The Air Racer



Charles A. Mendenhall

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Charles A. Mendenhall

SPECIALTY PRESS

To Diane—my ever patient wife, always ready to encourage
when this project seemed hopeless.

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INTRODUCTION

Rheims, France situated in the middle of Europe's champagne country is widely known for its beautiful cathedral. For the air racing enthusiast, this city has an added significance for it was here in 1909 that Glenn Curtiss fluttered around a race course at 47.65 miles per hour in his "Golden Flyer" to win the world's first air race. That race, for the James Gordon Bennett Cup, was to herald the coming of a motor sport that would eventually evolve into the fastest and most demanding competition in history.

The Rheims event, less than six years after the Wright's first heavier than air flight at Kitty Hawk, was inevitable as history shows whenever man invents a new transportation contrivance, it is soon thereafter that his competitive spirit demands that he engage in a test of speed with others of the same bent. Thus, aircraft racing, auto racing, clipper ship racing, chariot racing, and undoubtedly dug-out canoe racing, has occurred. This is all to the good because air racing, aside from the exciting and thrill charged atmosphere of the races themselves, has served an important purpose in the development of the airplane as we know it today. As one settles into a comfortable seat to be whisked across oceans at supersonic speed or marvels at the agility and performance of first line fighter planes, it is well to remember that a great deal of the evolution of today's fine aircraft lies vested in those racing machines of yesteryear.

Before World War I, the quest for greater speed and reliability in racing aircraft brought forth the monoplane Deperdussin and Nieuport racers which, for example, were significant advances over the stick and wire "Baby Wright" and Curtiss "Golden Flyer" machines. These aircraft could, in fact, be considered prototypes of the early fighters of World War I. While major aeronautical advances occurred during World War I and World War II, equally great achievements also occurred during peacetime because of air racing.

After Rheims the Gordon Bennett races continued as an annual event thru 1920 with the exception of the war years. While the Bennett race was only for land planes another event, the Schneider Trophy Race, began in 1913 for seaplanes and this series continued thru 1931 with speeds of racers developed solely for the contest exceeding four hundred miles per hour.

The military became enamoured of air racing in the twenties and competed in a series of Pulitzer Trophy Races with the Curtiss design team fielding the greatest number of winners. Their efforts culminated eventually in the beautiful P-6E Hawk fighters.

By 1929, the races again became the domain of civilians as Doug Davis expertly piloted the Travel Air "Mystery Ship" around the pylons in the Thompson Cup Race to win out over the best equipment the military people could field. With this, the Army and Navy gave up racing and the time of the ingenious, gutsy little guy began — the Golden Age of air racing. As the most colorful and dramatic period of air racing history, the time span between 1929 and 1939 shows the greatest amount of aeronautical ingenuity on the part of individuals of any era. Racing aircraft of these years still stand as monuments to such greats as the Granville Brothers, Ben Howard, Matty Laird, Gordon Israel, Clayton Folkerts and Jimmy Wedell, to name a few of many. The designer/flyers of the thirties came up with such then spectacular items as retractable landing gears, landing flaps and controllable pitch propellers as well as new lighter and stronger methods of airframe construction.

With the advent of World War II all racing activity was suspended and the airplane, based on the secrets learned in racing, leaped ahead a quantum jump in performance under the input of thousands of people and millions of dollars. By 1946, however, with the War behind us, air racing once more returned to Cleveland where modified fighter planes soldiered on in the pylon contests till 1949. Since fielding a modified fighter was extremely expensive, the Goodyear Trophy race was created to allow those of less means to compete. This race, of course, centered around home built midget racers that later became the Formula Ones raced today. Perhaps the public had become jaded for the post war races never equalled the ones of the Golden Age in entertainment and thrills. With the tragic crash of round the world flyer Bill Odom's "Beguine" into a Cleveland apartment house in 1949 the sport of air racing seemingly had come to an end.

True, the Continental Motors Race was carried on in Miami and Detroit but this was a rather half-hearted effort when compared to the mighty Bendix and Thompson Trophy Races of earlier years. Under the auspices of the Professional Race Pilots Association the midgets continued to dust the pylons at such places as Dansville, Niagara Falls, Fort Wayne, Oshkosh and Springfield during the fifties. These turned out to be mostly local interest events, however, with little if any coverage by the national press.

In 1964 the Reno National Air Races was established. These races featured not only the midgets but marked the return of the mighty unlimiteds to the racing scene. As this is written, still another year of Reno racing has transpired, the fourteenth, and no end is yet in sight.

The book, is an effort to draw together, under one cover, the intriguing story of the air racer by means of plan-type illustrations. The drawings contain information on over two hundred of the most interesting of these specialty aircraft. It was surprising to learn during research for this book that in some cases, no formal plans had ever been drawn. A few of the older planes continue to exist in museums around the world but most have been reduced to rubble either in accidents or by the ravages of time.

The drawings in this book, perhaps arbitrarily, cover the

air racers from 1909 thru 1975. 1975 was chosen as a cut-off date, for the period 1909-1975 seems to realistically encompass all the major developments of these colorful, fascinating aircraft. To continue past that date simply means another "Mustang" drawing with a different paint scheme or another "Formula I" with a slightly different shaped wing or fuselage.

Scale squares are provided on the illustrations for ease of scaling up for model aircraft plans. It is hoped that as much enjoyment is encountered by the reader in studying the advancement of aircraft design, as presented here, as was obtained by the author in preparing this book.

Rochester, New York
December, 1978

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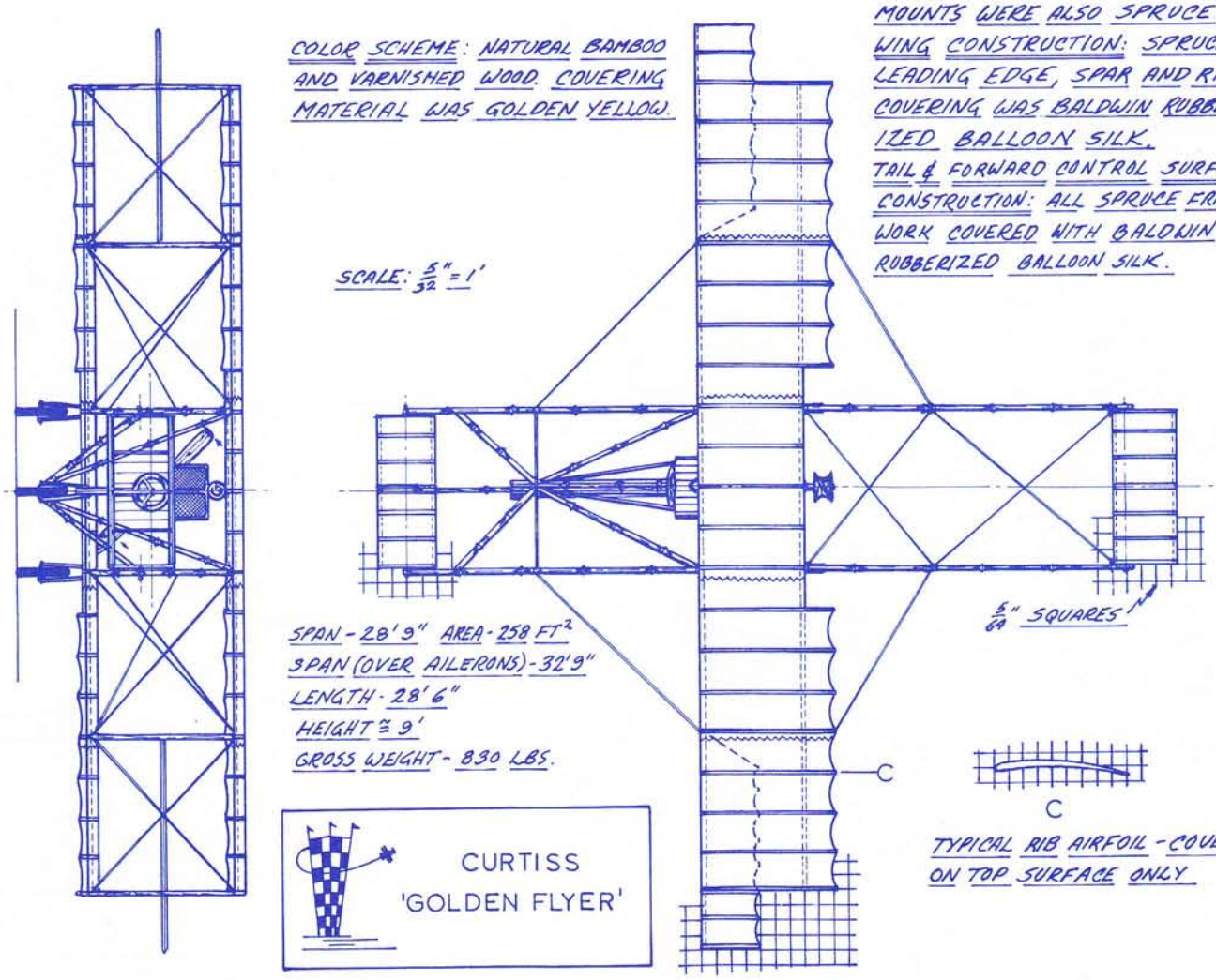
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FUSELAGE CONSTRUCTION: BAMBOO LONGERONS WITH SPRUCE BRACES, MUSIC WIRE 'X' BRACING. CENTRAL KEEL OF CRAFT & MOTOR MOUNTS WERE ALSO SPRUCE.
WING CONSTRUCTION: SPRUCE LEADING EDGE, SPAR AND RIBS. COVERING WAS BALDWIN RUBBERIZED BALLOON SILK.
TAIL & FORWARD CONTROL SURFACES CONSTRUCTION: ALL SPRUCE FRAMEWORK COVERED WITH BALDWIN RUBBERIZED BALLOON SILK.

COLOR SCHEME: NATURAL BAMBOO AND VARNISHED WOOD. COVERING MATERIAL WAS GOLDEN YELLOW.

SCALE: $\frac{5}{32}$" = 1'



$\frac{5}{64}$" SQUARES

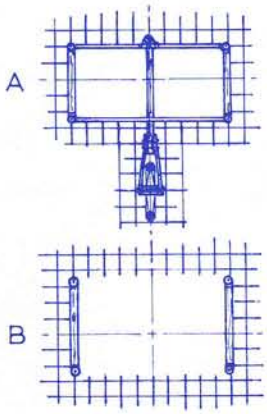
SPAN - 28'9" AREA - 258 FT²
SPAN (OVER AILERONS) - 32'9"
LENGTH - 28'6"
HEIGHT ≅ 9'
GROSS WEIGHT - 830 LBS.

CURTISS
'GOLDEN FLYER'

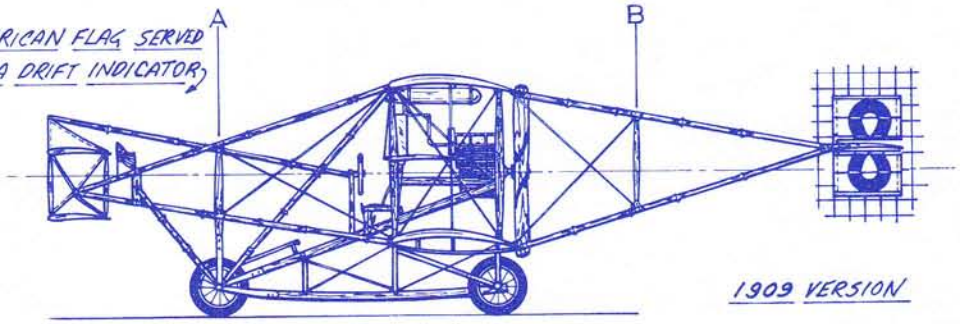
C

TYPICAL RIB AIRFOIL - COVERED ON TOP SURFACE ONLY

POWERPLANT: CURTISS 50 H.P. 8 CYLINDER 'V' TYPE ENGINE
PROPELLER: CARVED SPRUCE. 7' DIA.



AMERICAN FLAG SERVED AS A DRIFT INDICATOR



1909 VERSION

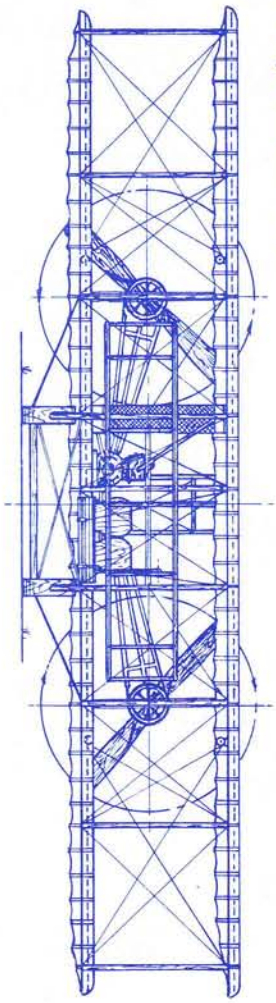
GLENN CURTISS WON THE WORLDS FIRST AIR RACE (FOR THE JAMES GORDON BENNETT CUP) IN AUGUST 1909. THE RACE, HELD AT RHEIMS, FRANCE, CONSISTED OF 2 LAPS & EQUAL TO A 12.43 MILE RACE. CURTISS, WITH A TOTAL OF 10 HOURS FLIGHT TIME, NONE IN THE 'GOLDEN FLYER', WON AT 47.65 M.P.H. TOP LEVEL SPEED - 60 M.P.H.

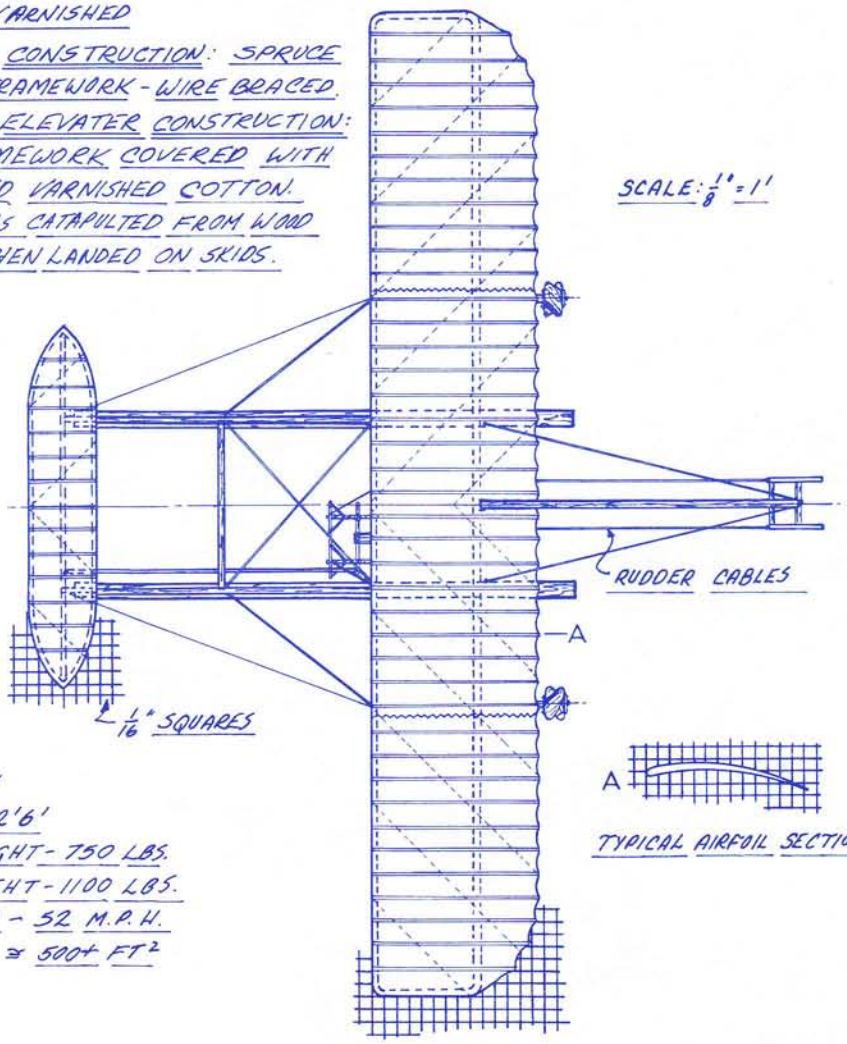
WING CONSTRUCTION: SPRUCE SPARS AND RIBS COVERED WITH UNBLEACHED COTTON & VARNISHED

FUSELAGE CONSTRUCTION: SPRUCE AND ASH FRAMEWORK - WIRE BRACED.

RUDDER & ELEVATER CONSTRUCTION: WOOD FRAMEWORK COVERED WITH UNBLEACHED VARNISHED COTTON.

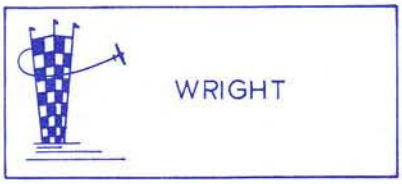
AIRCRAFT WAS CATAPULTED FROM WOOD MONORAIL, THEN LANDED ON SKIDS.





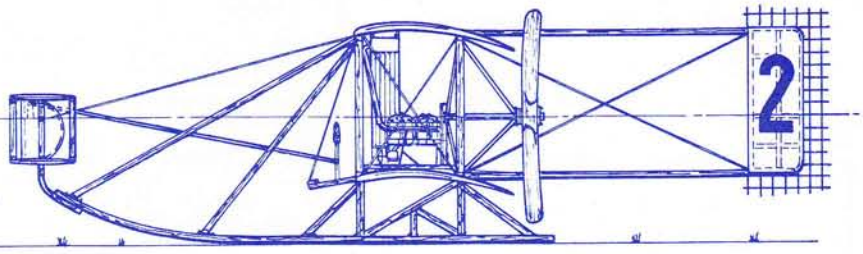
TYPICAL AIRFOIL SECTION

SPAN - 41'
LENGTH - 32'6'
EMPTY WEIGHT - 750 LBS.
GROSS WEIGHT - 1100 LBS.
MAX SPEED - 52 M.P.H.
WING AREA ≈ 500+ FT²



POWERPLANT: WATERCOOLED WRIGHT 4 CYLINDER ENGINE. 25 HORSEPOWER. 2 - 8'6" PROPELLERS - CARVED SPRUCE - 400 R.P.M.

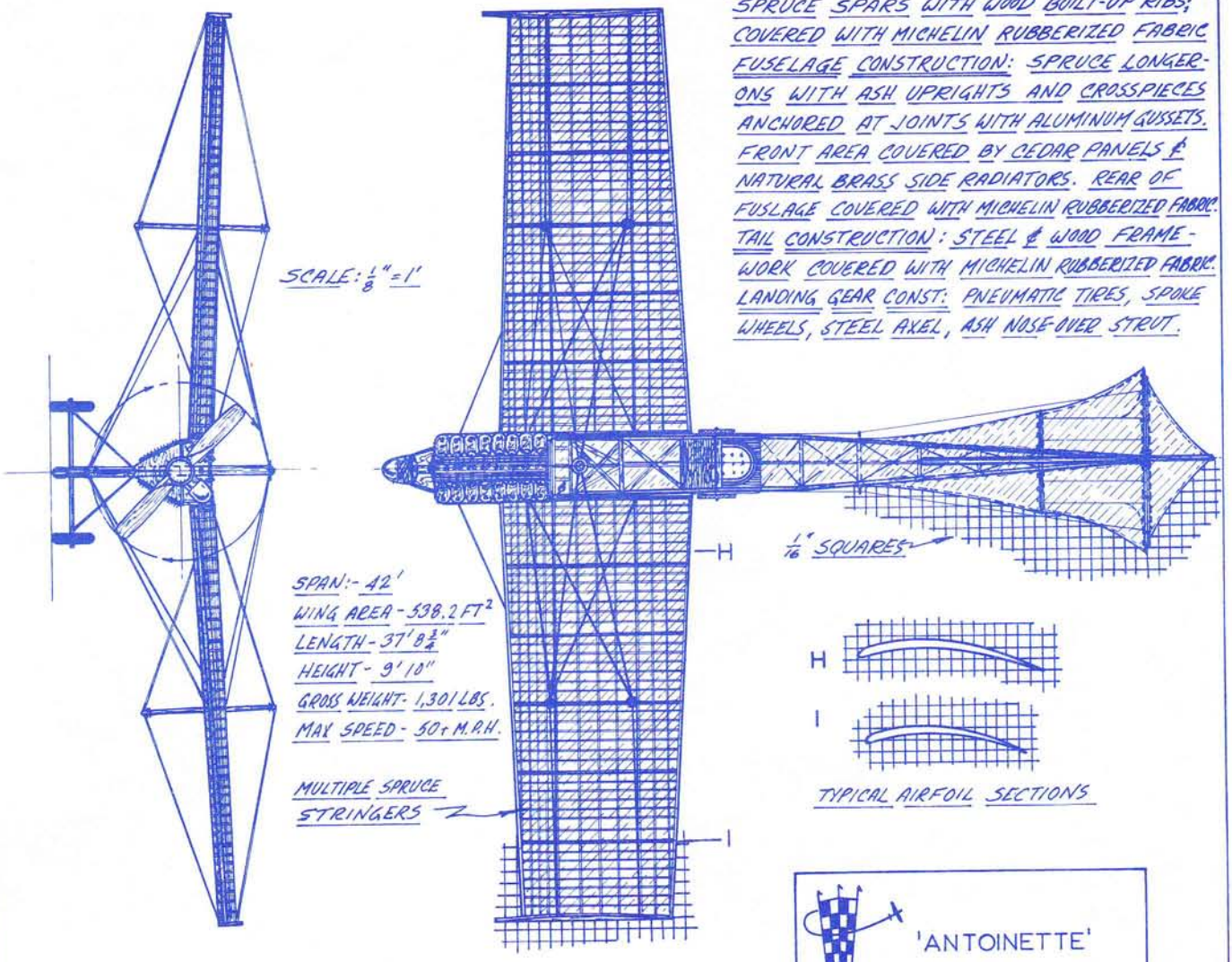
COLOR SCHEME: ALL WOOD SURFACES WERE NATURAL VARNISH. METAL SURFACES PAINTED BLACK. FABRIC WAS WHITE, BLACK RACE NO.



1909 VERSION

AIRCRAFT SHOWN WAS ONE OF THREE WRIGHTS AT RHEIMS IN 1909. THIS ONE, #2, WAS FLOWN BY EUGENE LEFEBVRE OF FRANCE TO 4TH PLACE IN JAMES GORDON BENNETT CUP RACE AVERAGING 35.7 MILES PER HOUR. CRAFT WAS VERY SIMILAR TO FIRST PLANE SUBMITTED TO U.S. ARMY FOR TESTING CM

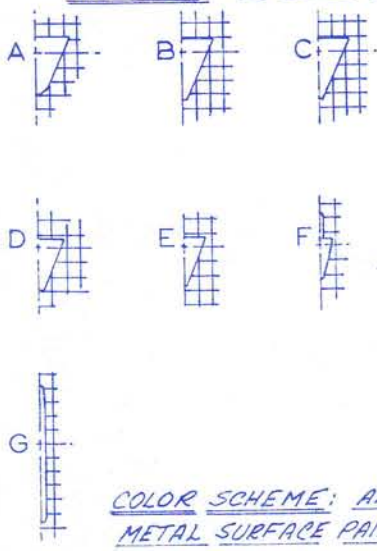
WING CONSTRUCTION: 2 WARREN TRUSS SPRUCE SPARS WITH WOOD BUILT-UP RIBS; COVERED WITH MICHELIN RUBBERIZED FABRIC FUSELAGE CONSTRUCTION: SPRUCE LONGERONS WITH ASH UPRIGHTS AND CROSSPIECES ANCHORED AT JOINTS WITH ALUMINUM GUSSETS. FRONT AREA COVERED BY CEDAR PANELS & NATURAL BRASS SIDE RADIATORS. REAR OF FUSLAGE COVERED WITH MICHELIN RUBBERIZED FABRIC. TAIL CONSTRUCTION: STEEL & WOOD FRAMEWORK COVERED WITH MICHELIN RUBBERIZED FABRIC. LANDING GEAR CONST: PNEUMATIC TIRES, SPOKE WHEELS, STEEL AXEL, ASH NOSE-OVER STRUT.

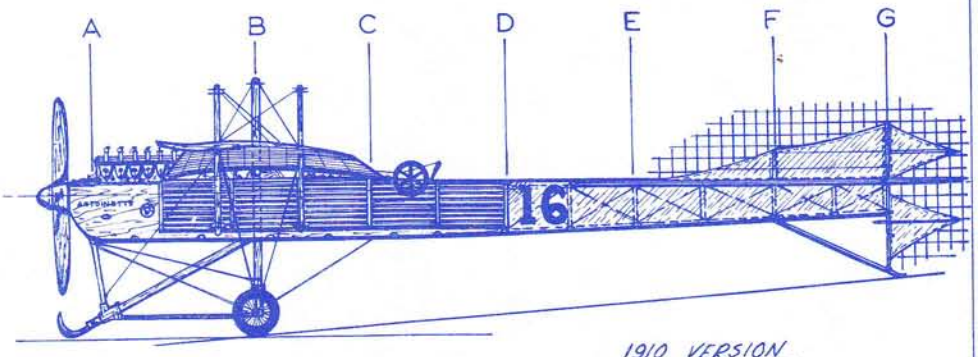


TYPICAL AIRFOIL SECTIONS



POWERPLANT: V-16 WATERCOOLED ANTOINETTE RATED @ 100 H.P.
PROPELLER: ONE PIECE CARVED MAHOGANY.





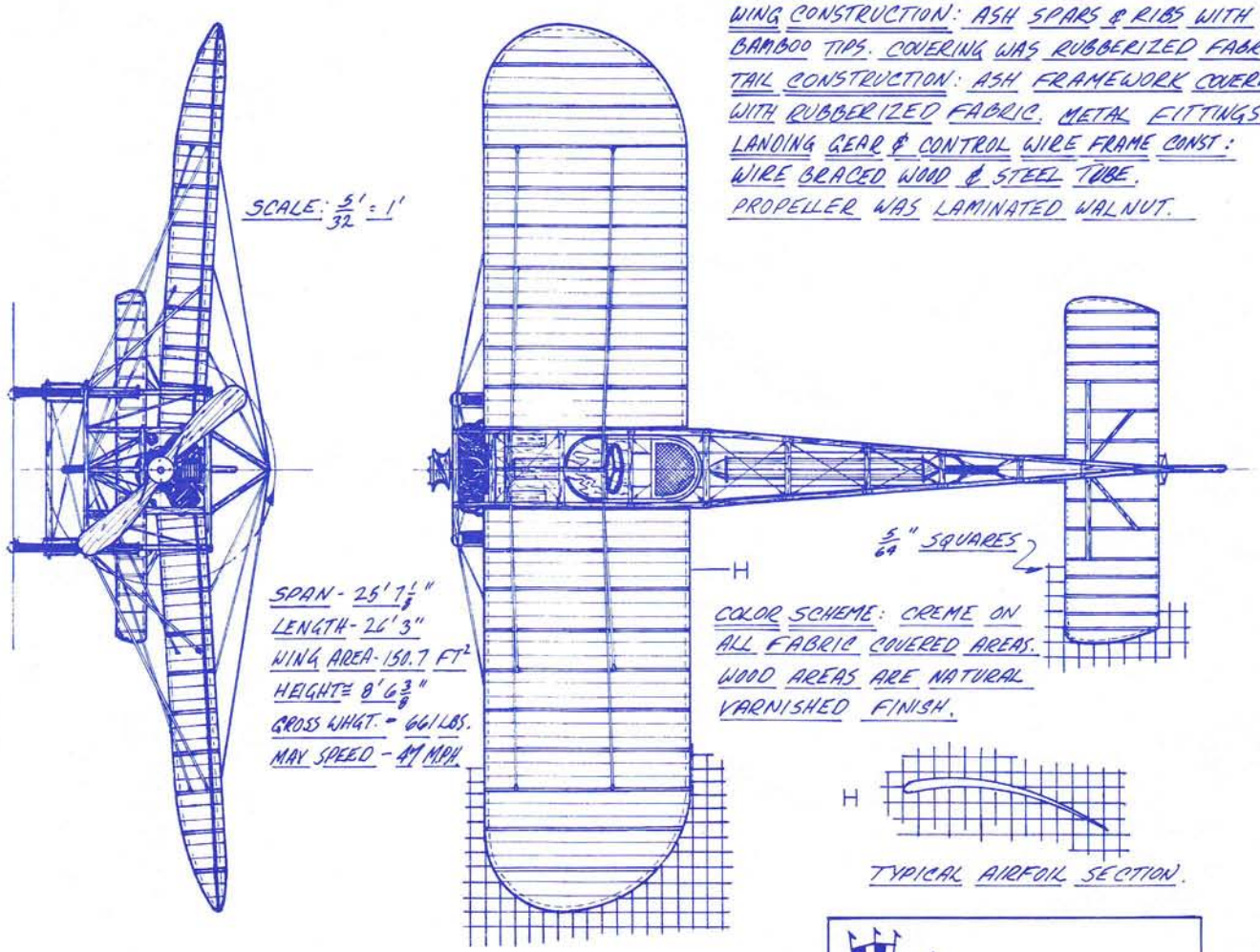
1910 VERSION

COLOR SCHEME: ALL WOOD AREAS WERE VARNISHED NATURAL WOOD. RACE NO AND EXPOSED METAL SURFACE PAINTED BLACK. FABRIC COVERED AREAS WERE LIGHT PEARL GRAY.

THE ANTOINETTE SERIES OF AIRCRAFT BEGAN IN 1908 WITH ANTOINETTE I AND WERE REFINED THRU ANTOINETTE VIII. CRAFT WERE DESIGNED BY M. LAVAVASSEUR. HUBERT LATHAM FLEW CRAFT (ANT. VII) IN 1909 & 1910 JAMES GORDON BENNETT CUP RACES TAKING 3RD PLACE IN 1909 AND 4TH PLACE IN 1910.

C.M.

FUSELAGE CONSTRUCTION: ASH LONGERONS - UPRIGHTS & CROSSPIECES. COVERED AREAS WERE CONTINENTAL RUBBERIZED & WATERPROOFED FABRIC. FRAMEWORK WAS CROSSBRACED WITH PIANO WIRE. WING CONSTRUCTION: ASH SPARS & RIBS WITH BAMBOO TIPS. COVERING WAS RUBBERIZED FABRIC. TAIL CONSTRUCTION: ASH FRAMEWORK COVERED WITH RUBBERIZED FABRIC. METAL FITTINGS. LANDING GEAR & CONTROL WIRE FRAME CONST.: WIRE BRACED WOOD & STEEL TUBE. PROPELLER WAS LAMINATED WALNUT.



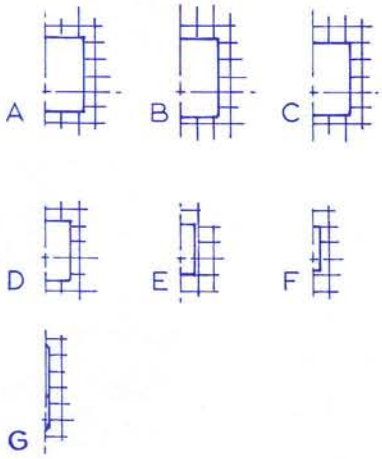
SPAN - 25'7 1/8"
LENGTH - 26'3"
WING AREA - 150.7 FT²
HEIGHT = 8'6 3/8"
GROSS WHGT. = 661 LBS.
MAX SPEED - 47 MPH

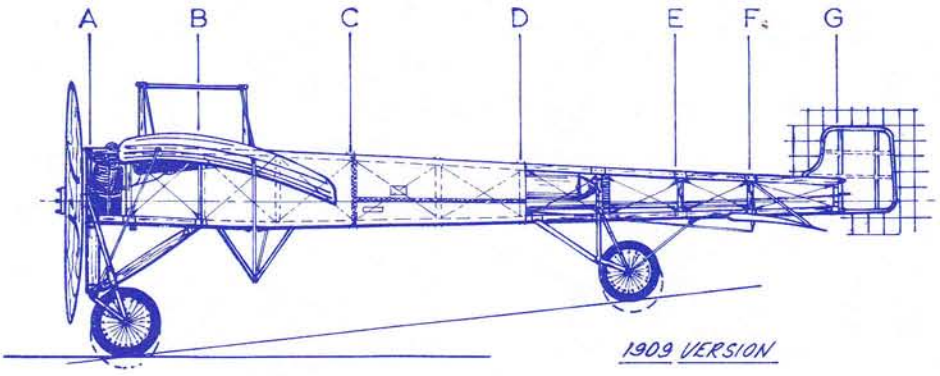
COLOR SCHEME: CREME ON ALL FABRIC COVERED AREAS. WOOD AREAS ARE NATURAL VARNISHED FINISH.

TYPICAL AIRFOIL SECTION.

POWERPLANT: 25 H.P. ANZANI 3 CYLINDER SEMI-RADIAL AIR COOLED. PROP WAS 6'6 3/4" IN DIAMETER.



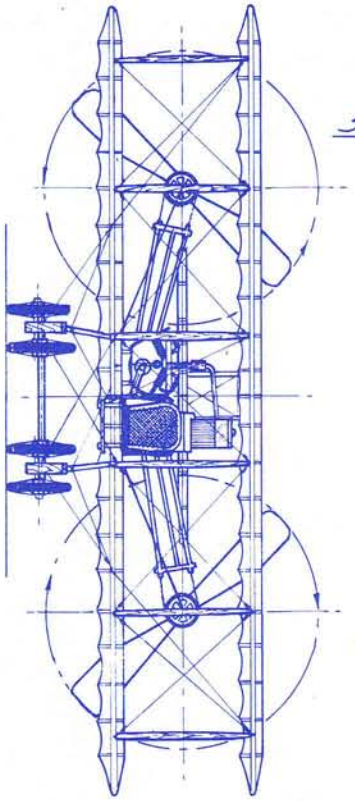




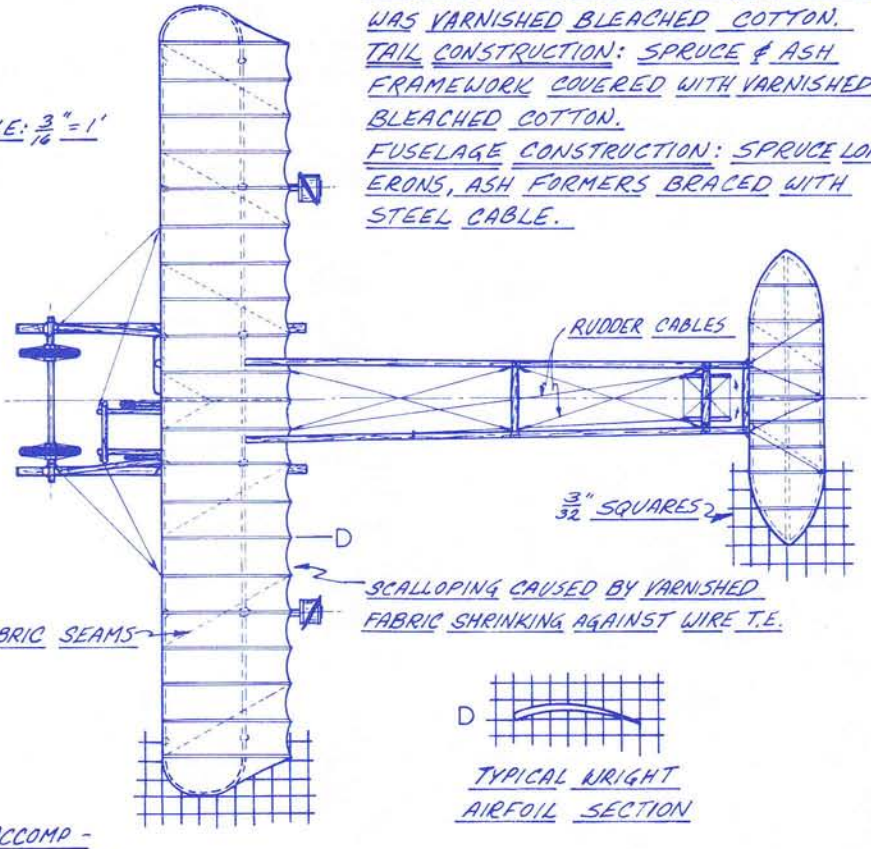
1909 VERSION

HELD AUGUST 22-29, 1909 THE FIRST AIR RACE AT RHEIMS, FRANCE FOUND THE BLERIOT XI A CONTENDER. THIS CRAFT FLOWN BY LOUIS BLÉRIOT HAD ON JULY 25TH BEEN FIRST TO CROSS THE ENGISH CHANNEL. AS BLERIOT CRACKED UP THIS SHIP DURING EARLY TRIALS AT THE RACE HE WAS FORCED TO FLY THE LARGER & MOST UNGRACEFUL BLERIOT XII, WHEREIN HE PLACED 2ND IN THE JAMES GORDON BENNETT RACE @ 46.03 MPH.

WING CONSTRUCTION: SPRUCE SPARS WITH ASH RIBS - WIRE TRAILING EDGE. COVERING WAS VARNISHED BLEACHED COTTON.
TAIL CONSTRUCTION: SPRUCE & ASH FRAMEWORK COVERED WITH VARNISHED BLEACHED COTTON.
FUSELAGE CONSTRUCTION: SPRUCE LONGERONS, ASH FORMERS BRACED WITH STEEL CABLE.



SCALE: $\frac{3}{16}$" = 1'

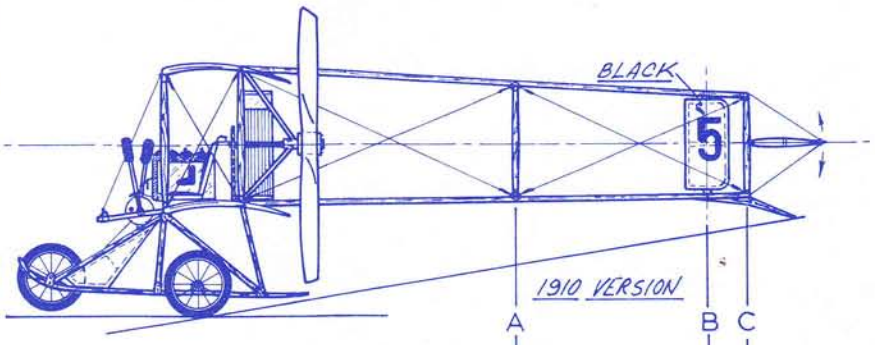


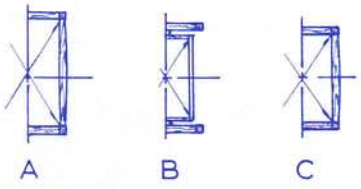
TYPICAL WRIGHT AIRFOIL SECTION

WITHOUT AILERONS BANKING WAS ACCOMPLISHED BY WARPING WINGS WITH CONTROLS



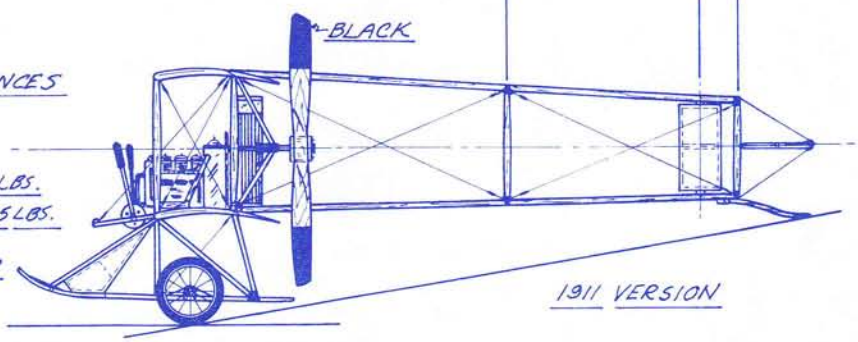
POWERPLANT: 50 HORSEPOWER WRIGHT V-8 - WATER COOLED
PROPELLERS: RH & LH CARVED YELLOW PINE.





SEVERAL BABY WRIGHT RACING AIRCRAFT WERE BUILT - ALL WITH VARIENCES IN DIMINSIONS FROM EACH OTHER.
SPAN ≈ 21' 5" AREA ≈ 145 FT.²
HEIGHT ≈ 6'10" GROSS WEIGHT ≈ 860 LBS.
MAX SPEED ≈ 75 M.P.H. EMPTY WHGT ≈ 685 LBS.

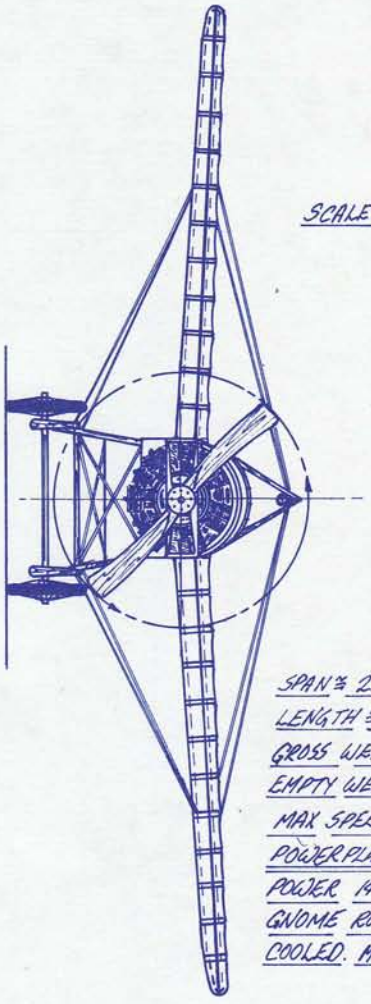
COLOR SCHEME: NATURAL VARNISHED COTTON AND VARNISHED WOOD.

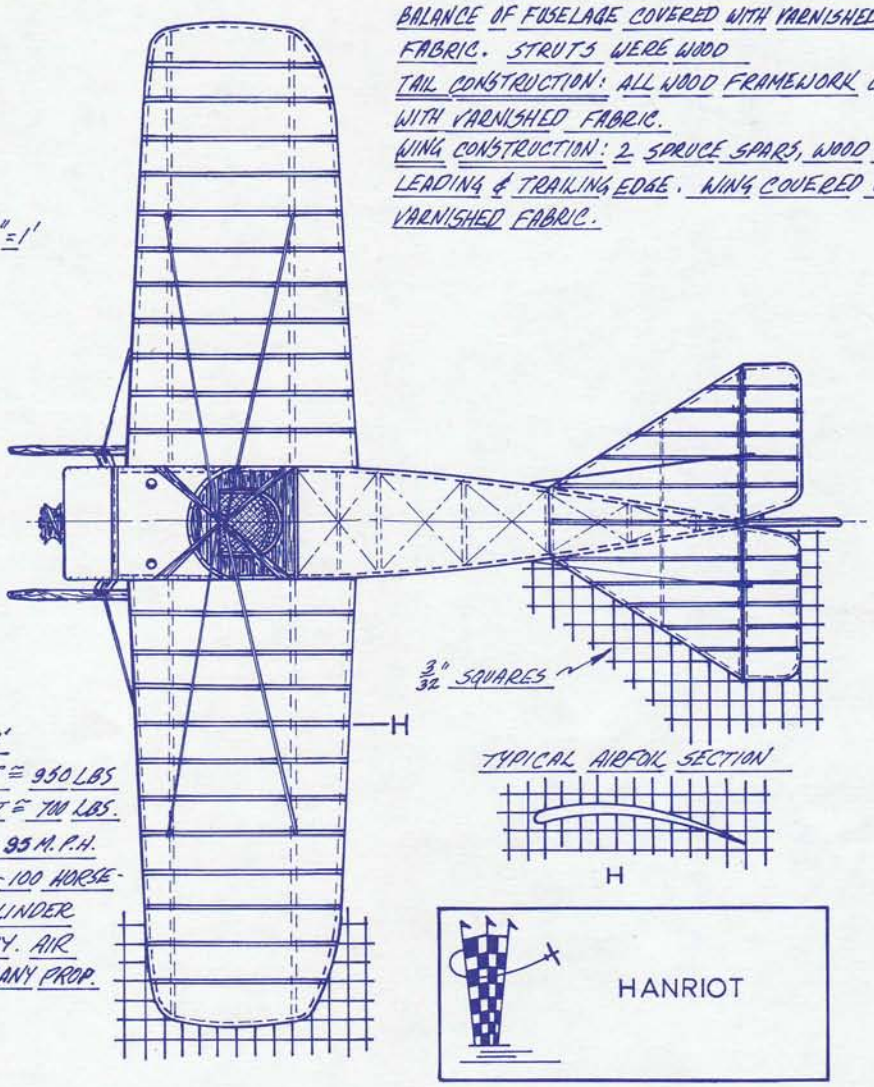


THESE PLANES WERE FLOWN IN 1910 AND 1911 GORDEN BENNET CUP RACES; IN 1910 BY W.R. BROOKINS AT BELMONT N.Y. & IN 1911 BY ALEC OGILVIE WHO TOOK 4TH PLACE (53.31 M.P.H.) AT EASTCHURCH ENGLAND.

