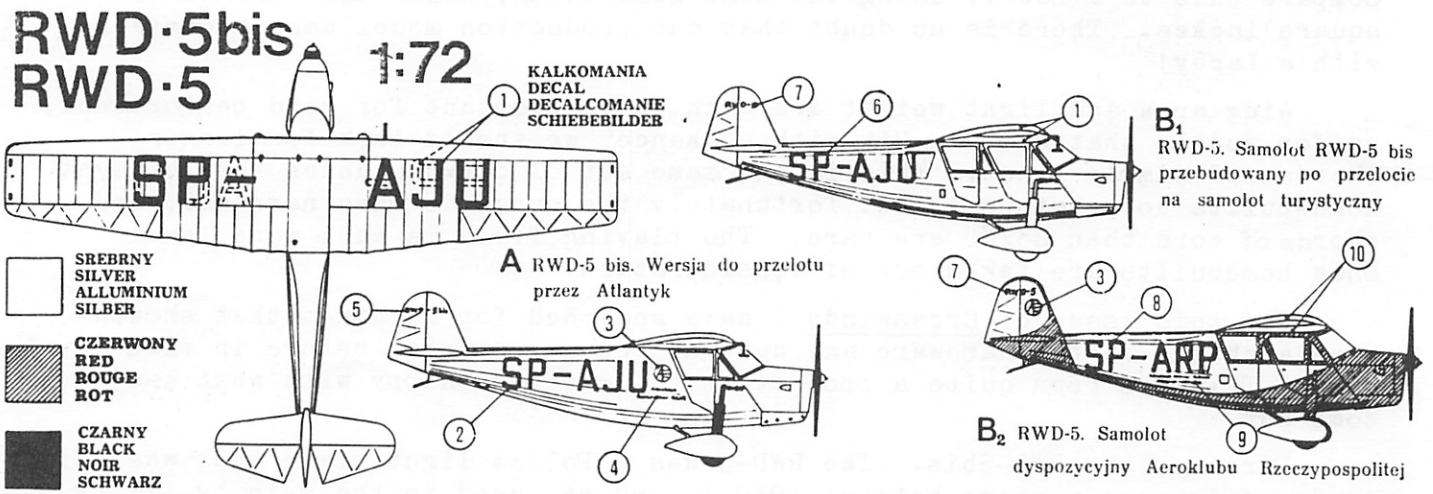
Firstly, the RWD-5bis. The RWD-5 was a Polish light plane that was produced in some numbers between 1930-37 and was used in the main by flying clubs. It had a 105 H.P. Cirrus Hermes 4-cylinder inverted air-cooled engine. The 5-bis was a long range modification which was flown across the South Atlantic in 1933, breaking the world distance record for aircraft up to 450Kg weight. The modifications included eliminating the rear door and windows and putting in a large fuel tank instead of a seat. The long exhaust pipe was taken off and the landing gear was strengthened. Thus this airplane, although virtually unknown, has a substantial record of achievement and deserves better than total obscurity. Although the plan is for the 5-bis, the 3-view will enable to make the RWD-5 with its nice color scheme.

Michael Zand's father,Dr. Stephen J. Zand, knew the R in RWD. For completeness R is Rogalski, W is Wigura and D is Dzewiecki. The RWD partnership produced quite a long line of aircraft including the RWD-8, a beautiful parasol 2-seat trainer with a 110 hp. Walter Junior engine, and they went up to at least the RWD-23 before the war.

The other plan is for the Piper Pacer PA-20. This is the tail - dragger version of the Tri Pacer, which of course is not such a promising subject. On the face of it there is nothing outstanding about this plane except that the chord at 13" span is almost 2½". I do remember a 14" version in a very old Aeromodeller, but it was very heavy at 3/4 ounce (21grams) and so it would fly only for about 20 seconds. Lets see how light we can make the peanut and get flights of a minute or more! The fuselage is quite complicated in shape and I have simplified it somewhat in the name of weight saving. You will see what I mean when you study the 3-view. This is taken from an article in Model Airplane News for June 1950. Dennis Norman came up with a copy from his extensive files. No details of coloring and other registration letters were given, and I hope that Russ Brown can give some information in this issue. The 3-view is by Leornard Wieczorek, a well known draftsman, and it contains a great

deal of information. If you feel like tackling the actual fuselage cross sections, feel free, all the information is there, but the added construction will inevitably increase weight and thus decrease duration, but you will probably get a few extra scale points as compensation.

Gordon J. Roberts



Work on RWD-5 prototype was started in 1930 and in 1937 it was test flown under identification marks SP-AGJ. The prototype differed from subsequent series produced aeroplans by flat front cockpit windscreens rocker type undercarriage and engine, neamely Cirrus Hermes II B. In the same year F. Żwirko and St. Wigura flying the SP-AGJ wan the 4-th National Touznament for Touring Aeroplanes.

The scorer gained by the prototype resulted in recognizing the RWD-5 as the best Polish sports aeroplane. In aircraft were built for Warsaw Aeroclub (SP-AJA' Kolejarz I' and SP-AJB' Kolejarz II') in 1933 fire aircrafts (SP-ARP, SP-AKZ, SP-AJP, SP-LOT, SP-ALR) and in 1934 the number increased to cliven planes (SP-ALS, SP-ALT, SP-ALU, SP-ALW, SP-ALY, SP-ALZ, SP-ALX' Legun I' SP-LOP, SP-AMU, SP-ALN, SP-.....). The aircraft belonging to that series were featured with slighly higher fin. In 1937 one more aeroplane was built: SP-BGX.

The RWD-5 bis, a modification of RWD-5, designed for transatlantic flight, was constructed in 1933. The aircraft was identified as SP-AJU. It was fitted with additional fuel tanks (in aerofoil and in place of passanger seat), the undercanrage was reinforced and the cockpit rear windows and doors were removed. On this aircaft captain pilot St. Skarżyński made in April 1933, a flight around Poland, followed - between April 27 th and June 24 th - by a flight from Warsaw to Rio de Janerio over a distance of nearly 18 000 km. in this from St. Louis, Africa to Maceio Brazil across the louth Atlantic.

By this leap St. Skarżyński broke the world record of distance covered by non-stop flight for the clan of aircraft up to 450 kg in base weight. At the same time in was the first succenfull flight of a Polish pilot across the Atlantic and RWD-5 was the lightest plane to overcome this zonte.

DANE TECHNICZNE RWD-5 I RWD-5 BIS

Dwumiejscowy samolot sportowy konstrukcji mieszanej, wolnonośny górnopłat ze stałym podwoziem. Kadłub - kratownica z rur stalowych, kryta płótnem na szkielecie z listew drewnianych. Płat trapezowy, dwudźwigarowy, kryty sklejką do pierwszego dźwigara, dalej-płótnem. Usterzenie wolnonośne konstrukcji drewnianej, stateczniki kryte sklejką, stery - płótnem.

Rozpiętość 10,2 m (SP-AGJ - 10,5 m), długość 7,2 m, wysokość 2,05 m (SP-AJU - 2,0 m). Powierzchnia nośna 15,5 m². Prędkość maksymalna 202 km/h (SP-AJU - 210 km/h). Zasięg 1080 km (SP-AJU - 5.000 km).

×4

CLUB NOTES

First of all, I would like to thank all of you who participated in any way at the CSU and KSU indoor contests. Especially, Russ Brown for scale and Bostonian judging, Larry Mzik for assisting CD at CSU, Chuck Slusarczyk for CD'ing at KSU and a special thank you to new club member, Dr. Vernon Neff for his efforts in obtaining the KSU fieldhouse for our March 12th meet.

For your information, we had 29 contestants at CSU plus five Eagle Scout juniors under the tutelage of Dan Briehl, and 21 contestants at KSU plus the Scouts. It is highly probable that we will hold next years indoor event at Kent State, since we were informed that the fieldhouse can be made available for our use in late winter on a Sunday. The site is bigger, a little less expensive and has plenty of parking space. However, in order for CFFS to continue sanctioning an annual indoor contest we need more support both from our club and the total model airplane community. Rent and awards are a major expense. We need about 50 contestants to break even. At Kent, with the larger flying space, we can have a dual contest, with more time for your favorite events.

As you can see from one of the modeling subjects presented in this issue, there is a Polish connection. Inspiration for the RWD-5 came from one of a group of plastic kits from Poland, given to me by my cousin, Dr. Adam Walaszek, of Krakow. I would appreciate photos of any finished models of the RWD-5 to send to him. There is also a Zand Rogalski connection, I remember the Rogalski's when they were house guests of my parents in Erie, Pennsylvania. The short story about them was especially recalled and recently written by my 94 year old, mother, Helen Zand, who still resides in Erie.