FUSELAGE CONSTRUCTION: WOOD LONGERONS WITH WIRE BRACED UPRIGHTS & CROSSPIECES, ALUMINUM ENGINE COWL & AROUND COCKPIT. BALANCE OF FUSELAGE COVERED WITH VARNISHED FABRIC. STRUTS WERE WOOD
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK COVERED WITH VARNISHED FABRIC.
WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD RIBS, LEADING & TRAILING EDGE. WING COVERED WITH VARNISHED FABRIC.

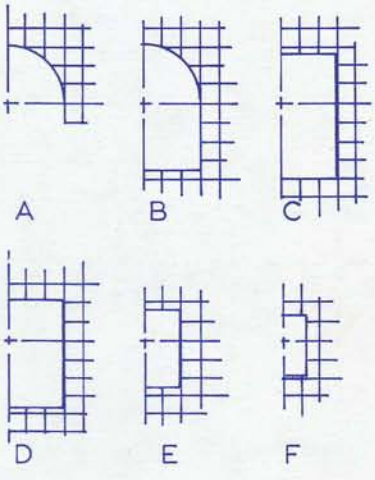
SCALE: $\frac{3}{16}$" = 1'

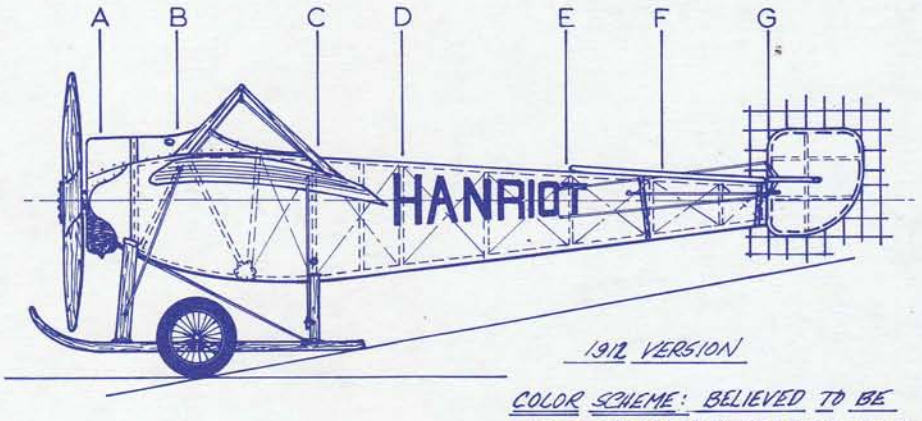




SPAN ≅ 28'
LENGTH ≅ 23'
GROSS WEIGHT ≅ 950 LBS
EMPTY WEIGHT ≅ 700 LBS.
MAX SPEED ≅ 95 M.P.H.
POWER PLANT:- 100 HORSE-POWER 14 CYLINDER GNOME ROTARY. AIR COOLED. MAHOGANY PROP.

TYPICAL AIRFOIL SECTION





1912 VERSION

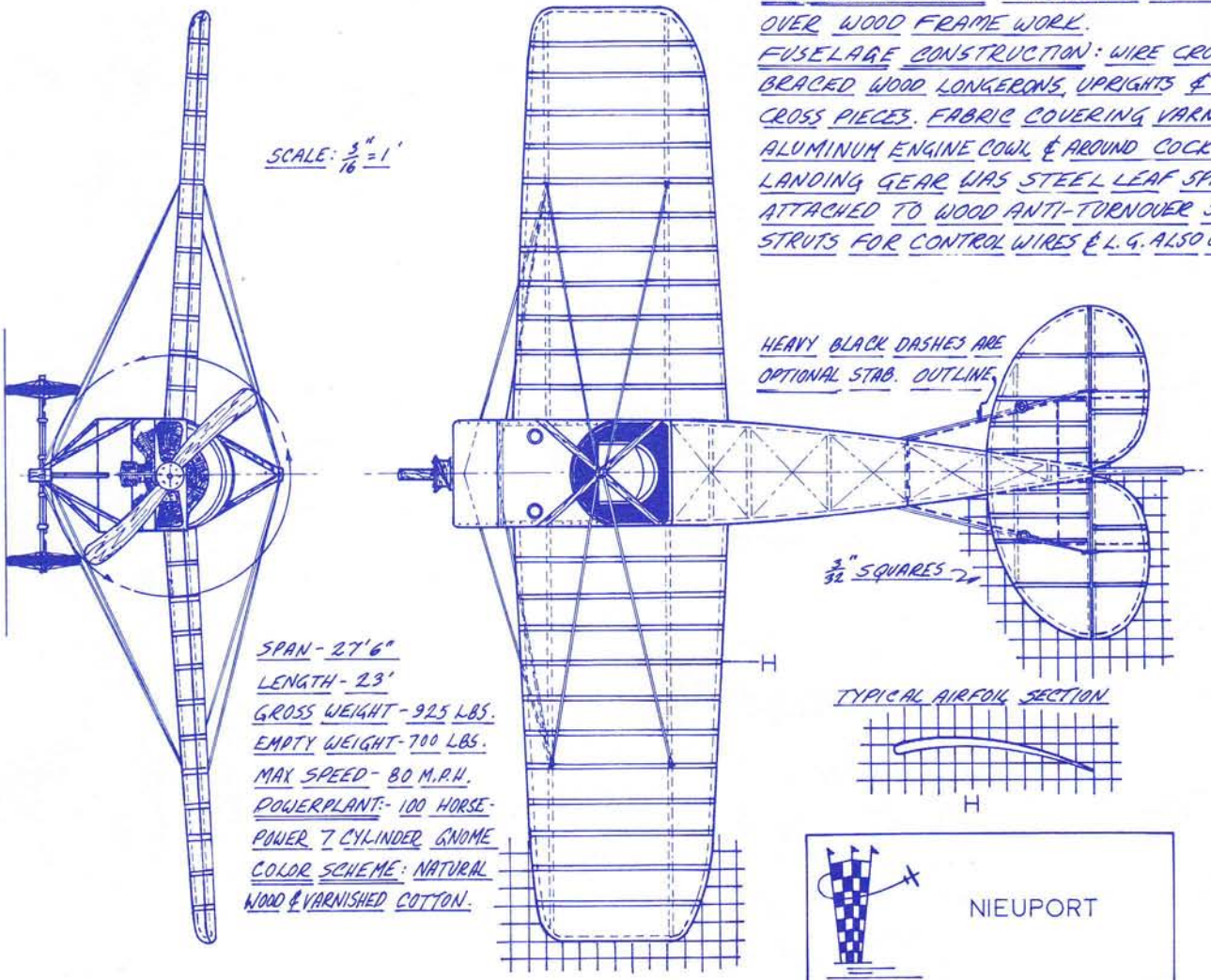
COLOR SCHEME: BELIEVED TO BE LIGHT GREEN WITH BLACK LETTERING.

ANDRE FREY FLEW THIS AIRCRAFT IN THE 1912 BENNETT RACE HELD AT CHICAGO. ENGINE PROBLEMS FORCED HIM OUT OF THE RACE ON THE 24TH LAP OF THE 30 LAP 124.8 MILE RACE.

CH

WING CONSTRUCTION: 2 SPRUCE SPARS WITH WOOD RIBS, LEADING & TRAILING EDGES. COVERERED WITH VARNISHED CLOTH. TAIL CONSTRUCTION: VARNISHED CLOTH OVER WOOD FRAME WORK. FUSELAGE CONSTRUCTION: WIRE CROSS-BRACED WOOD LONGERONS, UPRIGHTS & CROSS PIECES. FABRIC COVERING VARNISHED. ALUMINUM ENGINE COWL & AROUND COCKPIT. LANDING GEAR WAS STEEL LEAF SPRINGS ATTACHED TO WOOD ANTI-TURNOVER SKID. STRUTS FOR CONTROL WIRES & L.G. ALSO WOOD.

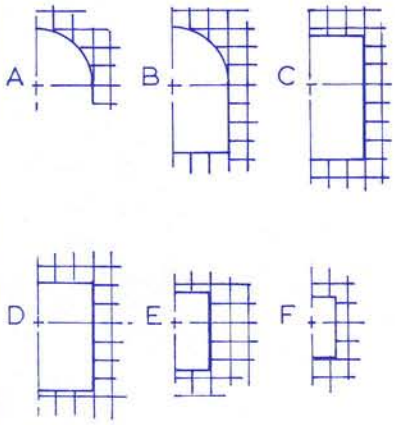
SCALE: $\frac{3}{16}$" = 1'

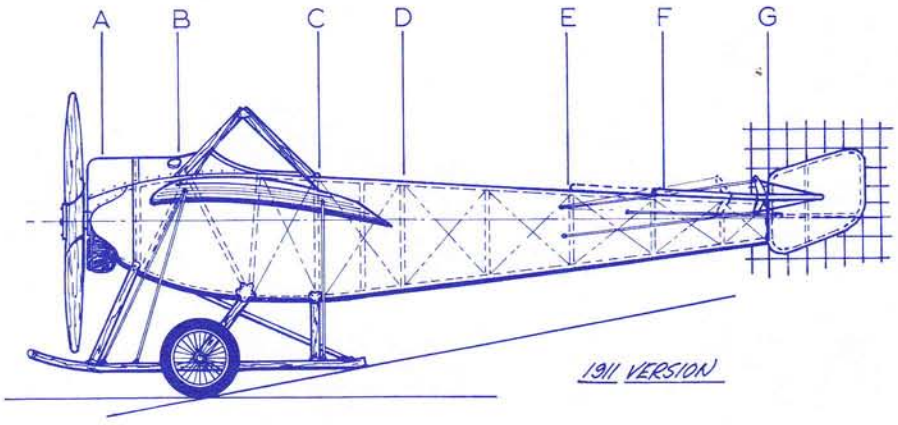


SPAN - 27'6"
LENGTH - 23'
GROSS WEIGHT - 925 LBS.
EMPTY WEIGHT - 700 LBS.
MAX SPEED - 80 M.P.H.
POWERPLANT:- 100 HORSE-POWER 7 CYLINDER GNOME
COLOR SCHEME: NATURAL WOOD & VARNISHED COTTON.

TYPICAL AIRFOIL SECTION







1911 VERSION



NIEUPORT RACERS, DESIGNED BY M. NIEUPORT ENG. OF FRANCE, WERE TO BECOME PROTOTYPES OF THE SEVERAL NIEUPORT FIGHTERS OF WORLD WAR I. AT THE 1911 JAMES GORDON BENNETT CUP RACES HELD AT EASTCHURCH ENGLAND, A 25 LAP 94 MILE RACE, AN AMERICAN, CHARLES WEYMAN PILOTED A NIEUPORT RACER AT 78 M.P.H. TO FIRST PLACE. 3RD & 5TH PLACES IN RACE WERE ALSO NIEUPORTS.

CH

WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD LEADING & TRAILING EDGE, WOOD RIBS, VARNISHED FABRIC COVERING. FUSELAGE CONSTRUCTION: SPRUCE LONGERONS, WOOD CROSSPIECES & UPRIGHTS, WIRE BRACED. ALUMINUM ENGINE COWL, FABRIC COVERED AFT OF COWL WOOD FRAME FOR CONTROL CABLES AND FLOATS TAIL CONSTRUCTION: FABRIC COVERED WOOD FRAMES FLOAT CONSTRUCTION: ALL WOOD WITH DURAL TIPS.

SCALE: $\frac{3}{16}$" = 1'

$\frac{3}{32}$" SQUARES

SPAN - 39' 7"
LENGTH - 28' 7"
GROSS WEIGHT - 1814 LBS.
EMPTY WEIGHT - 1323 LBS.
MAX SPEED - 70 MPH

POWERPLANT - AIR COOLED GNOME 14 CYLINDER TWIN ROW ROTARY. 160 H.P.

TYPICAL AIRFOIL SECTION

H

NIEUPORT

A B C D E F G H J K

1913 VERSION

COLOR SCHEME: BELIEVED TO BE ALL YELLOW WITH BLACK TAIL MARKINGS

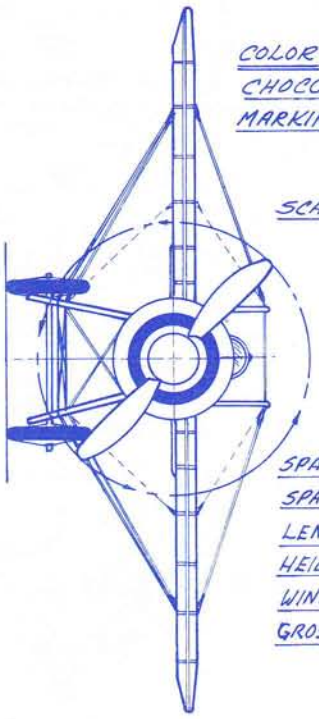
CHARLES WEYMAN FLEW ABOVE PLANE IN 1913 SCHNEIDER TROPHY RACE WHICH WAS 28 LAPS COVERING 174 MILES. AVERAGING 68.8 M.P.H. WEYMAN DROPPED OUT AFTER 5TH LAP. RACE WAS IN MONACO

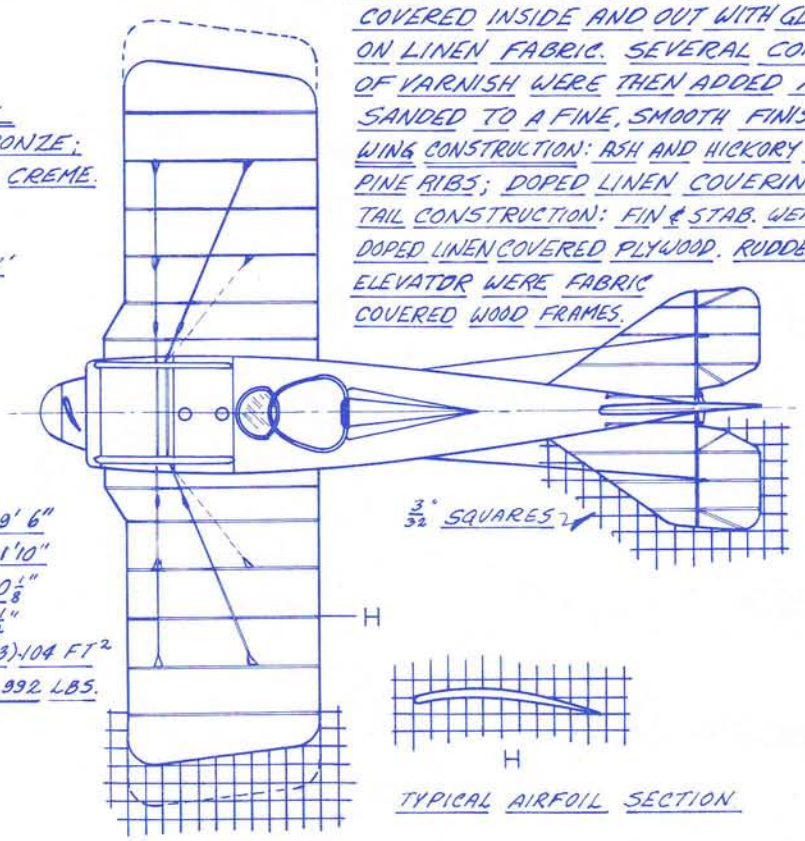
CK

FUSELAGE CONSTRUCTION: WOODEN MONOCOQUE OF $\frac{1}{8}$" 3 PLY TULIP WOOD COVERED INSIDE AND OUT WITH GLUED ON LINEN FABRIC. SEVERAL COATS OF VARNISH WERE THEN ADDED AND SANDED TO A FINE, SMOOTH FINISH.
WING CONSTRUCTION: ASH AND HICKORY SPARS; PINE RIBS; DOPED LINEN COVERING.
TAIL CONSTRUCTION: FIN & STAB. WERE DOPED LINEN COVERED PLYWOOD. RUDDER & ELEVATOR WERE FABRIC COVERED WOOD FRAMES.

COLOR SCHEME: CHOCOLATE BRONZE; MARKINGS WERE CREME.

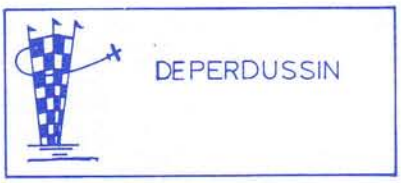
SCALE: $\frac{3}{16}$" = 1'

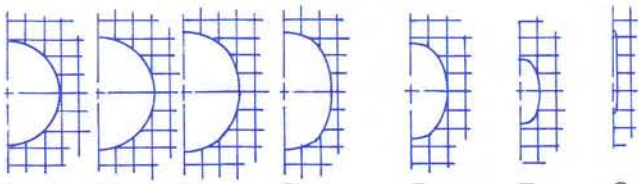




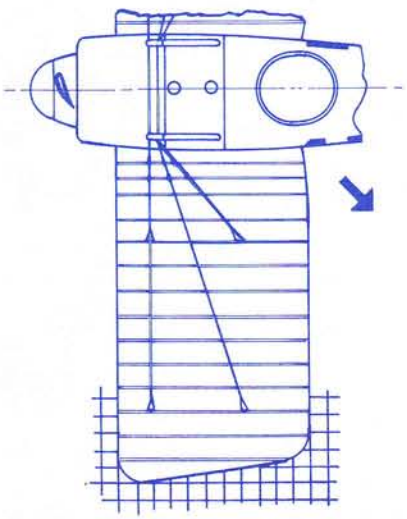
SPAN (1913) - 19' 6"
SPAN (1912) - 21'10"
LENGTH - 20' 0$\frac{1}{8}$"
HEIGHT ≅ 7'6$\frac{1}{2}$"
WING AREA (1913) 104 FT^2
GROSS WGHT. ≅ 992 LBS.

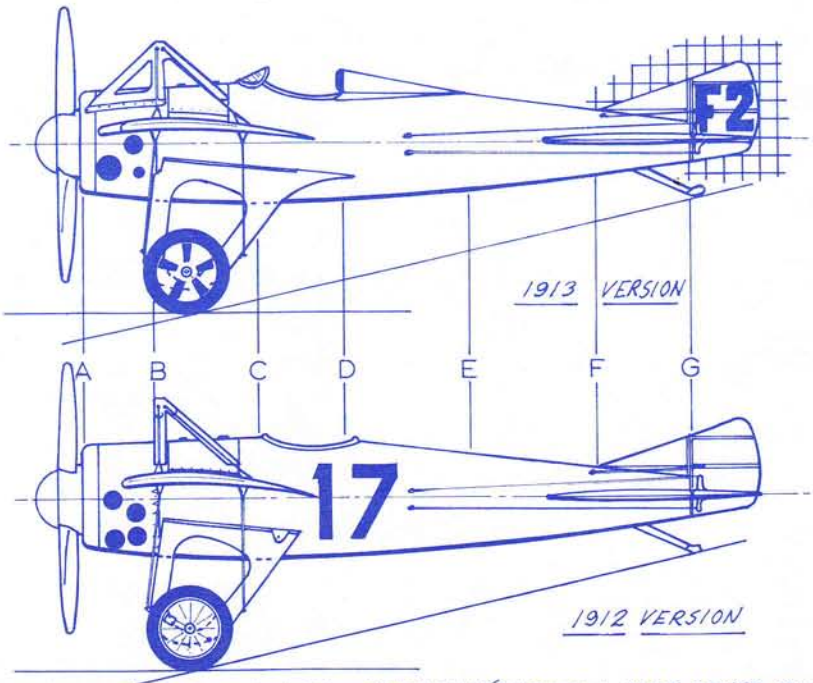
TYPICAL AIRFOIL SECTION





POWERPLANT: 160 H.P. GNOME 14 CYLINDER TWO ROW ROTARY.
PROPELLER: CARVED MAHOGANY
TOP SPEED - 127 M.P.H.



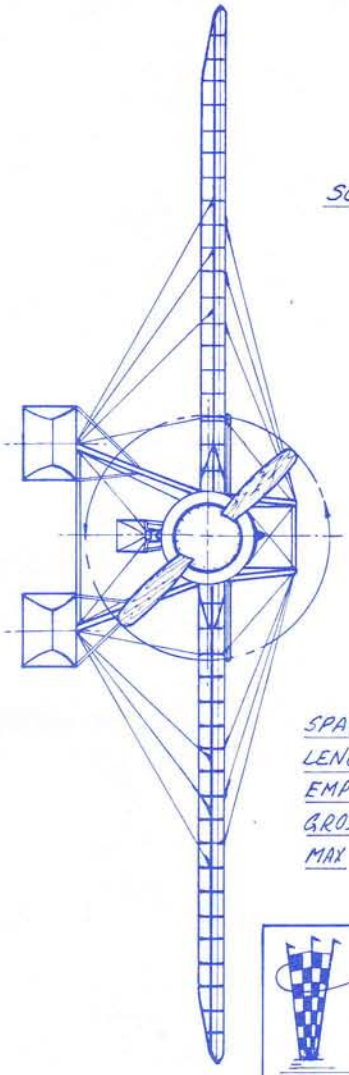


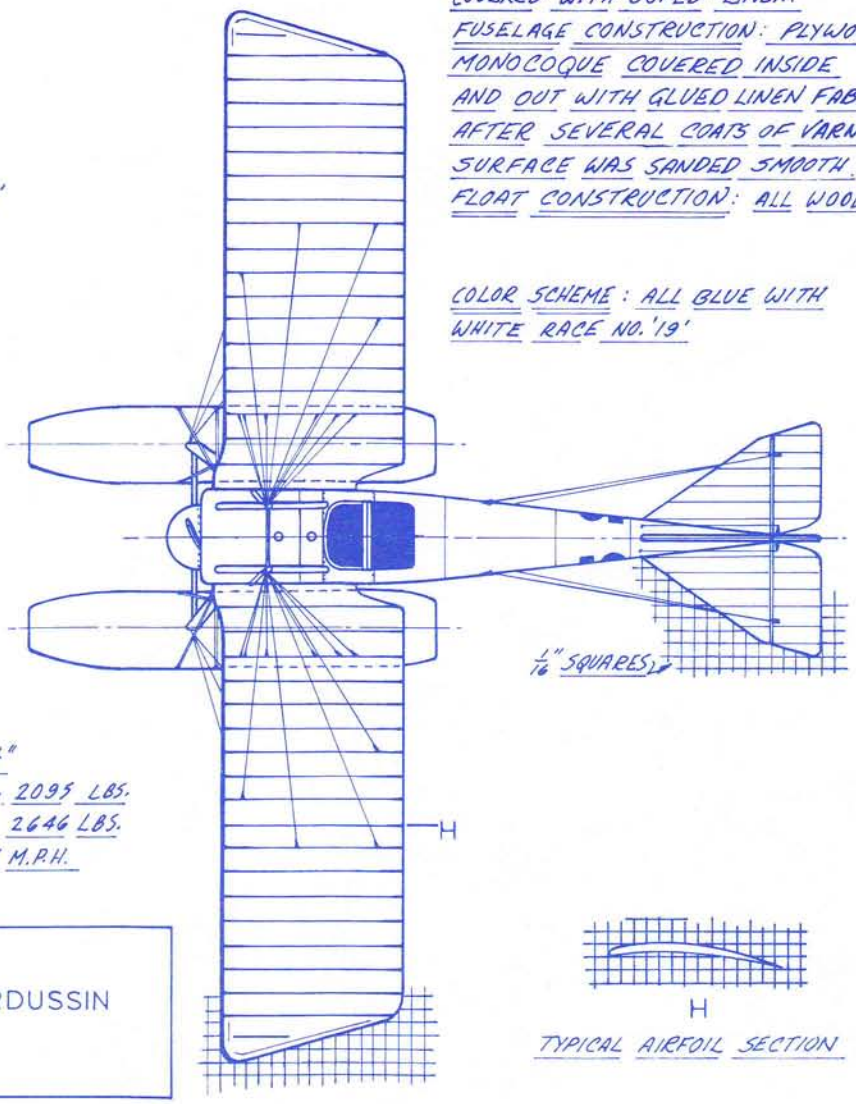
DEPERDUSSIN AIRCRAFT WERE THE FIRST TO EXCEED 100 M.P.H. THEY WON (AND TOOK MOST OTHER PLACES) THE 1912 AND 1913 JAMES GORDON BENNET CUP RACES; IN 1912 VEDRINE AT 105.5 MPH; PREVOST '13 @ 124.5. CM

WING CONSTRUCTION: SPRUCE SPARS WITH PINE RIBS; DOPED LINEN FABRIC.
TAIL CONSTRUCTION: WOOD FRAMES COVERED WITH DOPED LINEN.
FUSELAGE CONSTRUCTION: PLYWOOD MONOCOQUE COVERED INSIDE AND OUT WITH GLUED LINEN FABRIC. AFTER SEVERAL COATS OF VARNISH SURFACE WAS SANDED SMOOTH.
FLOAT CONSTRUCTION: ALL WOOD.

SCALE: $\frac{1}{8}$" = 1'

COLOR SCHEME: ALL BLUE WITH WHITE RACE NO. '19'



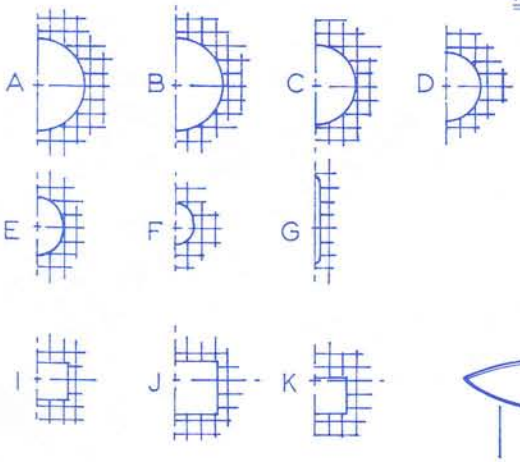


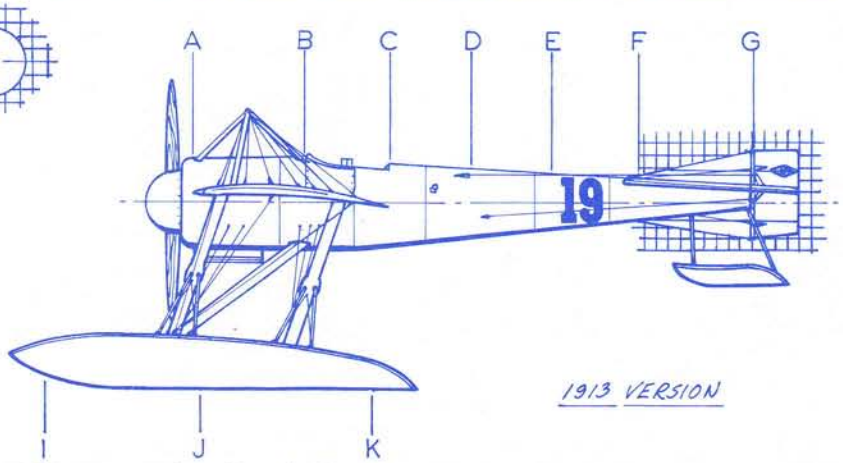
SPAN - 44' 3"
LENGTH - 32' 9½"
EMPTY WEIGHT - 2095 LBS.
GROSS WEIGHT - 2646 LBS.
MAX SPEED - 65 M.P.H.

DEPERDUSSIN

TYPICAL AIRFOIL SECTION

POWERPLANT: 2 ROW ROTARY GNOME - 14 CYLINDER - 160 HORSEPOWER



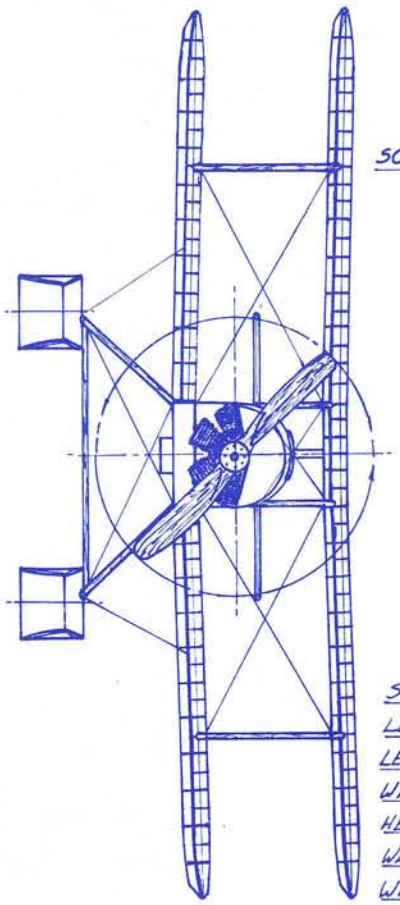


1913 VERSION

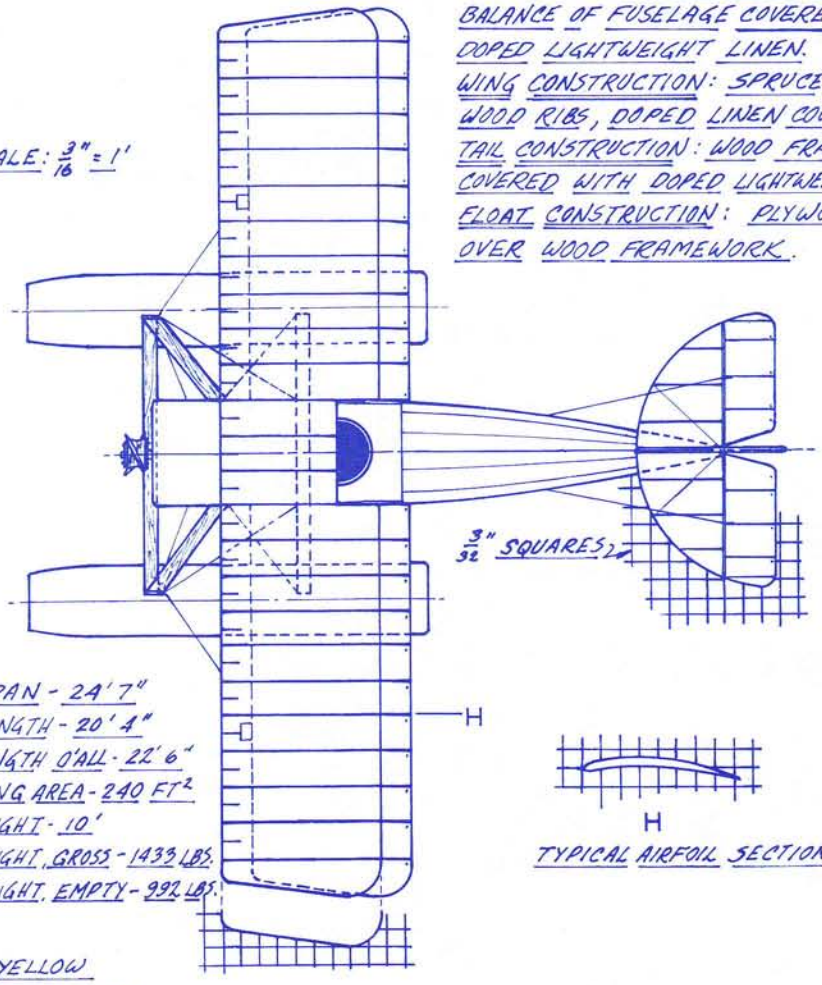
ON APRIL 6, 1913 MARCEL PREVOST WON THE FIRST SCHNEIDER TROPHY RACE WITH ABOVE PLANE. RACE WAS AT MONACO COVERING 174 MILES IN 28 LAPS. AIRCRAFT WAS VERY ADVANCED DESIGN FOR ITS TIME.

CH

FUSELAGE CONSTRUCTION: SPRUCE LONGERONS WITH WIRE BRACED PINE UPRIGHTS & CROSS PIECES; ALUMINUM COWL & COCKPIT DECKING; BALANCE OF FUSELAGE COVERED WITH DOPED LIGHTWEIGHT LINEN.
WING CONSTRUCTION: SPRUCE SPARS, WOOD RIBS, DOPED LINEN COVERING.
TAIL CONSTRUCTION: WOOD FRAMEWORK COVERED WITH DOPED LIGHTWEIGHT LINEN
FLOAT CONSTRUCTION: PLYWOOD OVER WOOD FRAMEWORK.



SCALE: $\frac{3}{16}$" = 1'



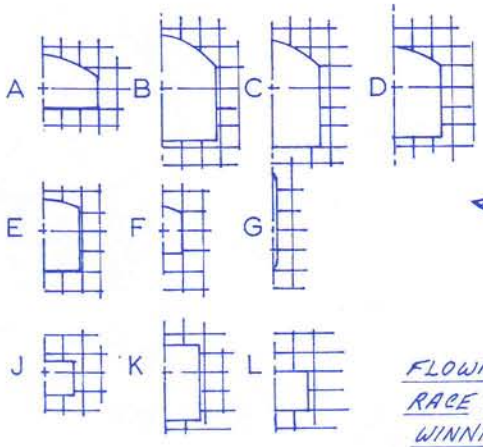
SPAN - 24' 7"
LENGTH - 20' 4"
LENGTH O'ALL - 22' 6"
WING AREA - 240 FT²
HEIGHT - 10'
WEIGHT, GROSS - 1433 LBS.
WEIGHT, EMPTY - 992 LBS.

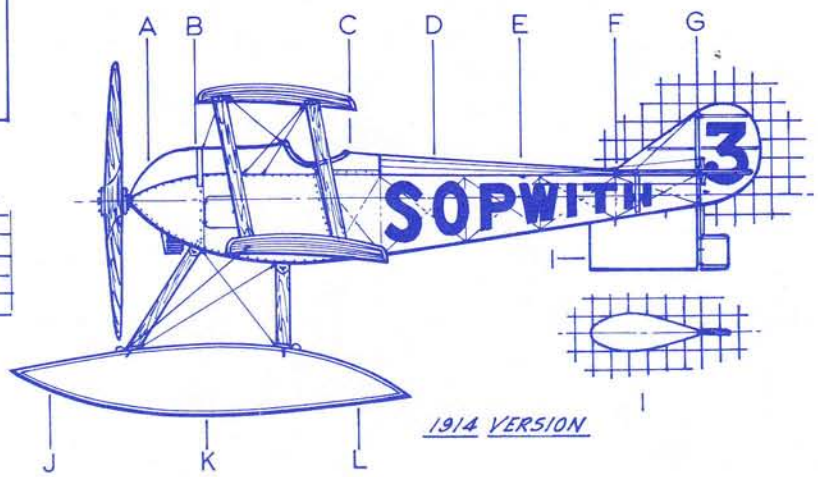
H
TYPICAL AIRFOIL SECTION

COLOR SCHEME: PALE GOLDEN YELLOW WITH BLACK MARKINGS. NATURAL ALUMINUM COWL & COCKPIT DECKING. VARNISHED WOOD STRUTS.

POWERPLANT: AIR COOLED 9 CYLINDED RADIAL GNOME. 100 HORSEPOWER. CARVED MAHOGANY PROPELLER





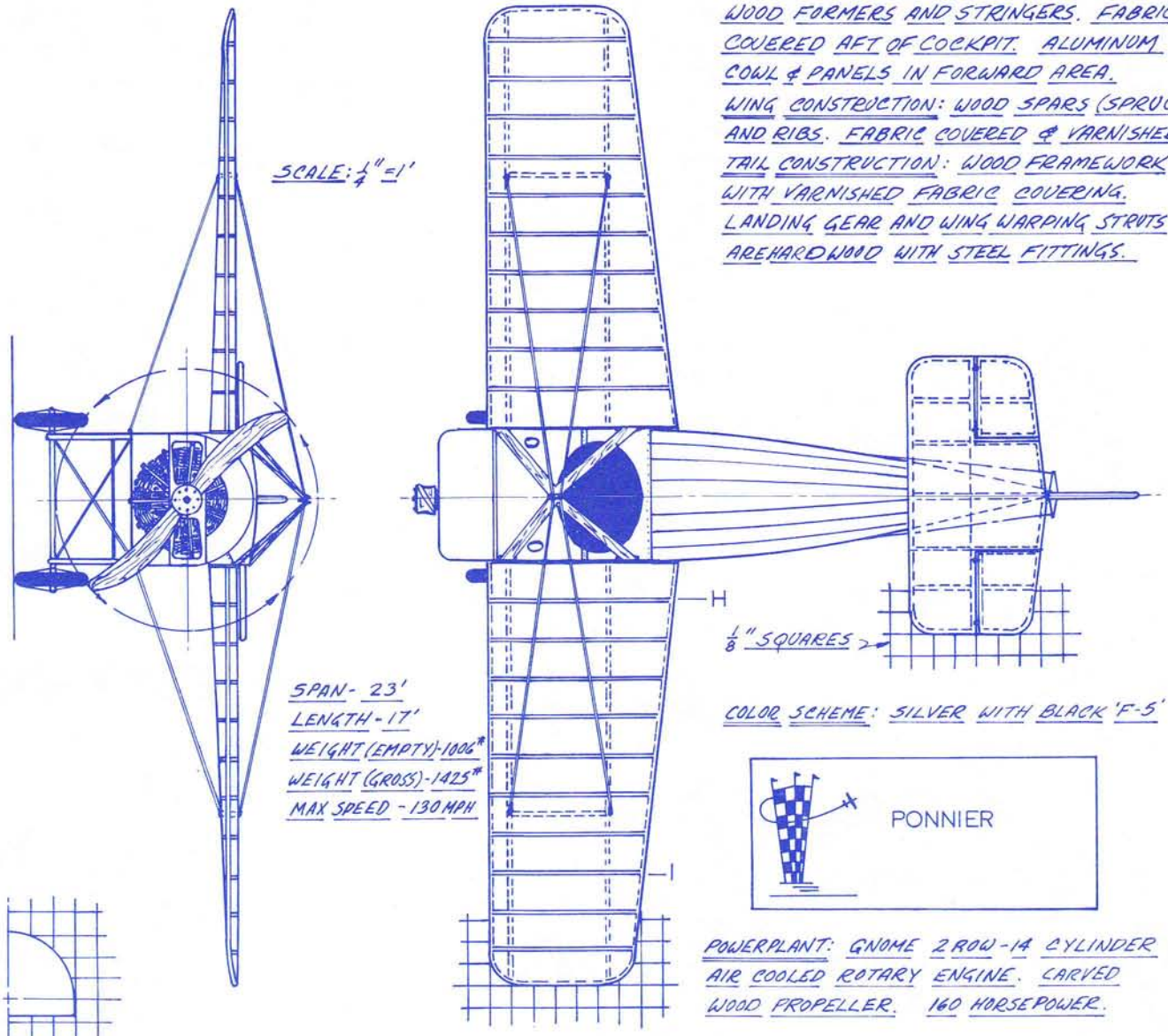


1914 VERSION

FLOWN BY C. HOWARD PIXTON. CRAFT WON THE 1914 SCHNEIDER TROPHY RACE. RACE WAS 28 LAPS COVERING 174 MILES AND WAS HELD AT MONACO. WINNING SPEED WAS 86.75 MILES PER HOUR. THIS PLANE STILL USED WING WARPING.

FUSELAGE CONSTRUCTION: ASH AND SPRUCE FRAME CROSS BRACED WITH MUSIC WIRE. WOOD FORMERS AND STRINGERS. FABRIC COVERED AFT OF COCKPIT. ALUMINUM COWL & PANELS IN FORWARD AREA.
WING CONSTRUCTION: WOOD SPARS (SPRUCE) AND RIBS. FABRIC COVERED & VARNISHED.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH VARNISHED FABRIC COVERING.
LANDING GEAR AND WING WARPING STRUTS ARE HARDWOOD WITH STEEL FITTINGS.

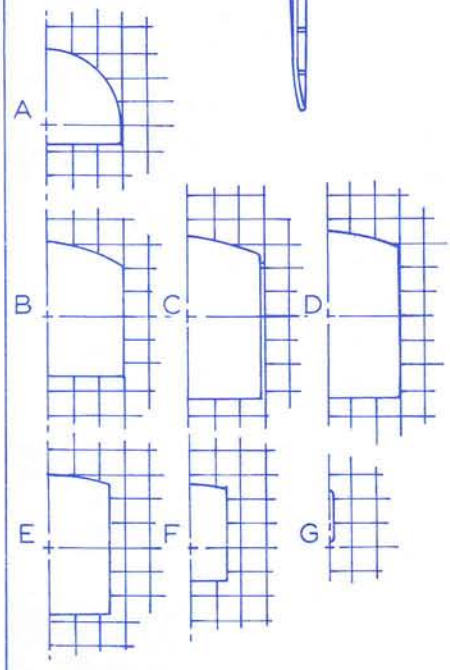
SCALE: 1/4" = 1'

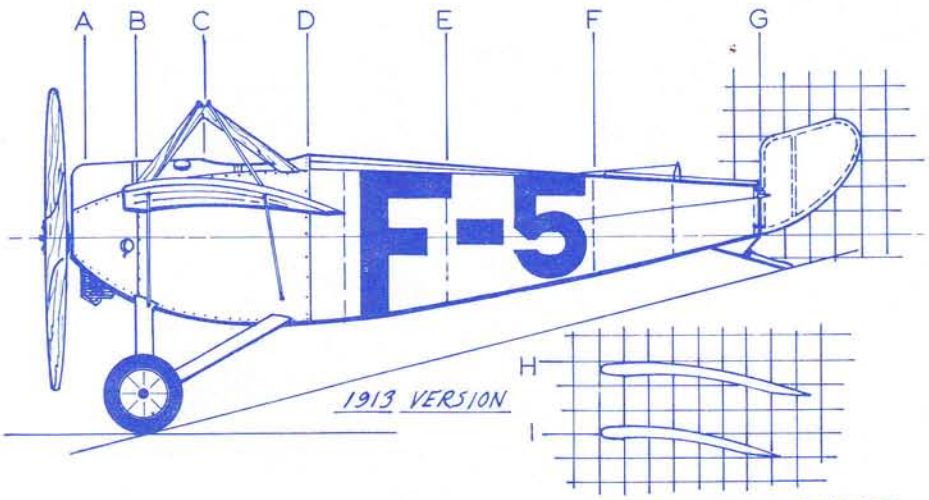


SPAN - 23'
LENGTH - 17'
WEIGHT (EMPTY) - 1006#
WEIGHT (GROSS) - 1425#
MAX SPEED - 130 MPH

COLOR SCHEME: SILVER WITH BLACK 'F-5'

POWERPLANT: GNOME 2 ROW - 14 CYLINDER AIR COOLED ROTARY ENGINE. CARVED WOOD PROPELLER. 160 HORSEPOWER.