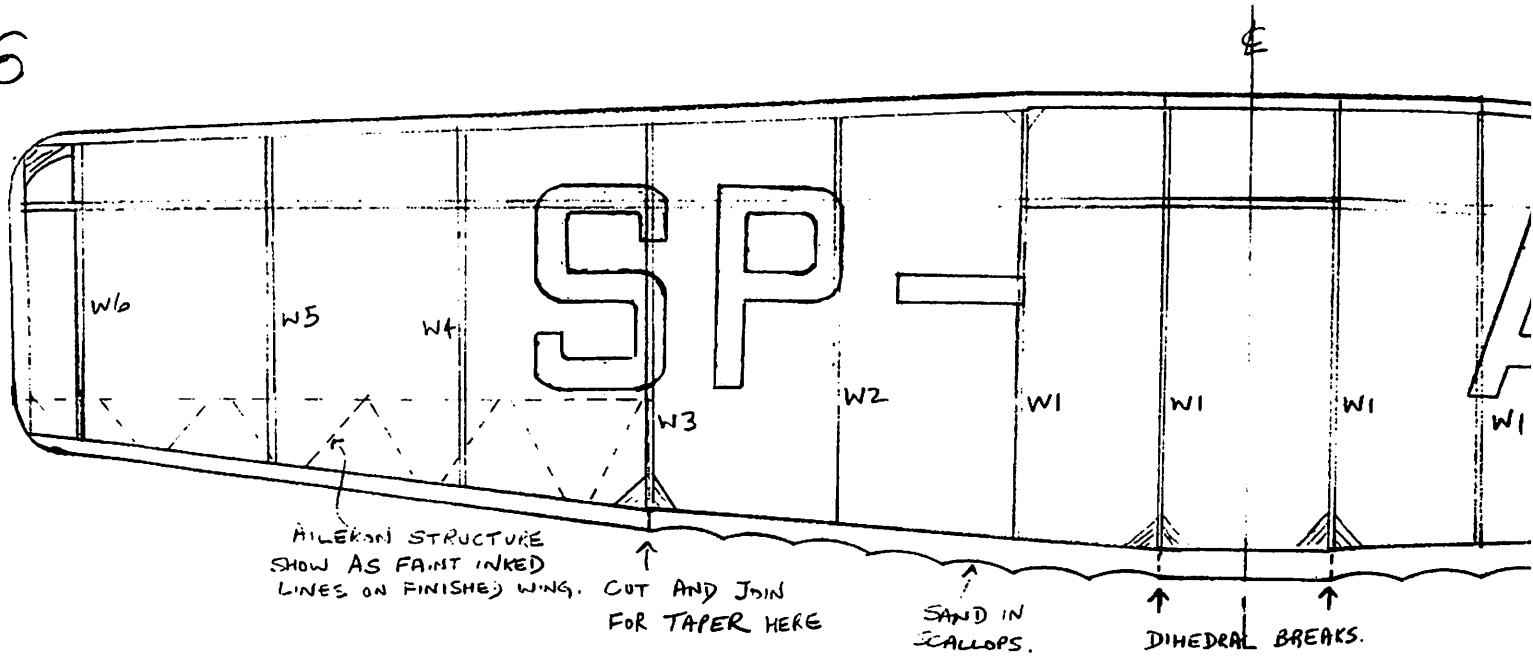
CLUB MEETINGS

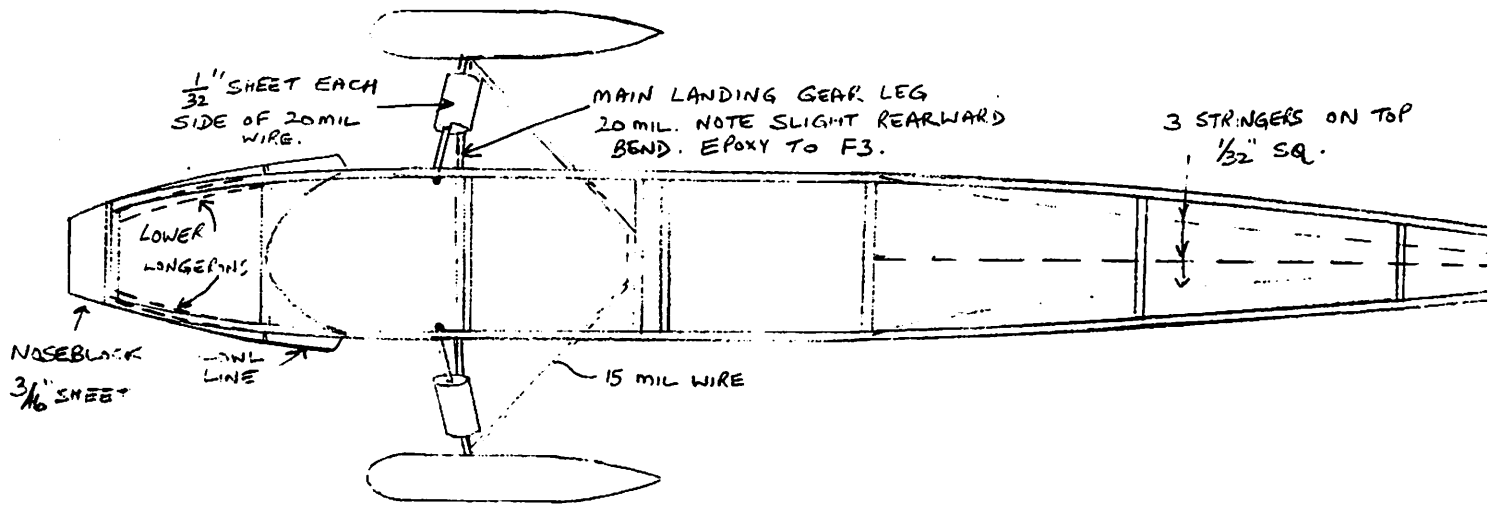
CFFS experienced some weather related problems with our usual January meeting and the make up date was no better, but we did decide to plan a dinner party for December 1995. The date is Saturday, Dec. 2 at the Independence Brown Derby Roadhouse. They offered us the best price and the most desirable date. We must guarentee forty guests so please mark your calendars.

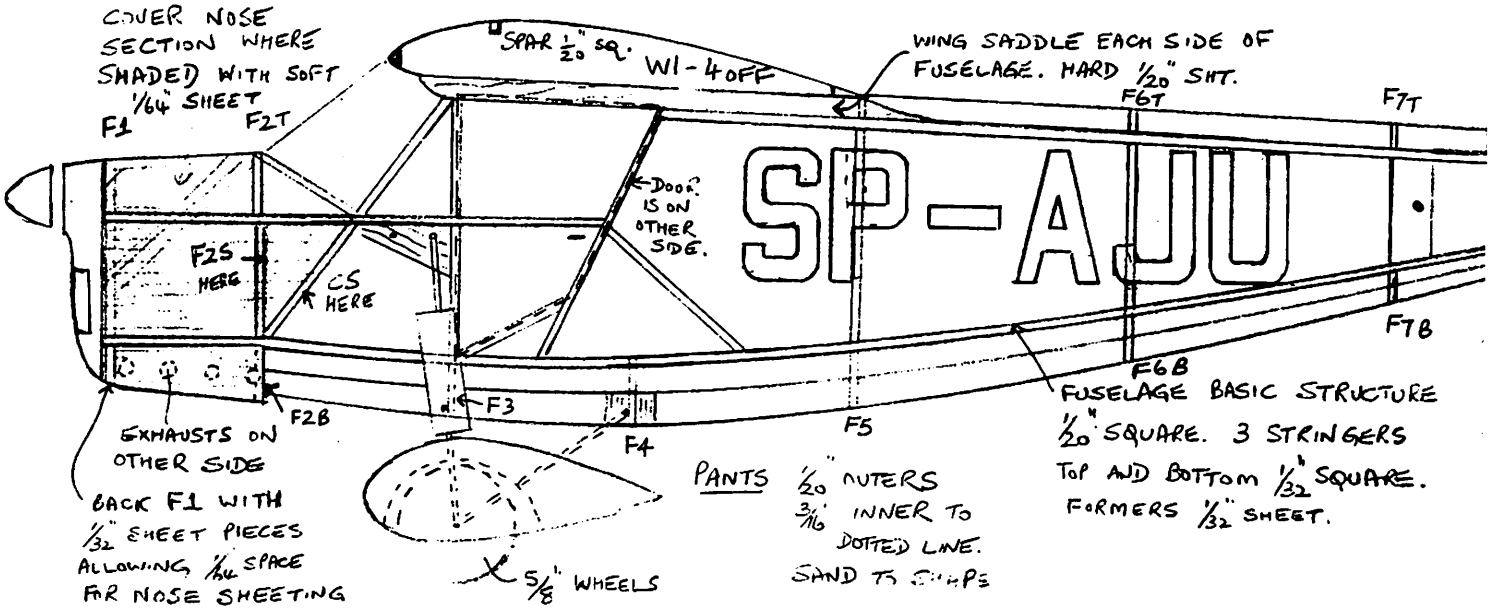
Irene and I hope to see you at our summer contests and maybe at Geneseo.

Michael C. Zand





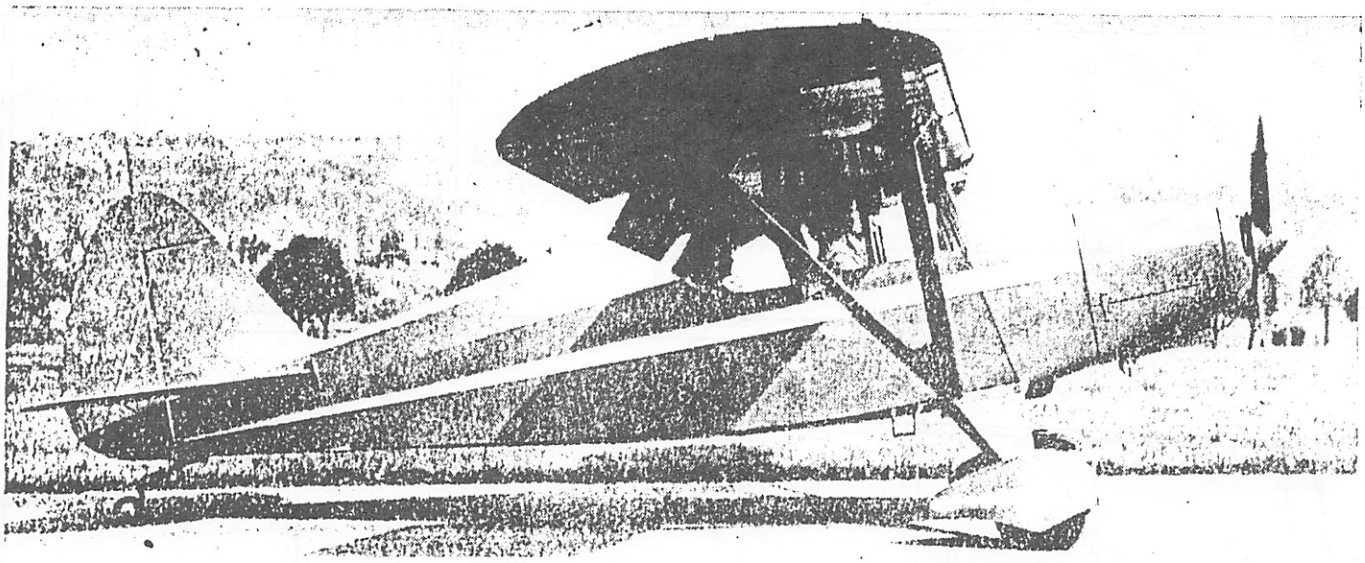




RWD - 5 bis

DESIGNED BY G
FOR "CROSSWIND

PIPER PACER



by ROBERT McLARREN

THE name "Cub" is inextricably linked with private flying in America. To the layman, all small airplanes are "Cubs," and when a light airplane passes overhead or the family drives past a small airport dotted with parked lightplanes, someone is bound to say: "Oh, look at that little *Cub* airplane!" It is amazing how this single word has come to symbolize all private flying in the United States and yet among those in the industry few words have been more fought-over, have been the subject of more law suits, or have been the subject of so many tedious explanations as the simple word *Cub,* which actually has no connection whatever with flying or the sky in its literal meaning!