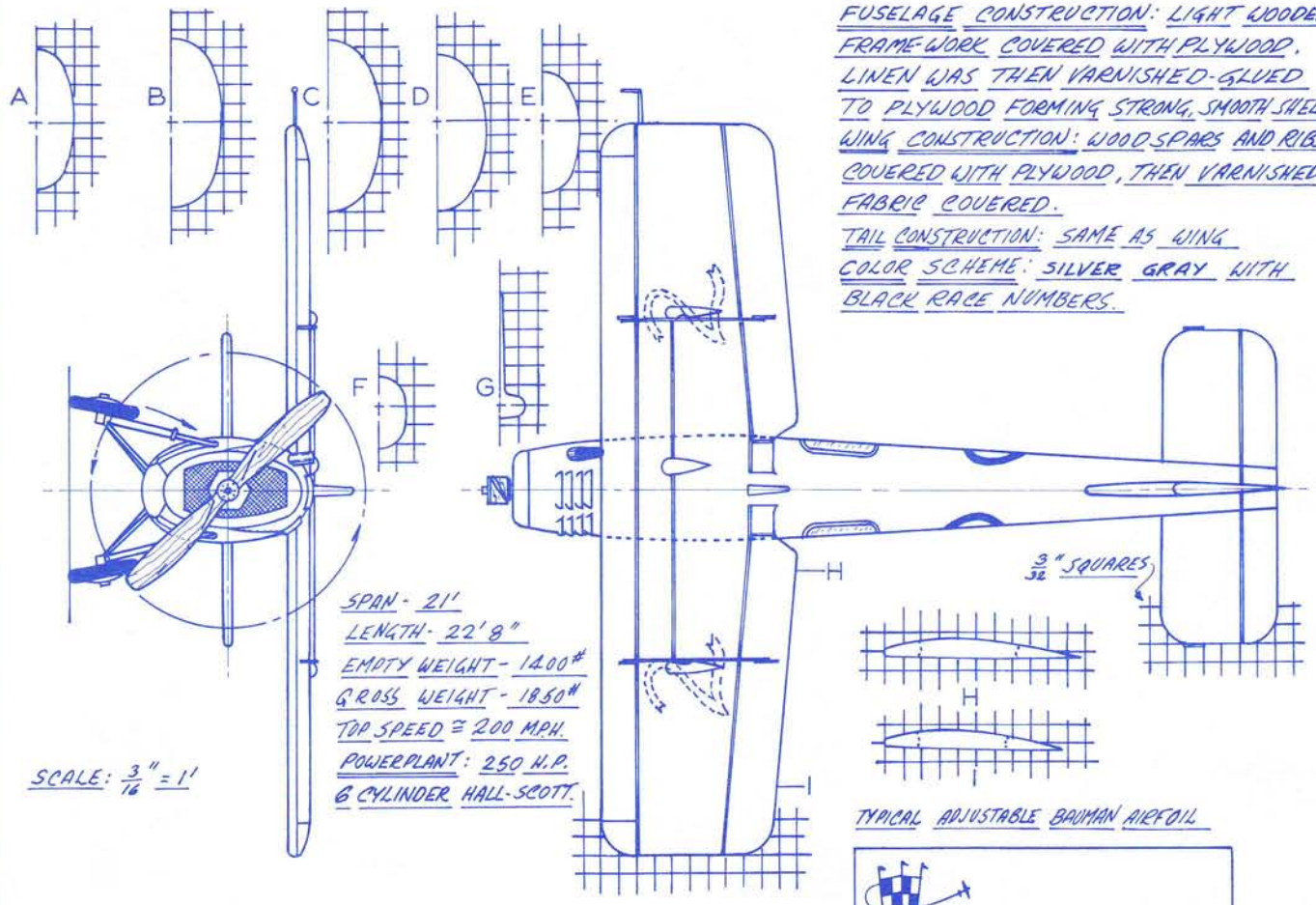


1913 VERSION

TYPICAL AIRFOIL SECTIONS.

THIS AIRCRAFT FLOWN BY EMILE VEDRINES TO SECOND PLACE IN 1913 JAMES GORDON BENNETT CUP RACE AT AN AVERAGES SPEED OF 123 M.P.H. PONNIER WAS VERY SIMILAR TO THE 1911 NIEUPORT & 1912 HANRIOT RACERS. CM

FUSELAGE CONSTRUCTION: LIGHT WOODEN FRAME-WORK COVERED WITH PLYWOOD. LINEN WAS THEN VARNISHED-GLUED TO PLYWOOD FORMING STRONG, SMOOTH SHELL.
WING CONSTRUCTION: WOOD SPARS AND RIBS COVERED WITH PLYWOOD, THEN VARNISHED FABRIC COVERED.
TAIL CONSTRUCTION: SAME AS WING
COLOR SCHEME: SILVER GRAY WITH BLACK RACE NUMBERS.



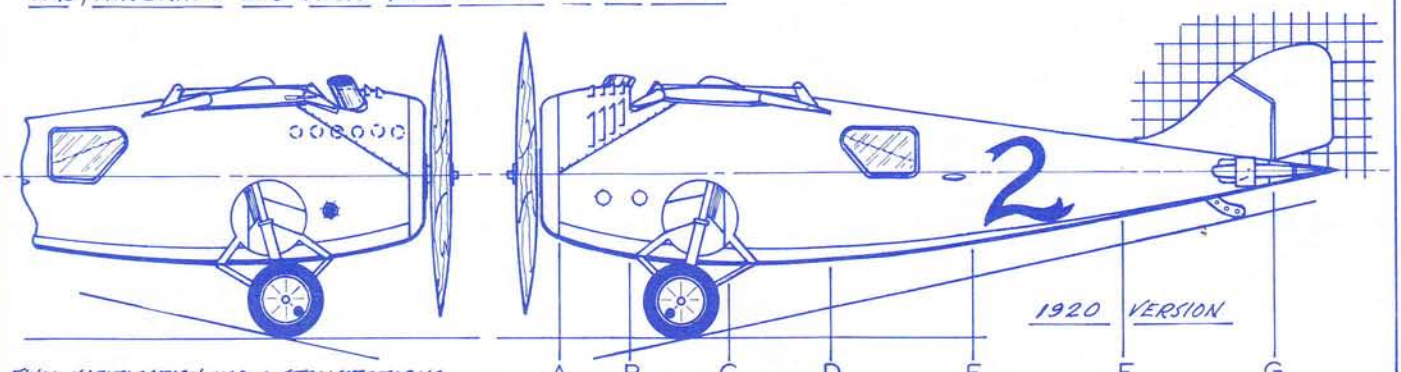
SPAN - 21'
LENGTH - 22'8"
EMPTY WEIGHT - 1400#
GROSS WEIGHT - 1850#
TOP SPEED = 200 M.P.H.
POWERPLANT: 250 H.P. 6 CYLINDER HALL-SCOTT.

SCALE: 3/16" = 1'

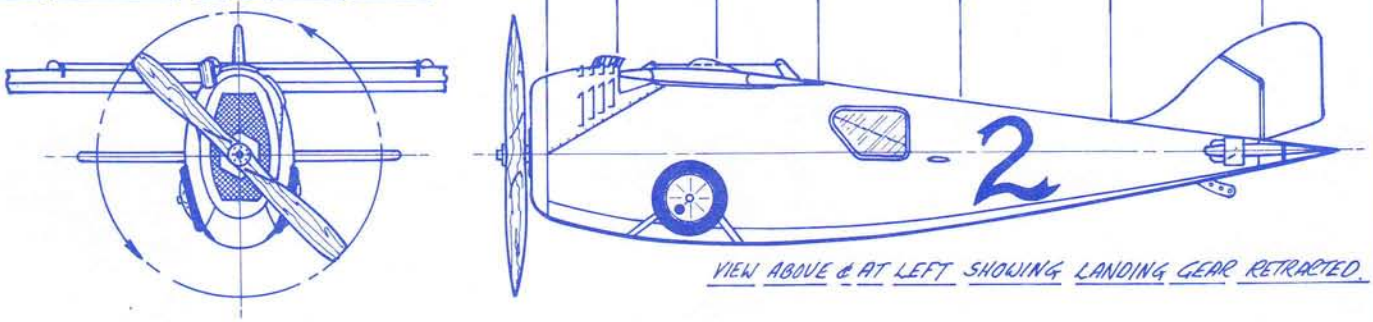
TYPICAL ADJUSTABLE BAUMAN AIRFOIL

DAYTON-WRIGHT

THE DAYTON-WRIGHT WAS DESIGNED BY MILTON C. BAUMANN AND ITS OFFICAL NAME WAS THE RB-1. WITH RETRACTABLE LANDING GEAR AND INTERCONNECTED VARIABLE CAMBER WING FOR LOW SPEED LANDINGS, AIRCRAFT WAS MANY YEARS AHEAD OF ITS TIME.



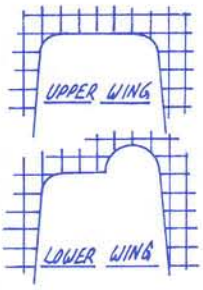
FINAL MODIFICATION HAD 6 STRAIGHT STACKS



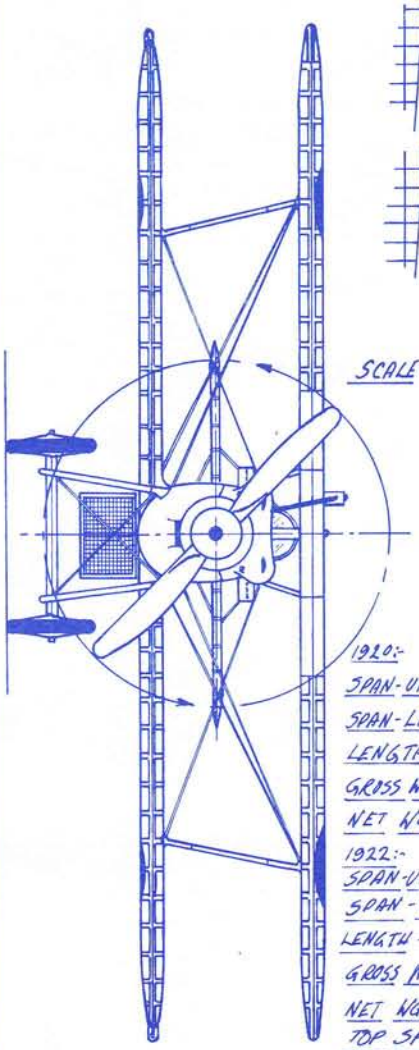
VIEW ABOVE & AT LEFT SHOWING LANDING GEAR RETRACTED.

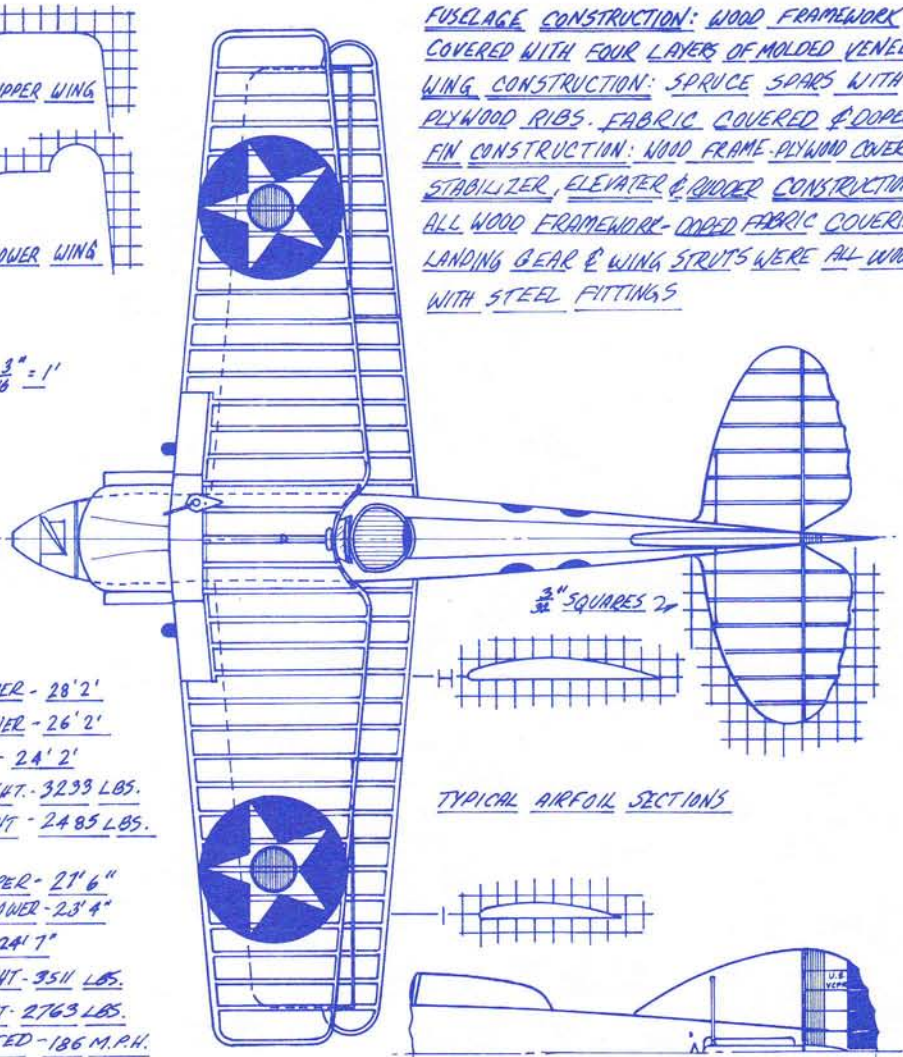
THE DAYTON-WRIGHT WAS ENTERED IN THE 1920 JAMES GORDON BENNETT CUP RACE. IT WAS PILOTED BY HOWARD RINEHART. DUE TO MECHANICAL PROBLEMS SHIP LEFT RACE AFTER FIRST LAP. RACE WAS AT ETAMPES, FRANCE.

FUSELAGE CONSTRUCTION: WOOD FRAMEWORK COVERED WITH FOUR LAYERS OF MOLDED VENEER. WING CONSTRUCTION: SPRUCE SPARS WITH PLYWOOD RIBS. FABRIC COVERED & DOPED. FIN CONSTRUCTION: WOOD FRAME-PLYWOOD COVERED STABILIZER, ELEVATER & RUDDER CONSTRUCTION: ALL WOOD FRAMEWORK-DOPED FABRIC COVERING. LANDING GEAR & WING STRUTS WERE ALL WOOD WITH STEEL FITTINGS



SCALE: $\frac{3}{16}$" = 1'





1920:-
SPAN-UPPER - 28'2'
SPAN-LOWER - 26'2'
LENGTH - 24'2'
GROSS WGHT. - 3293 LBS.
NET WGHT - 2485 LBS.

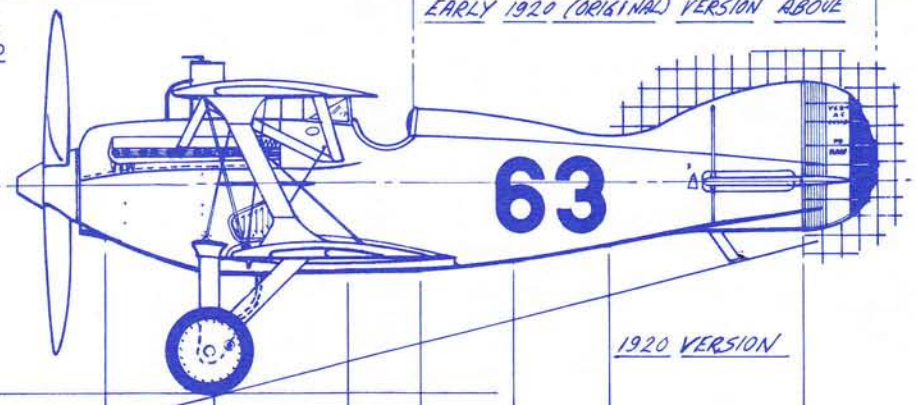
1922:-
SPAN-UPPER - 27'6"
SPAN - LOWER - 23'4"
LENGTH - 24'7"
GROSS WGHT - 3511 LBS.
NET WGHT - 2763 LBS.
TOP SPEED - 186 M.P.H.

TYPICAL AIRFOIL SECTIONS

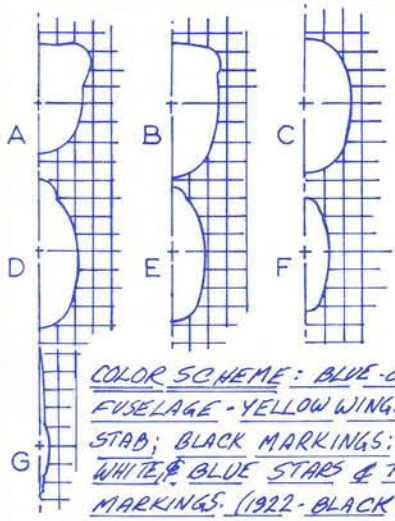
EARLY 1920 (ORIGINAL) VERSION ABOVE

POWERPLANT: PACKARD V-12 1A2025 ENGINE. 638 HORSE POWER. CARVED WOODEN PROPELLER.

VERVILLE-PACKARD
R-1



1920 VERSION

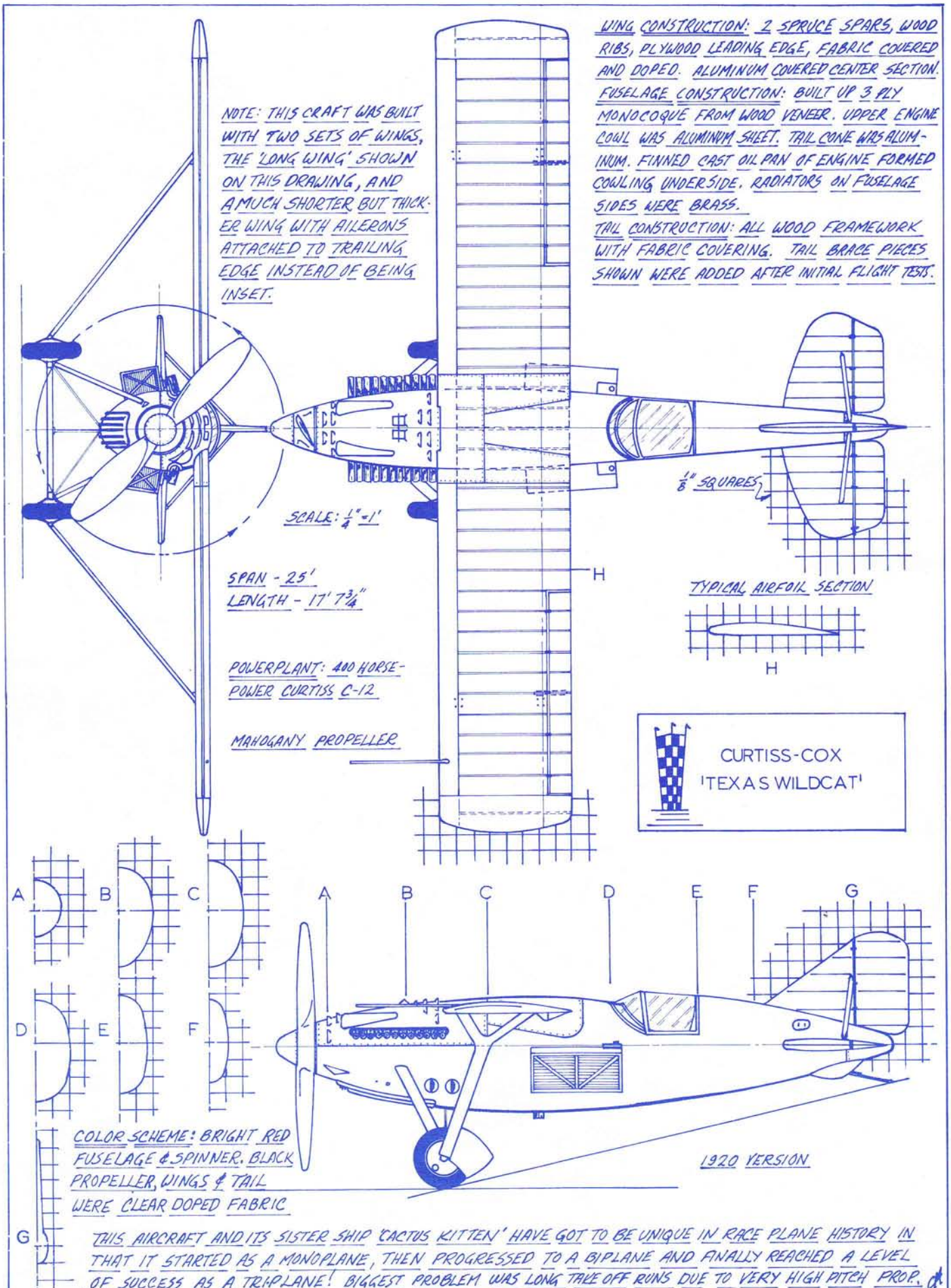


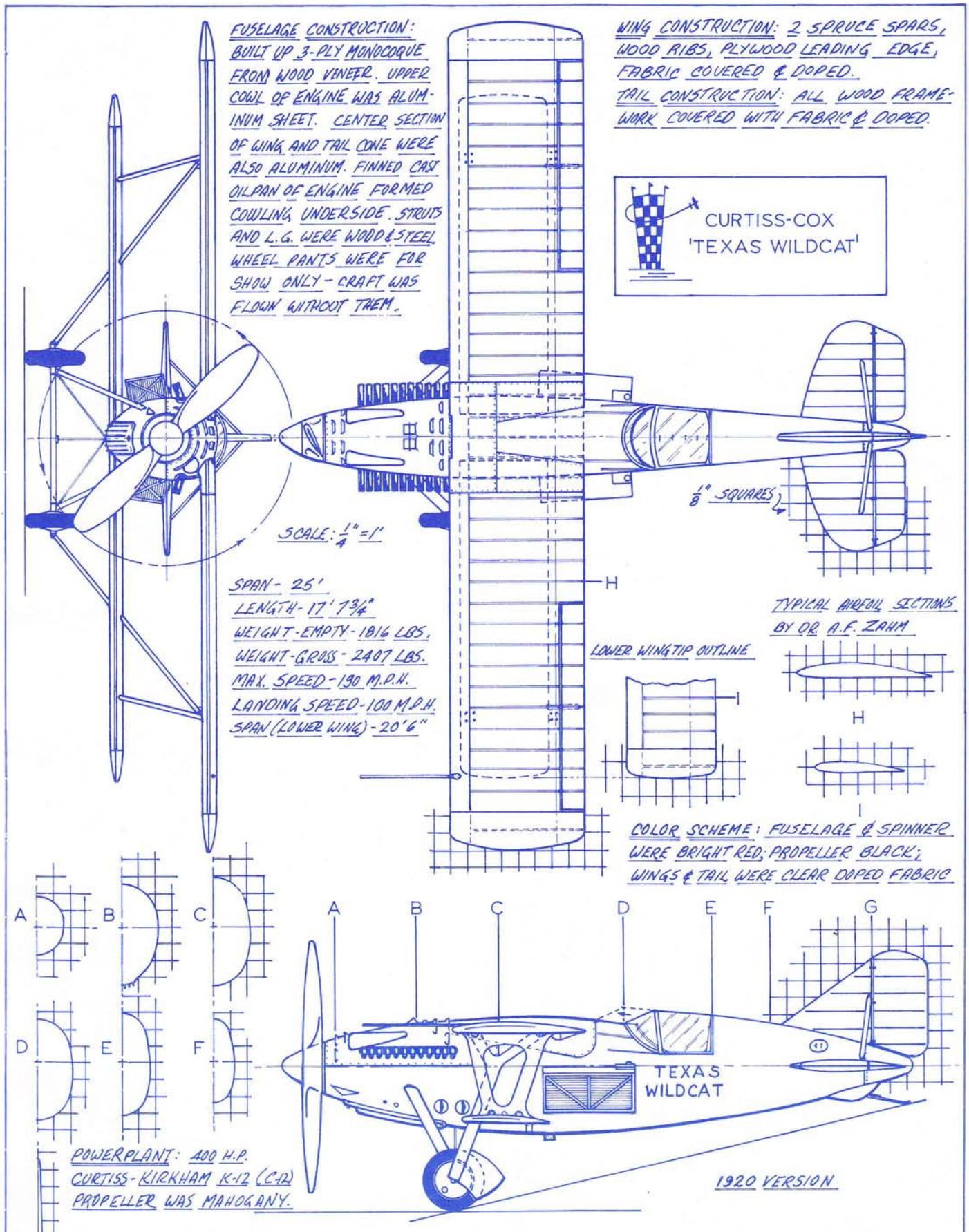


COLOR SCHEME: BLUE-GRAY FUSELAGE - YELLOW WINGS & STAB; BLACK MARKINGS; RED WHITE & BLUE STARS & TAIL MARKINGS. (1922 - BLACK STRUTS)

1922 VERSION
CAPT. C. MOSELY WON 1920 PULITZER @ 156.5 M.P.H. IN 1922 CRAFT TOOK 6TH @ 179 M.P.H. MOSELY WAS PILOT.

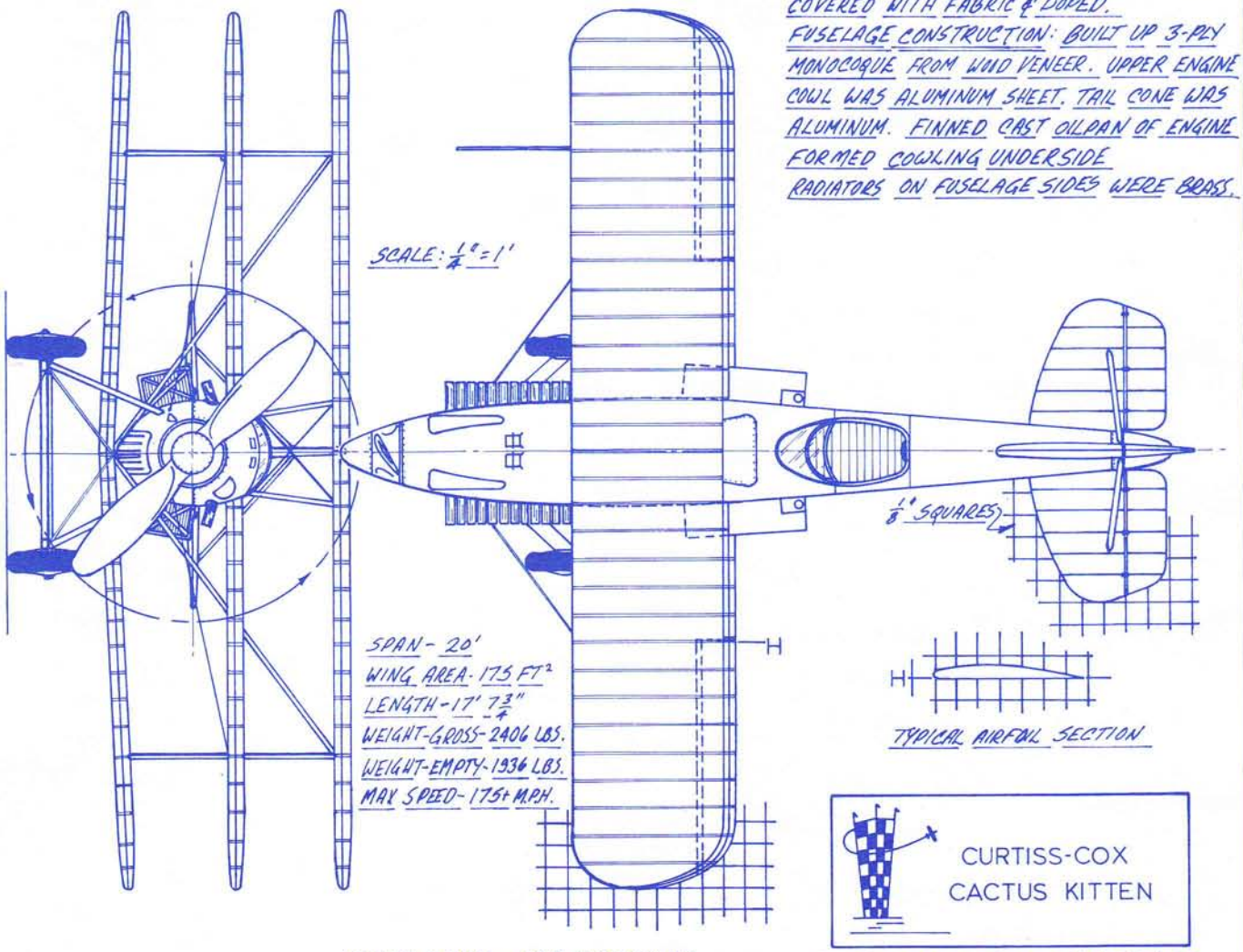
CM


NOTE: THIS CRAFT WAS BUILT WITH TWO SETS OF WINGS, THE 'LONG WING' SHOWN ON THIS DRAWING, AND A MUCH SHORTER BUT THICKER WING WITH AILERONS ATTACHED TO TRAILING EDGE INSTEAD OF BEING INSET.
WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD RIBS, PLYWOOD LEADING EDGE, FABRIC COVERED AND DOPED. ALUMINUM COVERED CENTER SECTION.
FUSELAGE CONSTRUCTION: BUILT UP 3 PLY MONOCOQUE FROM WOOD VENEER. UPPER ENGINE COWL WAS ALUMINUM SHEET. TAIL CONE WAS ALUMINUM. FINNED CAST OIL PAN OF ENGINE FORMED COWLING UNDERSIDE. RADIATORS ON FUSELAGE SIDES WERE BRASS.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK WITH FABRIC COVERING. TAIL BRACE PIECES SHOWN WERE ADDED AFTER INITIAL FLIGHT TESTS.
SCALE: 1/4" = 1'
1/8" SQUARES
SPAN - 25'
LENGTH - 17' 7 3/4"
POWERPLANT: 400 HORSEPOWER CURTISS C-12
MAHOGANY PROPELLER
H
TYPICAL AIRFOIL SECTION
H
CURTISS-COX
'TEXAS WILDCAT'
A
B
C
D
E
F
G
1920 VERSION
COLOR SCHEME: BRIGHT RED FUSELAGE & SPINNER. BLACK PROPELLER, WINGS & TAIL WERE CLEAR DOPED FABRIC
THIS AIRCRAFT AND ITS SISTER SHIP 'CACTUS KITTEN' HAVE GOT TO BE UNIQUE IN RACE PLANE HISTORY IN THAT IT STARTED AS A MONOPLANE, THEN PROGRESSED TO A BIPLANE AND FINALLY REACHED A LEVEL OF SUCCESS AS A TRIPLANE! BIGGEST PROBLEM WAS LONG TAKE OFF RUNS DUE TO VERY HIGH PITCH PROP.


FUSELAGE CONSTRUCTION: BUILT UP 3-PLY MONOCOQUE FROM WOOD VINEER. UPPER COWL OF ENGINE WAS ALUMINUM SHEET. CENTER SECTION OF WING AND TAIL CONE WERE ALSO ALUMINUM. FINNED CAST OILPAN OF ENGINE FORMED COWLING UNDERSIDE. STRUTS AND L.G. WERE WOOD & STEEL WHEEL PANTS WERE FOR SHOW ONLY - CRAFT WAS FLOWN WITHOUT THEM.
WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD RIBS, PLYWOOD LEADING EDGE, FABRIC COVERED & DOPED.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK COVERED WITH FABRIC & DOPED.
CURTISS-COX 'TEXAS WILDCAT'
SCALE: 1/4" = 1'
1/8" SQUARES
SPAN - 25'
LENGTH - 17' 7 3/4"
WEIGHT-EMPTY - 1816 LBS.
WEIGHT-GROSS - 2407 LBS.
MAX. SPEED - 190 M.P.H.
LANDING SPEED - 100 M.P.H.
SPAN (LOWER WING) - 20'6"
H
TYPICAL AIRFOIL SECTIONS BY OR. A.F. ZAHM
LOWER WINGTIP OUTLINE
I
COLOR SCHEME: FUSELAGE & SPINNER WERE BRIGHT RED; PROPELLER BLACK; WINGS & TAIL WERE CLEAR DOPED FABRIC
A B C D E F G
TEXAS WILDCAT
POWERPLANT: 400 H.P. CURTISS-KIRKHAM K-12 (C-12) PROPELLER WAS MAHOGANY.
1920 VERSION
THE DESIGN OF THIS AIRCRAFT WAS SPONSORED BY TEXAS MILLIONAIRE S.E.J. COX FOR INTENDED ENTRY IN 1920 GORDON BENNETT CUP RACE. TO HOT TO HANDLE, AIRCRAFT WAS DESTROYED IN CRASH IN FRANCE. PILOT WAS ROLAND ROHLFS WHO HAND PAINTED IN BLACK "TEXAS WILDCAT" ON FUSELAGE BEFORE FLIGHT.
CM

WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD RIBS, WOOD STRUTS, FABRIC COVERING.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK COVERED WITH FABRIC & DOPED.
FUSELAGE CONSTRUCTION: BUILT UP 3-PLY MONOCOQUE FROM WOOD VENEER. UPPER ENGINE COWL WAS ALUMINUM SHEET. TAIL CONE WAS ALUMINUM. FINNED CAST OILPAN OF ENGINE FORMED COWLING UNDERSIDE RADIATORS ON FUSELAGE SIDES WERE BRASS.

SCALE: $\frac{1}{4}$" = 1'



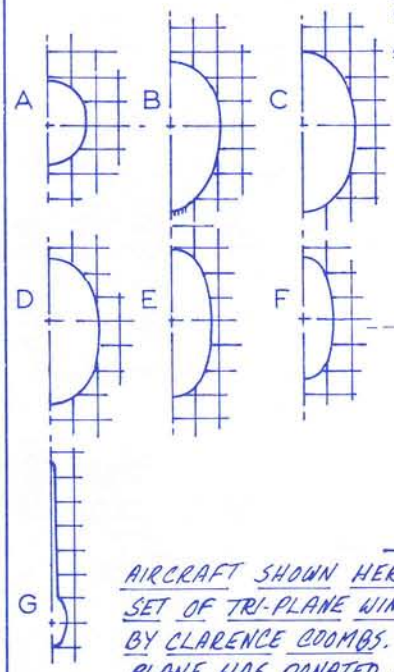
SPAN - 20'
WING AREA - 175 FT²
LENGTH - 17' 7 3/4"
WEIGHT-GROSS - 2406 LBS.
WEIGHT-EMPTY - 1936 LBS.
MAX SPEED - 175+ M.P.H.

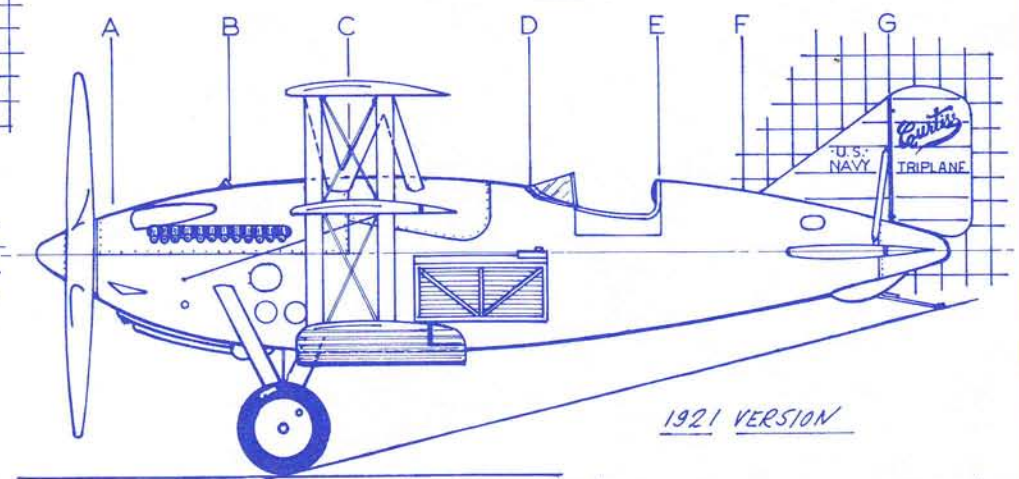
TYPICAL AIRFOIL SECTION

CURTISS-COX
CACTUS KITTEN

POWER PLANT - 435 HORSEPOWER CURTISS C-12 12 CYLINDER LIQUID COOLED ENGINE. CARVED MAHOGANY PROPELLER.

COLOR SCHEME: FUSELAGE & SPINNER WERE BRIGHT RED; PROPELLER BLACK; WINGS & TAIL WERE SILVER; TAIL MARKINGS BLACK.

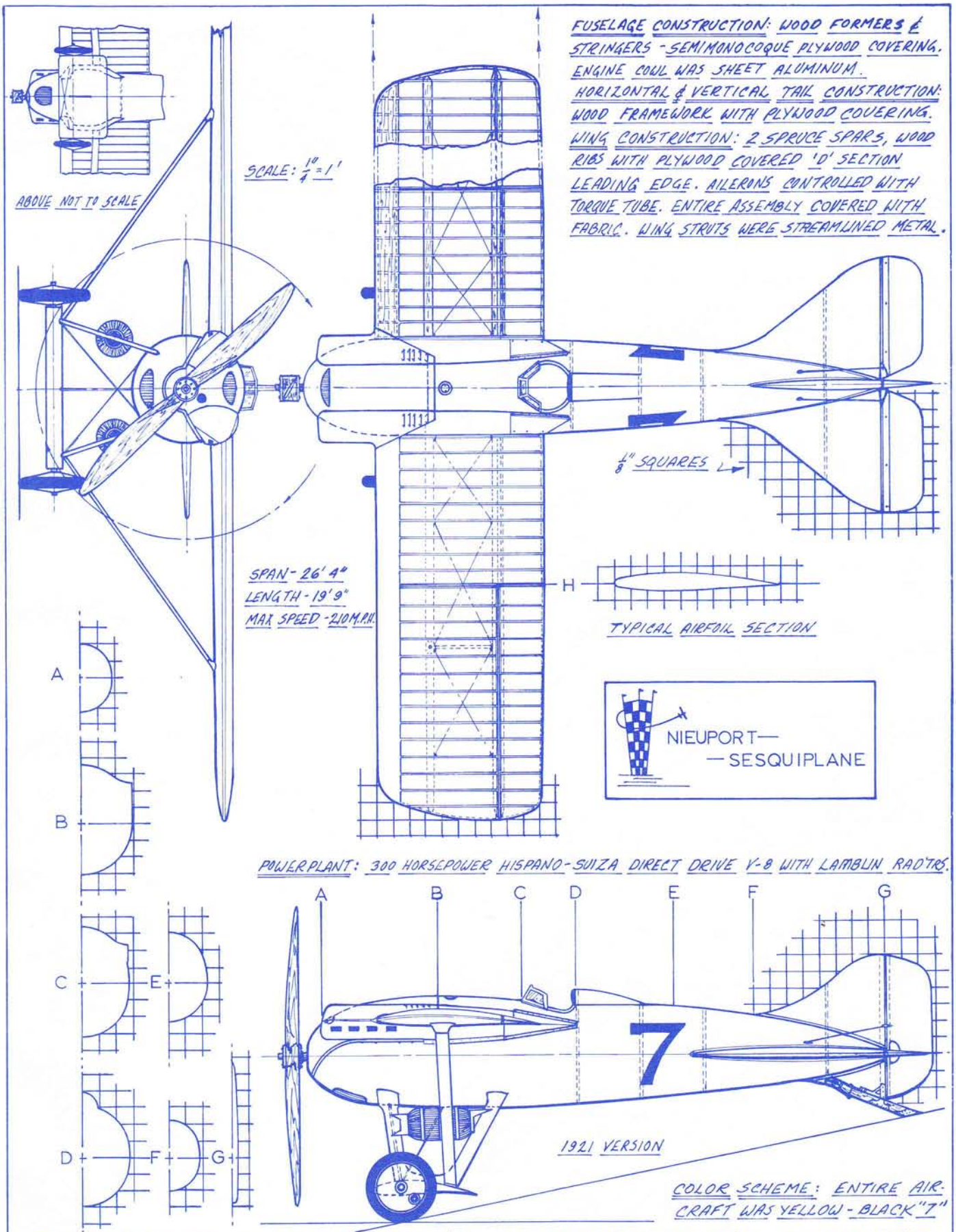




1921 VERSION

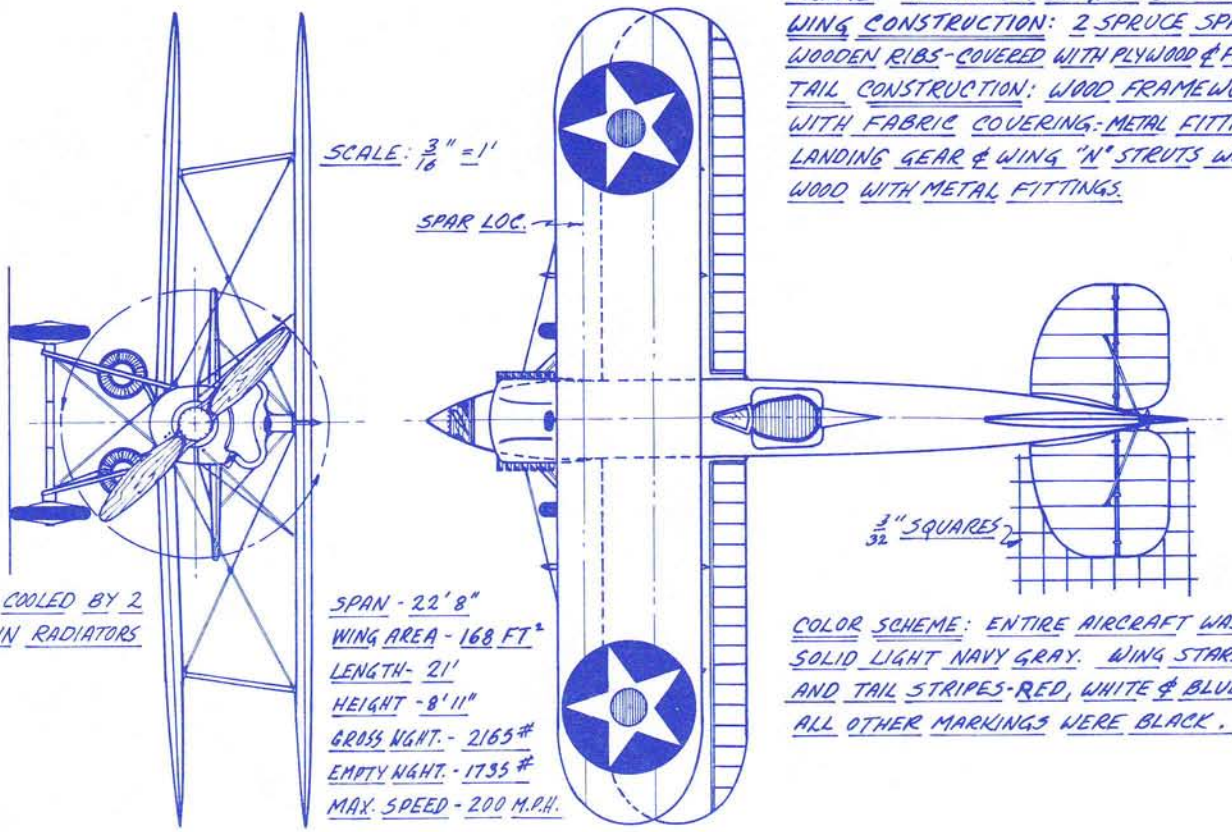
AIRCRAFT SHOWN HERE WAS BUILT FROM THE 1920 'CACTUS KITTEN' FUSELAGE & TAIL WITH A NEW SET OF TRI-PLANE WINGS. PLANE WAS FLOWN TO SECOND PLACE IN 1921 IN THE PULITZER TROPHY RACE BY CLARENCE COOMBS. SPEED WAS 170.26 M.P.H. IN THE 5 LAP 155.35 MILE RACE AT OMAHA, NEBRASKA. PLANE WAS DONATED BY S.E.A. COX TO THE U.S. NAVY AFTER THE RACE. BERT ACOSTA'S CURTISS R-1 WON.

CM



THIS AIRCRAFT WAS FIRST TO EXCEED 300 KM/HR. IN 1920 IT FLEW 187.8 M.P.H. BY 1921 REFINEMENTS HAD BROUGHT SPEED UP TO 206.9 M.P.H. THIS PLANE WAS FIRST OF A SERIES ENDING WITH THE 1923 NIEUPORT-DELAGE FLOWN BY SADI LACOINTE TO A WORLD SPEED RECORD OF 234.66 MPH.

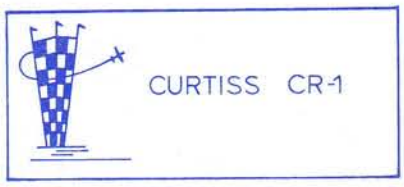
FUSELAGE CONSTRUCTION: PLYWOOD COVERING OVER BUILT UP WOOD FRAME: ALUMINUM ENGINE COWLING. WING CONSTRUCTION: 2 SPRUCE SPARS, WOODEN RIBS - COVERED WITH PLYWOOD & FABRIC. TAIL CONSTRUCTION: WOOD FRAMEWORK WITH FABRIC COVERING: METAL FITTINGS LANDING GEAR & WING "N" STRUTS WERE WOOD WITH METAL FITTINGS.

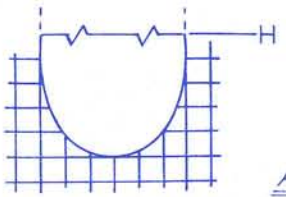


NOTE: COOLED BY 2 LAMBLIN RADIATORS

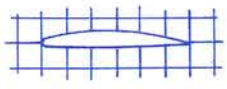
SPAN - 22'8"
WING AREA - 168 FT²
LENGTH - 21'
HEIGHT - 8'11"
GROSS WGHT. - 2165#
EMPTY WGHT. - 1735#
MAX. SPEED - 200 M.P.H.

COLOR SCHEME: ENTIRE AIRCRAFT WAS SOLID LIGHT NAVY GRAY. WING STARS AND TAIL STRIPES - RED, WHITE & BLUE ALL OTHER MARKINGS WERE BLACK.





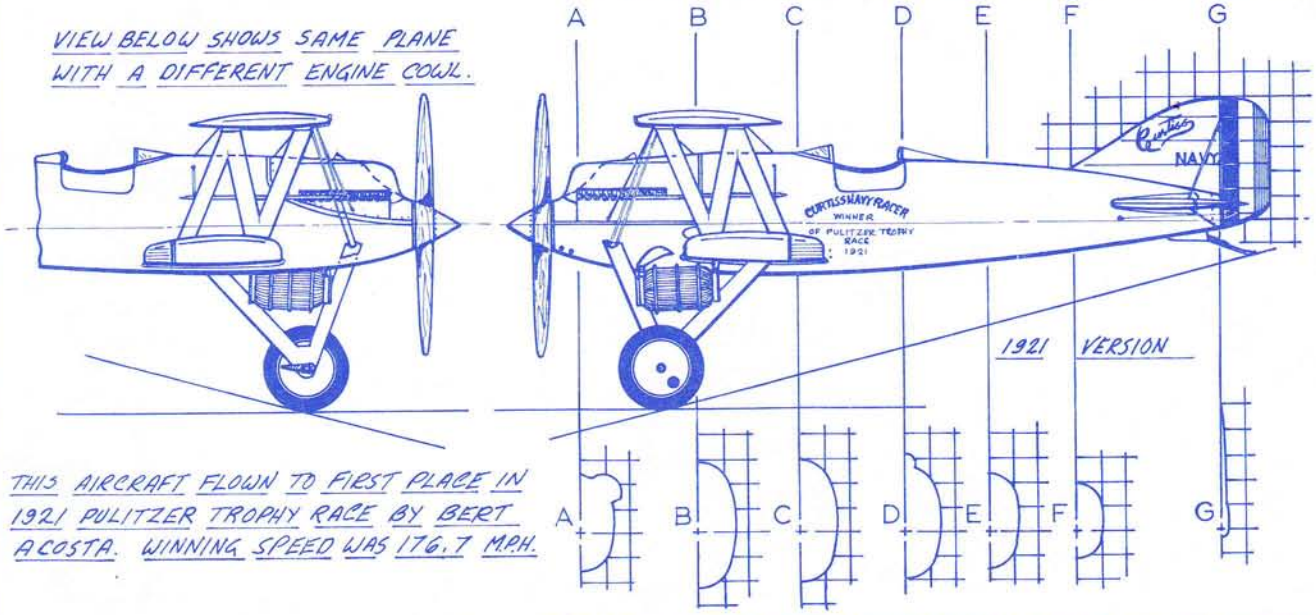
VIEW ABOVE APPLIES TO UPPER & LOWER WING TIPS.



TYPICAL CURTISS RACING AIRFOIL

POWERPLANT: 405 HORSEPOWER CURTISS D-12 12 CYLINDER VEE-TYPE CARVED WOOD PROPELLER (NATURAL WOOD FINISH).

VIEW BELOW SHOWS SAME PLANE WITH A DIFFERENT ENGINE COWL.



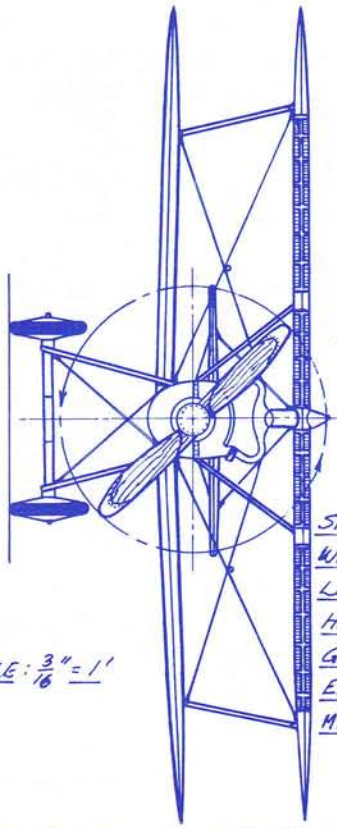
THIS AIRCRAFT FLOWN TO FIRST PLACE IN 1921 PULITZER TROPHY RACE BY BERT ACOSTA. WINNING SPEED WAS 176.7 MPH.

THE ABOVE DESIGN WAS THE FIRST OF THE RACING CURTISS BIPLANES OF THE 1920's - ALL CONSTRUCTED ALIKE! CK

FUSELAGE CONSTRUCTION: ALUMINUM ENGINE COWLING. WOOD FORMERS & FRAMEWORK COVERED WITH PLYWOOD. WING CONSTRUCTION: BRASS RADIATORS ON TOP WING. 2 SPRUCE SPARS. WOOD RIBS WITH PLYWOOD & FABRIC COVERING. TAIL CONSTRUCTION: WOOD & METAL FRAMEWORK WITH FABRIC COVERING. LANDING GEAR & "N" STRUTS WERE WOOD.

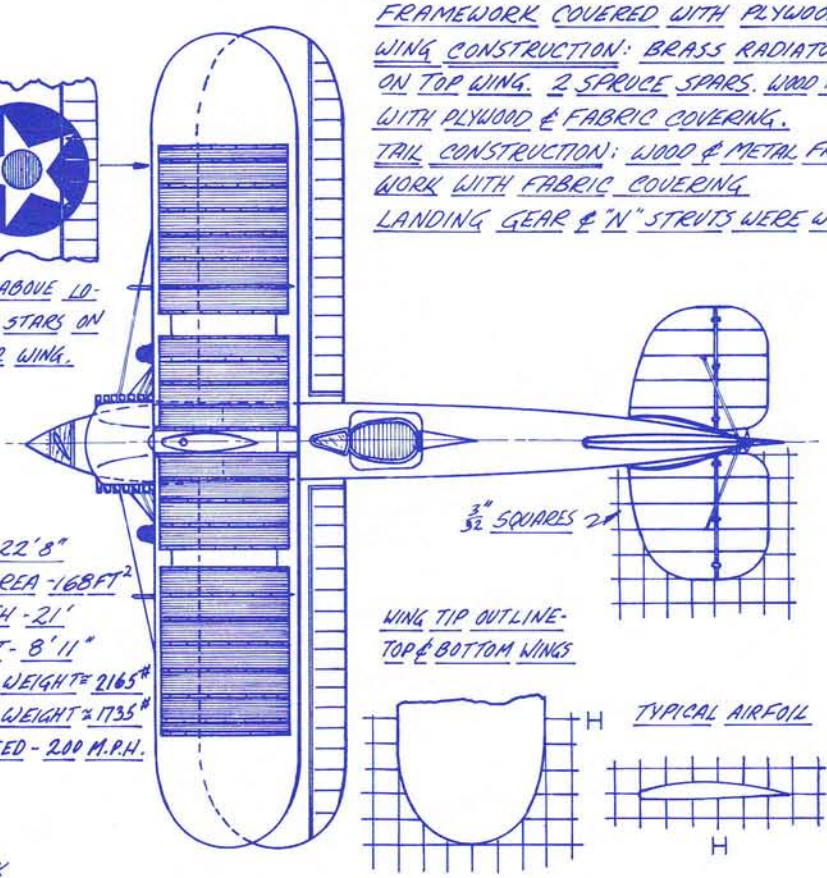


VIEW ABOVE LOCATES STARS ON LOWER WING.



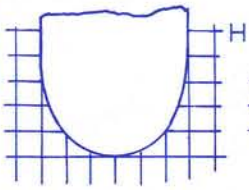
SCALE: $\frac{3}{16}$" = 1'

SPAN - 22'8"
WING AREA - 168FT²
LENGTH - 21'
HEIGHT - 8'11"
GROSS WEIGHT = 2165#
EMPTY WEIGHT = 1735#
MAX. SPEED - 200 M.P.H.



$\frac{3}{32}$ SQUARES

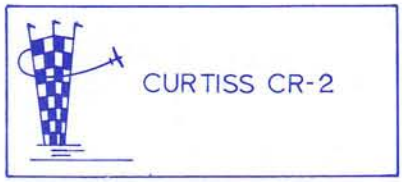
WING TIP OUTLINE - TOP & BOTTOM WINGS



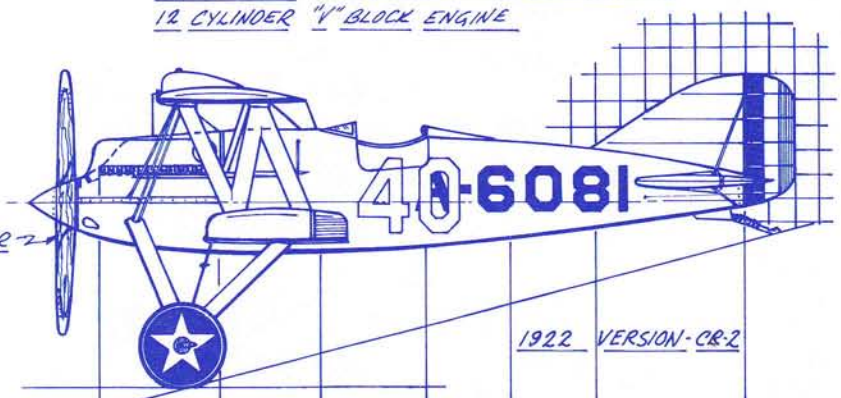
TYPICAL AIRFOIL

COLOR SCHEME: NAVY GRAY O'ALL; BLACK NUMERALS - WHITE RACE NUMBERS.

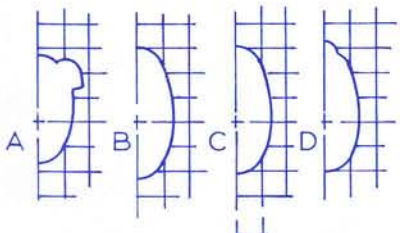
POWERPLANT: 405 HORSEPOWER CURTISS D-12 12 CYLINDER "V" BLOCK ENGINE

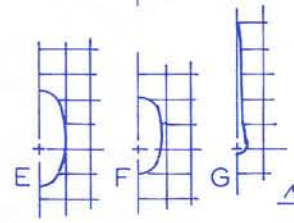


CARVED WOOD PROPELLER

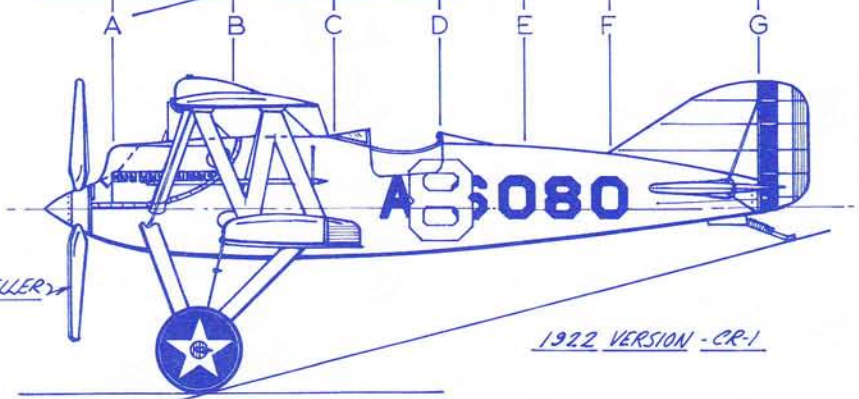


1922 VERSION - CR-2





METAL PROPELLER



1922 VERSION - CR-1

IN 1922 PULITZER TROPHY RACE A-6081 FLOWN BY LT. H.J. BROW TOOK 3RD PLACE AT 193.2 M.P.H. CR-1 MODIFIED TO CR-2 STANDARDS TOOK 4TH PLACE AT 188 M.P.H. FLOWN BY LT. ALFORD WILLIAMS. 155.35 MILE RACE AT DETROIT, MI.

FUSELAGE CONSTRUCTION: BASIC FRAMEWORK WAS WELDED STEEL TUBING. FORMERS & STRINGERS OF REAR FUSELAGE WERE WOOD-FABRIC COVERED. FORWARD OF COCKPIT WAS ALUMINUM COVERED.
WING CONSTRUCTION: PLYWOOD COVERED WOOD SPARS AND RIBS.
TAIL CONSTRUCTION: FABRIC COVERED WELDED STEEL TUBE FRAMEWORK.
WHEEL PANTS WERE HAMMERED ALUMINUM SHEET. WHEEL PANTS ARE THE FIRST ON RECORD FOR A RACING PLANE.

SCALE: $\frac{3}{16}$" = 1'

PLYWOOD

VIEW BELOW OF LOWER WING-TIP OUTLINE

I

PLYWOOD COVERING

FABRIC - REAR SPAR AFT

$\frac{3}{32}$" SQUARES

H

MAIN RIB LOCATIONS

I

TYPICAL LOWER WING AIRFOIL SECTION

H

TYPICAL MAIN WING AIRFOIL SECTION (M-80)

DUE TO BEING CONSTRUCTED ENTIRELY FROM PHOTOS DRAWING IS PROVISIONAL.

SPAN - 30'
LENGTH - 24'
LENGTH (WITH FLOATS) - 28'5"
GROSS WEIGHT - 3000 LBS.
MAX. SPEED ≅ 209 M.P.H.

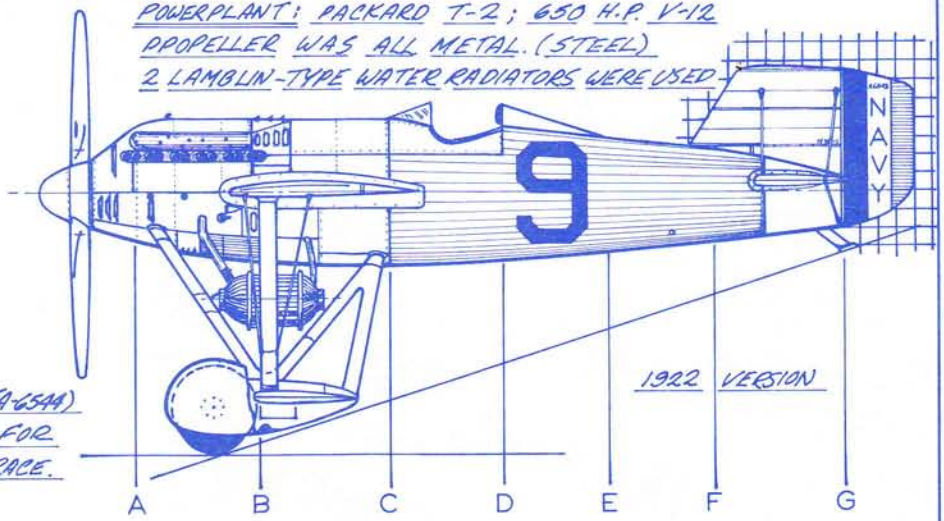
COLOR SCHEME: ENTIRE AIRCRAFT WAS SOLID LIGHT GRAY. RACING NUMERAL "9" WAS BLACK; RED, WHITE & BLUE RUDDER.



NOTE: DUE TO CRAFT BEING ENGINE TEST BED COWLING CONFIGURATION VARIED FROM TIME TO TIME.

POWERPLANT: PACKARD T-2; 650 H.P. V-12
PROPELLER WAS ALL METAL. (STEEL)
2 LAMBLIN-TYPE WATER RADIATORS WERE USED

A B C D E F



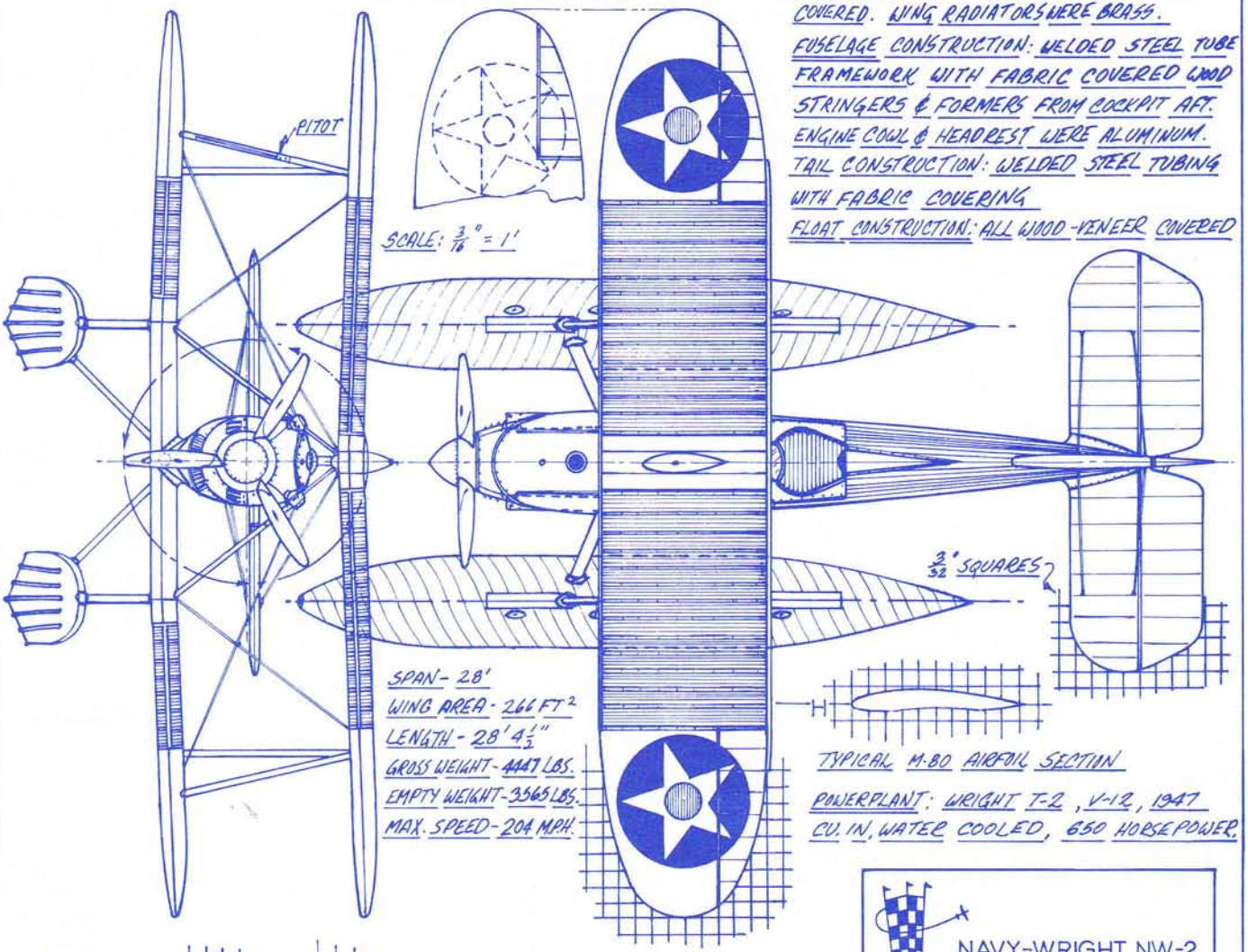
SISTER SHIP OF THIS CRAFT (A-6544) REBUILT AS NW-2 WITH FLOATS FOR 1923 SCHNEIDER TROPHY RACE.

G

THIS AIRCRAFT WAS BUILT AS A FLYING TEST BED FOR THE PACKARD T-2 ENGINE. NAMED "MYSTERY" IT WAS INTENDED FOR THE 1922 PULITZER RACE. HOWEVER IT WAS DESTROYED IN AN ACCIDENT WHILE FLOWN BY USMC LT. SAUNDERSON BEFORE IT COULD PROVE ITSELF. IT'S FORM-SESQUIPLANE.

NOTE LOWER WING AILERON IS SHORTER THAN THE UPPER WING AILERON.

WING CONSTRUCTION: PLYWOOD COVERING OVER WOOD RIBS & SPARS. AILERONS WERE FABRIC COVERED. WING RADIATORS WERE BRASS.
FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK WITH FABRIC COVERED WOOD STRINGERS & FORMERS FROM COCKPIT AFT. ENGINE COWL & HEADREST WERE ALUMINUM.
TAIL CONSTRUCTION: WELDED STEEL TUBING WITH FABRIC COVERING
FLOAT CONSTRUCTION: ALL WOOD - VENEER COVERED



SPAN - 28'
WING AREA - 266 FT²
LENGTH - 28' 4½"
GROSS WEIGHT - 4447 LBS.
EMPTY WEIGHT - 3565 LBS.
MAX. SPEED - 204 M.P.H.

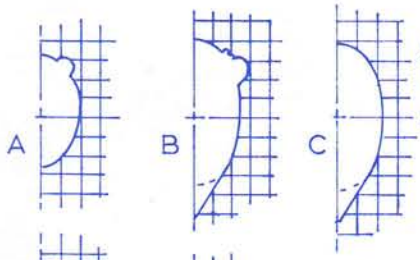
TYPICAL M-80 AIRFOIL SECTION

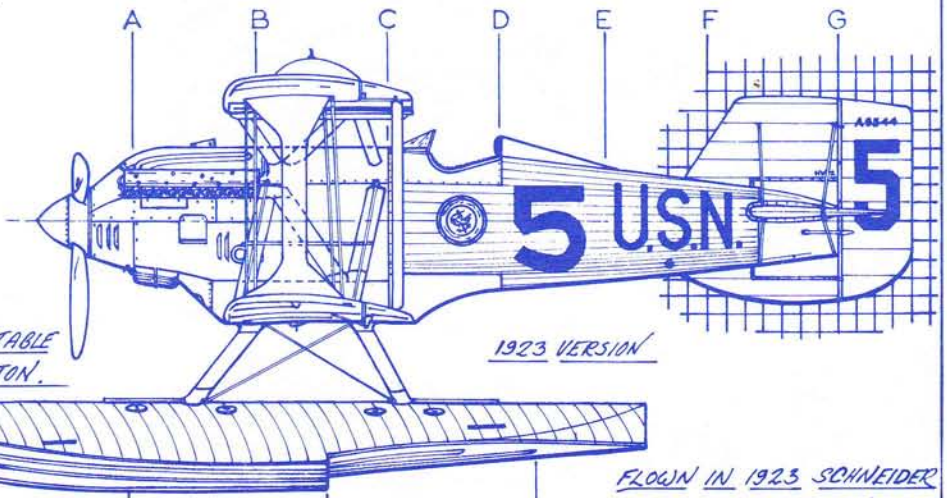
POWERPLANT: WRIGHT T-2, V-12, 1947 CU. IN. WATER COOLED, 650 HORSEPOWER.



NAVY-WRIGHT NW-2

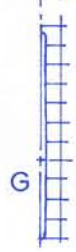
COLOR SCHEME: WINGS & TAIL WERE SILVER EXCEPT WHITE RUDDER. FUSELAGE, FLOATS & STRUTS MEDIUM GRAY. MARKINGS WERE BLACK.



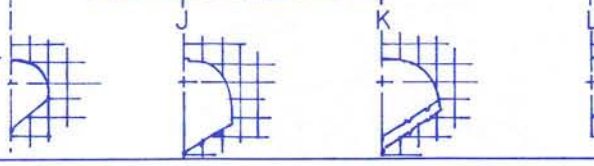


3 BLADED GROUND ADJUSTABLE ALUMINUM PROP. BY HAMILTON.

1923 VERSION



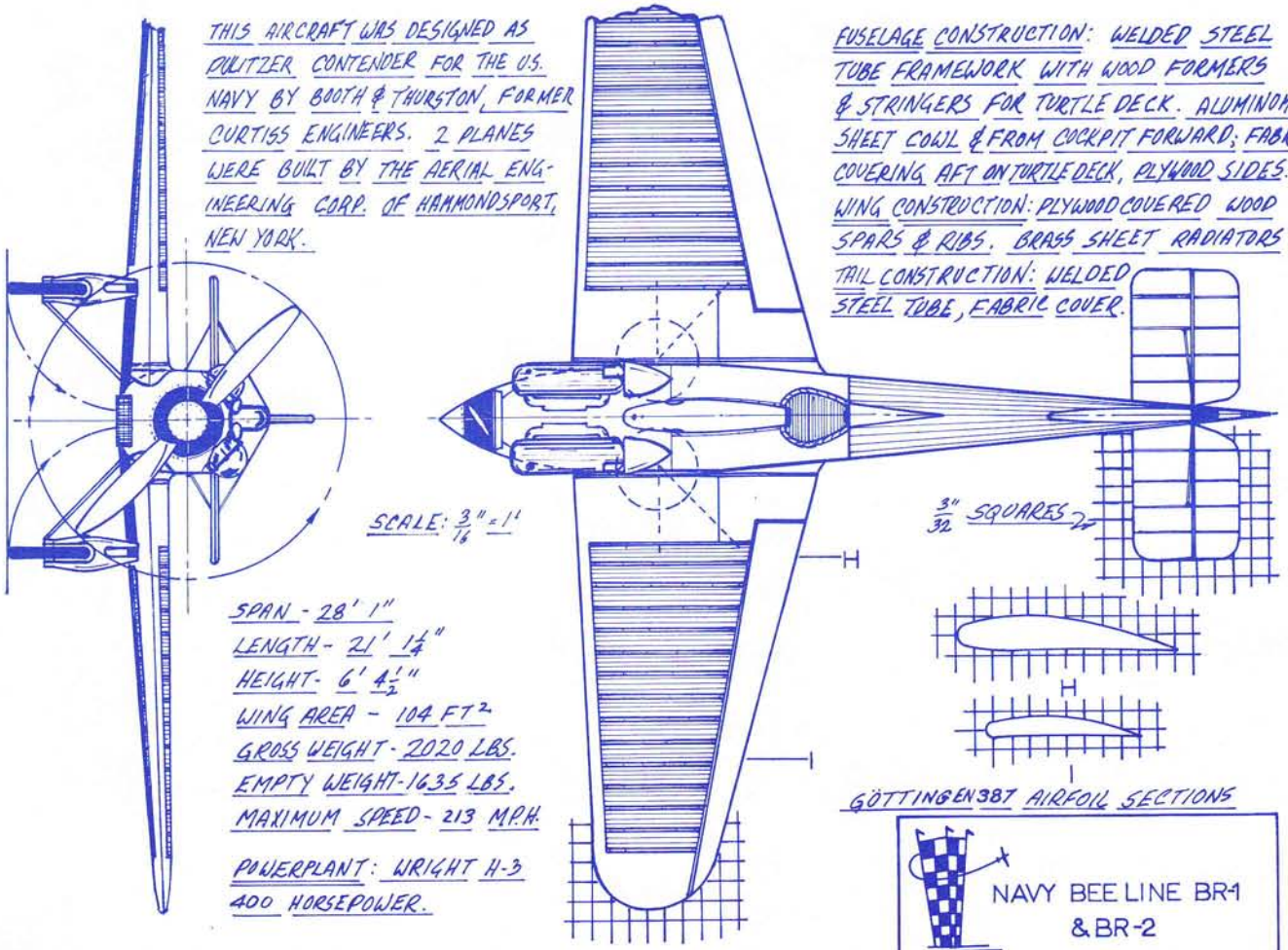
DESIGNED BY CDR. J.C. HUNSAKER BUREAU OF AERONAUTICS, U.S.N. BUILT BY THE WRIGHT CORP.



FLOWN IN 1923 SCHNEIDER RACE AT COWES, ENGLAND BY LT. GORTON U.S.N. PLANE'S ENGINE EXPLODED DURING TRIALS AND AIRCRAFT DESTROYED.

THIS AIRCRAFT WAS DESIGNED AS QUILTZER CONTENDER FOR THE U.S. NAVY BY BOOTH & THURSTON, FORMER CURTISS ENGINEERS. 2 PLANES WERE BUILT BY THE AERIAL ENGINEERING CORP. OF HAMMONDSPORT, NEW YORK.

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK WITH WOOD FORMERS & STRINGERS FOR TURTLE DECK. ALUMINUM SHEET COWL & FROM COCKPIT FORWARD; FABRIC COVERING AFT ON TURTLE DECK, PLYWOOD SIDES.
WING CONSTRUCTION: PLYWOOD COVERED WOOD SPARS & RIBS. BRASS SHEET RADIATORS
TAIL CONSTRUCTION: WELDED STEEL TUBE, FABRIC COVER.



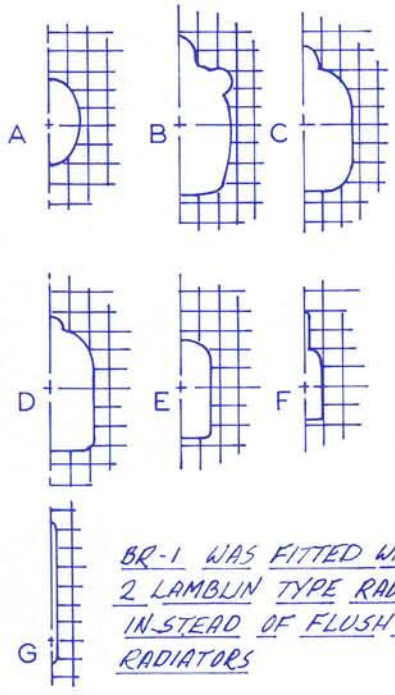
SPAN - 28' 1"
LENGTH - 21' 1¼"
HEIGHT - 6' 4½"
WING AREA - 104 FT²
GROSS WEIGHT - 2020 LBS.
EMPTY WEIGHT - 1635 LBS.
MAXIMUM SPEED - 213 M.P.H.

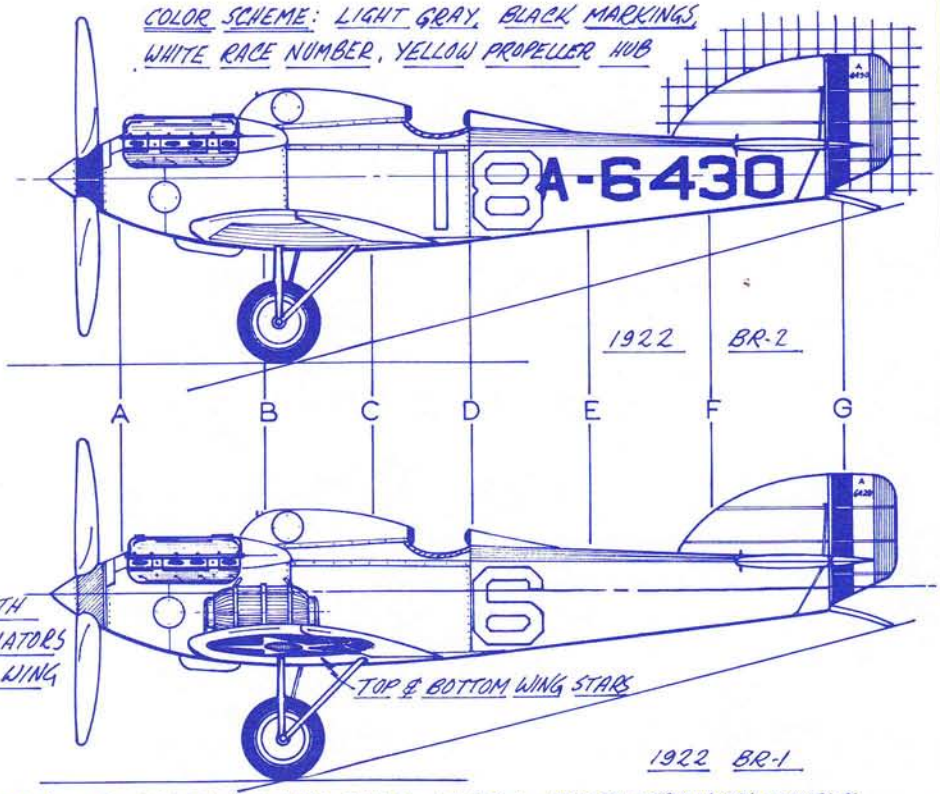
POWERPLANT: WRIGHT H-3 400 HORSEPOWER.

GÖTTINGEN 387 AIRFOIL SECTIONS

NAVY BEE LINE BR-1 & BR-2

COLOR SCHEME: LIGHT GRAY, BLACK MARKINGS, WHITE RACE NUMBER, YELLOW PROPELLER HUB

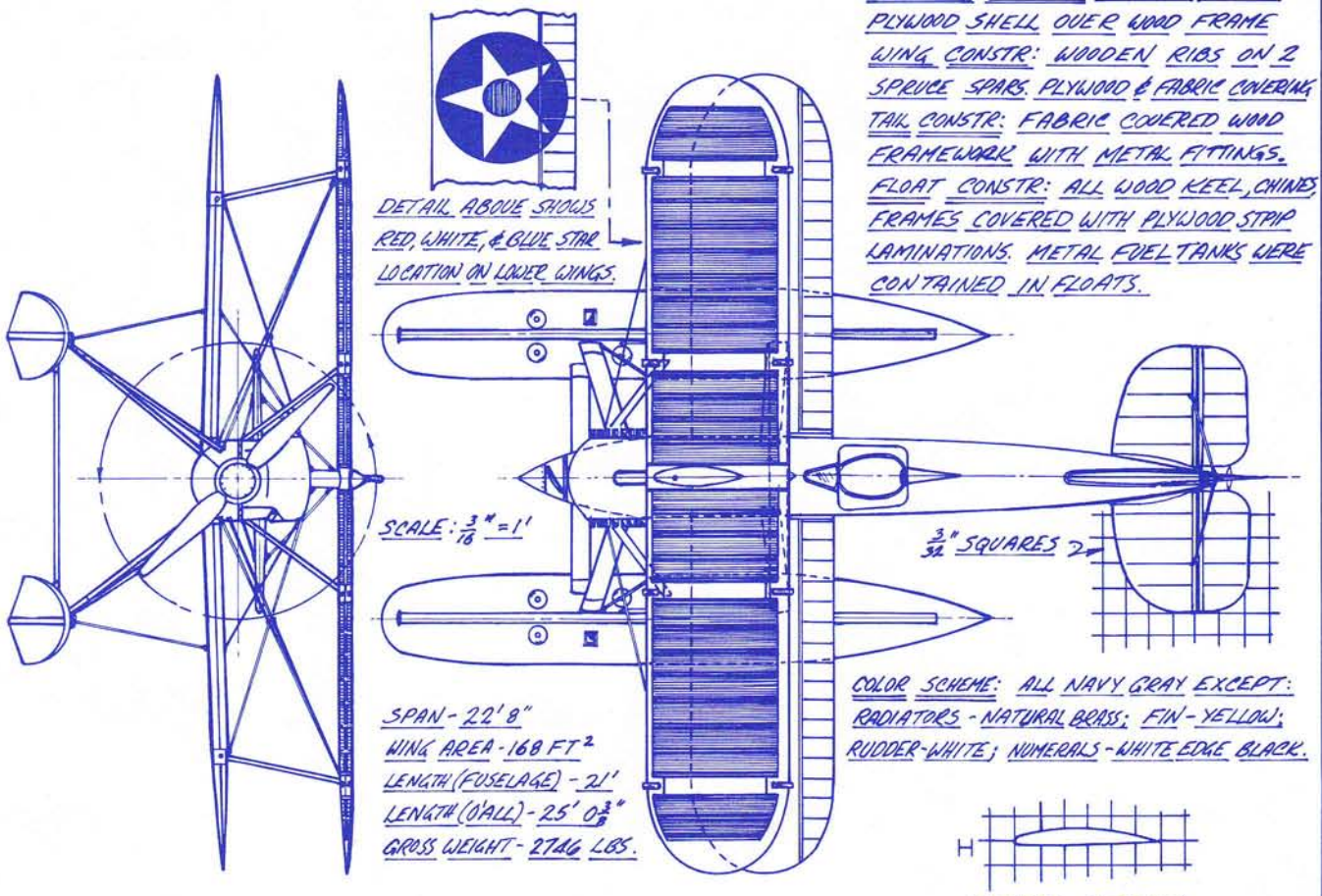




BR-1 WAS FITTED WITH 2 LAMBLIN TYPE RADIATORS IN-STEAD OF FLUSH WING RADIATORS

LT. RITTENHOUSE U.S.N. WAS PILOT OF BR-2, LT. CALLAWAY WAS PILOT OF BR-1. DUE TO MECHANICAL TROUBLES NEITHER CRAFT RACED.

CM



FUSELAGE CONSTR: ALUMINUM COWL. PLYWOOD SHELL OVER WOOD FRAME
WING CONSTR: WOODEN RIBS ON 2 SPRUCE SPARS. PLYWOOD & FABRIC COVERING
TAIL CONSTR: FABRIC COVERED WOOD FRAMEWORK WITH METAL FITTINGS.
FLOAT CONSTR: ALL WOOD KEEL, CHINES, FRAMES COVERED WITH PLYWOOD STRIP LAMINATIONS. METAL FUEL TANKS WERE CONTAINED IN FLOATS.

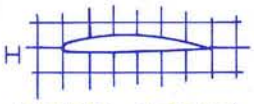
DETAIL ABOVE SHOWS RED, WHITE, & BLUE STAR LOCATION ON LOWER WINGS.

SCALE: $\frac{3}{16}$" = 1'

$\frac{3}{32}$" SQUARES

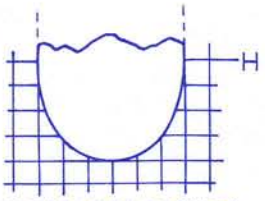
SPAN - 22' 8"
WING AREA - 168 FT²
LENGTH (FUSELAGE) - 21'
LENGTH (O'ALL) - 25' $0\frac{3}{8}$"
GROSS WEIGHT - 2746 LBS.

COLOR SCHEME: ALL NAVY GRAY EXCEPT: RADIATORS - NATURAL BRASS; FIN - YELLOW; RUDDER - WHITE; NUMERALS - WHITE EDGE BLACK.



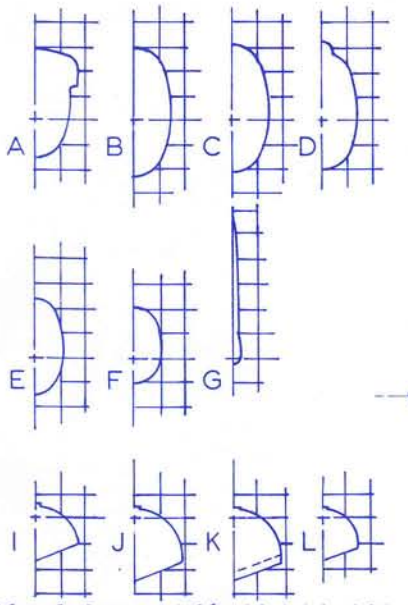
TYPICAL SECTION - CURTISS RACING AIRFOIL

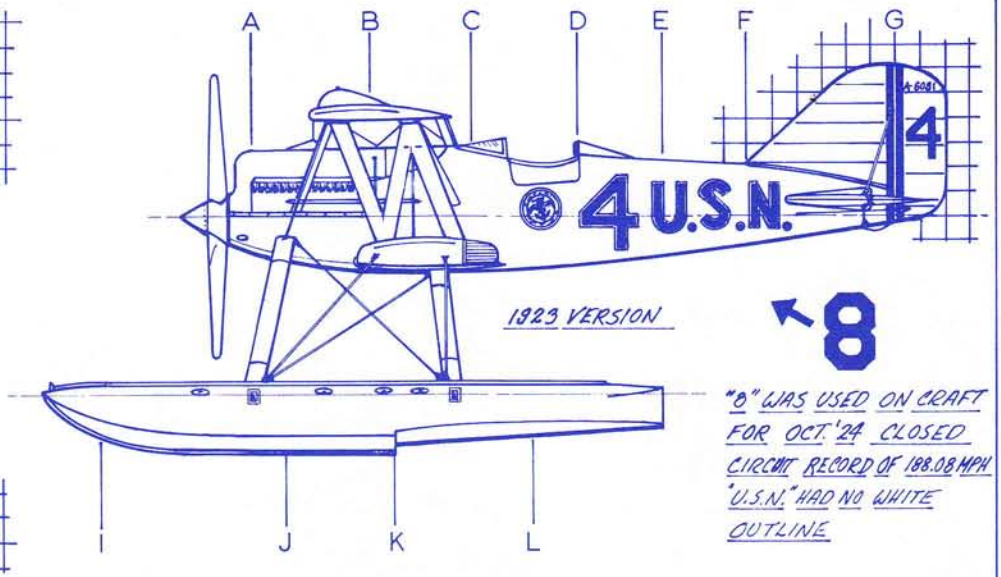
POWERPLANT: CURTISS D-12 12 CYLINDER "VEE" BLOCK ENGINE DELIVERING 465 HORSEPOWER.
PROPELLER: CURTISS-REED ALL METAL FIXED PITCH.
NOTE: DUE TO INCREASED H.P. OF CURTISS D-12 ENGINE ADDITIONAL WING RADIATORS WERE ADDED TO WING TIPS OUTSIDE OF 'N' STRUTS OVER & ABOVE THOSE ON CR-2.



ABOVE VIEW DEFINES UPPER & LOWER WING TIPS.







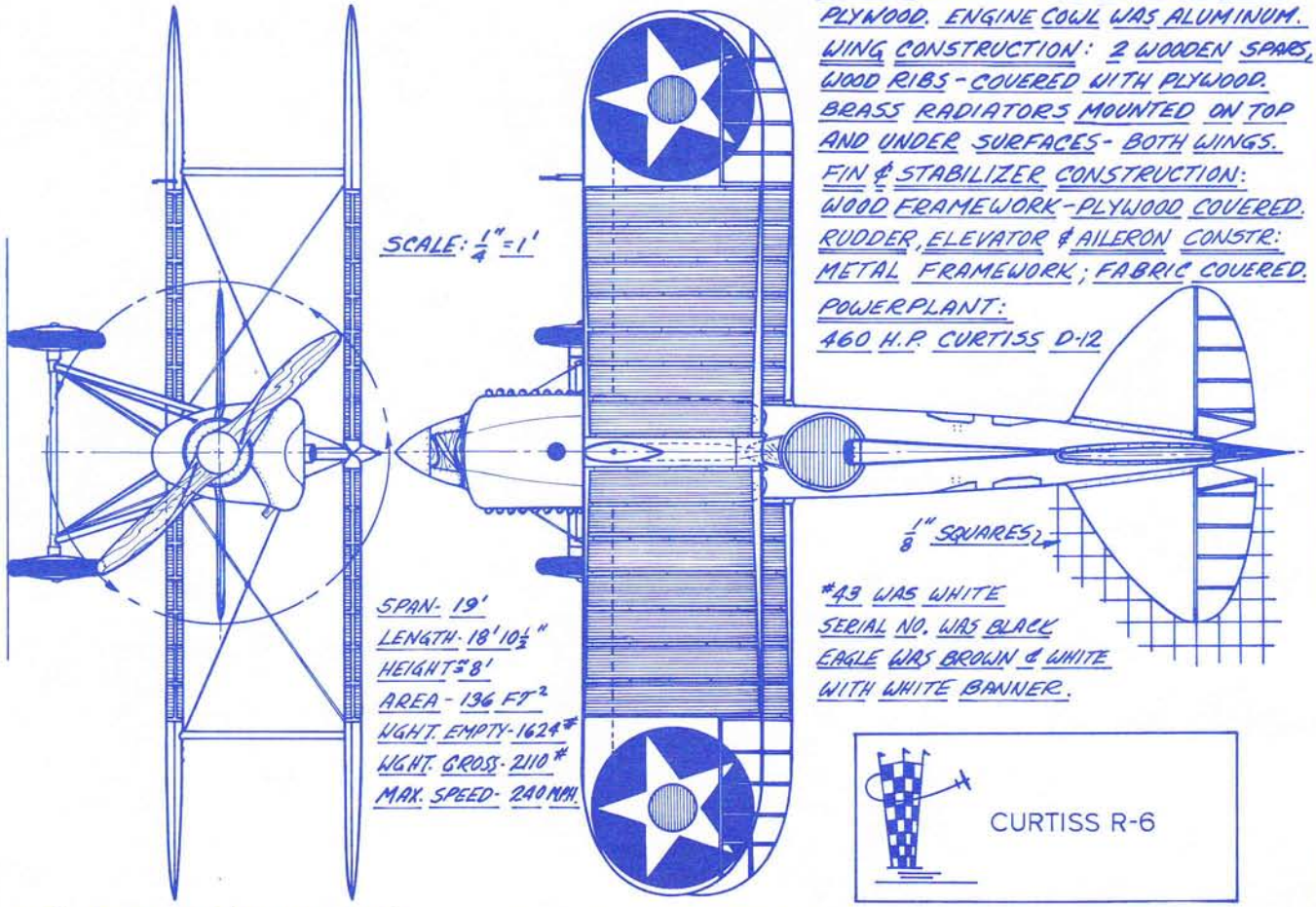
1923 VERSION

"8" WAS USED ON CRAFT FOR OCT. '24 CLOSED CIRCUIT RECORD OF 188.08 MPH "U.S.N." HAD NO WHITE OUTLINE

ABOVE PLANE WAS CR-1 IN 1921, MODIFIED TO CR-2 IN 1922, AND STILL FURTHER MODIFIED WITH FLOATS IN 1923. FLOWN BY LT. DAVID RITTENHOUSE A-6081 WON 1923 SCHNEIDER TROPHY AT COWES, U.K. AT 177.38 MPH. TOP SPEED - 190 MPH

FUSELAGE CONSTRUCTION: BUILT-UP WOODEN FRAMEWORK COVERED WITH PLYWOOD. ENGINE COWL WAS ALUMINUM.
WING CONSTRUCTION: 2 WOODEN SPARS, WOOD RIBS - COVERED WITH PLYWOOD. BRASS RADIATORS MOUNTED ON TOP AND UNDER SURFACES - BOTH WINGS.
FIN & STABILIZER CONSTRUCTION: WOOD FRAMEWORK - PLYWOOD COVERED.
RUDDER, ELEVATOR & AILERON CONSTR: METAL FRAMEWORK; FABRIC COVERED.
POWERPLANT: 460 H.P. CURTISS D-12

SCALE: 1/4" = 1'



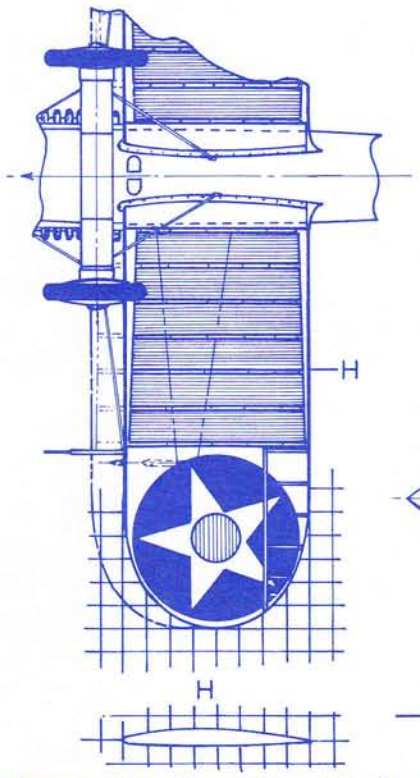
1/8" SQUARES

SPAN - 19'
LENGTH - 18' 10½"
HEIGHT - 8'
AREA - 196 FT²
WGHT. EMPTY - 1624#
WGHT. GROSS - 2110#
MAX. SPEED - 240 MPH.