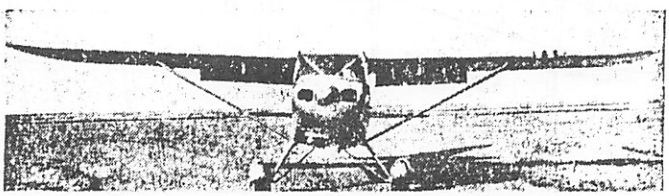
It all began way back in 1930 when Taylor Brothers Aircraft Corporation was formed to develop the simplest and cheapest airplane possible, the long-sought "everyman's airplane." But unlike literally hundreds of other dreams both before and since 1930, the little monoplane designed by C. G. Taylor was a dream come true. It made its first flight in 1931 and was an instant success. Taylor Aircraft Company was formed and a small plant placed in operation near Bradford, Pa. The price tag on this little monoplane was only $1,325 making it the lowest priced two-seat airplane in the nation (only the single-seat Heath *Parasol* at $1,074 was cheaper!). This simple high-wing monoplane had a span of 35′ 3″, was 22′ 3″ long, weighed only 525 lbs. empty and 925 lbs. fully loaded. It had a top speed of 75 mph and cruised at a fast 62 mph. And, believe it or not, it landed at just 26 mph!

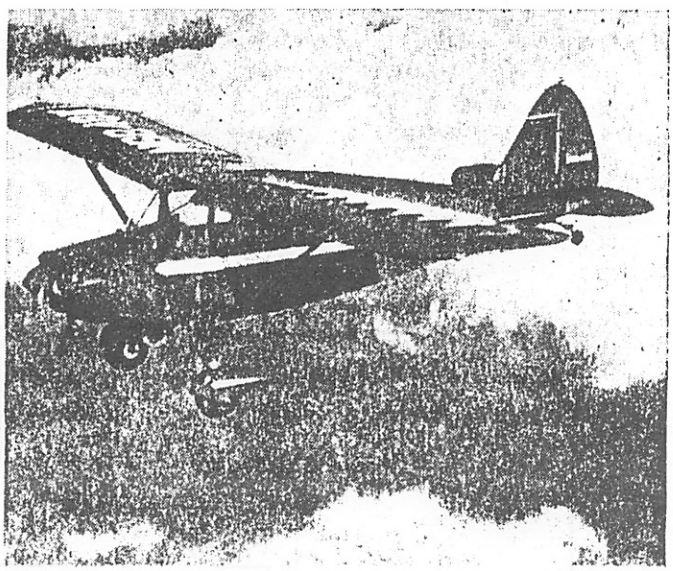
This was the little airplane dubbed the *Cub* by C. G. Taylor and the Taylor *Cub* quickly became a byword in American aviation. Orders poured in to the little factory, orders attracted by that low-price tag, which, even as today, began to inch up and by 1934 had reached $1,425. But the Taylor *Cub* was still the lowest-priced, the simplest to fly, and the easiest-to-build airplane in America. But even these advantages weren't great enough to combat the depression years of the early and mid-thirties, and the Taylor Aircraft Company found itself in increasingly desperate straits. By 1937, despite the excellence of the *Cub,* the financial handwriting was on the wall. In that year the firm was reorganized by William T. Piper and moved from Bradford down to Lock Haven, Pa.

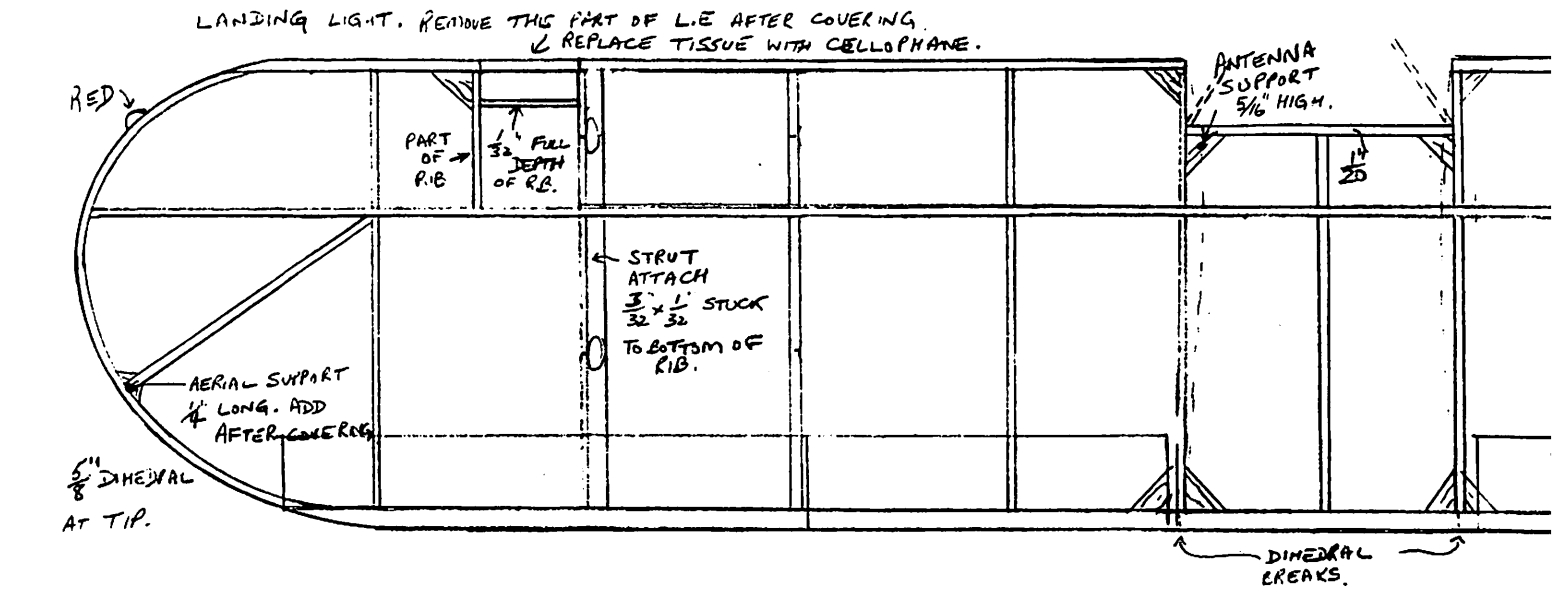
It was a combination of three factors that transformed the Taylor *Cub* from a badly slipping lightplane into the world-famed Piper *Cub* of today: (1) energetic, hard-driving Bill Piper put new capital and new management efficiency into the *Cub;* (2) a general re-design of the E-2, virtually unchanged from its 1931 prototype to its 1937 production model, produced the J-2 *Cub Sport* of vastly improved appearance; and (3) the private flying business began to shake out of its doldrums. In 1937 Piper Aircraft Corporation produced 707 *Cubs* in less than a year and in 1938, the first full year of production, a total of 737 *Cubs* was delivered. Acceleration of production, stepped-up sales, and a resurgent private flying business enabled Piper to deliver 1,806 airplanes in 1939 and in 1940 the astonishing total of 3,016 airplanes was produced.

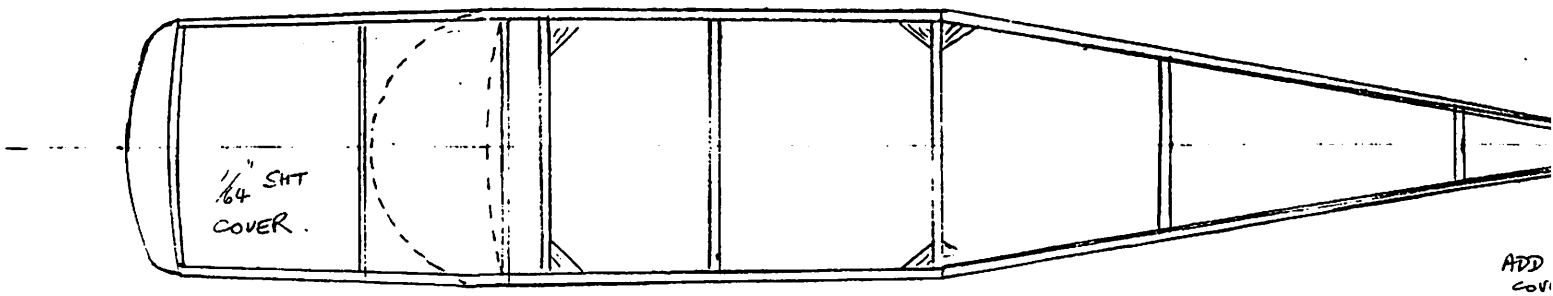
It takes two ingredients to become a successful manufacturer in the personal aircraft business: hard-headed business management and a genuine love of the game. Hundreds of aircraft company presidents have had only one of these attributes and their companies have failed, but Bill Piper has them both in precisely the right proportion as the brief but spectacular history of his company illustrates. His management side has always told him that production costs must be held down to rock bottom and that means a minimum of design changes in the product. But his love for the game has tempted him often to stray into the rocky garden of "dream airplanes," romances which have invariably cost him money but interludes which