#43 WAS WHITE
SERIAL NO. WAS BLACK
EAGLE WAS BROWN & WHITE
WITH WHITE BANNER.

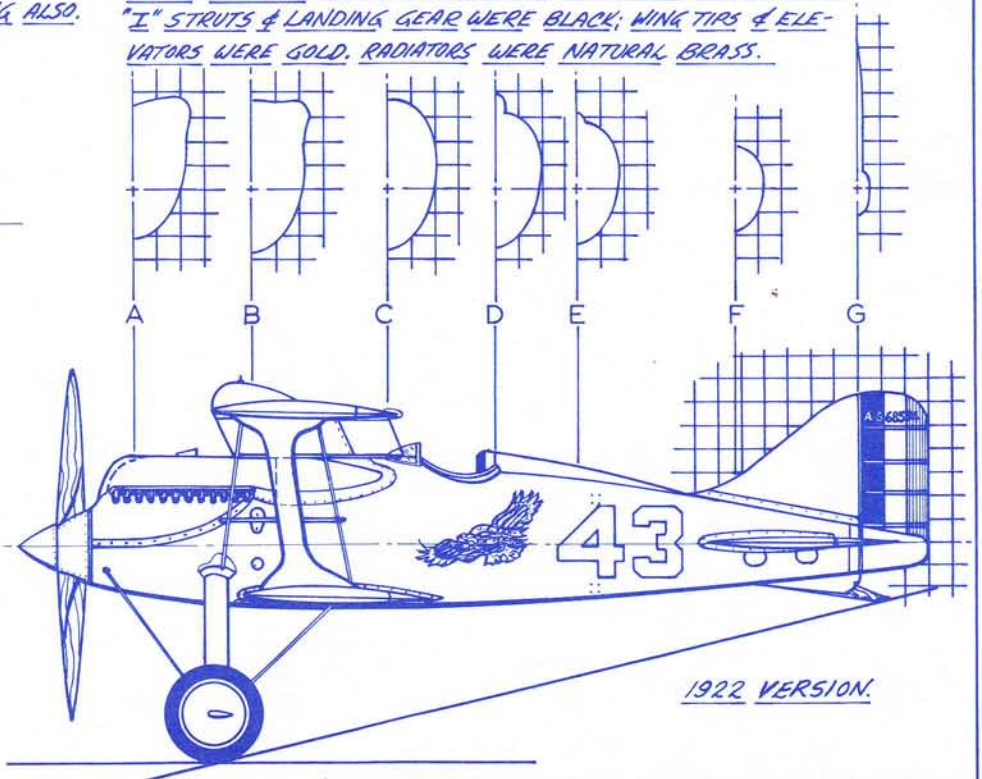
CURTISS R-6

VIEW BELOW SHOWING LOWER WING UNDERSIDE. TIP DETAIL: UPPER WING ALSO.



TYPICAL CURTISS C-27 AIRFOIL - BOTH WINGS.

COLOR SCHEME: RUDDER BOTTOM, FIN, FUSELAGE, STABILIZER, "I" STRUTS & LANDING GEAR WERE BLACK; WING TIPS & ELEVATORS WERE GOLD. RADIATORS WERE NATURAL BRASS.



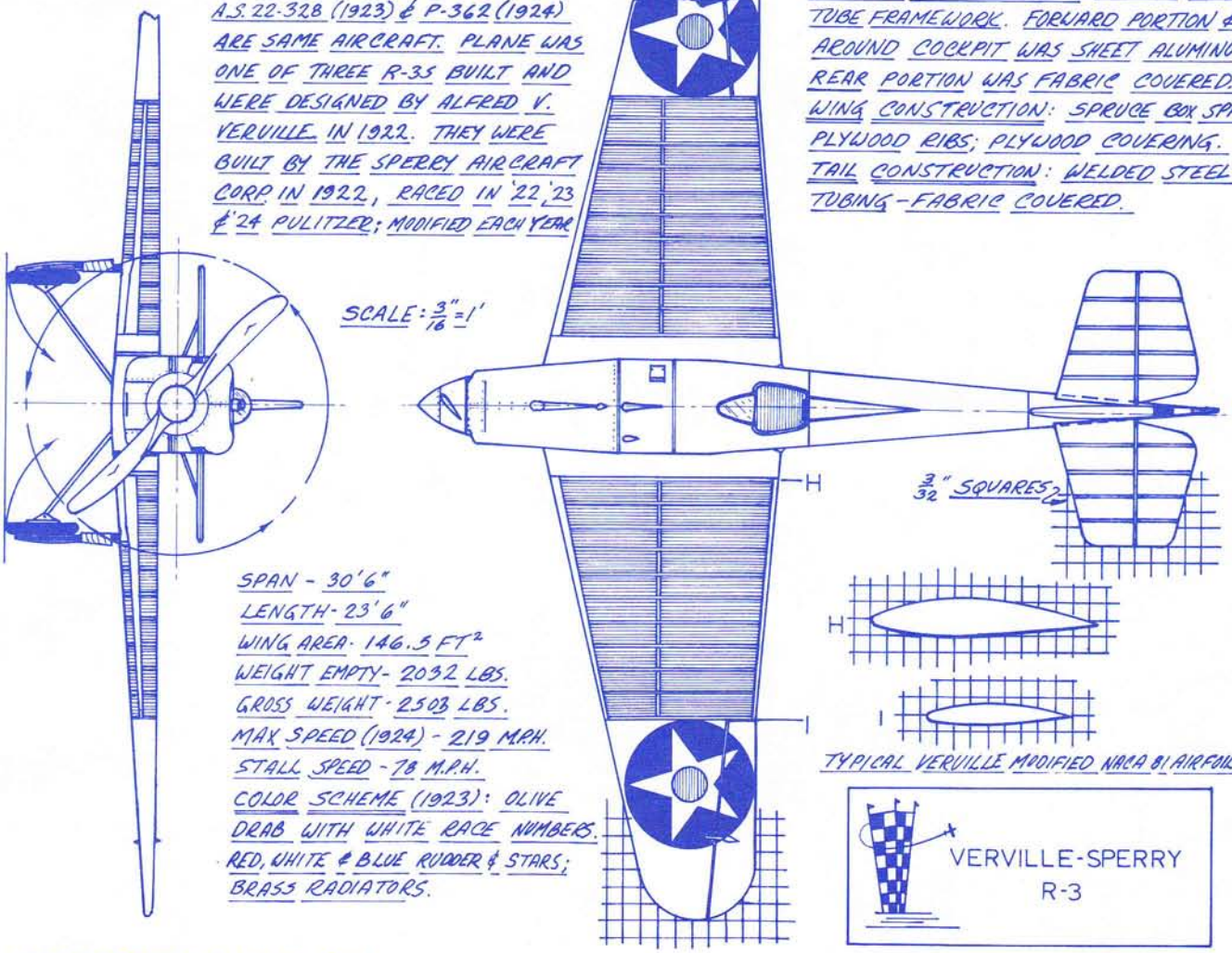
1922 VERSION.

CRAFT WON 1922 PULITZER @ 205.8 MPH. FLOWN BY LT. RUSSELL L. MAUGHAN. IN 1923 MAUGHAN SET WORLD SPEED RECORD WITH CRAFT.

A.S. 22-328 (1923) & P-362 (1924) ARE SAME AIRCRAFT. PLANE WAS ONE OF THREE R-35 BUILT AND WERE DESIGNED BY ALFRED V. VERVILLE IN 1922. THEY WERE BUILT BY THE SPERRY AIRCRAFT CORP IN 1922, RACED IN '22, '23 & '24 PULITZER; MODIFIED EACH YEAR

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK. FORWARD PORTION & AROUND COCKPIT WAS SHEET ALUMINUM. REAR PORTION WAS FABRIC COVERED. WING CONSTRUCTION: SPRUCE BOX SPARS, PLYWOOD RIBS; PLYWOOD COVERING. TAIL CONSTRUCTION: WELDED STEEL TUBING - FABRIC COVERED.

SCALE: $\frac{3}{16}" = 1'$

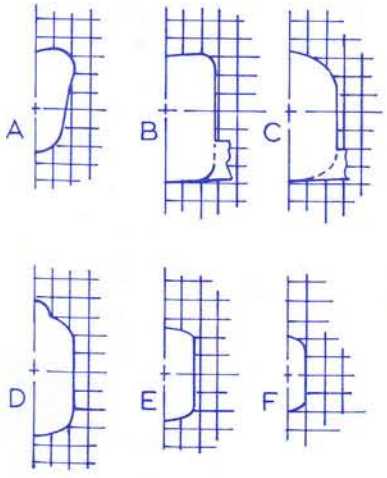


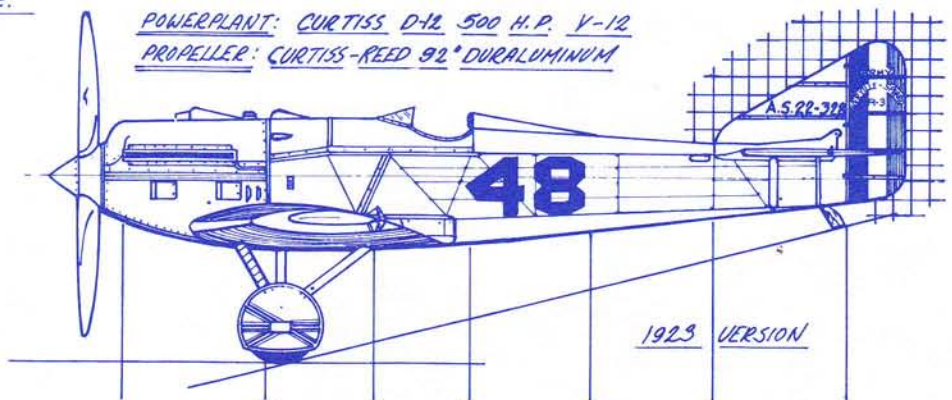
SPAN - 30'6"
LENGTH - 23'6"
WING AREA - 146.5 FT²
WEIGHT EMPTY - 2032 LBS.
GROSS WEIGHT - 2503 LBS.
MAX SPEED (1924) - 219 M.P.H.
STALL SPEED - 78 M.P.H.
COLOR SCHEME (1923): OLIVE DRAB WITH WHITE RACE NUMBERS. RED, WHITE & BLUE RUDDER & STARS; BRASS RADIATORS.

TYPICAL VERVILLE MODIFIED NACA 81 AIRFOIL

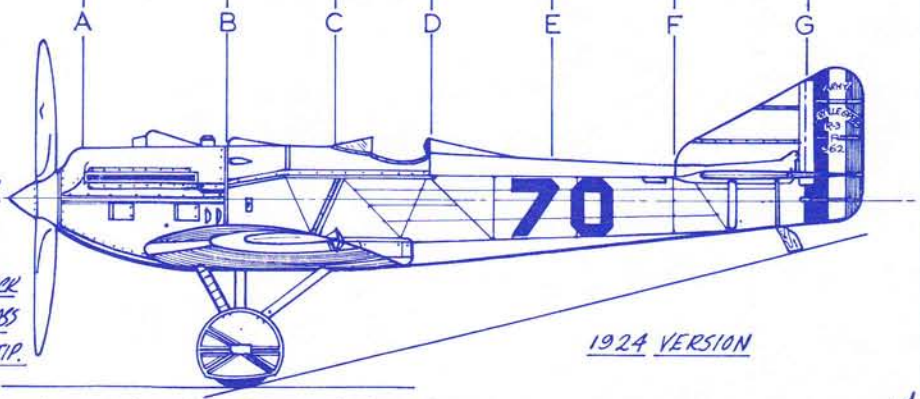
NOTE RETRACTABLE LANDING GEAR.

POWERPLANT: CURTISS D-12 500 H.P. V-12
PROPELLER: CURTISS-REED 92° DURALUMINUM





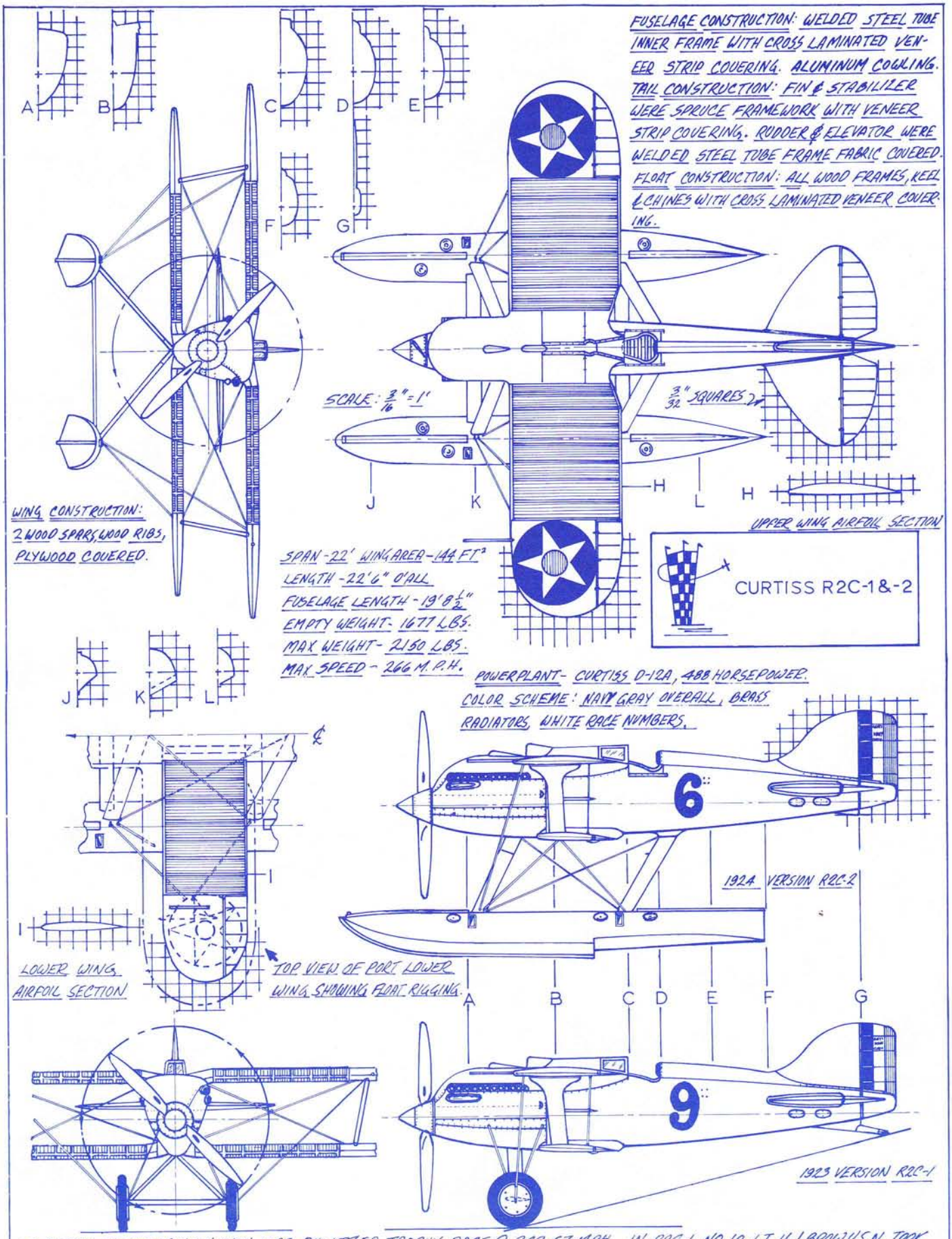
1923 VERSION



1924 VERSION

COLOR SCHEME (1924): BASIC COLOR OF ENTIRE AIRCRAFT WAS SILVER - RUDDER WAS RED, WHITE, & BLUE WITH BLACK LETTERING: RADIATORS WERE BRASS '70' WAS ALSO UNDER LEFT WING TIP.

1924 VERSION WON PULITZER RACE FLOWN BY LT. H.H. MILLS AT 215.72 M.P.H. AT DAYTON, OHIO OCTOBER 4TH.



FUSELAGE CONSTRUCTION: WELDED STEEL TUBE INNER FRAME WITH CROSS LAMINATED VENEER STRIP COVERING. ALUMINUM COWLING. TAIL CONSTRUCTION: FIN & STABILIZER WERE SPRUCE FRAMEWORK WITH VENEER STRIP COVERING. RUDDER & ELEVATOR WERE WELDED STEEL TUBE FRAME FABRIC COVERED. FLOAT CONSTRUCTION: ALL WOOD FRAMES, KEEL & CHINES WITH CROSS LAMINATED VENEER COVERING.

WING CONSTRUCTION: 2 WOOD SPARS, WOOD RIBS, PLYWOOD COVERED.

UPPER WING AIRFOIL SECTION

CURTISS R2C-1&-2

SPAN - 22' WING AREA - 144 FT²
LENGTH - 22'6" O'ALL
FUSELAGE LENGTH - 19'8 1/2"
EMPTY WEIGHT - 1677 LBS.
MAX WEIGHT - 2150 LBS.
MAX SPEED - 266 M.P.H.

POWERPLANT - CURTISS D-12A, 488 HORSEPOWER.
COLOR SCHEME: NAVY GRAY OVERALL, BRASS RADIATORS, WHITE RACE NUMBERS.

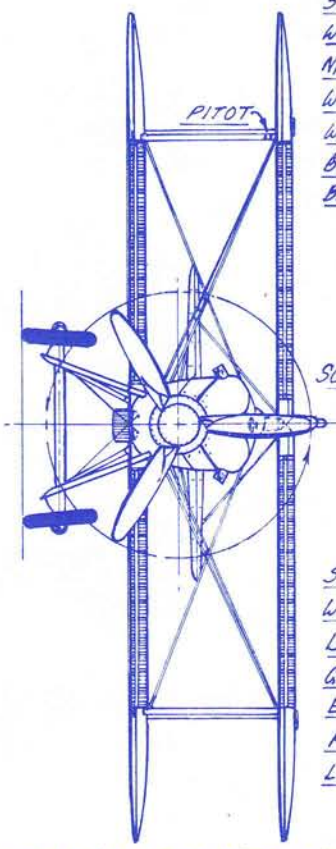
LOWER WING AIRFOIL SECTION

TOP VIEW OF PORT LOWER WING SHOWING FLOAT RIGGING.

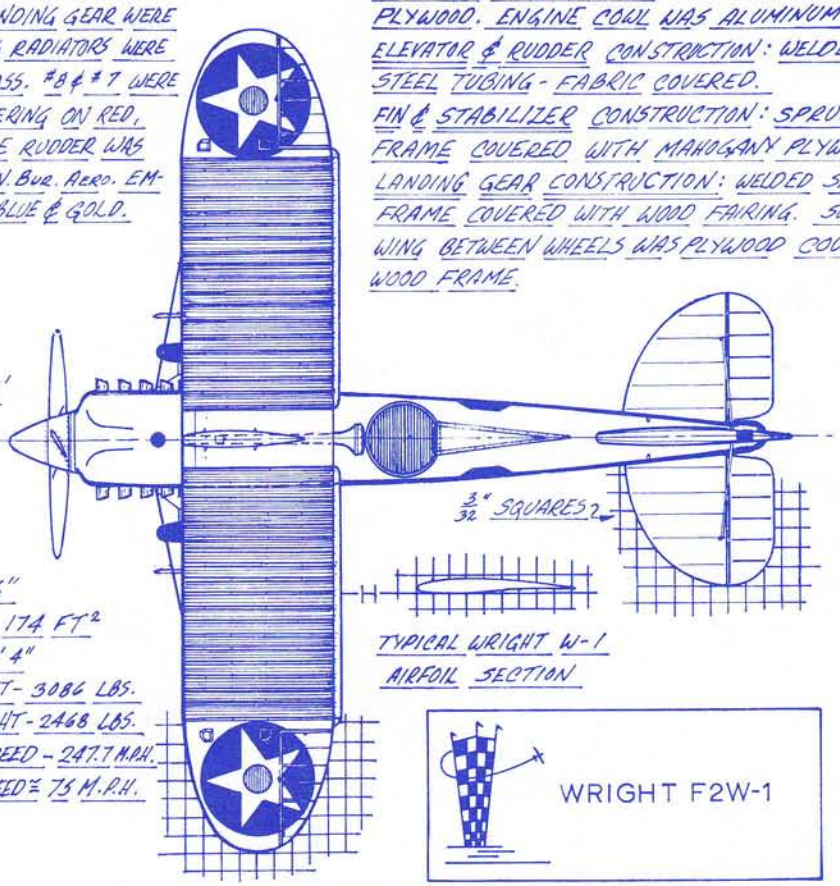
LT. ALFORD WILLIAMS U.S.N. WON 1923 PULITZER TROPHY RACE @ 243.67 M.P.H. IN R2C-1 NO 10 LT. H.J. BROW U.S.N. TOOK 2ND IN SAME RACE @ 241.78 M.P.H. RACE WAS 4 LAPS - 124.28 MILES HELD @ ST. LOUIS MO.. IN 1924 THE TWO CRAFT WERE FITTED WITH FLOATS FOR THE SCHNEIDER RACE WHICH WAS CANCELLED. LATER WERE USED FOR PRACTICE.

COLOR SCHEME: FUSELAGE & SPINNER WERE BRIGHT RED. WINGS, TAIL SURFACES, WING STRUTS & LANDING GEAR WERE WHITE. WING RADIATORS WERE NATURAL BRASS. #8 & #7 WERE WHITE. LETTERING ON RED, WHITE & BLUE RUDDER WAS BLACK. U.S.N. BUR. AERO. EMBLEM WAS BLUE & GOLD.

WING CONSTRUCTION: WOOD SPARS & RIBS COVERED WITH PLYWOOD. AILERONS WERE METAL FRAMES - FABRIC COVERED.
FUSELAGE CONSTRUCTION: MONOCOQUE MOLDED PLYWOOD. ENGINE COWL WAS ALUMINUM.
ELEVATOR & RUDDER CONSTRUCTION: WELDED STEEL TUBING - FABRIC COVERED.
FIN & STABILIZER CONSTRUCTION: SPRUCE FRAME COVERED WITH MAHOGANY PLYWOOD.
LANDING GEAR CONSTRUCTION: WELDED STEEL FRAME COVERED WITH WOOD FAIRING. SUB WING BETWEEN WHEELS WAS PLYWOOD COVERED WOOD FRAME.



SCALE: 3/16" = 1'

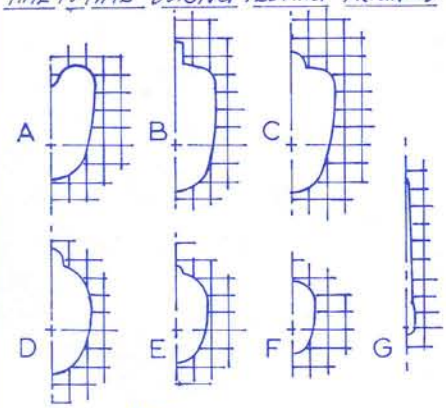


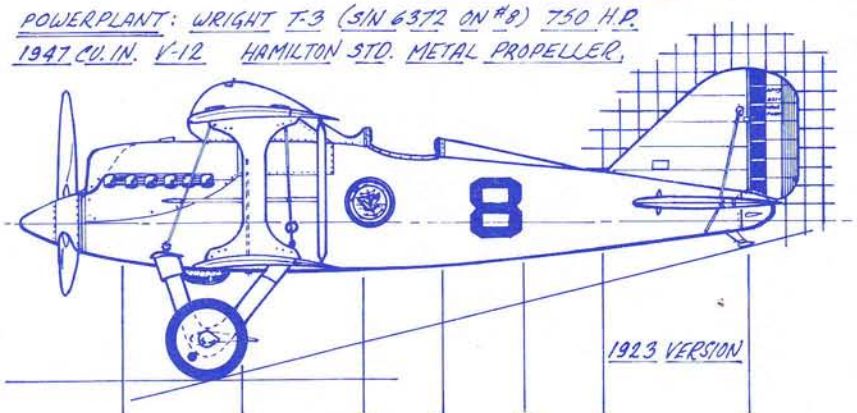
SPAN - 22'6"
WING AREA - 174 FT²
LENGTH - 21' 4"
GROSS WEIGHT - 3086 LBS.
EMPTY WEIGHT - 2468 LBS.
MAXIMUM SPEED - 147.7 M.P.H.
LANDING SPEED ≈ 75 M.P.H.

TYPICAL WRIGHT W-1 AIRFOIL SECTION

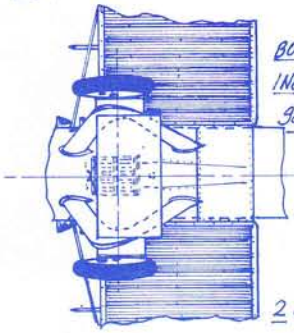
NOTE: 3 & 2 BLADE PROPELLERS WERE INTERCHANGED ON THESE PLANES FROM TIME TO TIME DURING TESTING PROGRAMS.

POWERPLANT: WRIGHT T-3 (S/N 6372 ON #8) 750 H.P. 1947 CU. IN. V-12 HAMILTON STD. METAL PROPELLER.

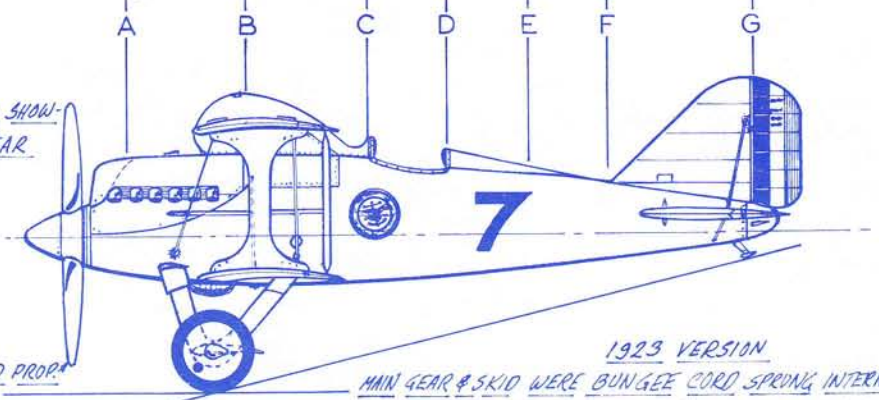




1923 VERSION



BOTTOM VIEW SHOWING LANDING GEAR SUB-WING.



2 BLADE WOOD PROP.

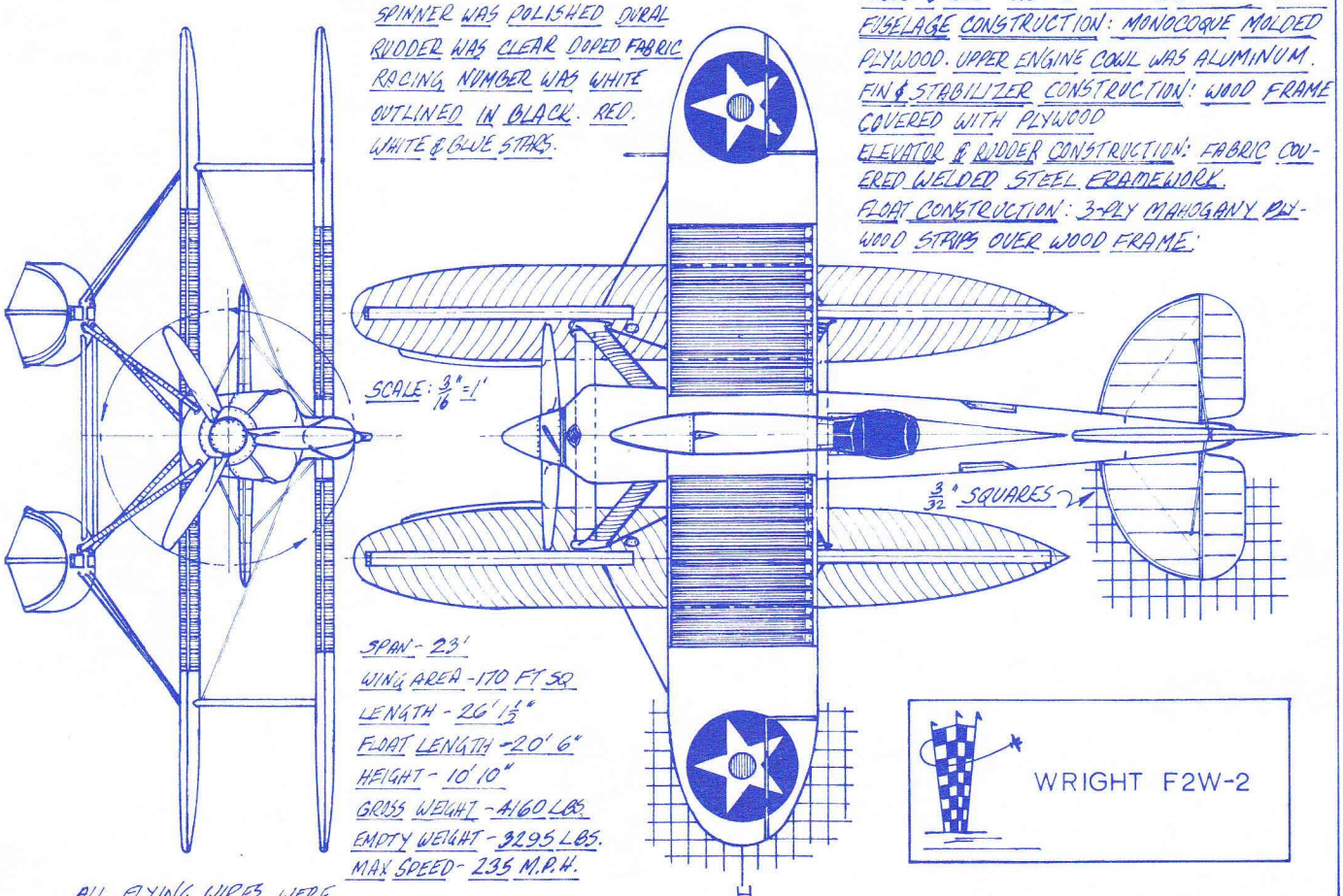
1923 VERSION

MAIN GEAR & SKID WERE BUNGEE CORD SPRING INTERNALLY.

#8 WAS FLOWN IN 1923 PULITZER TROPHY RACE TO 3RD PLACE BY USMC. LT. L.H. SANDERSON. #7 WAS FLOWN TO 4TH PLACE IN SAME RACE BY NAVY LT. S.W. CALLAWAY. RACE WAS 4 LAPS COVERING 124.28 MILES AND HELD AT ST. LOUIS, MO. CK

COLOR SCHEME: AIRCRAFT WAS MEDIUM BLUE THROUGH-OUT SPINNER WAS POLISHED DURAL RUDDER WAS CLEAR DOPED FABRIC RACING NUMBER WAS WHITE OUTLINED IN BLACK. RED, WHITE & BLUE STARS.

WING CONSTRUCTION: WOOD SPARS & RIBS COVERED WITH PLYWOOD. AILERONS CONTROLLED BY TORQUE TUBES & BELL CRANKS THROUGH INTERPLANE STRUTS.
FUSELAGE CONSTRUCTION: MONOCOQUE MOLDED PLYWOOD. UPPER ENGINE COWL WAS ALUMINUM.
FIN & STABILIZER CONSTRUCTION: WOOD FRAME COVERED WITH PLYWOOD
ELEVATOR & RUDDER CONSTRUCTION: FABRIC COVERED WELDED STEEL FRAMEWORK.
FLOAT CONSTRUCTION: 3-PLY MAHOGANY PLYWOOD STRIPS OVER WOOD FRAME.



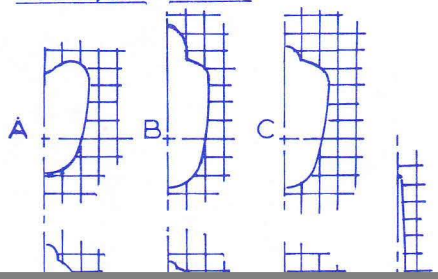
SCALE: $\frac{3}{16}$" = 1'

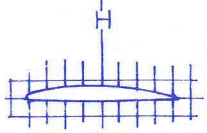
$\frac{3}{32}$" SQUARES

SPAN - 23'
WING AREA - 170 FT SQ
LENGTH - 26' 1½"
FLOAT LENGTH - 20' 6"
HEIGHT - 10' 10"
GROSS WEIGHT - 4160 LBS.
EMPTY WEIGHT - 3295 LBS.
MAX SPEED - 235 M.P.H.

WRIGHT F2W-2

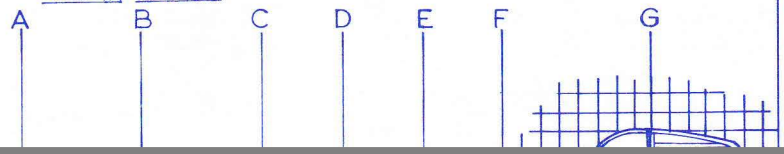
ALL FLYING WIRES WERE STREAMLINE SECTION.

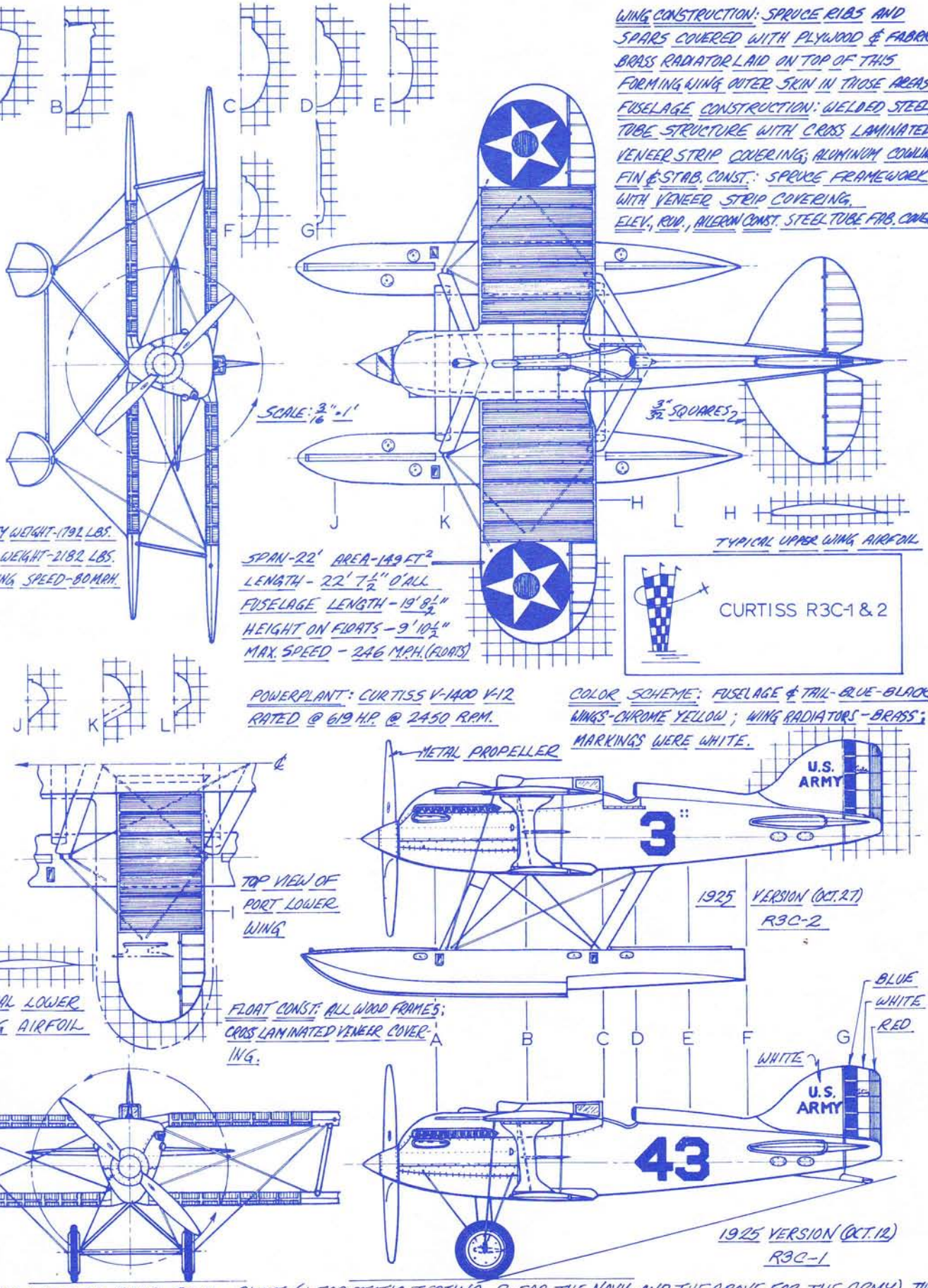




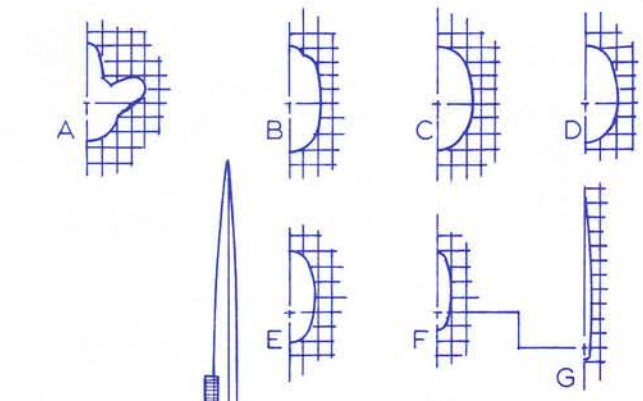
TYPICAL NAVY N-9 AIRFOIL SECTION

POWERPLANT: WRIGHT T-3 750 H.P. 1947 CU.IN. V-12 - WATER COOLED. ALL METAL HAMILTON GROUND ADJUSTABLE PROPELLER - 3 BLADED

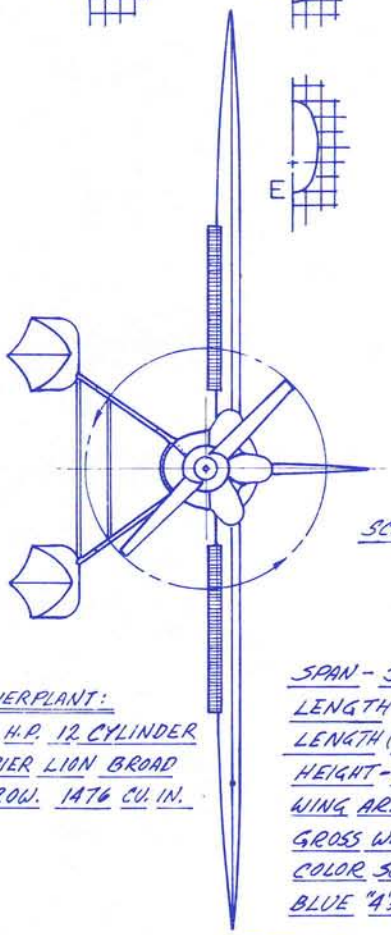




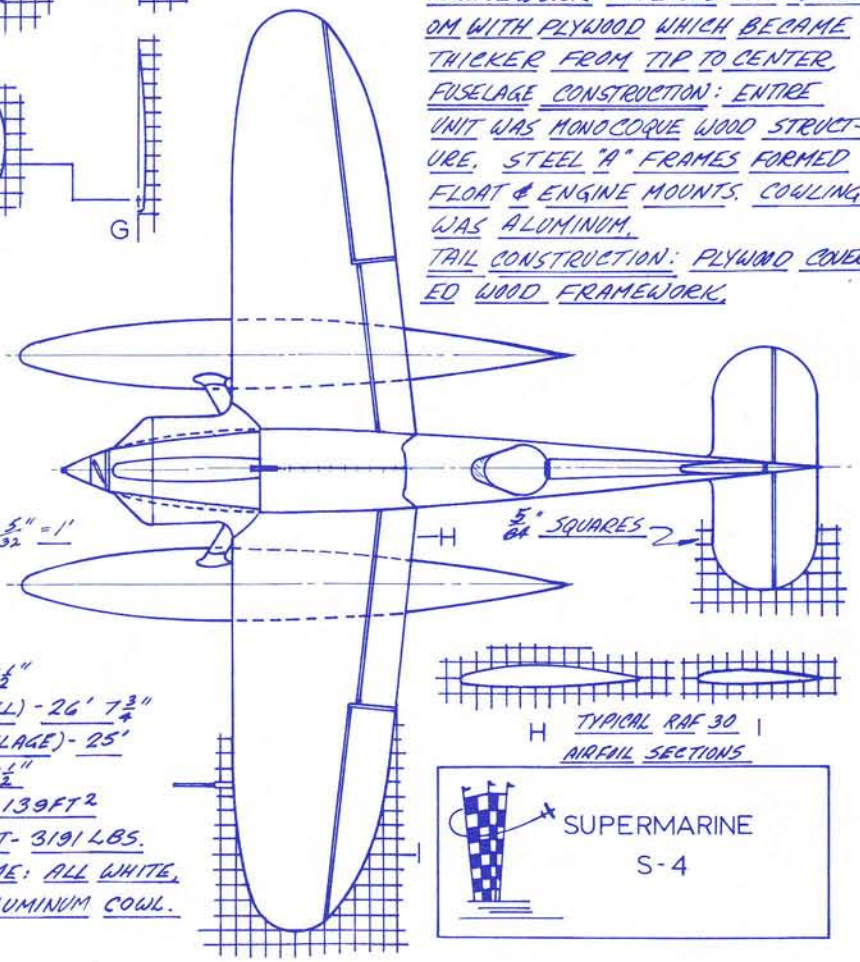
THE LAST OF FOUR R3Cs BUILT (1 FOR STATIC TESTING, 2 FOR THE NAVY, AND THE ABOVE FOR THE ARMY) THIS AIRCRAFT FITTED WITH WHEELS WON THE 1925 PULITZER RACE AT 248.99 M.P.H. IT WAS FLOWN BY LT. CYRUS BETTIS-USARS. TWO WEEKS LATER LT. JIMMY DOOLITTLE WON THE 1925 SCHNEIDER CUP RACE WITH SAME PLANE ON FLOATS AT 232.573 MPH.



WING CONSTRUCTION: 2 SPRUCE SPARS WITH PLYWOOD RIBS. SEVERAL SPANWISE STRINGER WERE SET IN NOTCHES IN THE RIBS. THE WHOLE WOODEN FRAMEWORK COVERED TOP & BOTTOM WITH PLYWOOD WHICH BECAME THICKER FROM TIP TO CENTER.
FUSELAGE CONSTRUCTION: ENTIRE UNIT WAS MONOCOQUE WOOD STRUCTURE. STEEL "A" FRAMES FORMED FLOAT & ENGINE MOUNTS. COWLING WAS ALUMINUM.
TAIL CONSTRUCTION: PLYWOOD COVERED WOOD FRAMEWORK.



SCALE: $\frac{5}{32}$" = 1'

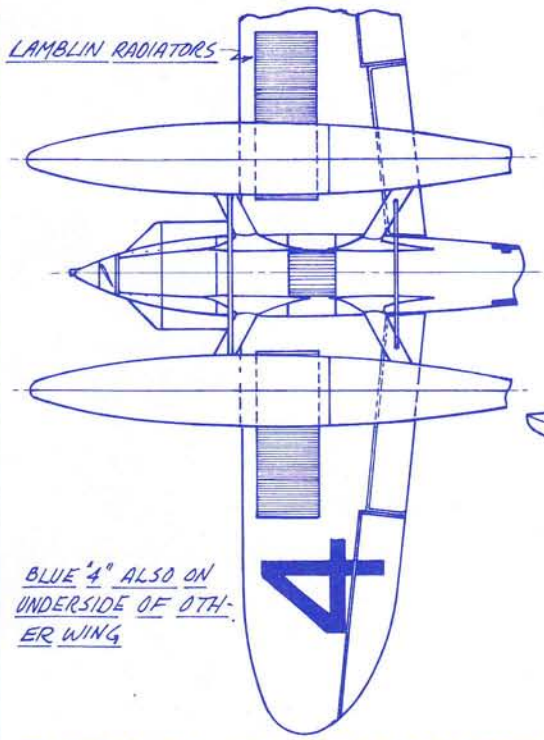


$\frac{5}{64}$" SQUARES

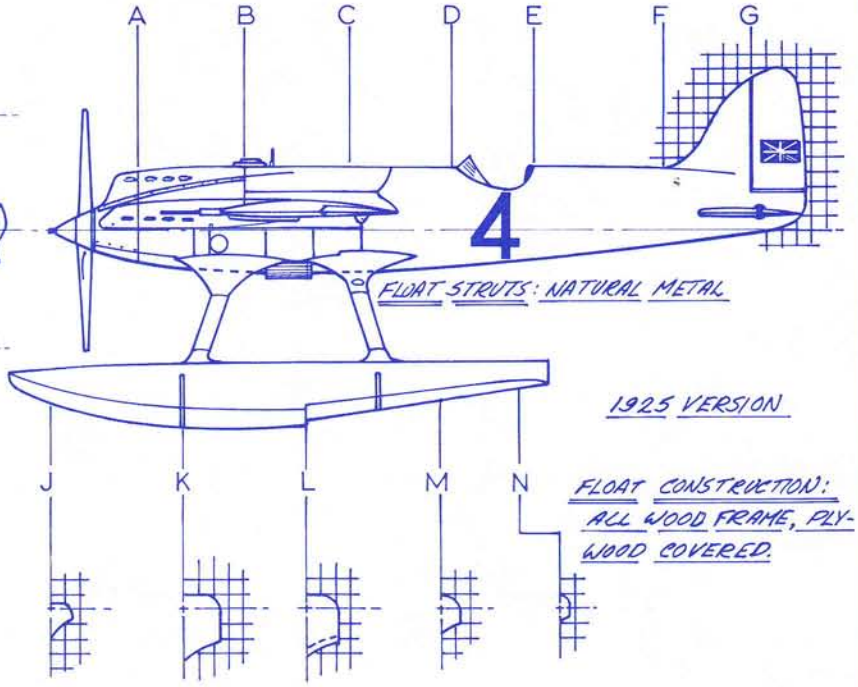
TYPICAL RAF 30 AIRFOIL SECTIONS

POWERPLANT:
700 H.P. 12 CYLINDER NAPIER LION BROAD ARROW. 1476 CU. IN.

SPAN - 30' 7½"
LENGTH (O'ALL) - 26' 7¾"
LENGTH (FUSELAGE) - 25'
HEIGHT - 11' 6½"
WING AREA - 139FT²
GROSS WEIGHT - 3191 LBS.
COLOR SCHEME: ALL WHITE, BLUE "4" - ALUMINUM COWL.



BLUE "4" ALSO ON UNDERSIDE OF OTHER WING

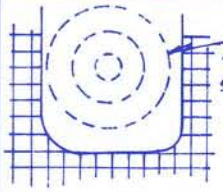


FLOAT STRUTS: NATURAL METAL

1925 VERSION

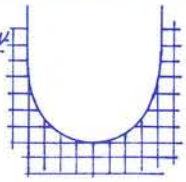
FLOAT CONSTRUCTION: ALL WOOD FRAME, PLYWOOD COVERED.

THE S-4 SET WORLD AIR SPEED RECORD FOR SEAPLANES AT 226.75 MPH. LATER TAKEN TO 1925 SCHNEIDER CUP RACE AT BALTIMORE U.S.A. CRAFT, FLOWN BY CAPT. HENRY BAIRD DEVELOPED FLUTTER & CRASHED. CH



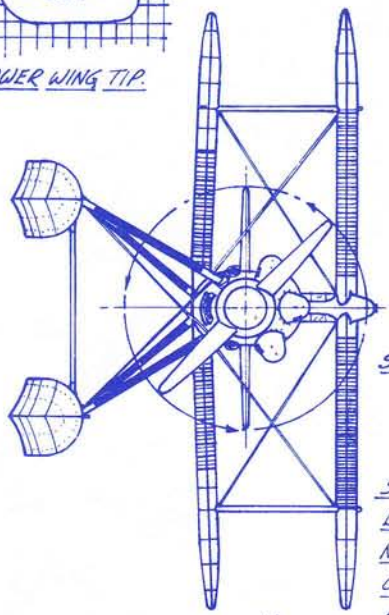
NOTE: LARGER ROUNDEL ON LOWER WING.

LOWER WING TIP.

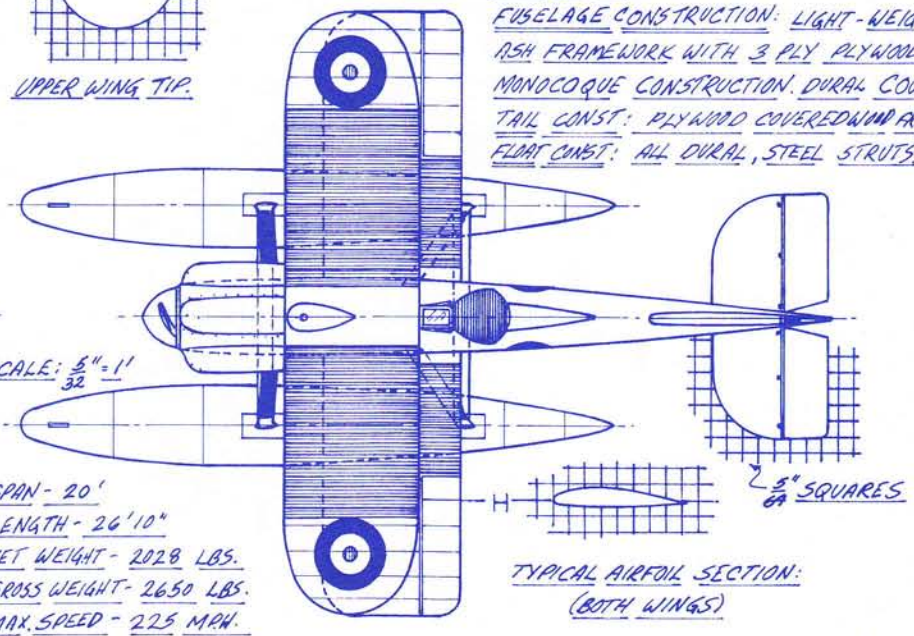


UPPER WING TIP.

WING CONSTRUCTION: ALL WOOD SPARS & RIBS WITH FABRIC COVERING. WING RADIATORS WERE BRASS.
FUSELAGE CONSTRUCTION: LIGHT-WEIGHT ASH FRAMEWORK WITH 3 PLY PLYWOOD MONOCOQUE CONSTRUCTION. DURAL COWL.
TAIL CONST: PLYWOOD COVERED WOOD FRAME
FLOAT CONST: ALL DURAL, STEEL STRUTS.



SCALE: $\frac{5}{32}$" = 1'



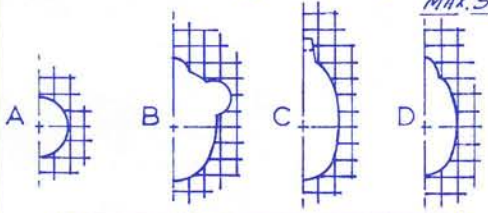
SPAN - 20'
LENGTH - 26'10"
NET WEIGHT - 2028 LBS.
GROSS WEIGHT - 2650 LBS.
MAX. SPEED - 225 MPH.

$\frac{5}{64}$" SQUARES

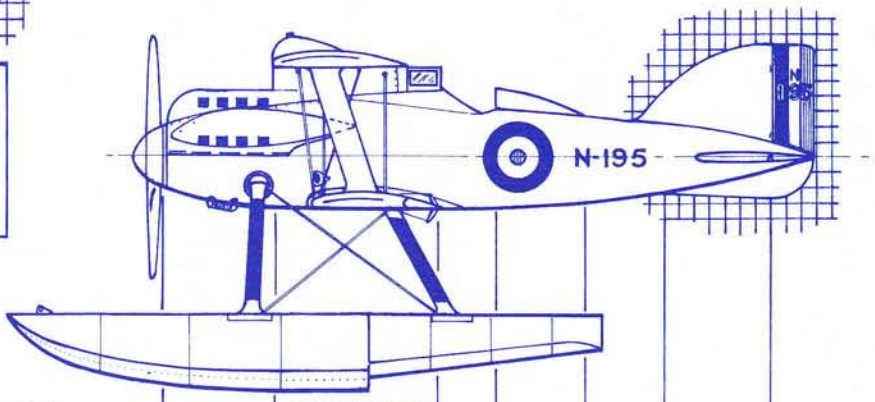
TYPICAL AIRFOIL SECTION: (BOTH WINGS)

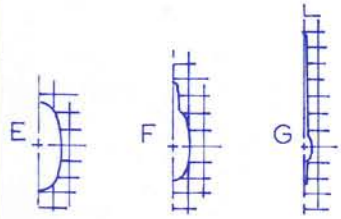
POWERPLANT: IIIA&B 670 HORSEPOWER LION III 12 CYLINDER (3 BANKS OF 4 IN "W" FORM. WATER COOLED. - METAL PROP.

COLOR SCHEME: POWDER BLUE WITH RED, WHITE & BLUE ROUNDELS & STRIPES. BLACK LETTERING WITH WHITE OUTLINES.



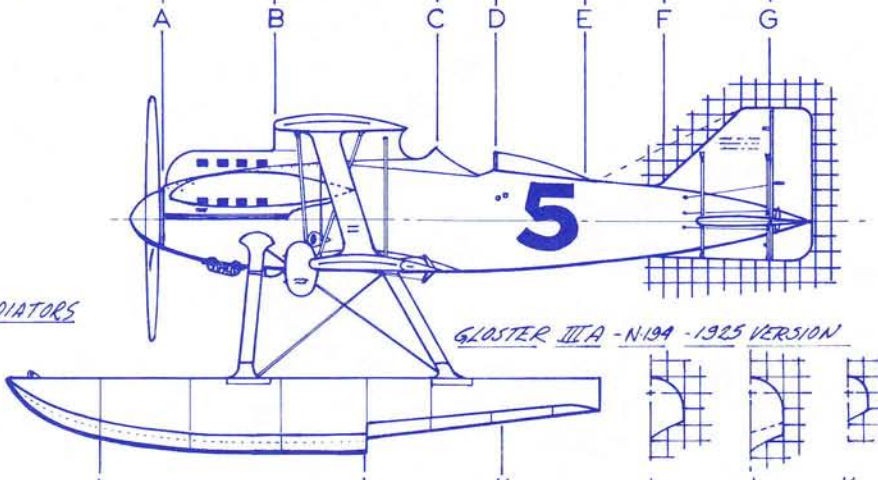


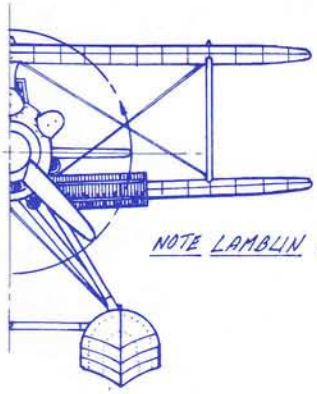




GLOSTER IIIB

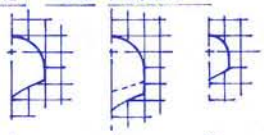
1927 VERSION





NOTE LAMBLIN WING RADIATORS

GLOSTER IIIA - N-194 - 1925 VERSION



CRAFT N195 IN IIIA VERSION WAS FLOWN TO 2ND PLACE IN 1925 SCHNEIDER TROPHY RACE. SPEED WAS 199.169 MPH AND PILOT WAS CAPT. HUBERT BROAD. PLACE WAS BALTIMORE U.S.A. PLANE CONVERTED TO IIIB TRAINER IN 1927. CH

MAJOR MARIO DE BARNARDI FLEW THE M-39 TO A SCHNEIDER TROPHY VICTORY AT HAMPTON ROADS, NORFOLK, VA. IN 1926 AT A SPEED OF 246.496 M.P.H.. (MAX. STRAIGHT & LEVEL SPEED WAS 258.874 M.P.H.)

AIRCRAFT WAS ONE OF 3 SISTER SHIPS. DESIGNER WAS MARIO CASTOLDI. M-39 WAS THE BEGINNING OF SERIES OF RACERS ENDING WITH THE FABULOUS M.C.-72

FUSELAGE CONSTRUCTION: ALL WOOD FORMERS AND STRINGERS COVERED WITH PLYWOOD. COWLING WAS SHEET ALUMINUM. ENGINE MOUNTS & FLOAT STRUTS WERE ALSO METAL.
WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING.
FLOAT CONSTRUCTION: WOOD FRAMES, KEEL AND CHINES WITH PLYWOOD COVERING

SCALE: $\frac{3}{16}$" = 1'

$\frac{3}{32}$" SQUARES

POWERPLANT: FIAT A.S.2. V-12 ENGINE. 800 HORSEPOWER.

MACCHI M-39

SPAN - 30' 4½" AREA - 153.92 FT²
FUSELAGE LENGTH - 22' 1"
O'ALL LENGTH - 25'6" HEIGHT - 10'
GROSS WEIGHT - 3472 LBS.

H

TYPICAL AIRFOIL SECTION INCLUDES FLUSH WING RADIATORS

COLOR SCHEME: ALL RED WITH WHITE RACE NO. & FLOAT BOTTOMS. GREEN, WHITE & RED RUDDER STRIPES.

A B C D E F G

5

ALUM. FIXED PITCH PROP.

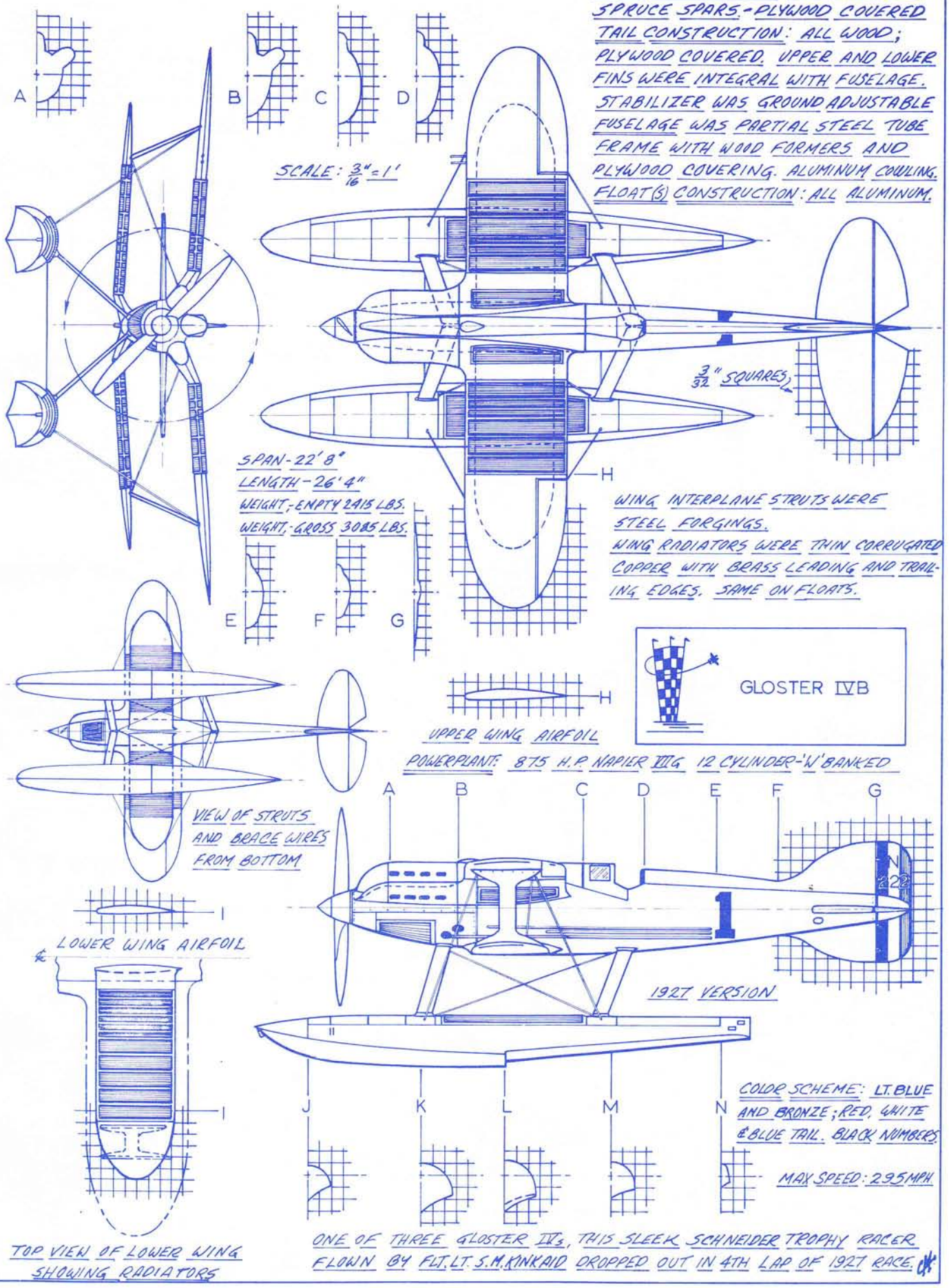
1926 VERSION

I J K L M

ABOVE VIEW SHOWS RIGGING ON UNDERSIDE. OIL COOLER UNDER ENGINE

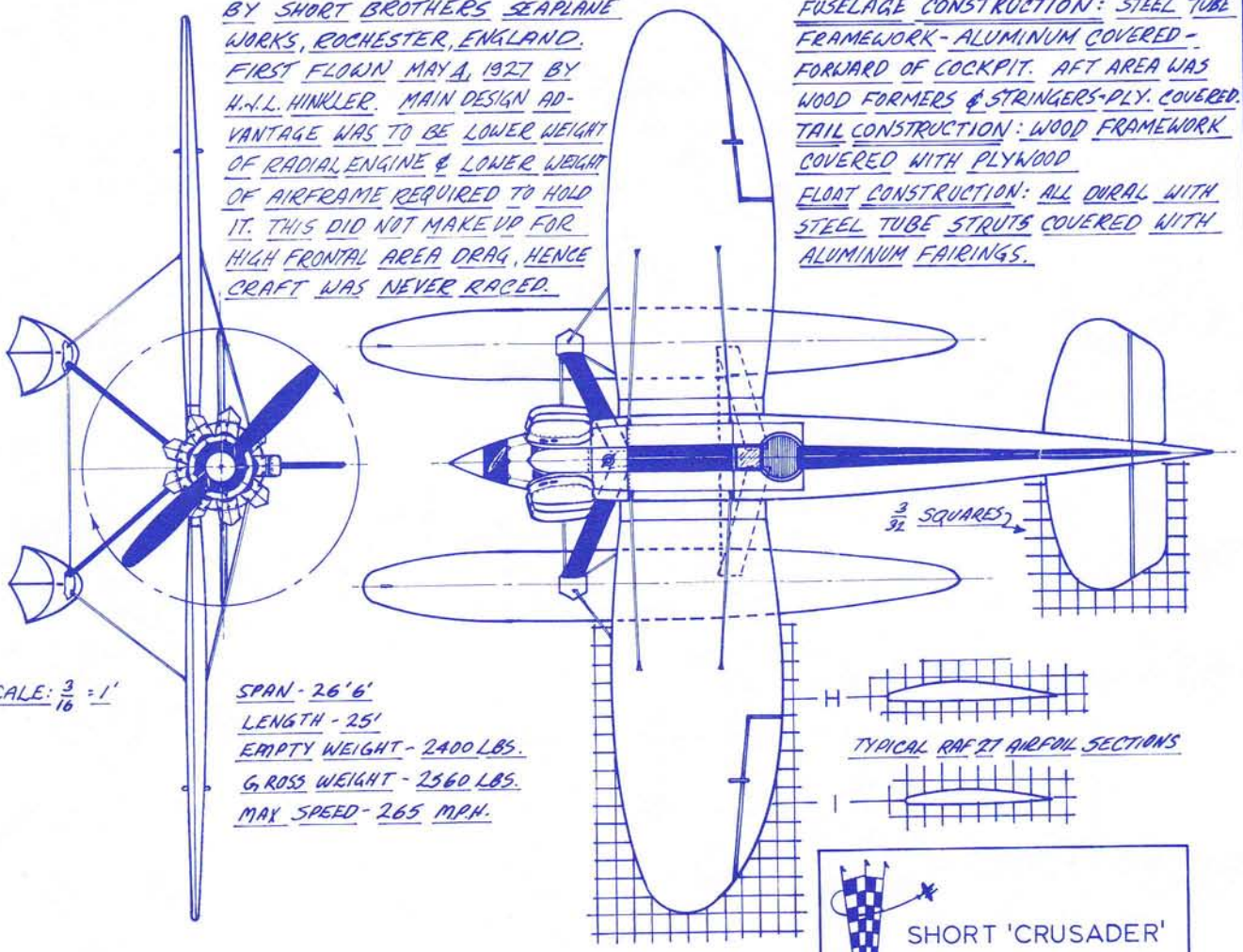
A B C D E F G

CH


WING CONSTRUCTION: ALL WOOD WITH SPRUCE SPARS - PLYWOOD COVERED
TAIL CONSTRUCTION: ALL WOOD; PLYWOOD COVERED. UPPER AND LOWER FINS WERE INTEGRAL WITH FUSELAGE. STABILIZER WAS GROUND ADJUSTABLE
FUSELAGE WAS PARTIAL STEEL TUBE FRAME WITH WOOD FORMERS AND PLYWOOD COVERING. ALUMINUM COWLING.
FLOAT(S) CONSTRUCTION: ALL ALUMINUM.
A
B
C
D
SCALE: 3/16" = 1'
3/32" SQUARES
H
SPAN - 22'8"
LENGTH - 26'4"
WEIGHT, EMPTY 2415 LBS.
WEIGHT, GROSS 3085 LBS.
E
F
G
WING INTERPLANE STRUTS WERE STEEL FORGINGS.
WING RADIATORS WERE THIN CORRUGATED COPPER WITH BRASS LEADING AND TRAILING EDGES. SAME ON FLOATS.
GLOSTER IVB
H
UPPER WING AIRFOIL
POWERPLANT: 875 H.P. NAPIER VIIG 12 CYLINDER-'W' BANKED
VIEW OF STRUTS AND BRACE WIRES FROM BOTTOM
A
B
C
D
E
F
G
N
22
1
I
LOWER WING AIRFOIL
1927 VERSION
I
J
K
L
M
N
COLOR SCHEME: LT. BLUE AND BRONZE; RED, WHITE & BLUE TAIL. BLACK NUMBERS.
MAX SPEED: 295 MPH
TOP VIEW OF LOWER WING SHOWING RADIATORS
ONE OF THREE GLOSTER IVs, THIS SLEEK SCHNEIDER TROPHY RACER FLOWN BY FLT. LT. S.M. KINKAID DROPPED OUT IN 4TH LAP OF 1927 RACE.

THE 'CRUSADER' WAS DESIGNED BY W.G. CARTER AND CONSTRUCTED BY SHORT BROTHERS SEAPLANE WORKS, ROCHESTER, ENGLAND. FIRST FLOWN MAY 4, 1927 BY H.V.L. HINKLER. MAIN DESIGN ADVANTAGE WAS TO BE LOWER WEIGHT OF RADIAL ENGINE & LOWER WEIGHT OF AIRFRAME REQUIRED TO HOLD IT. THIS DID NOT MAKE UP FOR HIGH FRONTAL AREA DRAG, HENCE CRAFT WAS NEVER RACED.

WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING.
FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK - ALUMINUM COVERED - FORWARD OF COCKPIT. AFT AREA WAS WOOD FORMERS & STRINGERS - PLY. COVERED.
TAIL CONSTRUCTION: WOOD FRAMEWORK COVERED WITH PLYWOOD
FLOAT CONSTRUCTION: ALL DURAL WITH STEEL TUBE STRUTS COVERED WITH ALUMINUM FAIRINGS.



SCALE: $\frac{3}{16}$ = 1'

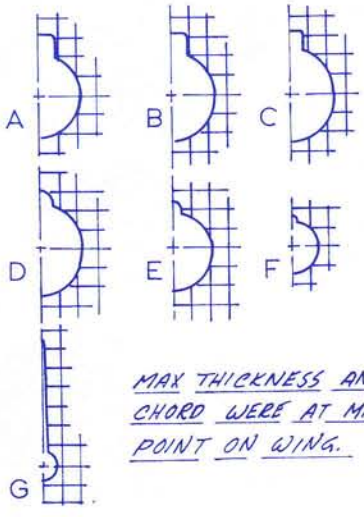
SPAN - 26'6'
LENGTH - 25'
EMPTY WEIGHT - 2400 LBS.
GROSS WEIGHT - 2560 LBS.
MAX SPEED - 265 M.P.H.

TYPICAL RAF 27 AIRFOIL SECTIONS

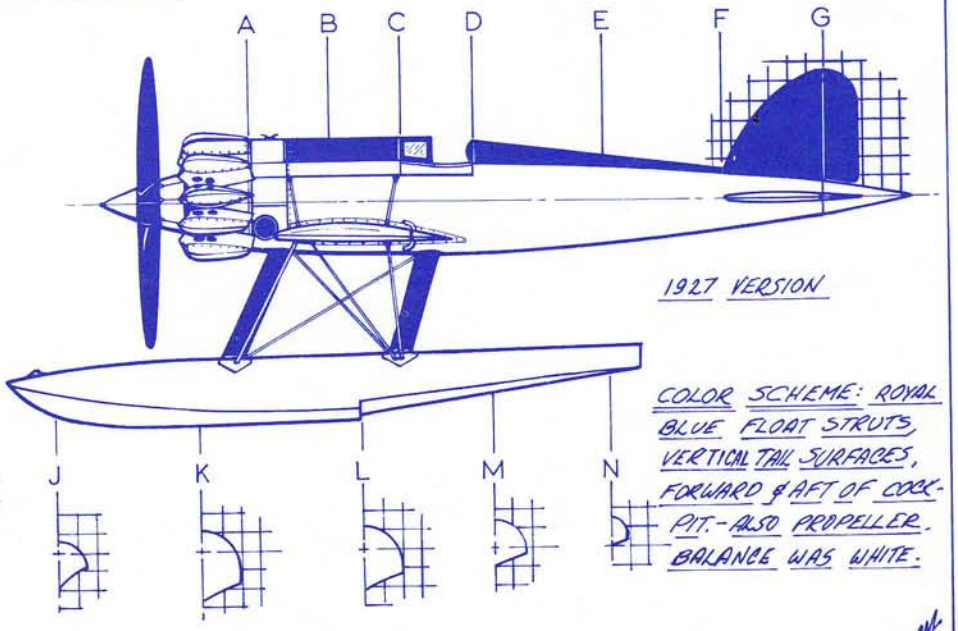


SHORT 'CRUSADER'

POWERPLANT: 9 CYLINDER AIR COOLED RADIAL MERCURY I ENGINE PRODUCING 650 HORSEPOWER. PROPELLER WAS WOOD. ENGINE WAS GEARED ALLOWING POINTED NOSE.

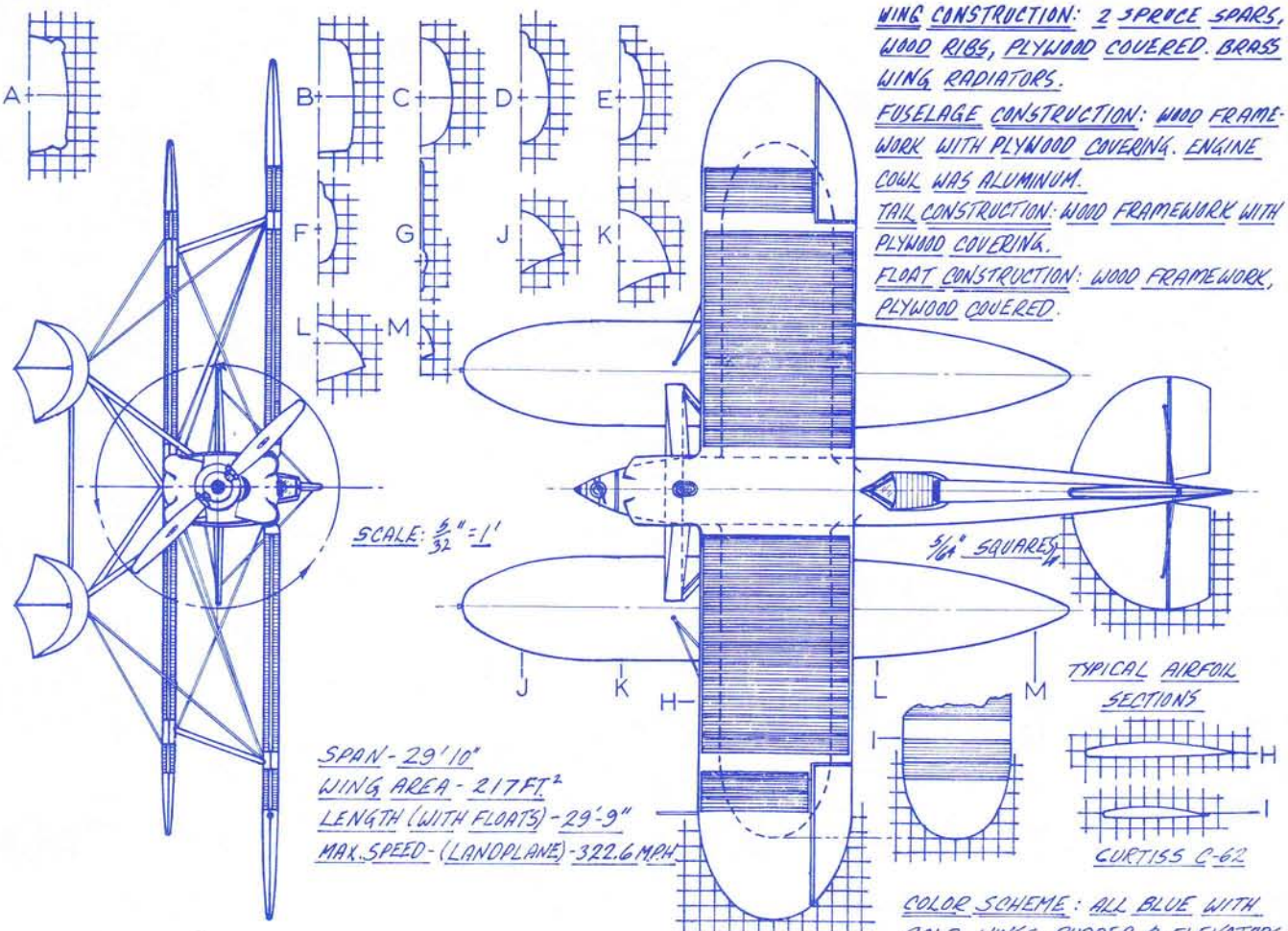


MAX THICKNESS AND CHORD WERE AT MID-POINT ON WING.



1927 VERSION

COLOR SCHEME: ROYAL BLUE FLOAT STRUTS, VERTICAL TAIL SURFACES, FORWARD & AFT OF COCKPIT. - ALSO PROPELLER. BALANCE WAS WHITE.



WING CONSTRUCTION: 2 SPRUCE SPARS, WOOD RIBS, PLYWOOD COVERED. BRASS WING RADIATORS.
FUSELAGE CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING. ENGINE COWL WAS ALUMINUM.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING.
FLOAT CONSTRUCTION: WOOD FRAMEWORK, PLYWOOD COVERED.

SCALE: $\frac{3}{32}$" = 1'

5/64" SQUARES

SPAN - 29'10"
WING AREA - 217 FT.²
LENGTH (WITH FLOATS) - 29'-9"
MAX. SPEED - (LANDPLANE) - 322.6 MPH

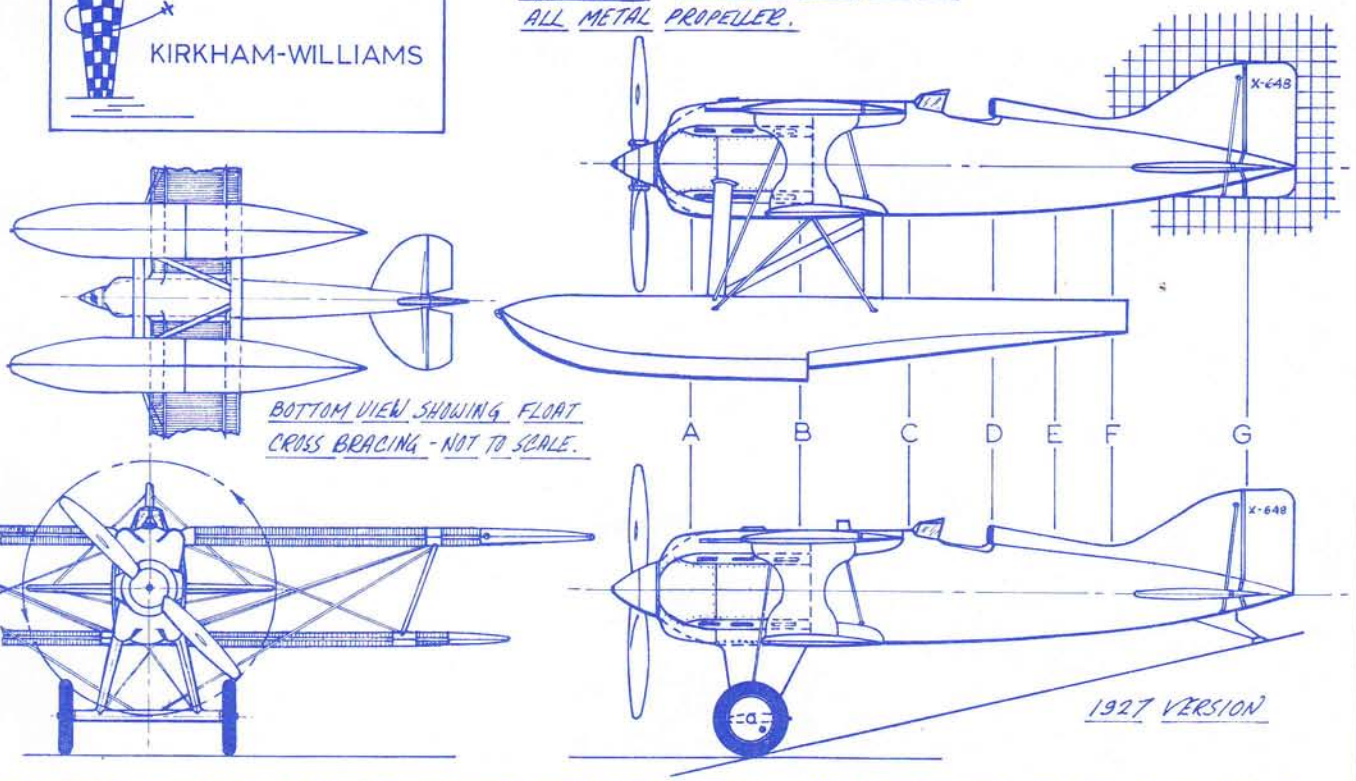
TYPICAL AIRFOIL SECTIONS

CURTISS C-62

COLOR SCHEME: ALL BLUE WITH GOLD WINGS, RUDDER & ELEVATORS.

KIRKHAM-WILLIAMS

POWERPLANT: PACKARD X-12, 1250 H.P. ALL METAL PROPELLER.



BOTTOM VIEW SHOWING FLOAT CROSS BRACING - NOT TO SCALE.

1927 VERSION

THE KIRKHAM-WILLIAMS WAS BUILT BY KIRKHAM PRODUCTS COMPANY. MAJOR EFFORT WAS MADE BY AL WILLIAMS TO MAKE CRAFT A 'GRASS ROOTS' ENTRY IN 1927 SCHNEIDER RACE. NOT READY IN TIME, CRAFT WAS CONVERTED TO LAND PLANE. CM

TAIL CONSTRUCTION: STABILIZER, ELEVATOR & RUDDER WERE BUILT-UP WOOD FRAMES COVERED WITH PLYWOOD.

COLOR SCHEME: ALL BLUE FUSELAGE AND TAIL. SILVER SPINNER, ENGINE CYLINDER COVERS, FLOAT TOPS, STRUTS, WING & HORIZONTAL TAIL.

FUSELAGE CONSTRUCTION: ALL ALUMINUM SEMI-MONOCOQUE WITH SKIN ATTACHED TO 32 "U" SECTION FORMERS.

WING CONSTRUCTION: 2 WOODEN SPARS WITH RIBS OF 3PLY SPRUCE PLUS $\frac{3}{32}$" PLYWOOD WING COVERING. 30 ga. COPPER RADIATORS ATTACHED TO TOP & BOTTOM SKIN WITH SCREWS.

SCALE: $\frac{5}{32}$" = 1'

$\frac{5}{64}$" SQUARES

SPAN - 26' 9"
LENGTH - 24' 3½"
HEIGHT - 11' 1"
WEIGHT (EMPTY) - 2680 LBS.

"NOTE" FUSELAGE SIDE NUMERALS WERE WHITE; "N" NUMBERS BLACK.

SUPERMARINE
S-5

H

I

TYPICAL RAF 30 AIRFOIL SECTIONS

POWERPLANT: 875 H.P. GEARED NAPIER LION VIIB - 1476 CU.IN.; ALUMINUM PROPELLER.

WHITE

A B C D E F G

FLOAT CONSTRUCTION: ALL ANODIZED ALUMINUM. STARBOARD FLOAT ALSO HELD A TIN-PLATE FUEL TANK.

1927 VERSION

J K L M N

BLACK "5"s ON WINGS OF N219 IN 1929 - UNDERSIDE ONLY

1929 VERSION

BOTTOM VIEW SHOWING RIGGING. NOT TO SCALE

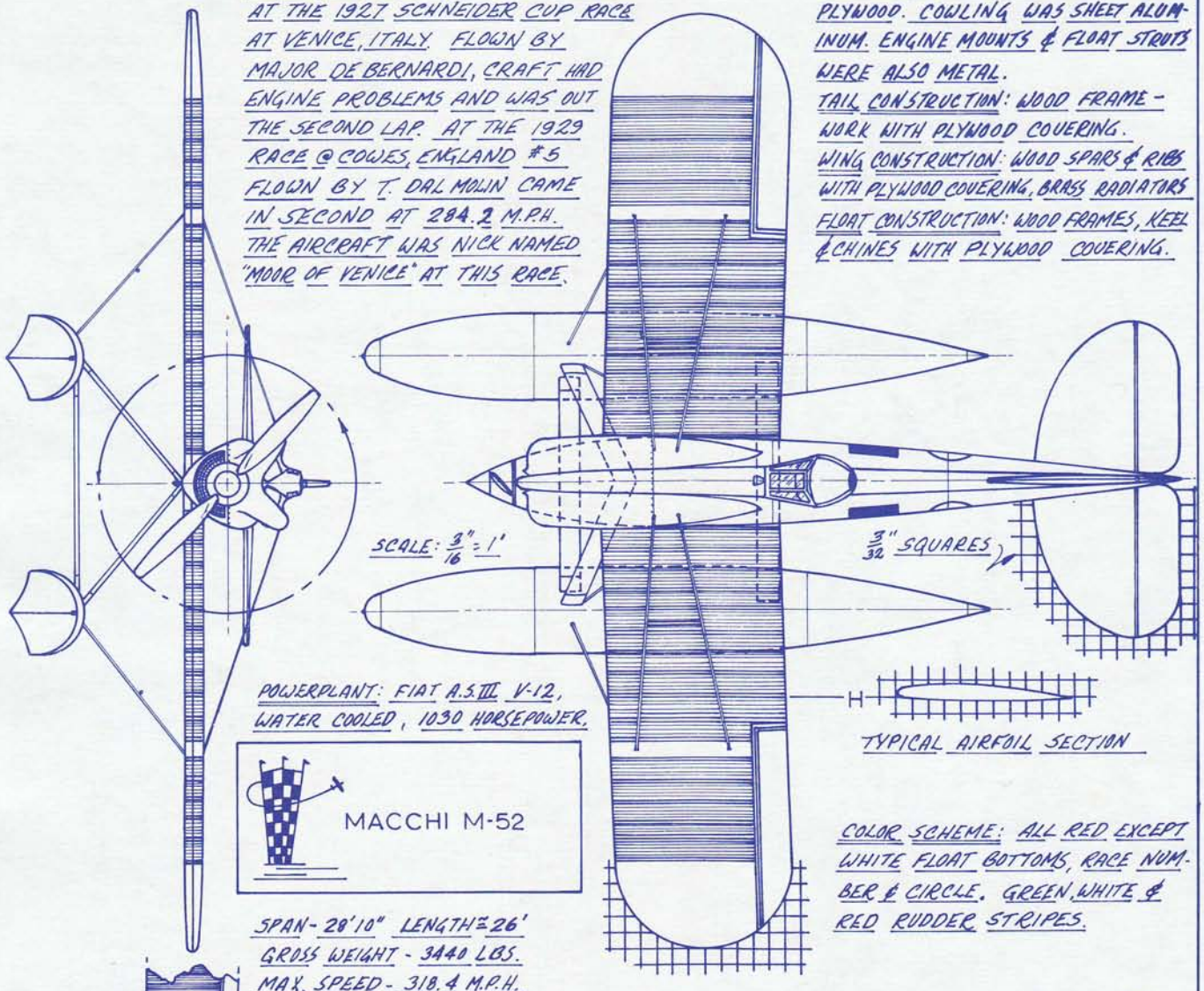
6

ABOVE "6" ON 1927 VERSION - NO ROUNDEL

N220 & N219 TOOK 1ST & 2ND PLACES IN THE 1927 SCHNEIDER CUP RACE AT LIDO ITALY. SPEEDS WERE 281.65 & 273 M.P.H.

#5 WAS ONE OF 3 M-52 AIRCRAFT AT THE 1927 SCHNEIDER CUP RACE AT VENICE, ITALY. FLOWN BY MAJOR DE BERNARDI, CRAFT HAD ENGINE PROBLEMS AND WAS OUT THE SECOND LAP. AT THE 1929 RACE @ COWES, ENGLAND #5 FLOWN BY T. DAL MOLIN CAME IN SECOND AT 284.2 M.P.H. THE AIRCRAFT WAS NICK NAMED "MOOR OF VENICE" AT THIS RACE.

FUSELAGE CONSTRUCTION: ALL WOOD FORMERS & STRINGERS COVERED WITH PLYWOOD. COWLING WAS SHEET ALUMINUM. ENGINE MOUNTS & FLOAT STRUTS WERE ALSO METAL.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING.
WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING, BRASS RADIATORS
FLOAT CONSTRUCTION: WOOD FRAMES, KEEL & CHINES WITH PLYWOOD COVERING.