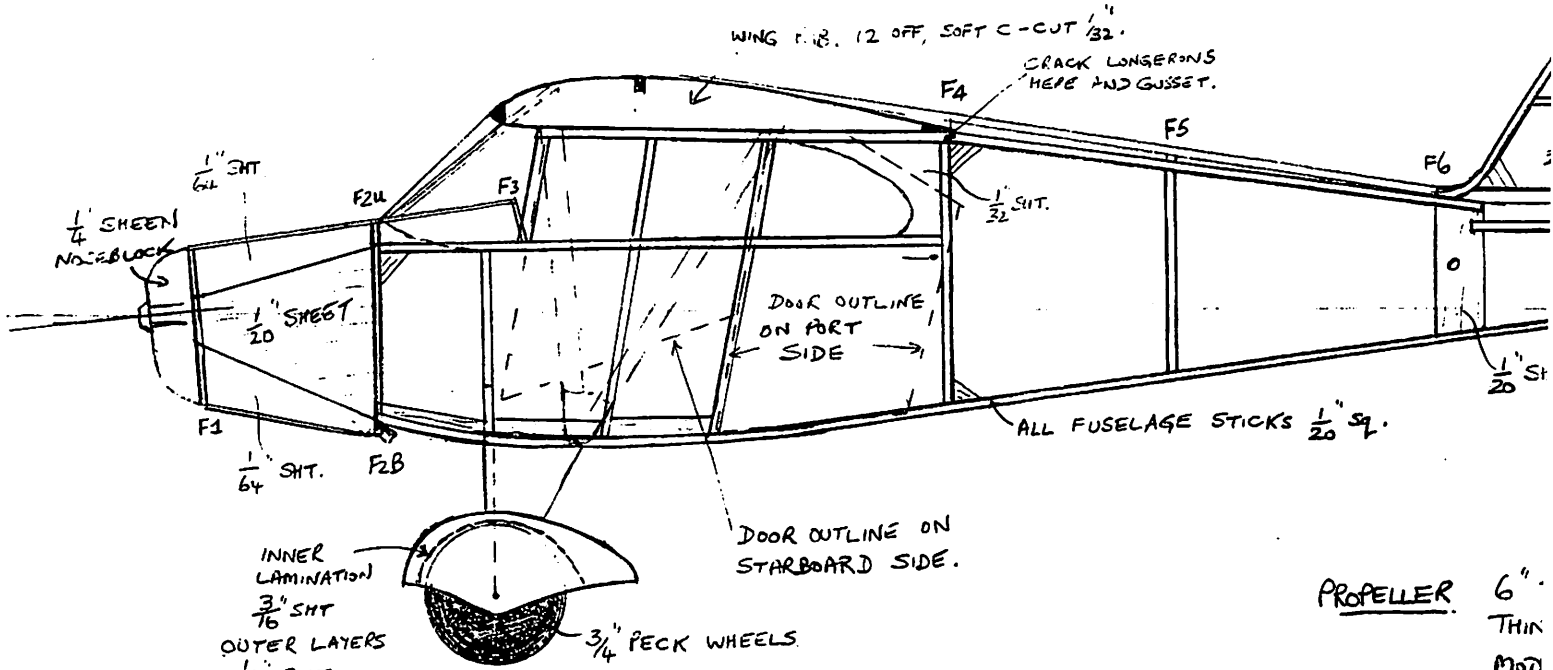
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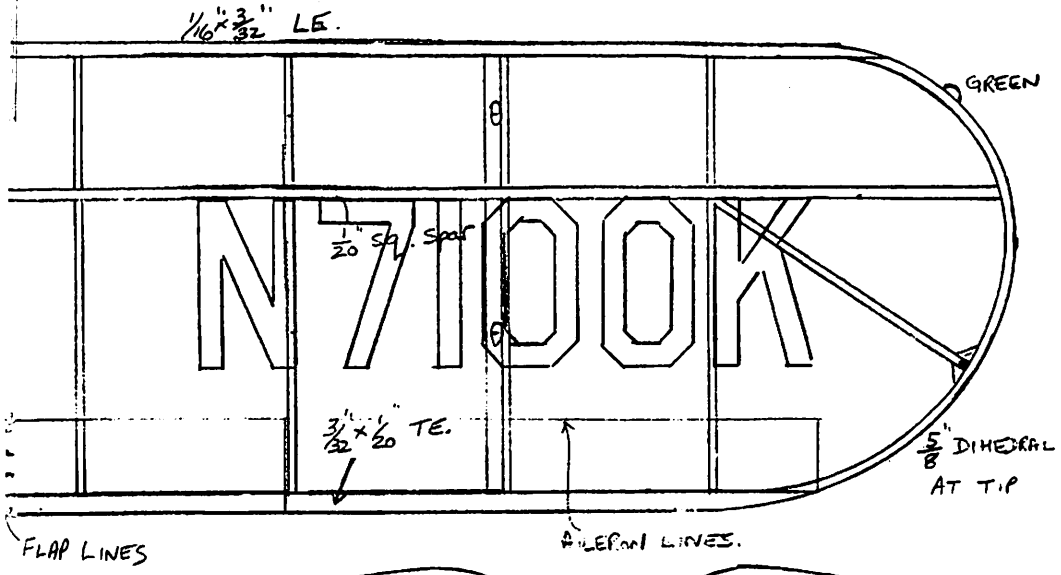
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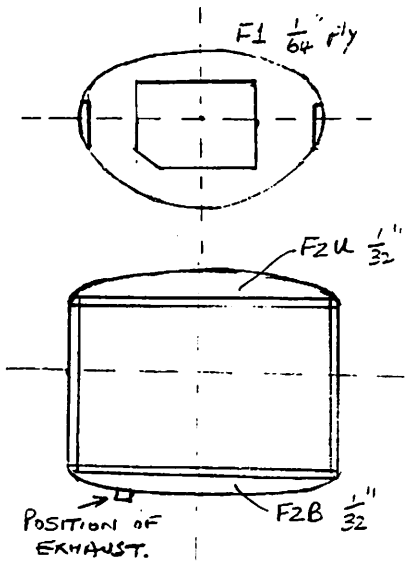
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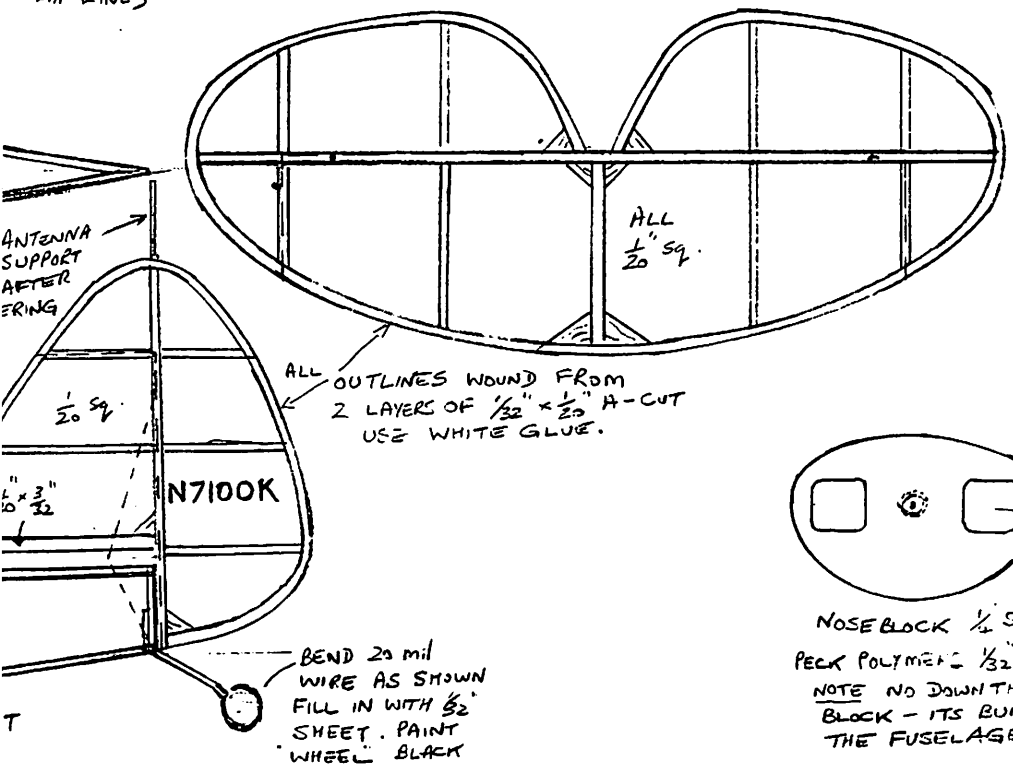
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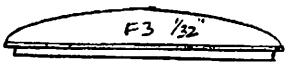
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PIPER PACER
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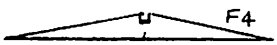


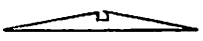






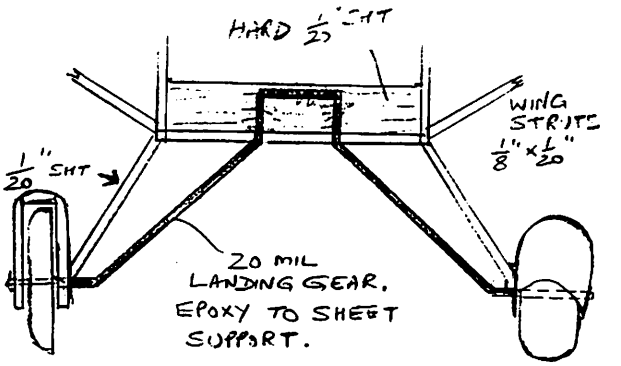
COVER UPPER & LOWER PARTS OF NOSE AREA WITH SOFT 1/64" SHEET. F1 – F3 ON TOP F1 – F2L ON BOTTOM.







NOSE BLOCK 1/4" SHT
PECK POLYMERS 1/32" BEARING
NOTE NO DOWN THRUST ON BLOCK – ITS BUILT INTO THE FUSELAGE.



PANTS
1/20" SHEET OUTLINES, 3/16" INNER, CUT TO DOTTED LINE IN SIDE VIEW. SAND TO SHAPE.

MODEL PANT

ORIGINAL PANT PROFILE

ERN AERO SCRAPED DOWN
TO BALANCE COMPLETED
EL AT ABOUT 30% CHORD.

LOOP OF 0.080" TAN II
IST LENGTH AND WIDTH
SUIT YOUR MODEL.

AT NO MORE THAN 10 grams.

TISSUE. 1 VERY THIN COAT DOPE.
IN MIST OF COLORED DOPE OR FLOQUIL

GORDON ROBERTS
SWINDS" 2/95.

Piper Pacer

(*Continued from page* 21)

his practical sense has always cut short on the brink of disaster.

To the non-technical observer the modern Piper *Cub* may appear a far cry from its early prewar antecedent but Piper has carefully managed to see that underneath all the neat wheel pants, the smoothly-formed engine cowling and the door arrangement, his Cub has the same old wing and fuselage produced by the available jigs and fixtures that were turning out these assemblies a decade ago! We told you that the 1931 *Cub* had a wingspan of 35' 3" and you'll find that it is precisely this dimension given for the new 1950 *Super Cub!* We said that first Cub was 22' 3" long and the present welded-steel tubing structure still retains this basic dimension, modified slightly by a different engine installation! That is the hard-headed side of Bill Piper that has kept production costs on the floor and held his sales prices well under anybody who cares to compete with him.

Piper has provided a classic demonstration of what can be done to "dress up" the same basic package for the salesmen. For example, his initial prewar success was gained by offering the J-2 *Cub Sport*, with the same Continental A40 engine as used in the original *Cub;* the J-3 *Cub Trainer*, with a 50 hp Continental A50 engine; the J-4 *Cub Coupe*, with a 75 hp Continental A75 engine and featuring side-by-side seating; and the J-5 *Cub Cruiser* with the 75 hp engine, but permitting a pilot forward and two passengers aft. This gave the prospective customer a wide range of models to choose from, but underneath it all lay the standard spruce spars, aluminum ribs and steel tubing fuselage, all fabric covered and all built on the same tooling investment! But the resulting economies placed the Piper *Cub* in all its models well within the reach of anyone eager to fly his own airplane.

Like all other aircraft manufacturers, Piper Aircraft went to war 100%. But unlike most of the others, Piper was not invited in, he had to *fight* his way in! In 1940 anyone who suggested that the Piper *Cub* had a brilliant war future would have been laughed at, and that's what happened to Bill Piper when he first broached the subject to the Army Air Forces! At his own expense he furnished several *Cub* airplanes to the Army during their maneuvers in Louisiana and Tennessee in 1940 and 1941 and by some of the most exhausting and rugged flying and operations in history his pilots convinced the Army that the lowly "puddle-jumper" did, indeed, have military usefulness. One of the officers convinced was young Col. Ike Eisenhower, whose reports to Washington glowed with praise for the usefulness of the lightplane in war.

In September, 1941, Piper delivered four *Cubs* to the Air Force and in November, only a month before Pearl Harbor, an additional 40 *Cubs* were delivered. Immediately after Pearl Harbor struck, the Navy bought all the J-3 *Cub Trainers* Piper had on hand and the Air Force snapped up all the J-4 *Cub Coupes* and J-5 *Cub Cruisers*. Piper was ready with a military adaptation of the *Cub* immediately after Pearl Harbor and went into mass production of the L-4 for the Air Force, and the NE-1 and HE-1 for the Navy. Production on these "Grasshoppers" continued despite heavy inroads made on Piper's technical and production personnel by the draft, which refused to defer his workers, although they were engaged in military aircraft production. In 1942 Piper delivered 1,855 *Cubs*, in 1943 a total of 1,319, in 1944 a total of 1,904 and production continued right up to V-J Day, when it ceased with 819 deliveries during the year, or a grand total of 5,941 Piper *Cubs* produced during the war!

Piper had been well aware that his military production would be stopped suddenly someday and his staff made completely detailed plans for conversion to the tremendous pent-up demand for civilian *Cubs* following the end of hostilities. These plans were so complete that the first civilian Piper *Cub* manufactured since Pearl Harbor was completed on August 14, 1945, the same week that military production was ordered halted! And between August 14 and December 27, 1945, Piper delivered 1,000 PA-11 *Cub Specials* to civilian purchasers, whose orders were pouring in faster than production could keep pace!

(*Turn to page* 54)

We said earlier that Bill Piper combined hard-headed business sense with a love for the game and this latter side of him came out in full force late in the war—only to be quashed by his realistic economic sense. Piper set aside his business acumen and decided that the lowly *Cub* had run its course, that what was needed in the postwar personal aircraft picture was sleek, all-metal, high-performance aircraft. He and his engineers designed and built a two-seat tandem low-wing all-metal Piper *Skycoupe*, powered by a 130 hp Franklin engine, and having a top speed of 150 mph, a cruising speed of better than 135 mph, and featuring sliding cockpit hatches, retractable landing gear, and all the other postwar "dream airplane" features. His crew also produced the PA-6 Piper *Skysedan*, seating four and powered by a 165 hp Continental engine. Gleaming all-metal in design, here was the postwar "family airplane," with electrically-operated retractable landing gear, retractable flaps, a cruising speed of 125 mph, and a top speed of 145 mph. And to round out his postwar line with a model for the wartime fighter pilot, he produced the PA-8 Piper *Skycycle* (Model Airplane News, November, 1945) single-seater powered by a 55 hp Lycoming engine, which gave it a top speed of 120 mph, and a cruising speed of 95 mph. Designed to sell for less than $1,000 and featuring an economy of 35 miles per gallon, the *Skycycle* rounded out Piper's postwar all-metal line. Here was a "love for the game" with a vengeance!

But Piper's old hard-headed business sense stepped into the picture in the nick of time and prevented the catastrophe that overtook dozens of other builders of all-metal postwar "dream" airplanes who took the full plunge into production and sales. Piper wisely said "No thanks!" and quietly shelved his beautiful all-metal collection and went back to producing the "washed-up, out-dated" *Cub* of prewar fame. And what happened? New sales records smashed, production records hung up month after month and a flood of *Cubs* across the nation's GI-Bill flight training airports.

The popular PA-11 *Cub Special* was followed by the terrifically successful PA-12 Piper *Super Cruiser*, which squeezed a second passenger into the rear seat to make it a three-place *Cub*. It was only a short step to an additional seat in front and the Piper PA-14 *Family Cruiser* four-placer entered the assembly lines. And still those good-old wing and fuselage jigs and dies, that had been turning out their metal ribs and welded steel-tubing fuselages for a decade, continued to produce frameworks on which fancy sales features were hung.

Finally, late in 1947, Piper's engineers took their first big step in redesigning the original *Cub* and produced the PA-15 Piper *Vagabond*, the first really new *Cub* since 1931. The *Vagabond* was designed primarily for economy, for the training of students and use of the private pilot. It featured a shortened and fattened fuselage, a clipped wing and the ultimate in simplicity. Powered by a 65 hp Lycoming, the trim little ship seated two side-by-side, cruised at 90 mph. The little *Vagabond* attained better than 20 miles to the gallon but, best of all, cost only $1,995 delivered at Lock Haven, Pa. Here was the hard-headed answer to the postwar "dream" airplane problem, not a gleaming thing of beauty but a complete, economical airplane selling for less than $2,000! Despite all the reams of debate and publicity on what the postwar personal aircraft should look like and do, Bill Piper gambled on his conviction that the postwar buyer, given the choice of an electrically-retractable landing gear or a price tag of $1,995, would take the latter: and he was right!



Cautiously, Piper added improvements to the *Vagabond*, producing the *Vagabond Trainer* and offering the *Vagabond*, with either the Lycoming or Continental 65 hp engines. With the rising market for four-place aircraft inexorably crowding the two-place market, Piper's equally hard-bitten Chief Engineer Walter Jamouneau skillfully added two seats to the successful *Vagabond*, installed a 115 hp Lycoming engine, added 500 lbs. of gross weight to the airplane, yet squeezed all this into the same *Vagabond* wing requirements. The result: the well-known Piper PA-16 *Clipper*, which cruises at 112 mph and lands at only 50 mph. And the price tag on this skillful blend of engineering and executive management: just $2,995! Here is a four-place airplane for less than $3,000, the kind his competitor's glistening all-metal, retractable landing gear models make look like a free gift (some other four-placers sell for more than $10,000!).

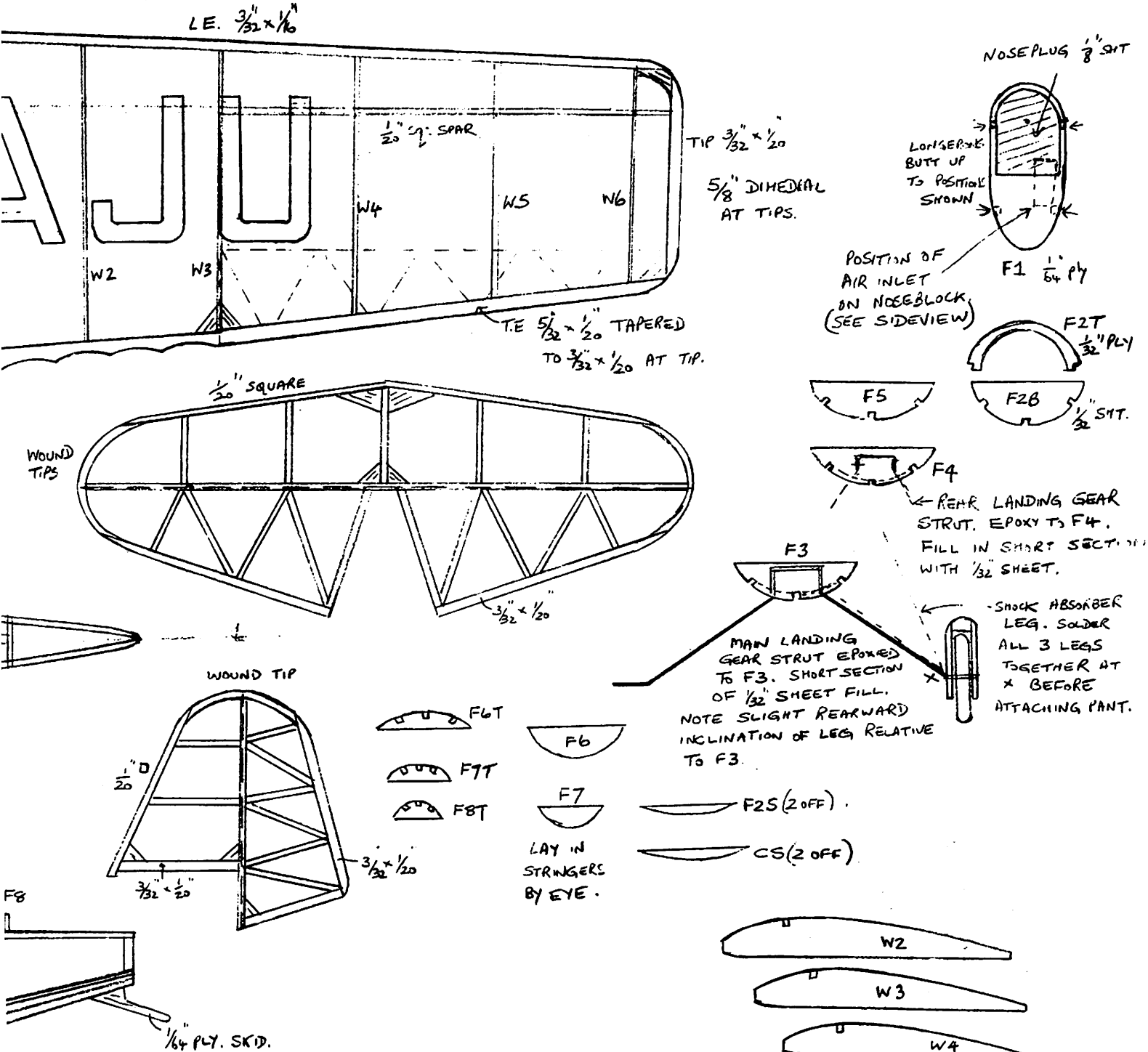
For 1950 Piper has again spruced up the *Clipper* with added refinements and a selection of more powerful engines resulting in the Piper PA-20 *Pacer*, our Plane of the Month. The *Pacer 115* uses a Lycoming O-235-C1 engine of 108 hp at 2,600 rpm, driving a Sensenich fixed-pitch propeller 6' 2" in diameter. It features an additional 6 gallons of fuel over the *Clipper*, redesigned landing gear, a larger horizontal tail and a redesigned instrument panel with glove compartment on the left side. The *Pacer 115* weighs 825-920 lbs. empty (depending on equipment installed) and 1,650-1,750 lbs. fully loaded. It is equipped with hydraulic brakes, landing flaps, 1-1/2 gal. oil tank, and carries 36 gals. of 80 octane fuel. It has a top speed of 125 mph at sea level and cruises at 112 mph. And this trim four-place craft sells for only $3,295!