SCALE: $\frac{3}{16}$" = 1'

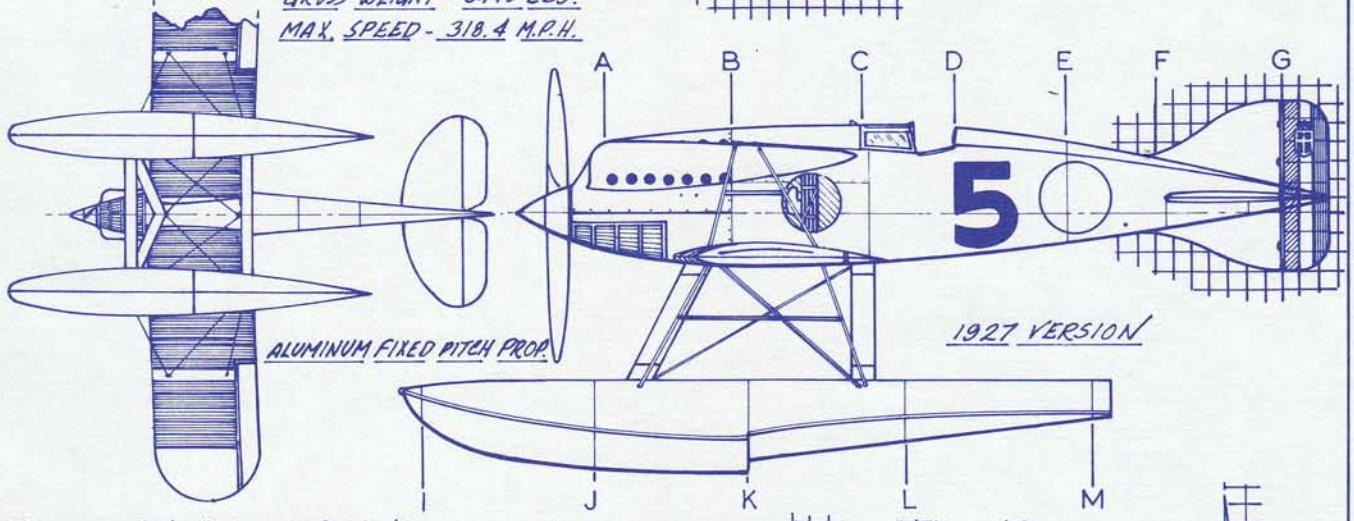
$\frac{3}{32}$" SQUARES

POWERPLANT: FIAT A.S.III V-12, WATER COOLED, 1030 HORSEPOWER.

TYPICAL AIRFOIL SECTION

COLOR SCHEME: ALL RED EXCEPT WHITE FLOAT BOTTOMS, RACE NUMBER & CIRCLE. GREEN, WHITE & RED RUDDER STRIPES.

SPAN - 28'10" LENGTH = 26'
GROSS WEIGHT - 3440 LBS.
MAX. SPEED - 318.4 M.P.H.



ALUMINUM FIXED PITCH PROP.

1927 VERSION

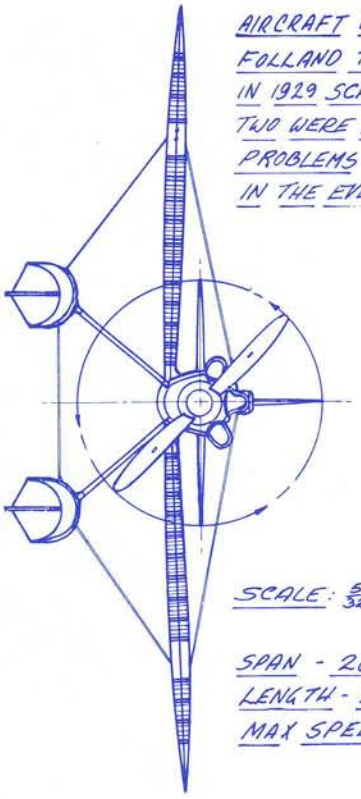
VIEW SHOWING UNDERSIDE RIGGING

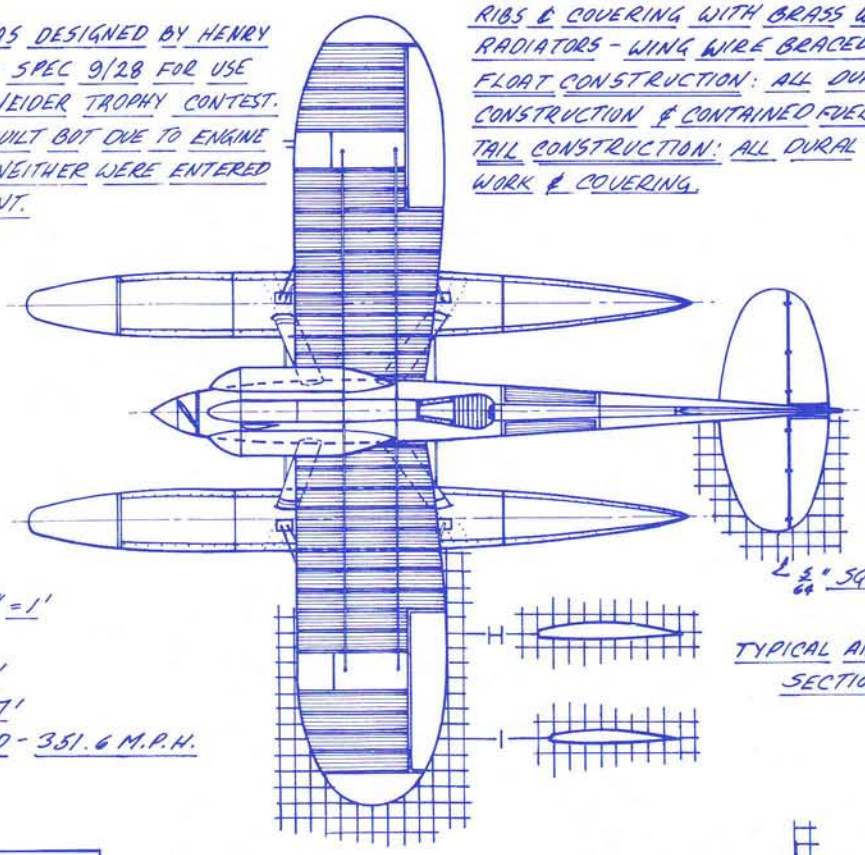


CH

FUSELAGE CONSTRUCTION: DURAL SEMI-MONOCOQUE WITH CURVED INTEGRAL WING ROOTS.
WING CONSTRUCTION: ALL WOOD SPARS, RIBS & COVERING WITH BRASS WING RADIATORS - WING WIRE BRACED.
FLOAT CONSTRUCTION: ALL DURAL CONSTRUCTION & CONTAINED FUEL TANKS.
TAIL CONSTRUCTION: ALL DURAL FRAMEWORK & COVERING.

AIRCRAFT WAS DESIGNED BY HENRY FOLLAND TO SPEC 9/28 FOR USE IN 1929 SCHNEIDER TROPHY CONTEST. TWO WERE BUILT BOT DUE TO ENGINE PROBLEMS NEITHER WERE ENTERED IN THE EVENT.





1 5/64" SQUARES

TYPICAL AIRFOIL SECTIONS

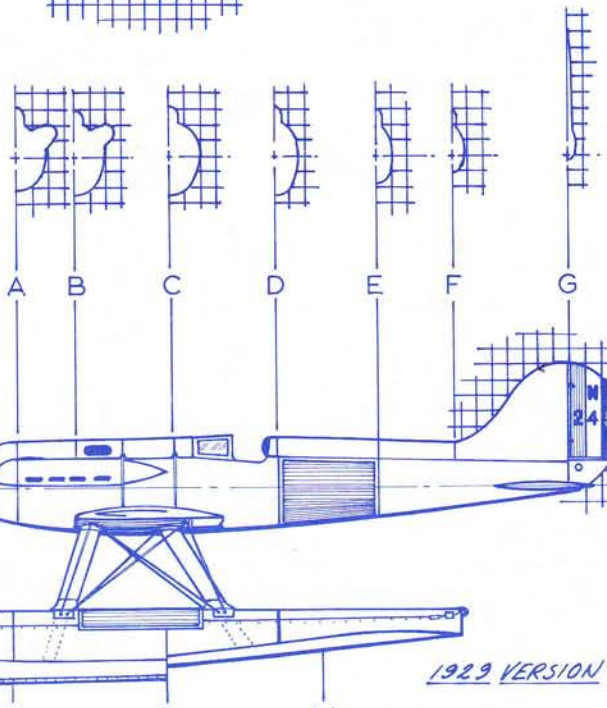
SCALE: 5/32" = 1'

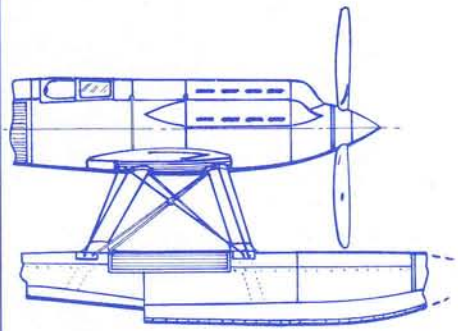
SPAN - 26'
LENGTH - 27'
MAX SPEED - 351.6 M.P.H.



GLOSTER VI

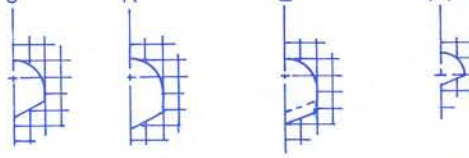
POWERPLANT: 1320 HORSEPOWER NAPIER LION VII D - 3 BANKS OF 4 CYLINDERS (12 CYL). ALL METAL FIXED PITCH PROPELLER.





1929 VERSION

LATE 1929 VERSION
ABOVE VIEW SHOWS OPTIONAL COCKPIT COVER. ALL RIVETING WAS FLUSH.
CRAFT NICKNAME WAS "GOLDEN ARROW".

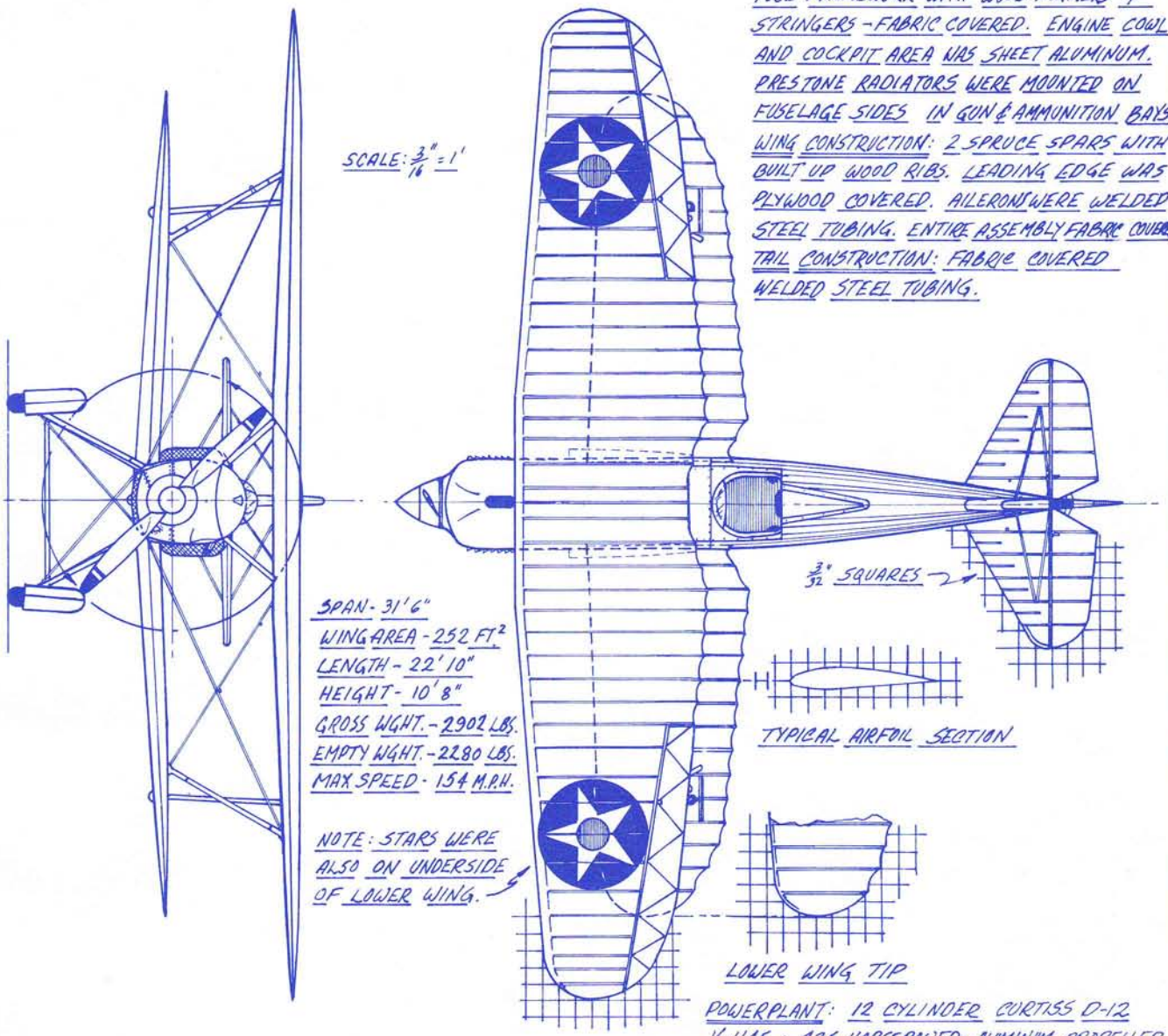


COLOR SCHEME: OLD GOLD OVERALL - BLUE, WHITE & RED RUDDER - BLACK NUMERALS

CRAFT SET WORLD SPEED RECORD OF 336.31 M.P.H ON SEPT. 12, 1929 - BROKEN 2 DAYS LATER BY THE S-6! CK

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK WITH WOOD FORMERS & STRINGERS - FABRIC COVERED. ENGINE COWL AND COCKPIT AREA WAS SHEET ALUMINUM. PRESTONE RADIATORS WERE MOUNTED ON FUSELAGE SIDES IN GUN & AMMUNITION BAYS. WING CONSTRUCTION: 2 SPRUCE SPARS WITH BUILT UP WOOD RIBS. LEADING EDGE WAS PLYWOOD COVERED. AILERONS WERE WELDED STEEL TUBING. ENTIRE ASSEMBLY FABRIC COVERED. TAIL CONSTRUCTION: FABRIC COVERED WELDED STEEL TUBING.

SCALE: $\frac{3}{16}$" = 1'



$\frac{3}{32}$" SQUARES

SPAN - 31'6"
WING AREA - 252 FT.²
LENGTH - 22'10"
HEIGHT - 10'8"
GROSS WGHT. - 2902 LBS.
EMPTY WGHT. - 2280 LBS.
MAX SPEED - 154 M.P.H.

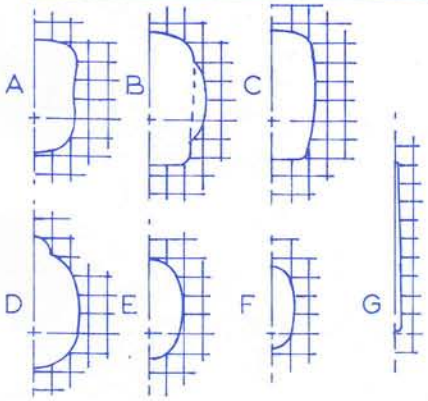
NOTE: STARS WERE ALSO ON UNDERSIDE OF LOWER WING.

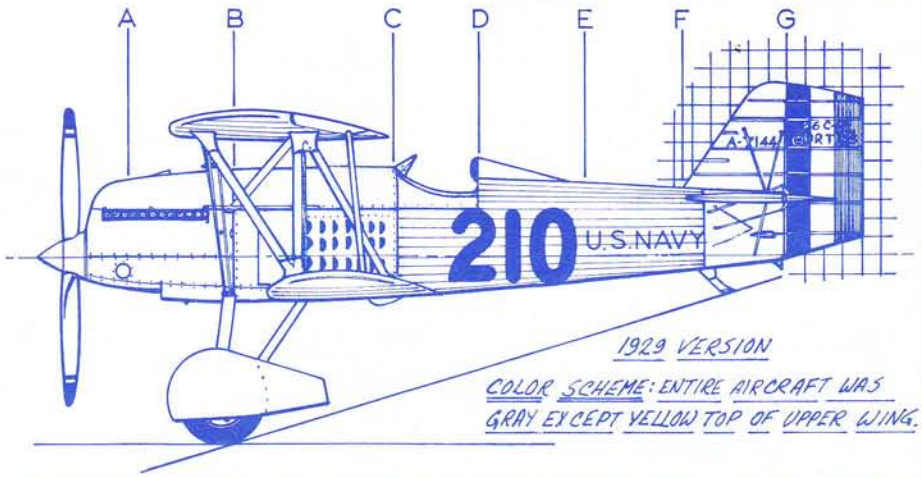
TYPICAL AIRFOIL SECTION

LOWER WING TIP

POWERPLANT: 12 CYLINDER CURTISS D-12 V-1145; 435 HORSEPOWER; ALUMINUM PROPELLER

CURTISS F6C-3 'HAWK'





1929 VERSION

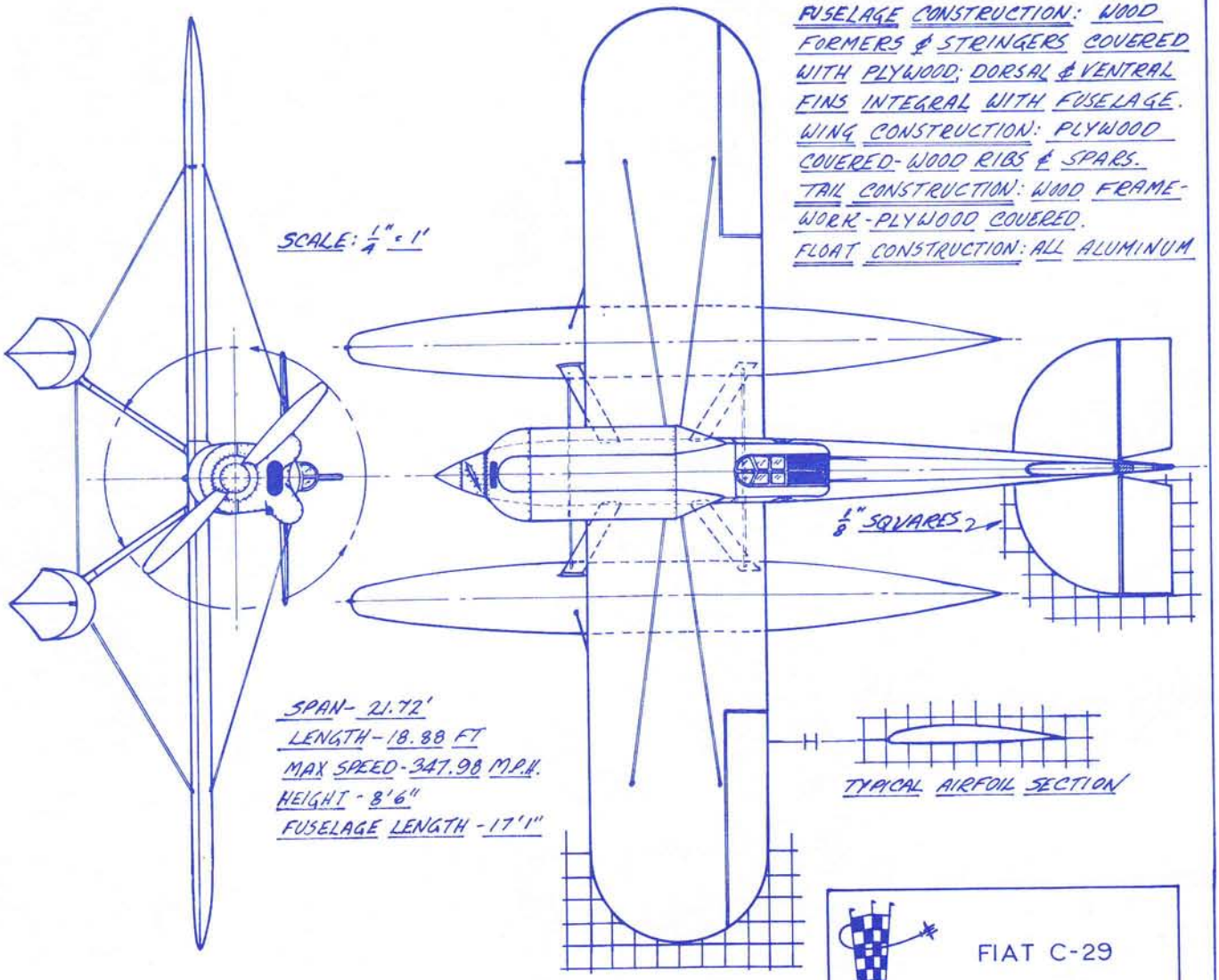
COLOR SCHEME: ENTIRE AIRCRAFT WAS GRAY EXCEPT YELLOW TOP OF UPPER WING.

THIS AIRCRAFT FLOWN BY COMDR. J.J. CLARK U.S.N. TO FOURTH PLACE IN "FREE FOR ALL" RACE AT 1929 NATIONAL AIR RACES AT CLEVELAND. SPEED WAS 153.38 M.P.H. DOUG DAVIS WON RACE WITH TRAVELAIR 'R' MYSTERY PLANE @ 194.9 M.P.H.

CK

FUSELAGE CONSTRUCTION: WOOD FORMERS & STRINGERS COVERED WITH PLYWOOD; DORSAL & VENTRAL FINS INTEGRAL WITH FUSELAGE.
WING CONSTRUCTION: PLYWOOD COVERED-WOOD RIBS & SPARS.
TAIL CONSTRUCTION: WOOD FRAME-WORK-PLYWOOD COVERED.
FLOAT CONSTRUCTION: ALL ALUMINUM

SCALE: 1/4" = 1'



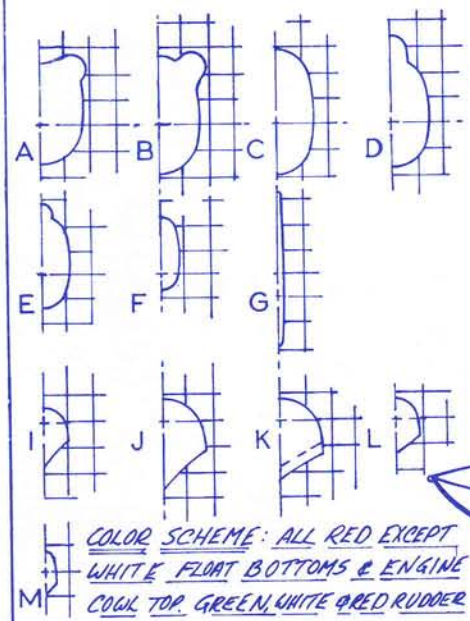
SPAN- 21.72'
LENGTH- 18.88 FT
MAX SPEED- 347.98 M.P.H.
HEIGHT - 8'6"
FUSELAGE LENGTH - 17'1"

TYPICAL AIRFOIL SECTION

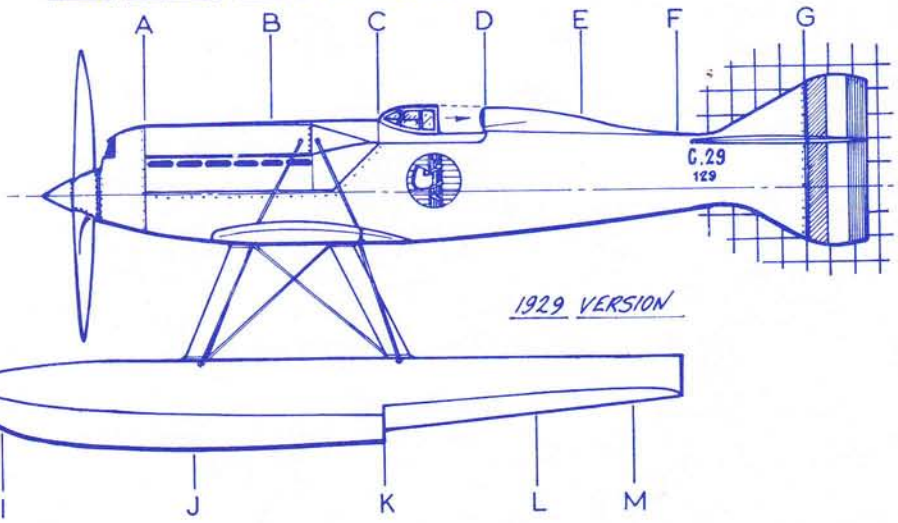


FIAT C-29

POWERPLANT: 1000 H.P. FIAT A5-5 V-12 LIQUID COOLED ENGINE. METAL PROPELLER.



NOTE: WINDSHIELD SLID REAR-WARD FORMING CANOPY ENCLOSURE.



1929 VERSION

COLOR SCHEME: ALL RED EXCEPT WHITE FLOAT BOTTOMS & ENGINE COWL TOP. GREEN, WHITE & RED RUDDER

A VERY 'HOT' AIRPLANE, "129" WAS ONE OF THREE BUILT WITH THE OTHER TWO CRASHING DURING TEST FLIGHTS. IT WAS BROUGHT TO '29 SCHNEIDER BUT DID NOT RACE DUE TO INSUFFICIENT TESTING BEING DONE. CK

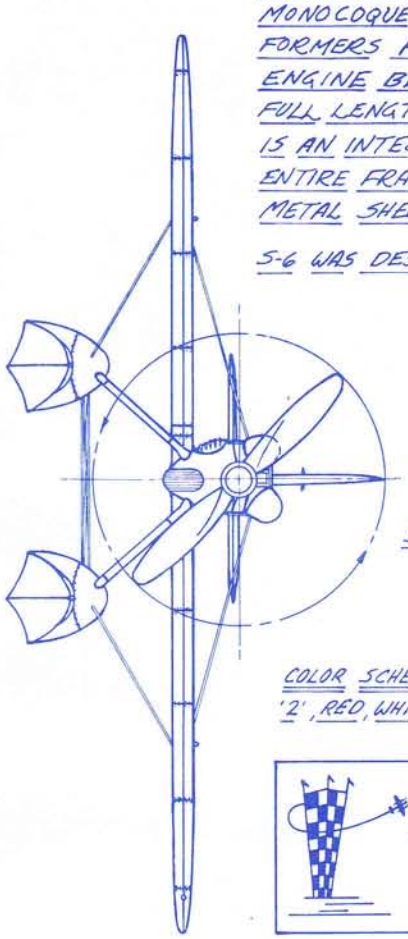
FUSELAGE CONSTRUCTION: SEMI-MONOCOQUE MADE UP OF 46 ALUMINUM FORMERS HELD IN PLACE BY ENGINE BEARERS RUNNING THE FULL LENGTH OF FUSELAGE. FIN IS AN INTEGRAL PART OF ASSEMBLY. ENTIRE FRAMEWORK COVERED WITH METAL SHEETING.

S-6 WAS DESIGNED BY R.J. MITCHELL

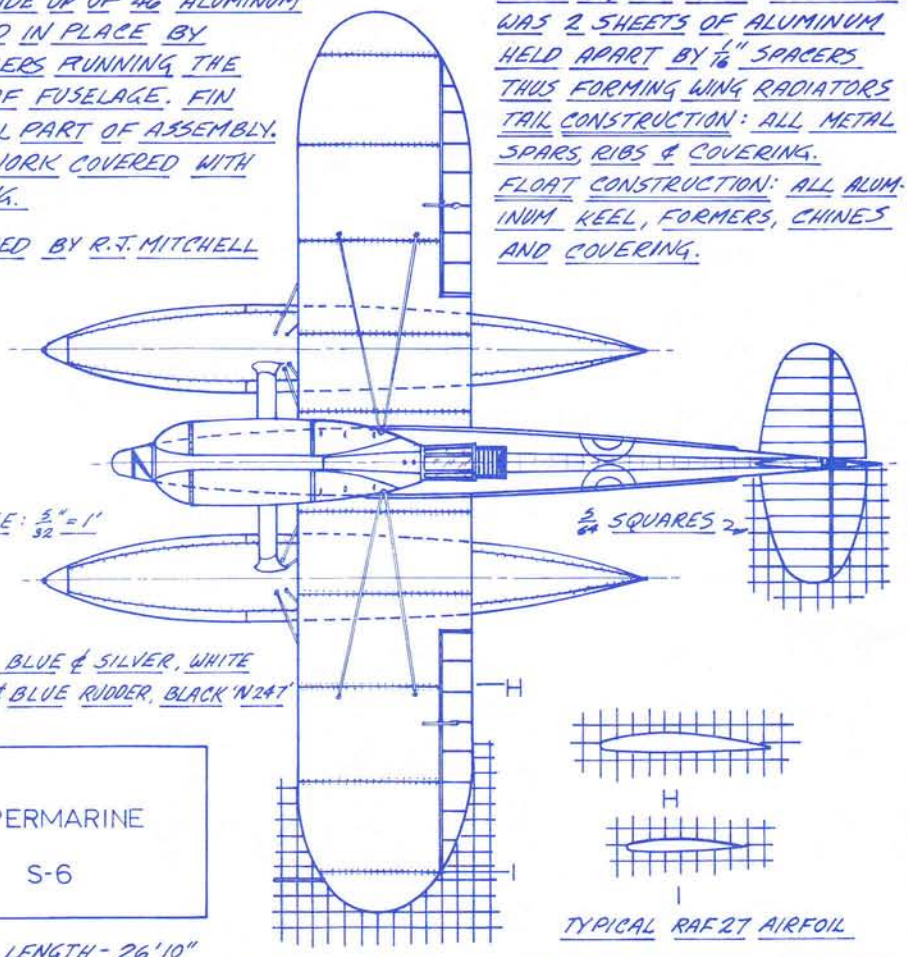
WING CONSTRUCTION: ALUMINUM SPARS (2) AND RIBS. COVERING WAS 2 SHEETS OF ALUMINUM HELD APART BY 1/16" SPACERS THUS FORMING WING RADIATORS

TAIL CONSTRUCTION: ALL METAL SPARS, RIBS & COVERING.

FLOAT CONSTRUCTION: ALL ALUMINUM KEEL, FORMERS, CHINES AND COVERING.



SCALE: 5/32" = 1'



5/64 SQUARES

COLOR SCHEME: BLUE & SILVER, WHITE '2', RED, WHITE & BLUE RUDDER, BLACK 'N247'

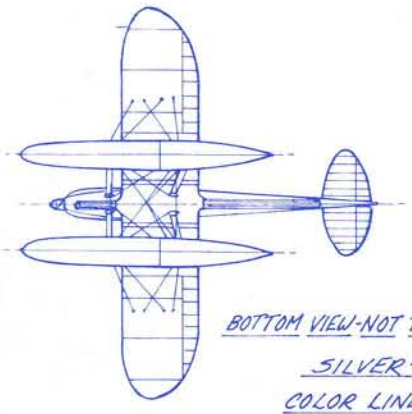


TYPICAL RAF 27 AIRFOIL

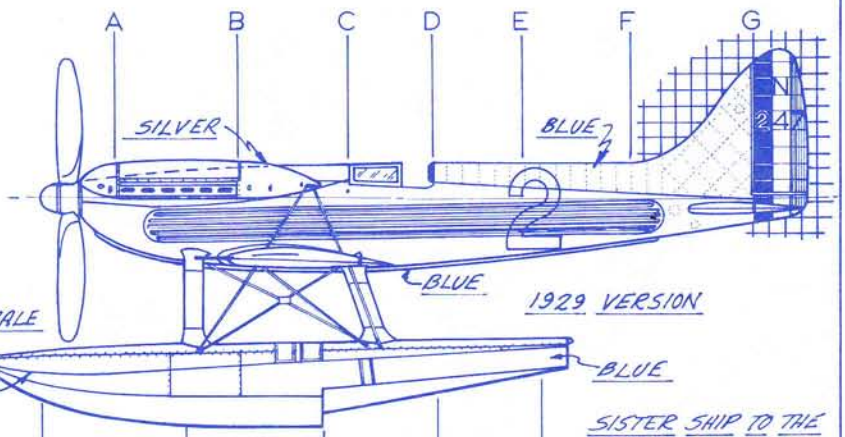
SPAN - 30' WING AREA - 145 FT² LENGTH - 26'10"
FLOAT LENGTH - 19'5" WEIGHT EMPTY - 4471 LBS
GROSS WEIGHT - 5771 LBS. MAX SPEED - 357.7 MPH

PROPELLER WAS FIXED PITCH

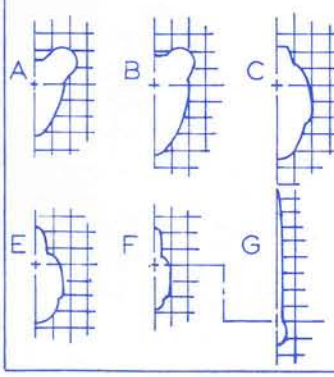
POWERPLANT: ROLLS-ROYCE "R" 12 CYLINDER "V" TYPE 1900 H.P.

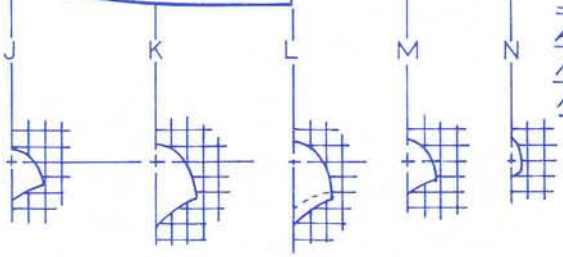


BOTTOM VIEW-NOT TO SCALE



1929 VERSION





SISTER SHIP TO THE ABOVE PLANE WAS N-248 WITH RACE NUMBER "8"

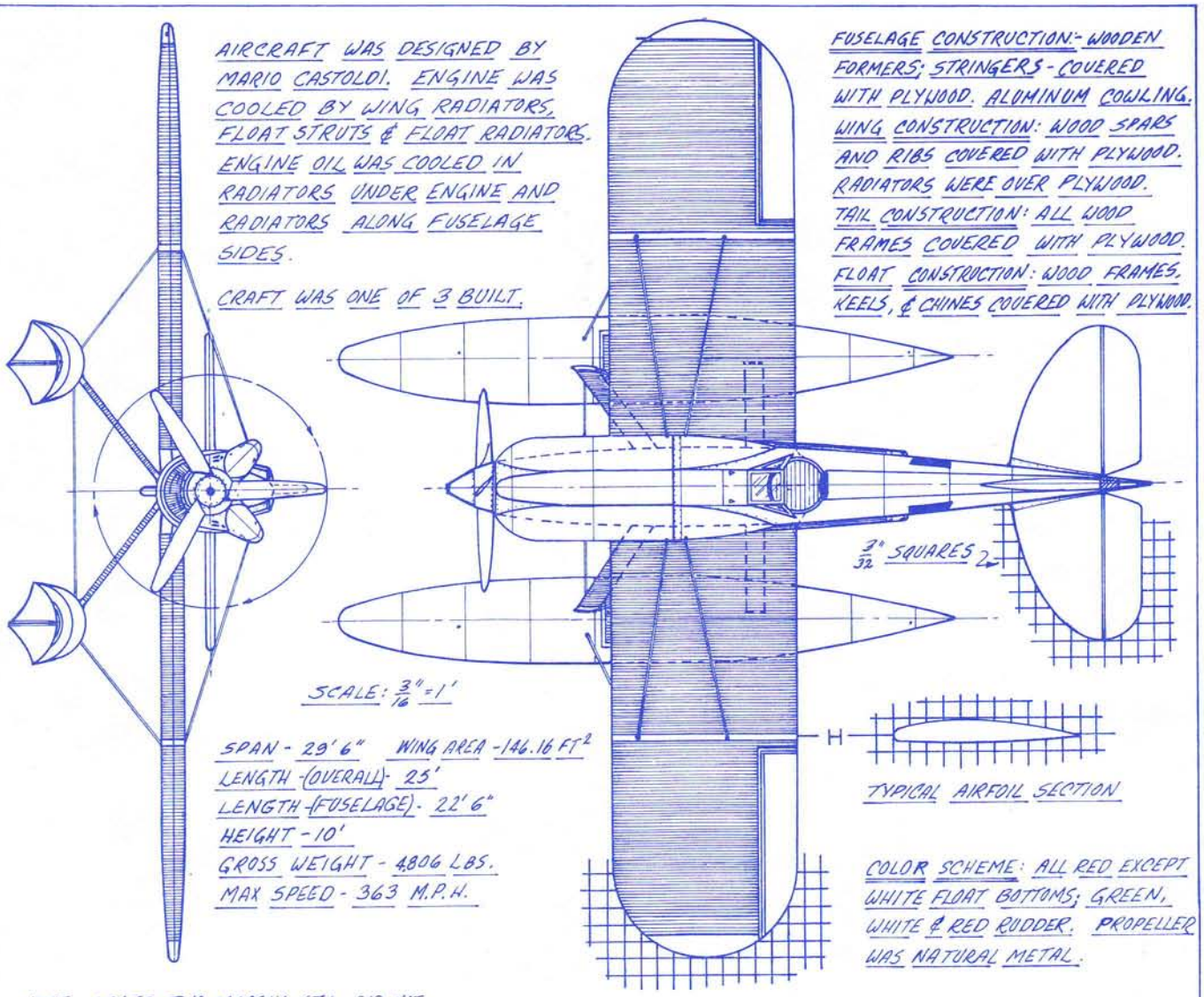
FLOWN BY F/O H.R.D. WAGHORN N-247 WON THE 1929 SCHNEIDER TROPHY CONTEST. TWO WEEKS LATER S/LDR. A.H. ORLEBAR SET A WORLD AIR SPEED RECORD OF 357.7 M.P.H. IN SAME AIRCRAFT.

CH

AIRCRAFT WAS DESIGNED BY MARIO CASTOLDI. ENGINE WAS COOLED BY WING RADIATORS, FLOAT STRUTS & FLOAT RADIATORS. ENGINE OIL WAS COOLED IN RADIATORS UNDER ENGINE AND RADIATORS ALONG FUSELAGE SIDES.

CRAFT WAS ONE OF 3 BUILT.

FUSELAGE CONSTRUCTION:- WOODEN FORMERS; STRINGERS - COVERED WITH PLYWOOD. ALUMINUM COWLING. WING CONSTRUCTION: WOOD SPARS AND RIBS COVERED WITH PLYWOOD. RADIATORS WERE OVER PLYWOOD. TAIL CONSTRUCTION: ALL WOOD FRAMES COVERED WITH PLYWOOD. FLOAT CONSTRUCTION: WOOD FRAMES, KEELS, & CHINES COVERED WITH PLYWOOD.



$\frac{3}{32}$" SQUARES

SCALE: $\frac{3}{16}$" = 1'

SPAN - 29' 6" WING AREA - 146.16 FT^2
LENGTH - (OVERALL) - 25'
LENGTH - (FUSELAGE) - 22' 6"
HEIGHT - 10'
GROSS WEIGHT - 4806 LBS.
MAX SPEED - 363 M.P.H.

H

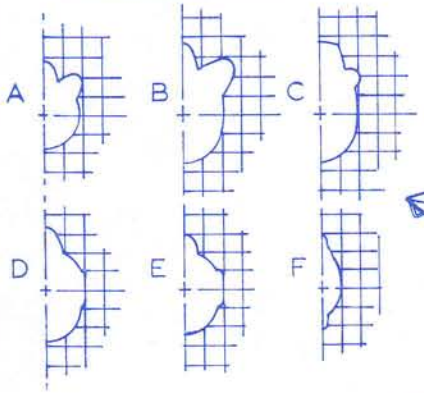
TYPICAL AIRFOIL SECTION

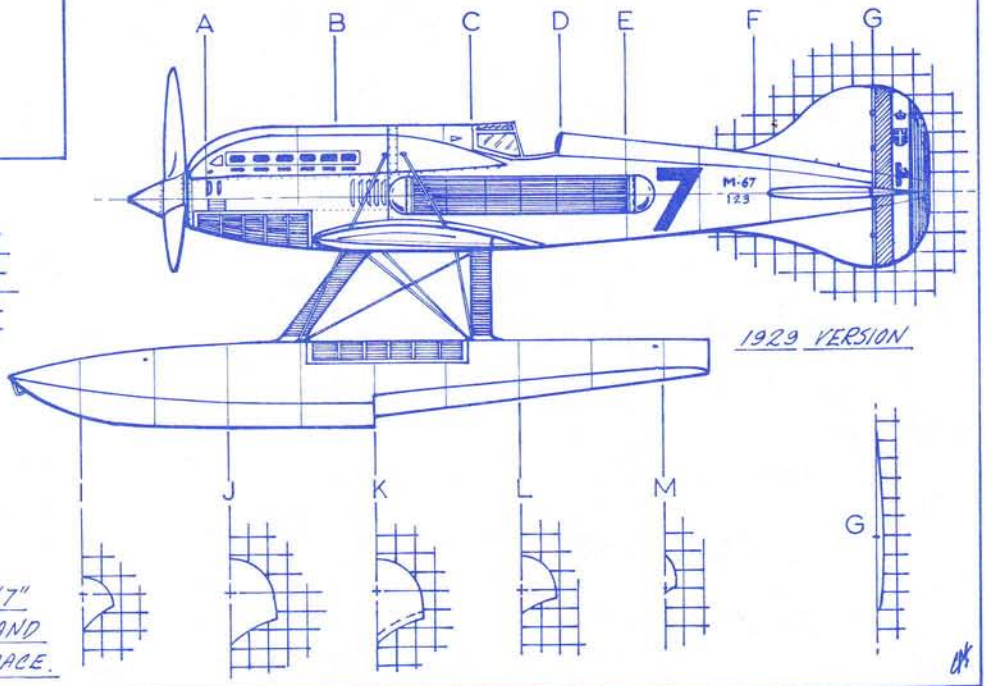
COLOR SCHEME: ALL RED EXCEPT WHITE FLOAT BOTTOMS; GREEN, WHITE & RED RUDDER. PROPELLER WAS NATURAL METAL.

NOTE: OTHER TWO MACCHI 67's DID NOT HAVE RADIATORS ON FLOATS & STRUTS.

POWERPLANT: 1400 H.P. ISOTTA-FRASCHINI ASSO 18 CYLINDER WATERCOOLED "W" TYPE ENGINE. 3 BLADE METAL FIXED PITCH PROP.