The new *Pacer 125* features a step up to a 125 hp Lycoming O-290-D engine, the extra power increasing the top speed to 135 mph and cruise to 125 mph. It has a gross weight of 1,800 lbs., giving an extra 50 to 150 lbs. over the model 115. The model 125 uses the same Sensenich fixed-pitch propeller with the result that the heavier weight stretches the take-off substantially, but the addition of wing flaps to this model holds the landing run over a 50' obstacle to the same 600' as the model 115. The *Pacer 125* features sound-proofing as an added feature. The bigger engine and the many extras price the *Pacer 125* at $3,795.

The *Pacer 135* is the deluxe model with all of the above features, including the 125 hp Lycoming engine, plus an Aeromatic controllable-pitch propeller, which gives substantial improvement in the take-off run, the rate-of-climb, ceiling and other performance factors. With this propeller the *Pacer 135* cruises at 135 mph at 75% power at 5,000', real altitude performance compared with 135 mph top speed for the other *Pacers*.

But cagey Bill Piper hasn't tossed all his eggs in these fancy new baskets, attractive as they are. The trusty Piper *Cub* is still available, although its now the 1950 *Super Cub* with a lot of improved features and stepped-up performance. But underneath all the fancy trimmings, we'll bet you'll still find Piper's trusty basic wing and fuselage tooling that has cut his costs and brought flying closer to the average man-on-the-street than all the fancy "dream" airplanes put together in the last decade!

MODEL AIRPLANE NEWS • June, 1950



PROPELLER 6" TERN AERO SCRAPED FOR BALANCE.

POWER TRY AN 18" LOOP OF 0.060" TAN II.

COVER GANPI TISSUE. ONE THIN COAT OF CLEAR DOPE. MIST ON ALUMINUM DOPE VERY THINLY.

WEIGHT AIM AT 10 GRAMS MAX.

SEE SIDE ELEVATION FOR W1. ALL RIBS FROM VERY LIGHT 1/32" C-CUT BALSA

JORDON ROBERTS
2/95

NOTES ON THE ROGALSKI/ZAND CONNECTION

I met Stanislaw Rogalski for the first time in the early 1930's, when he visited us in Forest Hills, N.Y. Dad had met him either in Europe or this country. I can't remember where or on what occasion.

Our next meeting, including his wife, was in Erie, Pa. in 1948, as a result of Dad's and my efforts to bring them to this country.

The end of the war found the Rogalskis in Turkey where they fled at the beginning of the War on September 1, 1939. Stan was at the head of his aeroplane factory in Warsaw when the war broke out, he took one of his own planes and Lala, his wife and flew to Rumania. He gave his car to a workman in the factory, whom he knew well and trusted, and asked him to drive to Rumania and give him the car when they met there. They accomplished that.

I don't know what Stan did during the duration of the war but in the later years of it he was teaching aeronautics at the University of Istanbul. He got in touch with Dad and asked if he would try and get him into the United States and Dad started to do so, writing in all to 146 companies if they would retain him so that he could get an American visa. They all answered that they would not hire a man they could not interview.

With Dad's efforts to get Stan here failing, it occurred to me to ask Dr. Woehrly, a priest and president of Gannon, a small Catholic college for men, where I was teaching. I told him Stan's story and asked him if he would engage him so that he would get the American visa. The saintly man said yes and turned to his typwriter and typed out the form supplied by the embassy, attesting that he would engage Stanislaw Rogalski as a teacher of mathematics. On the strength of this testimonial which he sent to Stan, he and Lala were here in six weeks. We gave them hospitality and they stayed with us two or three months. I don't remember how long, and I don't recall if Stan really taught at Gannon or was merely on hold. He did substitute for me in my Polish class.

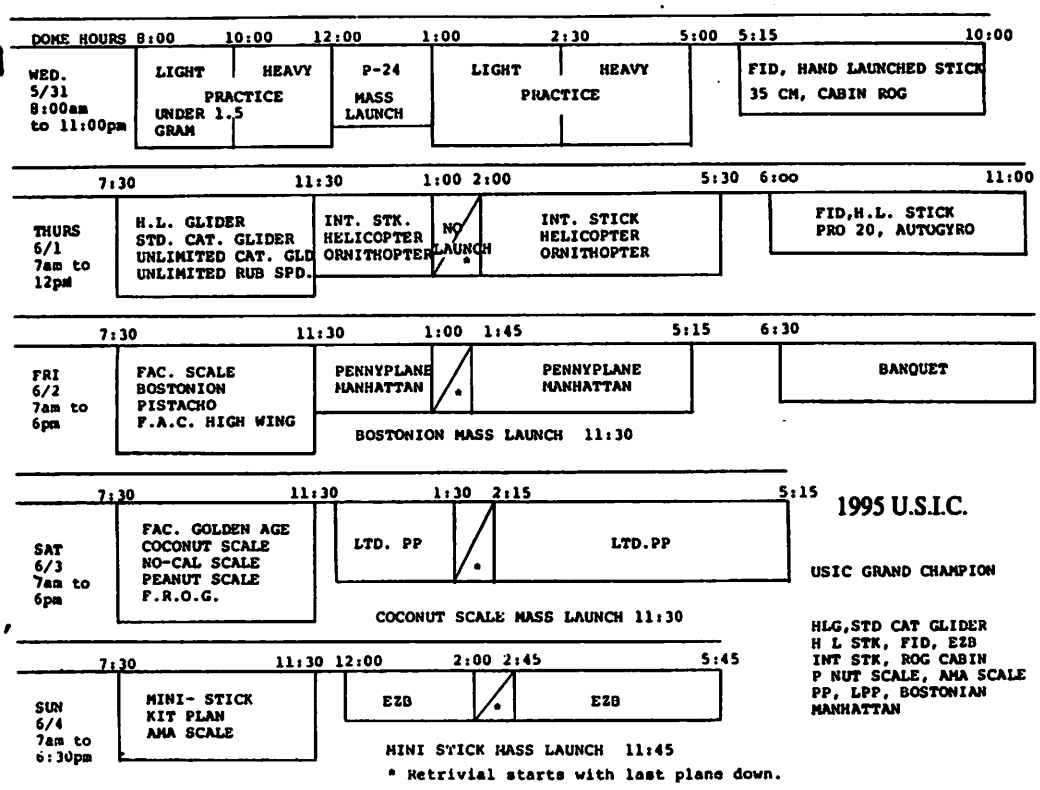
Stan and Lala were both charming people, she a great beauty. Her first name Lala, is a pet form of "lalka" which is the Polish word for doll. They were pleasant guests and we enjoyed their visit a great deal. He kept seeking jobs in various parts of the country and finally found one in Hagerstown Md. After that he worked for a company in Trenton and then took a position with Grumman in Long Island NY where he lived for the rest of his life.

Helen S. Zand

1995 USIC

United States Indoor Championship





CONTEST MANAGER: Howard Henderson
CONTEST DIRECTOR: Roy White
CONTEST DIRECTOR: Larry Coslick
FACILITIES DIRECTOR: Gary Underwood
SECRETARY: Mary Jane Reilly
SCALE MAMAGER: Jim Miller
EVENTS DIRECTOR: Bill Martin

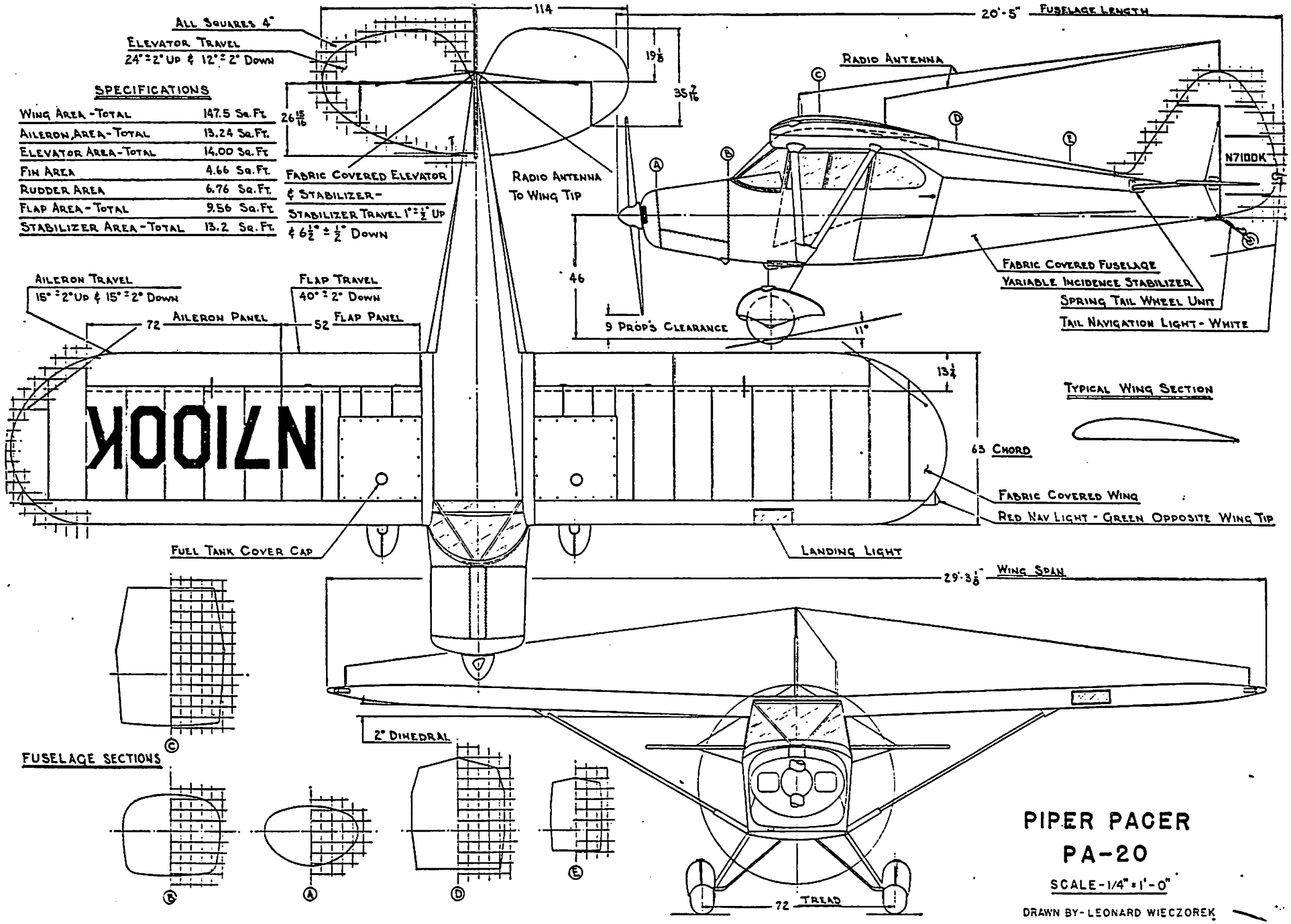
1995 ENTRY FORMS

Send large, self addressed, stamped envelope to,
USIC, 444 Bryan,
St. Louis, MO. 63122

1995 U.S.I.C.

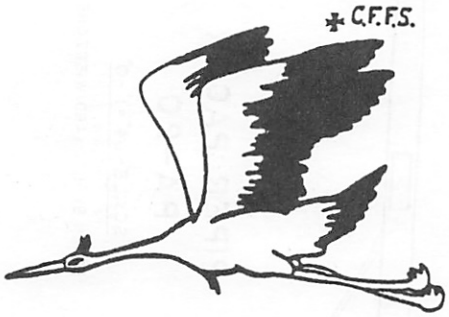
USIC GRAND CHAMPION

HLG,STD CAT GLIDER
H L STK, FID, EZB
INT STK, ROG CABIN
P NUT SCALE, AMA SCALE
PP, LPP, BOSTONIAN
MANHATTAN

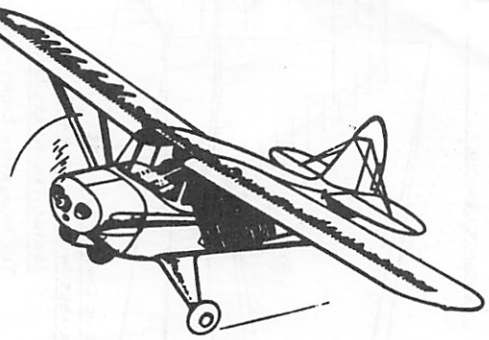


See EAA SPORT AVIATION FEB 85 pg 56 for Pacer pale grey with orange cowl top, nose, 2 line stripes, spinner, wheel hubs (no pants), and N 86250 on rudder. Richard Baker 1626 Sherman Canon City, CO 81212

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CFFS SUNDAY 10AM-5PM CONTEST SCHEDULE AT LORAIN COUNTY COMMUNITY COLLEGE, ELYRIA I-90 EXIT 148 S. to ABBE RD. RT 301S. TO LCCC UPWIND. PICK A PLAN OR $ POT PRIZE.

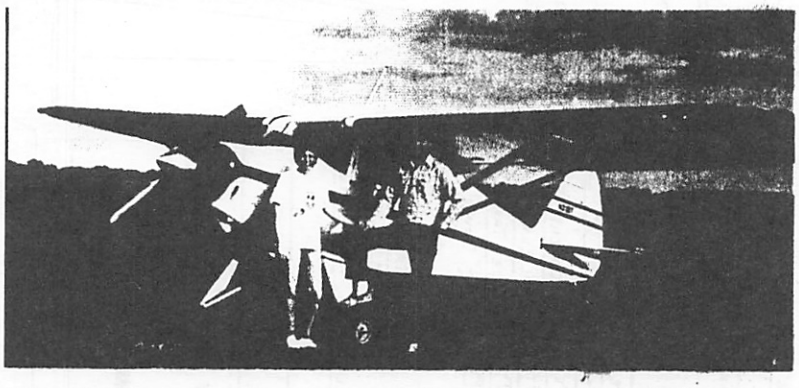
SUN 6/25 EVENTS: CD JIM HYKA 216/481-6525 OR RUSS BROWN FOR INFORMATION.

1. FAC PEANUT	9. WW I BI PEANUT at 11:00	17. FAC O.T. 36" RUBBER
2. HI WING PEANUT	10. WW I BIPE DOGFIGHT 11:30	18. FAC O.T. STICK 36" MAX.
3. DIME & HI FLIER SC.	11. WW II N. CAL 1 FLT. 12:00	19. CO2 & ELECT PRECISION
4. COMET & G. AGE SC.	12. GREVE RACE M.L. 1:00	20. HLG (J)(S)(O)/$ POT
5. FUNK & WACO SCALE	13. WW II PEANUT M.L. 2:00	21. HAND CAT GLIDER, 6"ST'K.
6. FAC RUB. SCALE	14. THOMPSON RACE 3:00	22 JR. FUSELAGE RUBBER.(J)
7. PIONEER PRE 1914	15. WW II FAC COMBAT 4:00	BRING PLAN FOR OLD TIMER
8. N.CAL PROFILE SC.	16. EMBRYO ENDURANCE(J)S(O)	CONSTRUCTION PROOF.

CFFS SUNDAY JULY 30 CD GORDON ROBERTS 5539 HILLTOP OVAL PARMA, OH 44134 PHONE 216/ 749-4817. SAME EVENTS AS ABOVE.

CFFS SUNDAY AUGUST 6 CD RUSS BROWN 4909 N. SEDGEWICK, LYNDHURST, OH 44124 PHONE 216/382-4821. EVENTS AS ABOVE ADDING CO2 OR ELECTRIC POWER FAC SCALE, AND OMITTING HLG AND CAT. L. GLIDER (FLOWN AT WPAFB CONTEST SAME DAY.)

CFFS SUNDAY SEPT 10 AT LCCC RUSS BROWN CD. SAME EVENTS AS JUN 25 & JULY 30.



Right - "Our Tri-Pacer, N35392, was acquired in 1982 needing lots of TLC. After a complete rebuild and many modifications, 'Ramblin' Rose' emerged on Memorial Day, 1993, as a PA-22/20-150 tail-dragger, N31BT. My wife Rose supported the project all the way and sewed a completely new interior. It flies and handles like a dream."
- Boyd Tietmeyer, Rt. 1, Box 190, York, NY 68467

PIPER PACER PA-22/20-150 # N31BT "RAMBLIN' ROSE" is warm white with bright red trim on the cowl face, funnel stripe, wing leading edge, struts, fin bands. and N31BT on fin. The prop spinner is chrome, with a grey propwith white tips. Wheel hubs are dull aluminum. A single slant radio antenna may be mounted at left front wing root. SPORT AVIATION 10/94. The antenna is white. Just the rose to feature in your peanut patch'Nes Paw?

Jim Younkin's Mystery Pacer N 86483 is bright red with black trim on nose, tapered stripe, thin fin leading edge scallop five point including ends trim, number below stripe in front of horizontal tail, and Travel Air Mystery Ship logo on fin. The wheel pants on this brilliant tail dragger are red with black scallop trim. All red wing and horizontal tail. A pair of white slant radio antennas are split , mounting at wing roots at front door post. Get a copy of March 1989 EAA Sport Aviation for a feature story and color photos. The red copies too dark, like black to get useable copies for this doccumentation offering.

One of two Pacers on EDO 2000 floats may be in factory red on warm white # N5851D in EAA VINTAGE AIRPLANE March 1987. N17PC is white, red, and gold in August 1980 Vintage Airplane.

1995 CALENDAR

SAT 4/22 ERIE CLUB BANQUET PM AT ERIE, PA

SUN 4/23 ERIE FAC OUTDOOR CONTEST AT PRANGMORE, PA (ERIE)
SUN 4/30 CFFS MEETING AT DENNIS NORMANS. 8:00 P.M. LATE COLE PALEN PG'M.

MAY 5-7 AIR RACING HISTORIANS SYMPOSIUM AT HOLLIDAY INN W. 150TH / I-71.
SUN 5/7 CLOUDBUSTER INDOOR CONTEST AT FLINT, MI CAT. III SWING DOME.

SAT 5/13 ERIE FAC OUTDOOR CONTEST AT PRANGMORE. I-90 157 EXIT PRESQUE ISLE.
SAT 6/10 ERIE FAC CONTEST AT PRANGMORE. OFF 157 RT. AT MILLFAIR RD. N-EAST.

JUN 24-25 WACO FLY IN AT MT. VERNON, OH WYNKOOP FIELD. BANQUET 6/24 P.M.
SUN 6/25 CFFS CONTEST AT LORAIN COUNTY CC. I-90 EXIT 148 TO ABBE RD.301S.
FAC EVENTS , FAC 36" OLD T. RUBBER, 36" O.T. STICK, 6"CAT L.G., HLG/POT $.
JIM HYKA CD 216/ 481-6525.

JULY 14-16 FAC NATIONALS AT GENESEO, NY.
JULY 21-23 CLEVELAND 500 CAR RACES AT BURKE APT. CFFS USHERS.R. BROWN.
SUN 7/23 DAYTON BUZZARDS FAC AT WPAFB AREA B 9-5 P.M. F. SCOTT 513/335-3057
SUN 7/30 CFFS FAC AT L.C.C.C. FAC EVENTS, O.T. & HLG, CAT LG FOR $ POTS.
GORDON ROBERTS CD. 216/749-4817. 10:00 AM-5:00 PM.

SUN 8/6 CFFS FAC CONTEST AT LCCC AS ABOVE. RUSS BROWN CD 216/382-4821.
SAT 8/12 ERIE FAC CONTEST & PICNIC AT PRANGMORE.



SUN 9/10 CFFS FAC CONTEST AT LCCC. RUSS BROWN CD.
SAT 9/16 ERIE FAC AT PRANGMORE.

SAT 10/ 7 ERIE FAC AT PRANGMORE.

SAT 12/ 2 CFFS DINNER AT BROWN DERBY, INDEPENDENCE RT 21 & I-77 CLOVERLEAF.

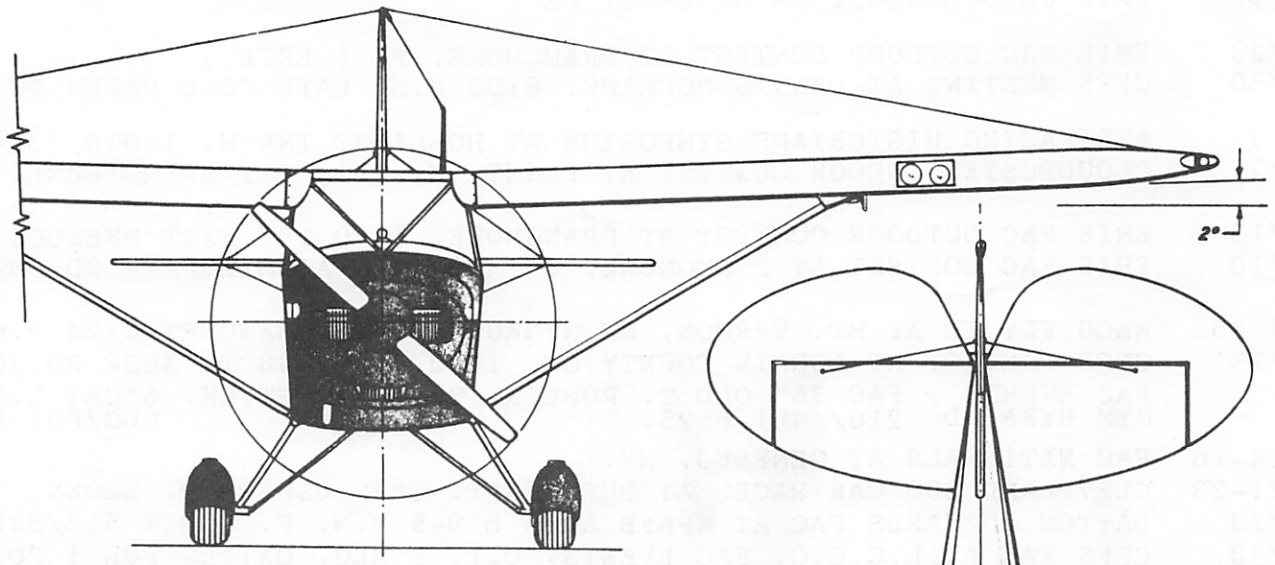
CROSSWINDS RENEWALS

PLEASE CHECK YOUR ADDRESS MAILING LABLE FOR ISSUE EXPIRATION NUMBER 85 OR LOWER FOR $ 12.00 CONTRIBUTIONS. TO CLEVELAND FREE FLIGHT SOCIETY. , OR TO RUSS BROWN 4909 N. SEDGEWICK, LYNDHURST, OHIO 44124. USA. NOTE: CHECKS TO CROSSWINDS HAVE BEEN A PROBLEM OR WORSE WITH EVER STUFFIER BANKS. THANKS.

PIPER PACER

GORDON ROBERTS AFFECTION FOR HIGH WING SUBJECTS THIS ISSUE INSPIRES A DEEP DIVE INTO THE ARCHIVES AT BLUE FOX BASE FOR TAIL DRAGGER PACER COLORS. WE MAY NOT HAVE TIME NOR SPACE TO COMPLETE THIS VITAL DATA FOR THIS ISSUE. A SEARCH IN EAA SPORT AVIATION AND VINTAGE AIRPLANE ISSUES FOR TAILDRAGGER PACERS PA-20 OR TRI-PACERS CONVERTED BACK TO CLEANER TAILWHEELS FINDS A FEW BRIGHT GEMS. A BRIGHT RED WITH BLACK TRIM ON NOSE, STRIPE, WHEEL PANTS AND SCALLOP FIN EDGE & LOGO BY TRAVEL AIR MYSTERY SHIP RACER REPLICA BUILDER JIM YOUNKIN IS ESPECIALLY APPEALING. BUT IT ALSO HAS WHEEL PANTS. ANOTHER GOOD COLOR IS A LIGHT YELLOW WITH A BIT OF LIGHT GREEN TRIM OUTLINED WITH WIDE BLACK EDGE LINES. ALSO WITH WHEEL PANTS. A WHITE PACER WITH RED TRIM HAS NO RANTS. BUT THE REGISTRATION NUMBER IS FUZZY, REQUIRING A LETTER TO OWNER. FACTORY COLORS WERE PALE GREY OR WHITE WITH RED GEOMETRIC TRIM ART.LATE 1940"S TO EARLY 50"S MAGAZINES SHOULD SHOW PIPER PACERS. THE TRI PACER WAS INTRODUCED IN 1952. PACERS ARE AN EVOLUTION OF THE EXCELLENT SHORT WING SERIES PIPER VAGABOND, WITH MINOR CHANGES AND MORE POWER AS COLTS, PACERS, AND CLIPPERS. NOW OWNERS ARE CONVERTING THE TRI PACER PA-22 BACK TO TAILDRAGGER FORM WHERE PERFORMANCE IS DESIRED. PUTTING A HEAVY POLE RIGHT IN THE PROP BLAST DOES NOTHING FOR SPEED!

16

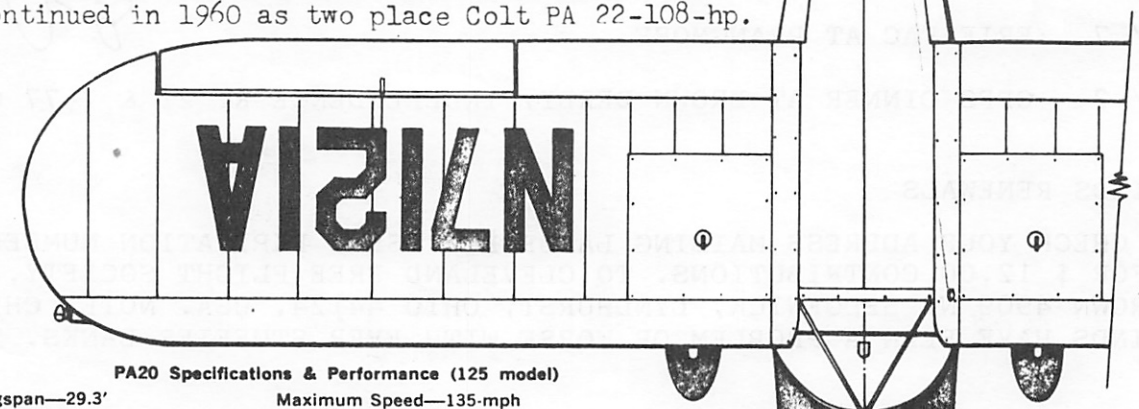


Piper PA20 Pacer

The four-place Piper PA20 "Pacer" introduced in 1950 was a direct development of the PA16 "Clipper." Powered by 115 and 125-hp Lycoming engines, the 115-hp version was soon dropped from production. Features of the 1950 "Pacer" included flaps, improved shock absorbers, front and rear doors, removable rear seats for cargo-carrying, and a controllable pitch propeller in the 135 model.

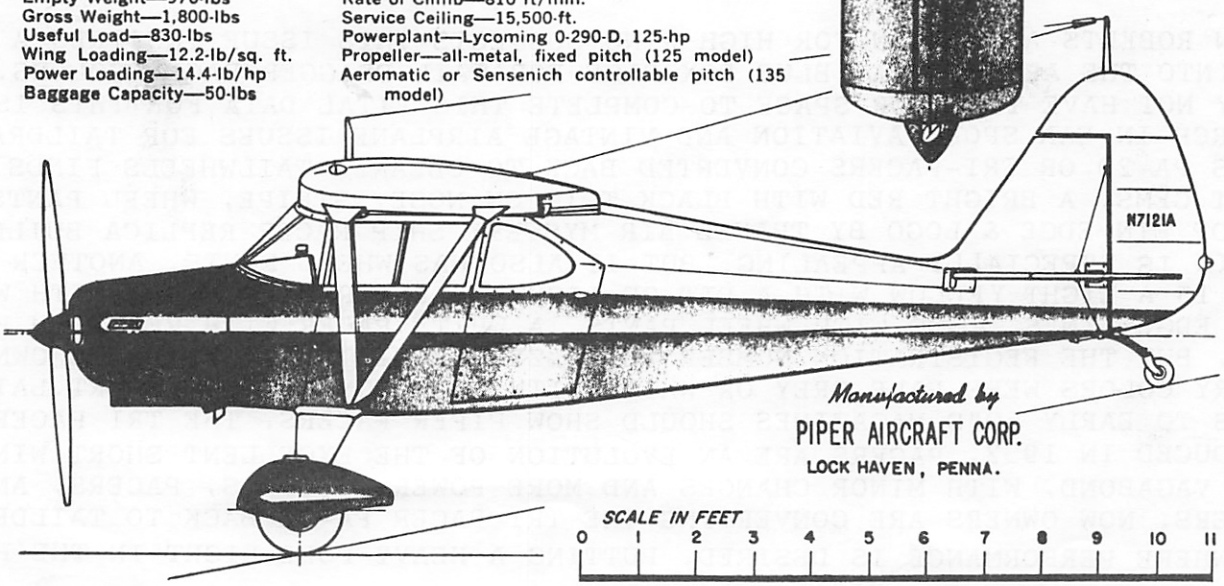
In 1952 the model PA22 "Tri-Pacer" was introduced in 125 and 135-hp versions. General specifications and performance figures of the "Pacer" and "Tri-Pacer" models were virtually identical. The PA20 "Pacer" was dropped from production at the end of 1953 in favor of the more popular "Tri-Pacer" design.

continued in 1960 as two place Colt PA 22-108-hp.



PA20 Specifications & Performance (125 model)

Wingspan—29.3'	Maximum Speed—135-mph
Length—20.4'	Cruising Speed—125 mph
Height—74.5"	Stalling Speed—48-mph
Empty Weight—970-lbs	Rate of Climb—810 ft/min.
Gross Weight—1,800-lbs	Service Ceiling—15,500-ft.
Useful Load—830-lbs	Powerplant—Lycoming 0-290-D, 125-hp
Wing Loading—12.2-lb/sq. ft.	Propeller—all-metal, fixed pitch (125 model)
Power Loading—14.4-lb/hp	Aeromatic or Sensenich controllable pitch (135 model)
Baggage Capacity—50-lbs	



Manufactured by
PIPER AIRCRAFT CORP.
LOCK HAVEN, PENNA.

AIR PROGRESS OCT/NOV 1964