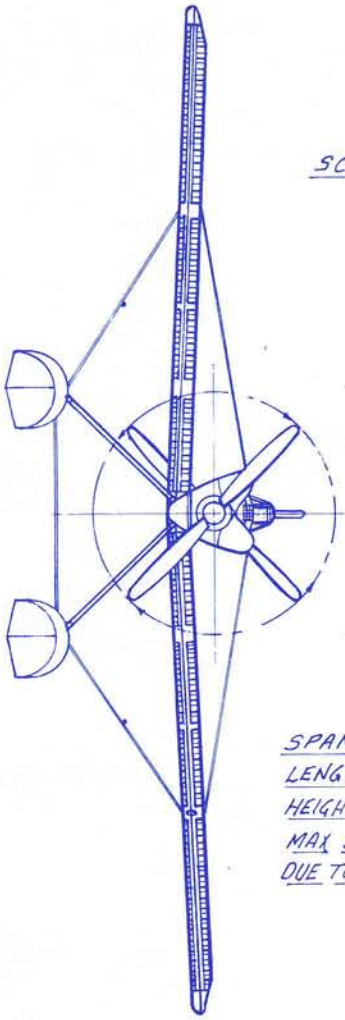


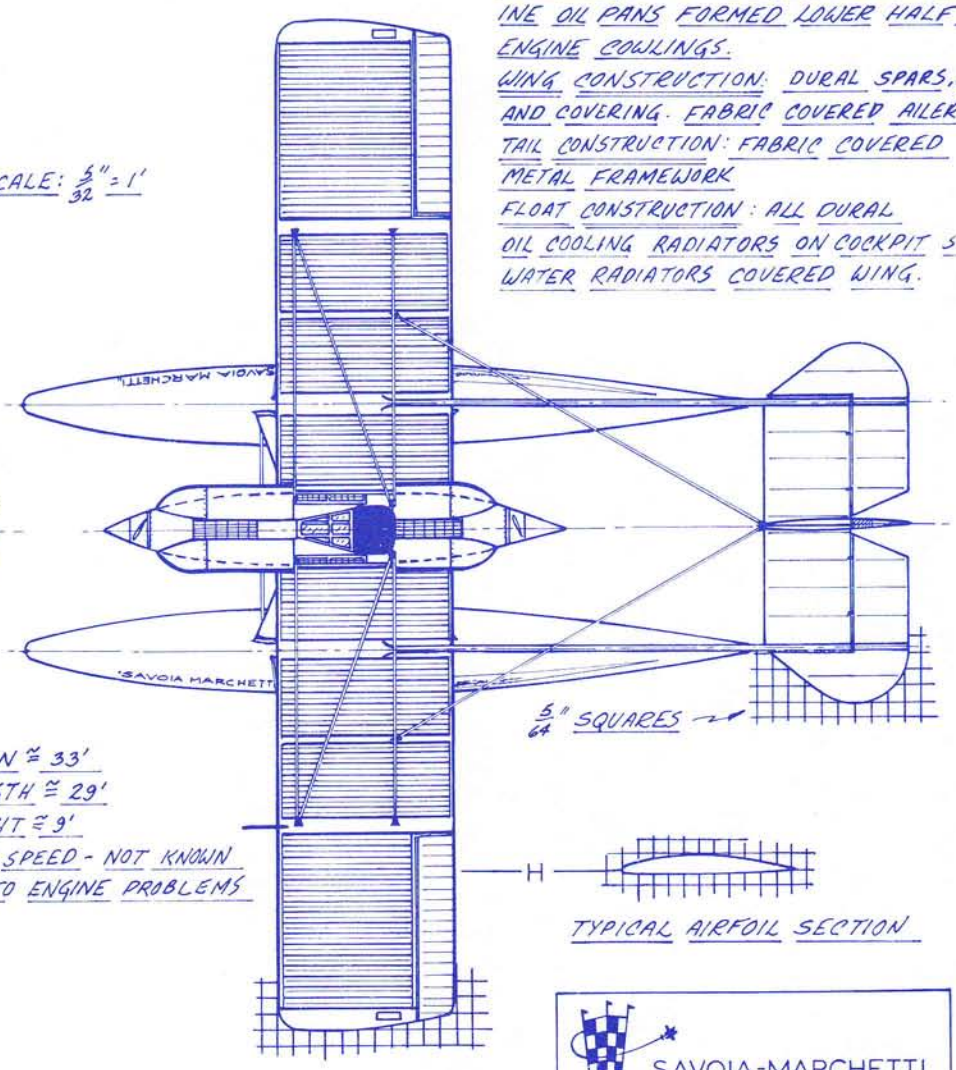
1929 VERSION

LT. REMO CADRINGHER FLEW "7" TO 5TH PLACE AT COWES, ENGLAND IN 1929 SCHNEIDER TROPHY RACE.

FUSELAGE CONSTRUCTION: ALL DURAL FORMERS, STRINGERS & COVERING. ENGINE OIL PANS FORMED LOWER HALF OF ENGINE COWLINGS.
WING CONSTRUCTION: DURAL SPARS, RIBS AND COVERING. FABRIC COVERED AILERONS.
TAIL CONSTRUCTION: FABRIC COVERED METAL FRAMEWORK
FLOAT CONSTRUCTION: ALL DURAL
OIL COOLING RADIATORS ON COCKPIT SIDES.
WATER RADIATORS COVERED WING.

SCALE: $\frac{5}{32}$" = 1'





$\frac{5}{64}$" SQUARES

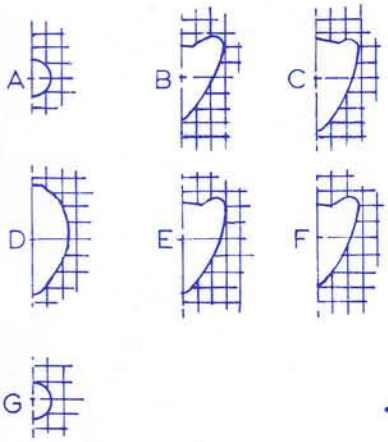
SPAN ≅ 33'
LENGTH ≅ 29'
HEIGHT ≅ 9'
MAX SPEED - NOT KNOWN DUE TO ENGINE PROBLEMS

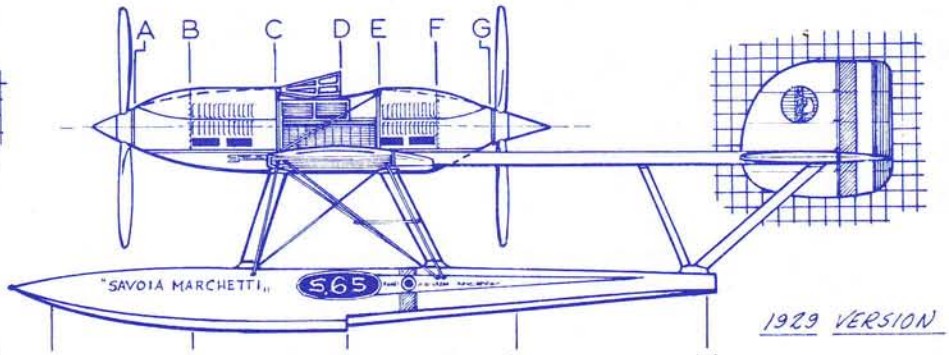
TYPICAL AIRFOIL SECTION



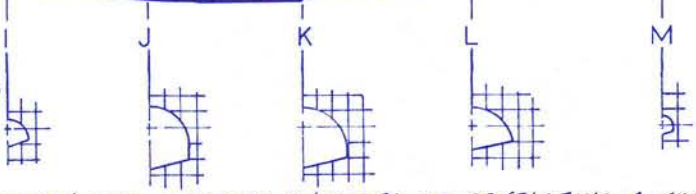
SAVOIA-MARCHETTI
S-65

POWERPLANTS: 2 1000 HORSEPOWER ISOTTA FRASCHINI ENGINES TURNING METAL PROPELLERS IN OPPOSITE DIRECTIONS.





1929 VERSION

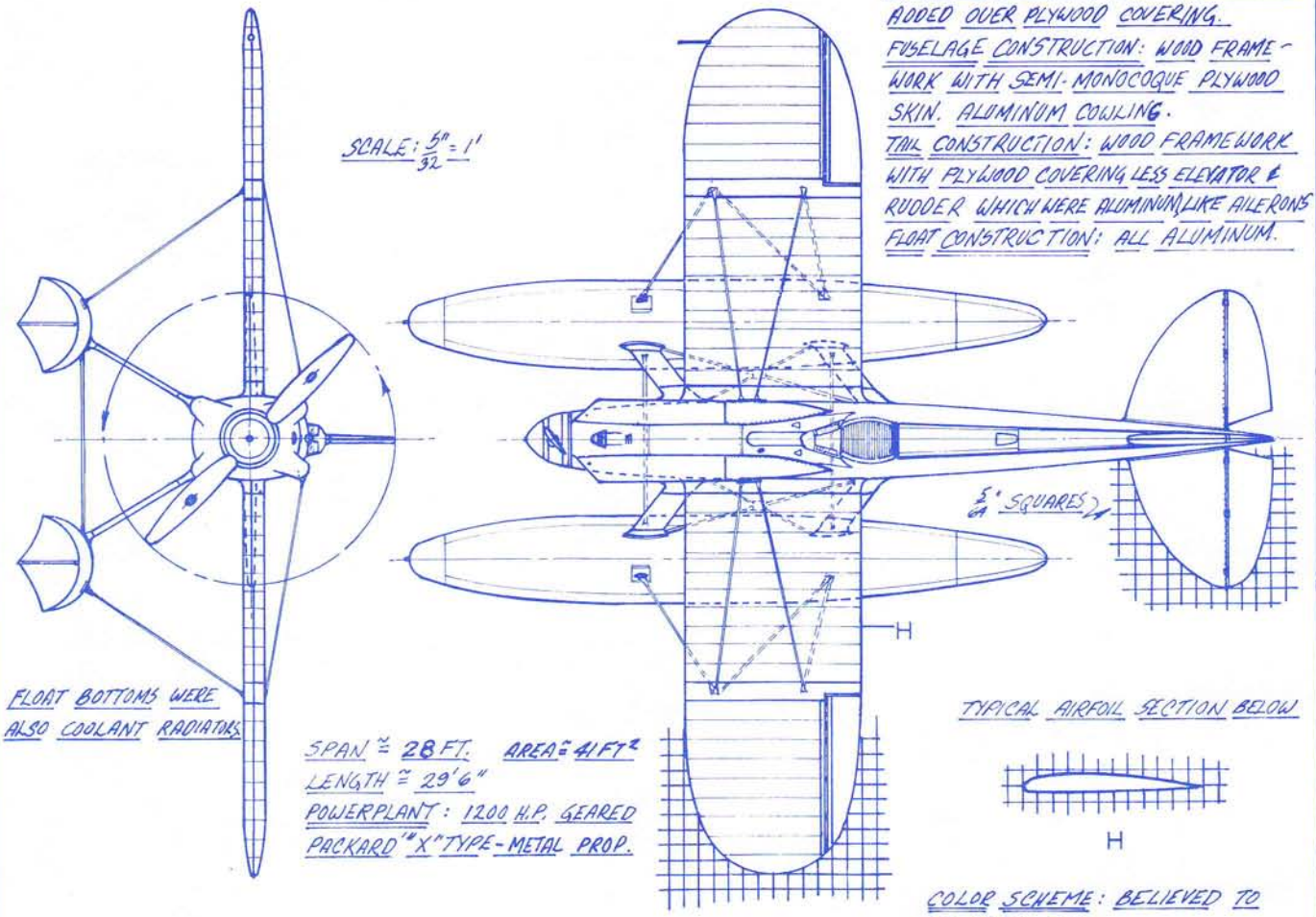


COLOR SCHEME: NATURAL DURAL FUSELAGE. BALANCE OF AIRCRAFT WAS RED. RUDDER WAS GREEN, WHITE & RED.

AIRCRAFT WAS WORKED ON BETWEEN 1929 AND 1931 IN HOPES OF DEVELOPING A SUCCESSFUL SCHNEIDER RACER. BUT RADIATOR AREA WAS ONLY SUFFICIENT FOR ONE ENGINE TO BE RUN WIDE OPEN AT A TIME.

WING CONSTRUCTION: WOOD SPARS, RIBS & PLYWOOD COVERING. WATER RADIATORS ADDED OVER PLYWOOD COVERING.
FUSELAGE CONSTRUCTION: WOOD FRAME-WORK WITH SEMI-MONOCOQUE PLYWOOD SKIN. ALUMINUM COWLING.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING LESS ELEVATOR & RUDDER WHICH WERE ALUMINUM LIKE AILERONS
FLOAT CONSTRUCTION: ALL ALUMINUM.

SCALE: $\frac{5''}{32} = 1'$



FLOAT BOTTOMS WERE ALSO COOLANT RADIATORS

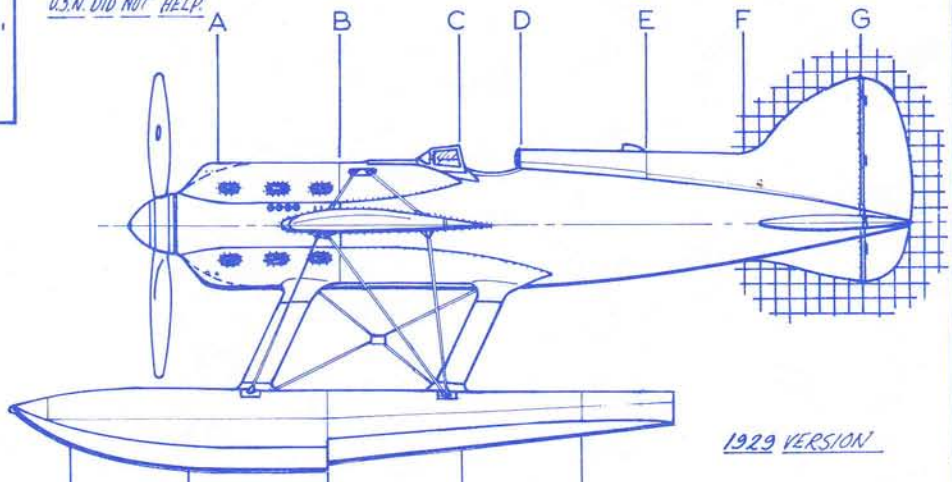
SPAN ≅ 28 FT. AREA ≅ 41 FT²
LENGTH ≅ 29'6"
POWERPLANT: 1200 H.P. GEARED PACKARD "X" TYPE-METAL PROP.

TYPICAL AIRFOIL SECTION BELOW

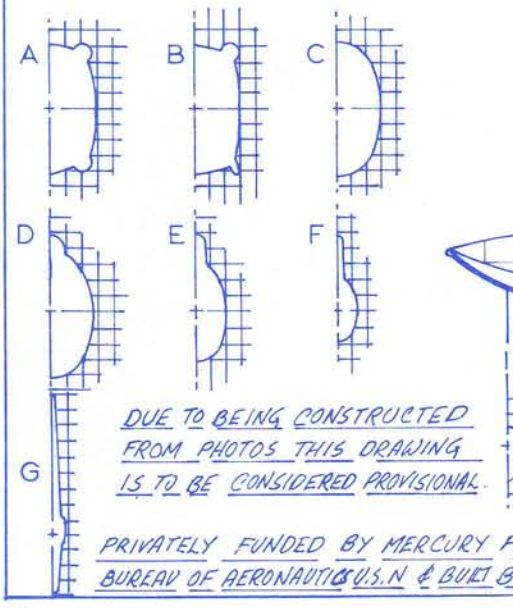
COLOR SCHEME: BELIEVED TO BE NAVY BLUE.

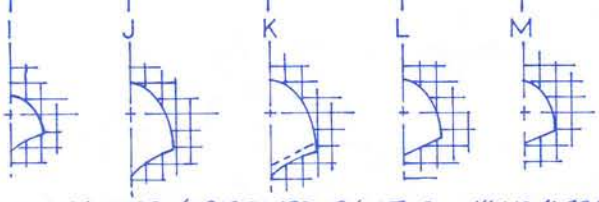
AMERICAN 'MERCURY'

MEANT FOR THE 1929 SCHNEIDER RACE, 'MERCURY' WAS TO BE FITTED WITH 1500 H.P. PACKARD ENGINE & TRANSPORTED TO ENGLAND BY U.S.N. DESTROYER; U.S.N. DID NOT HELP.



1929 VERSION



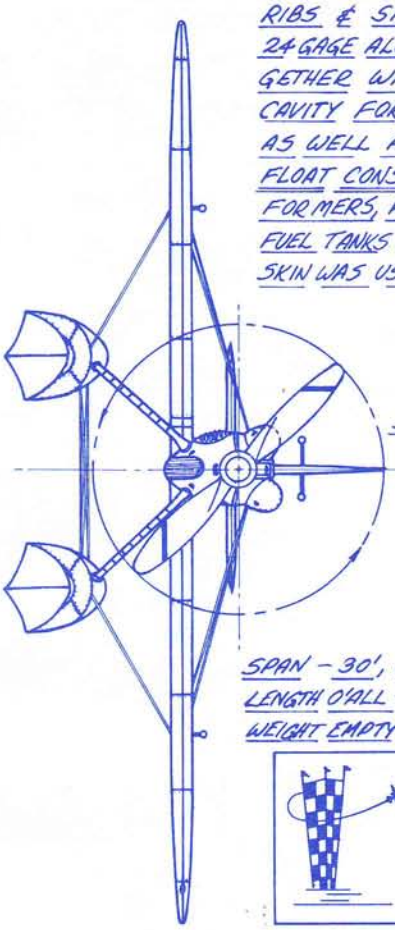


DUE TO BEING CONSTRUCTED FROM PHOTOS THIS DRAWING IS TO BE CONSIDERED PROVISIONAL.

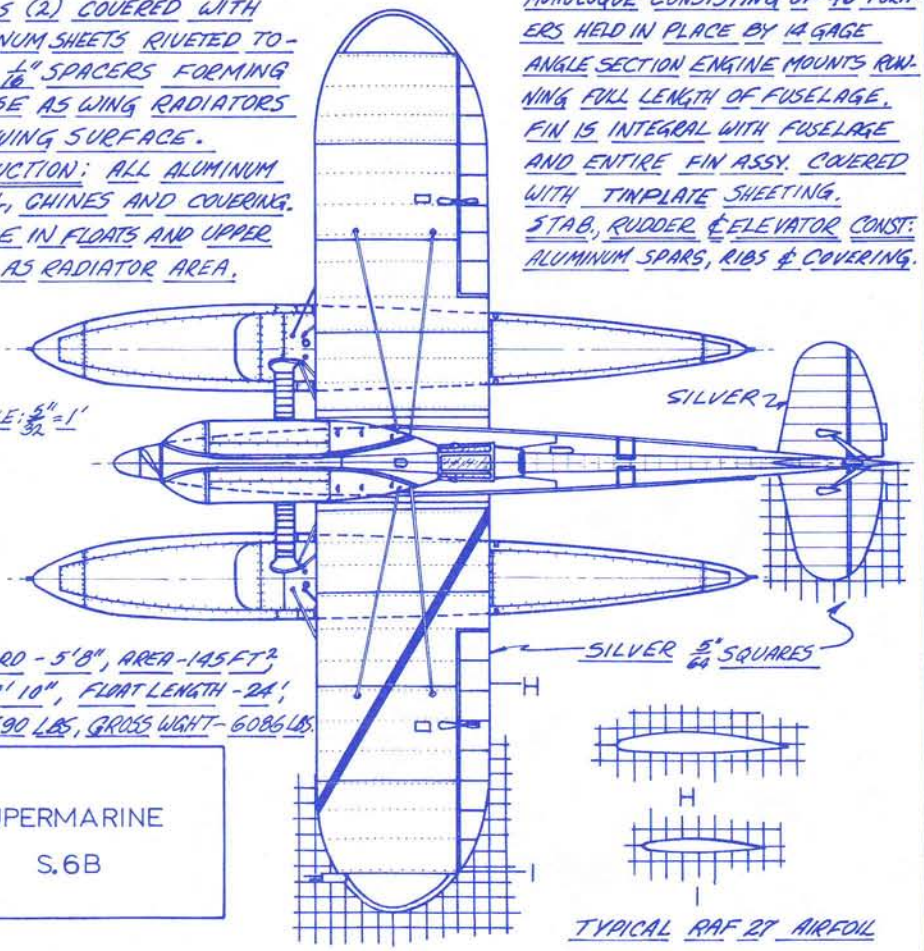
PRIVATELY FUNDED BY MERCURY FLYING CORP. & DIRECTED BY LT. AL WILLIAMS, CRAFT WAS DESIGNED BY BUREAU OF AERONAUTICS U.S.N. & BUILT BY THE NAVAL AIRCRAFT FACTORY. CRAFT WAS UNABLE TO TAKE OFF - OVERWEIGHT! CK

WING CONSTRUCTION: ALL ALUMINUM RIBS & SPARS (2) COVERED WITH 24 GAGE ALUMINUM SHEETS RIVETED TOGETHER WITH 1/16" SPACERS FORMING CAVITY FOR USE AS WING RADIATORS AS WELL AS WING SURFACE. FLOAT CONSTRUCTION: ALL ALUMINUM FORMERS, KEEL, CHINES AND COVERING. FUEL TANKS WERE IN FLOATS AND UPPER SKIN WAS USED AS RADIATOR AREA.

FUSELAGE CONSTRUCTION: SEMI-MONOCOQUE CONSISTING OF 46 FORMERS HELD IN PLACE BY 14 GAGE ANGLE SECTION ENGINE MOUNTS RUNNING FULL LENGTH OF FUSELAGE. FIN IS INTEGRAL WITH FUSELAGE AND ENTIRE FIN ASSY. COVERED WITH TINPLATE SHEETING. STAB., RUDDER & ELEVATOR CONST: ALUMINUM SPARS, RIBS & COVERING.



SCALE: 5"/32 = 1'



SPAN - 30', CHORD - 5'8", AREA - 145 FT², LENGTH O'ALL - 28' 10", FLOAT LENGTH - 24', WEIGHT EMPTY - 4590 LBS, GROSS WGHT - 6086 LBS.

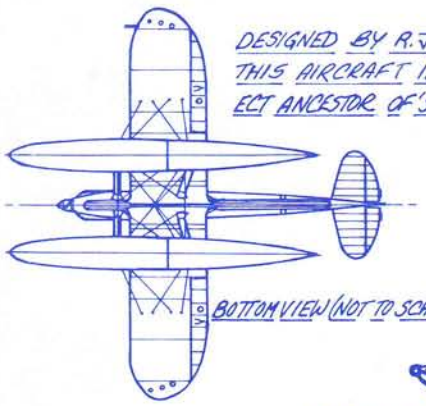
SUPERMARINE
S.6B

TYPICAL RAF 27 AIRFOIL

VIEW BELOW SHOWS RIGGING OF FLOATS TO WINGS AND FUSELAGE

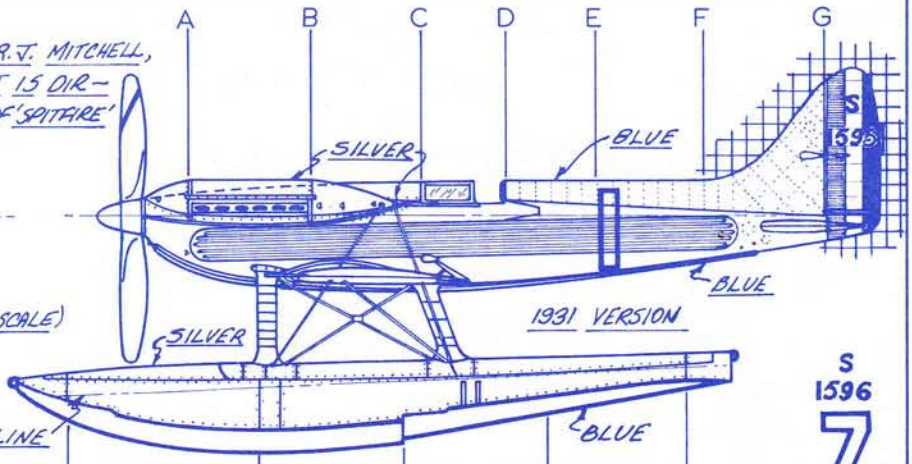
POWERPLANT: ROLLS-ROYCE 'R-29' 2350 H.P. FIXED PITCH PROP.

COLOR SCHEME: SILVER & BLUE WITH WHITE "I", RED, WHITE & BLUE RUDDER.



BOTTOM VIEW (NOT TO SCALE)

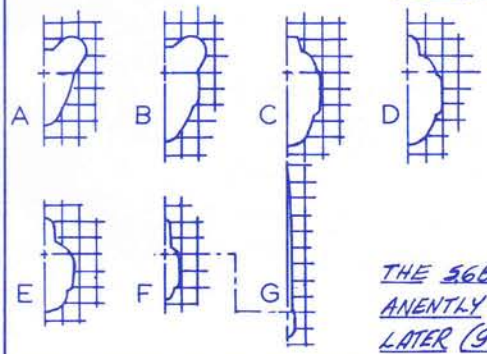
DESIGNED BY R.J. MITCHELL, THIS AIRCRAFT IS DIRECT ANCESTOR OF 'SPITFIRE'



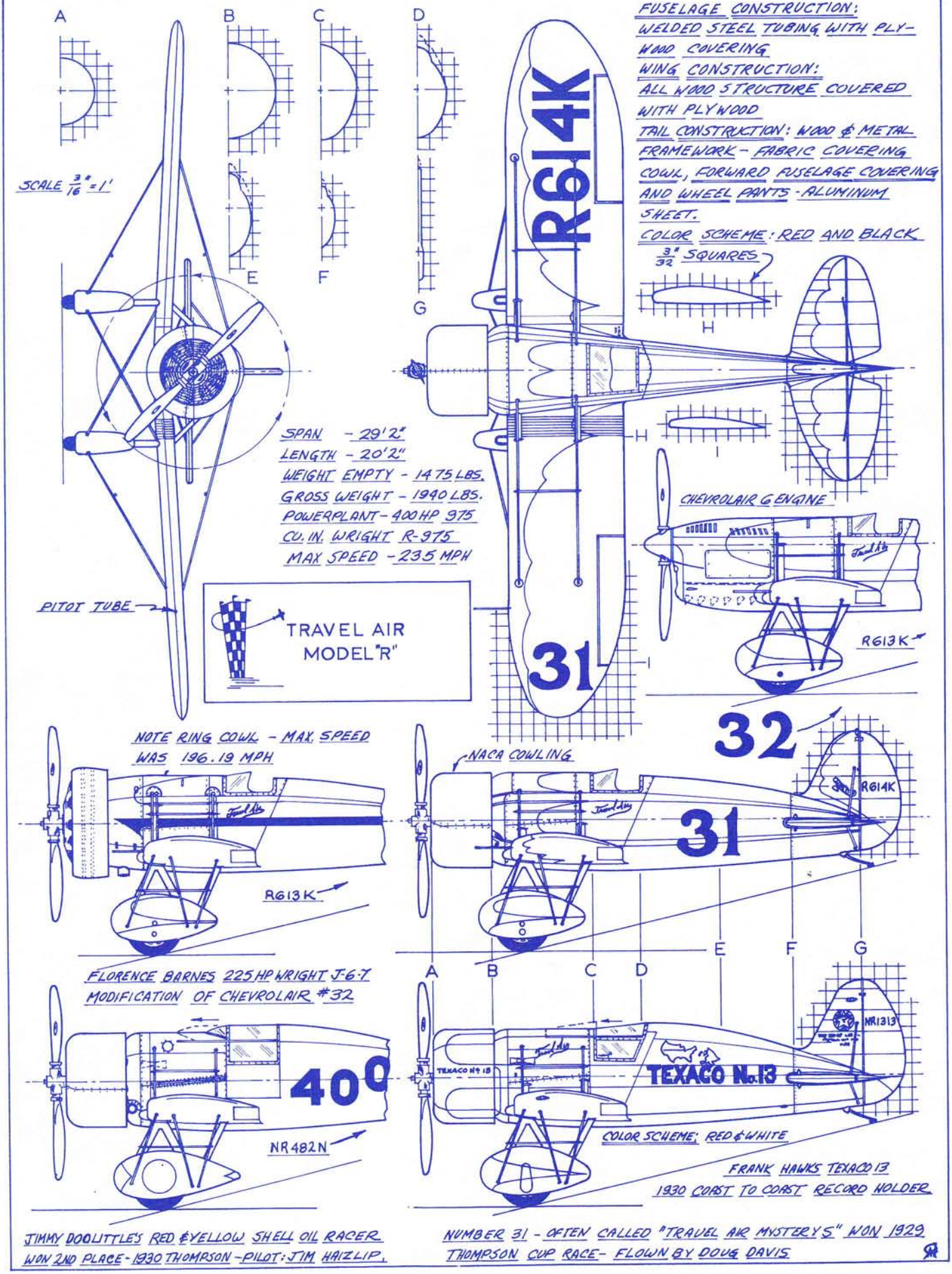
1931 VERSION

S 1596 7

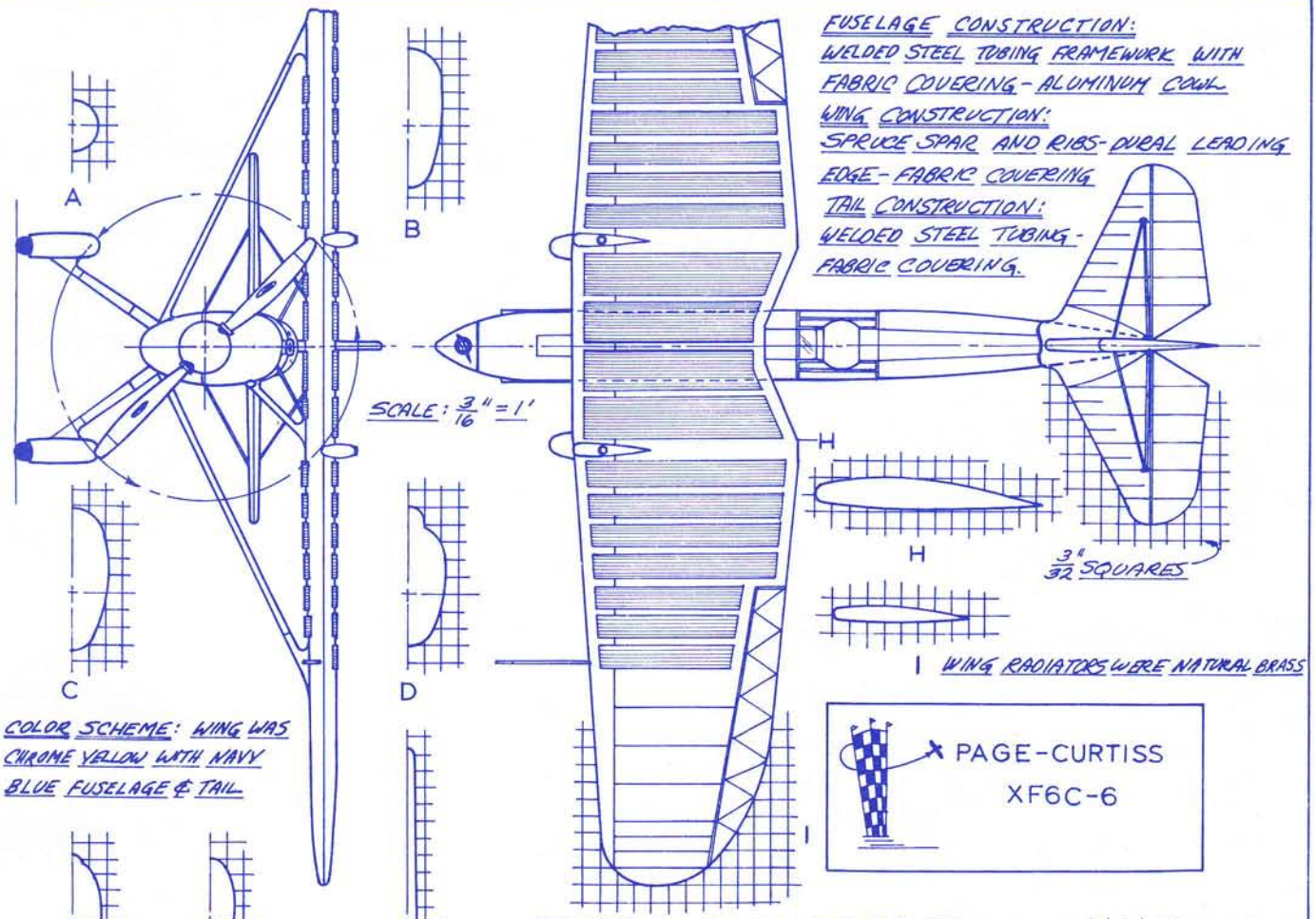
ABOVE NUMBERS WERE ON TAIL & FUSELAGE OF RESERVE PLANE



THE S6B FLOWN BY FLT. LT. J.N. BOOTHMAN WON THE SCHNEIDER TROPHY PERMANENTLY FOR GREAT BRITAIN IN SEPT. 1931 @ 340 M.P.H. FLT. LT. G.H. STAINFORTH LATER (9-29-31) TOOK WORLD SPEED RECORD OF 406.997 M.P.H. FOR ENGLAND.


A
B
C
D
E
F
G
H
I
SCALE 3/16" = 1'
R614K
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING WITH PLY-WOOD COVERING
WING CONSTRUCTION: ALL WOOD STRUCTURE COVERED WITH PLYWOOD
TAIL CONSTRUCTION: WOOD & METAL FRAMEWORK - FABRIC COVERING
COWL, FORWARD FUSELAGE COVERING AND WHEEL PANTS - ALUMINUM SHEET.
COLOR SCHEME: RED AND BLACK
3/32" SQUARES
SPAN - 29'2"
LENGTH - 20'2"
WEIGHT EMPTY - 1475 LBS.
GROSS WEIGHT - 1940 LBS.
POWERPLANT - 400 HP 975 CU. IN. WRIGHT R-975
MAX SPEED - 235 MPH
PITOT TUBE
TRAVEL AIR MODEL "R"
31
CHEVROLAIR G ENGINE
R613K
NOTE RING COWL - MAX. SPEED WAS 196.19 MPH
R613K
32
NACA COWLING
R614K
31
FLORENCE BARNES 225 HP WRIGHT J-6-7
MODIFICATION OF CHEVROLAIR #32
400
NR 482N
TEXACO No.13
NR1313
COLOR SCHEME: RED & WHITE
FRANK HAWKS TEXACO 13
1930 COAST TO COAST RECORD HOLDER
JIMMY DOOLITTLE'S RED & YELLOW SHELL OIL RACER
WON 2ND PLACE - 1930 THOMPSON - PILOT: JIM HAIZLIP.
NUMBER 31 - OFTEN CALLED "TRAVEL AIR MYSTERY S" WON 1929
THOMPSON CUP RACE - FLOWN BY DOUG DAVIS

#13596



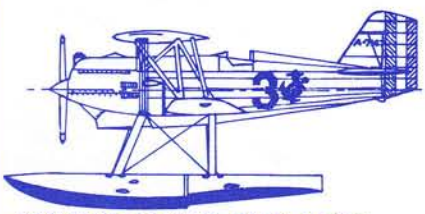
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBING FRAMEWORK WITH FABRIC COVERING - ALUMINUM COWL.
WING CONSTRUCTION:
SPRUCE SPAR AND RIBS - DURAL LEADING EDGE - FABRIC COVERING
TAIL CONSTRUCTION:
WELDED STEEL TUBING - FABRIC COVERING.

I WING RADIATORS WERE NATURAL BRASS

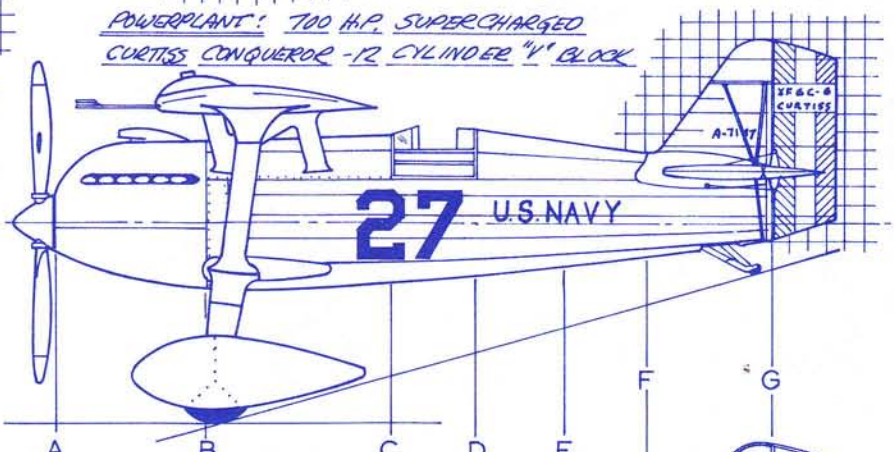
COLOR SCHEME: WING WAS CHROME YELLOW WITH NAVY BLUE FUSELAGE & TAIL

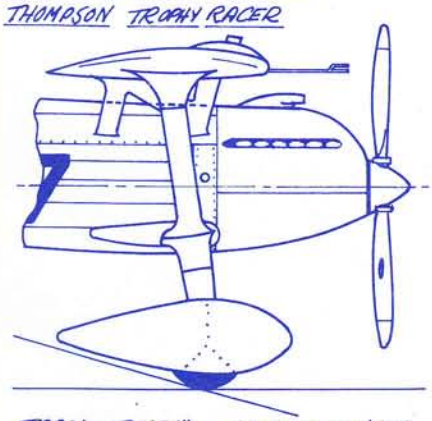
PAGE-CURTISS
XF6C-6

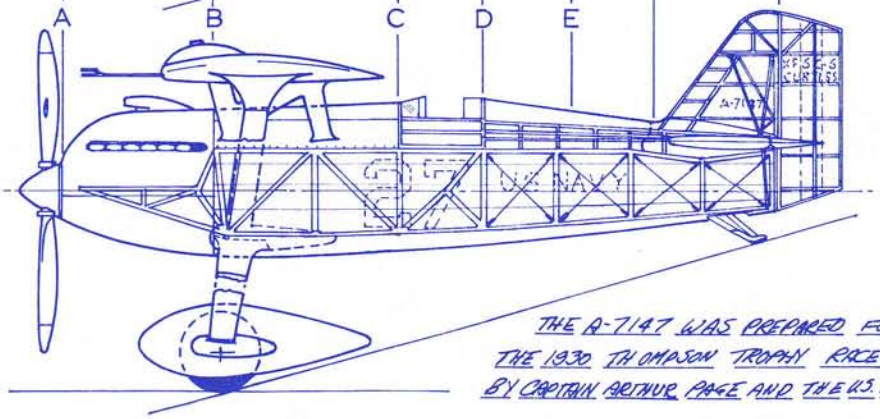
POWERPLANT: 700 H.P. SUPERCHARGED CURTISS CONQUEROR - 12 CYLINDER "V" BLOCK



ABOVE VIEW SHOWS CU NO. A-7147 USED IN MARINE TROPHY RACE BEFORE BEING CONVERTED TO PAGE'S THOMPSON TROPHY RACER



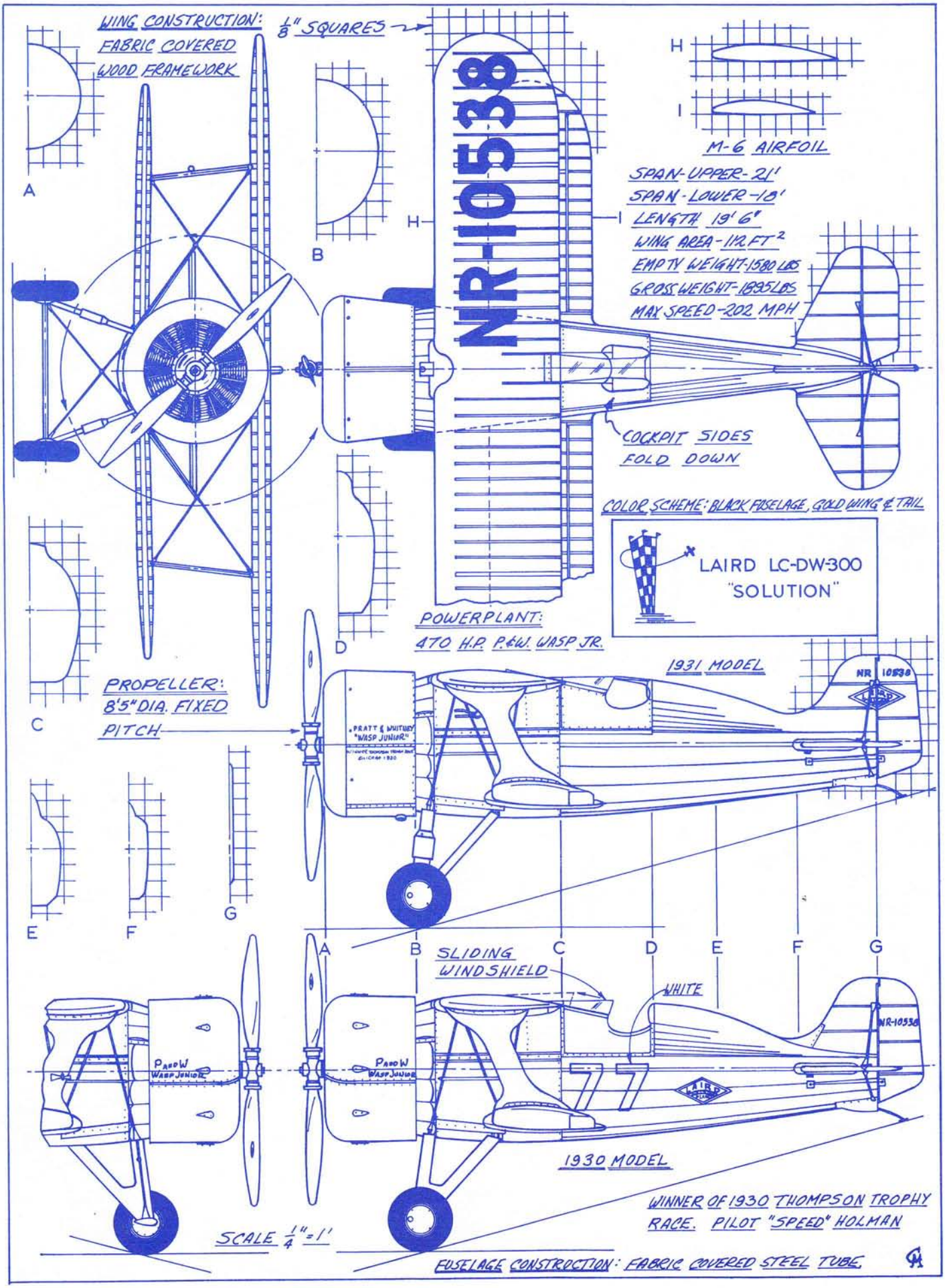


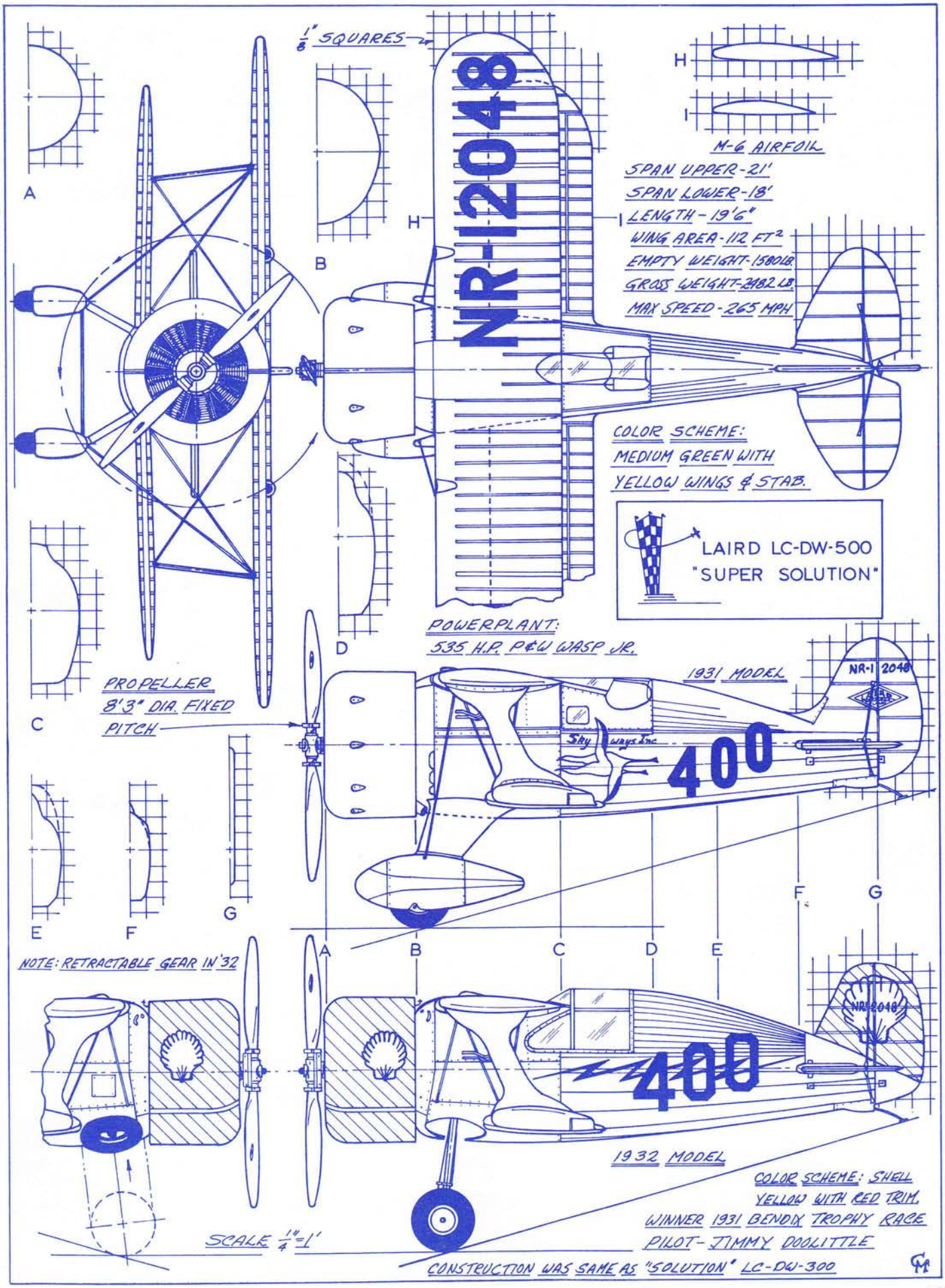


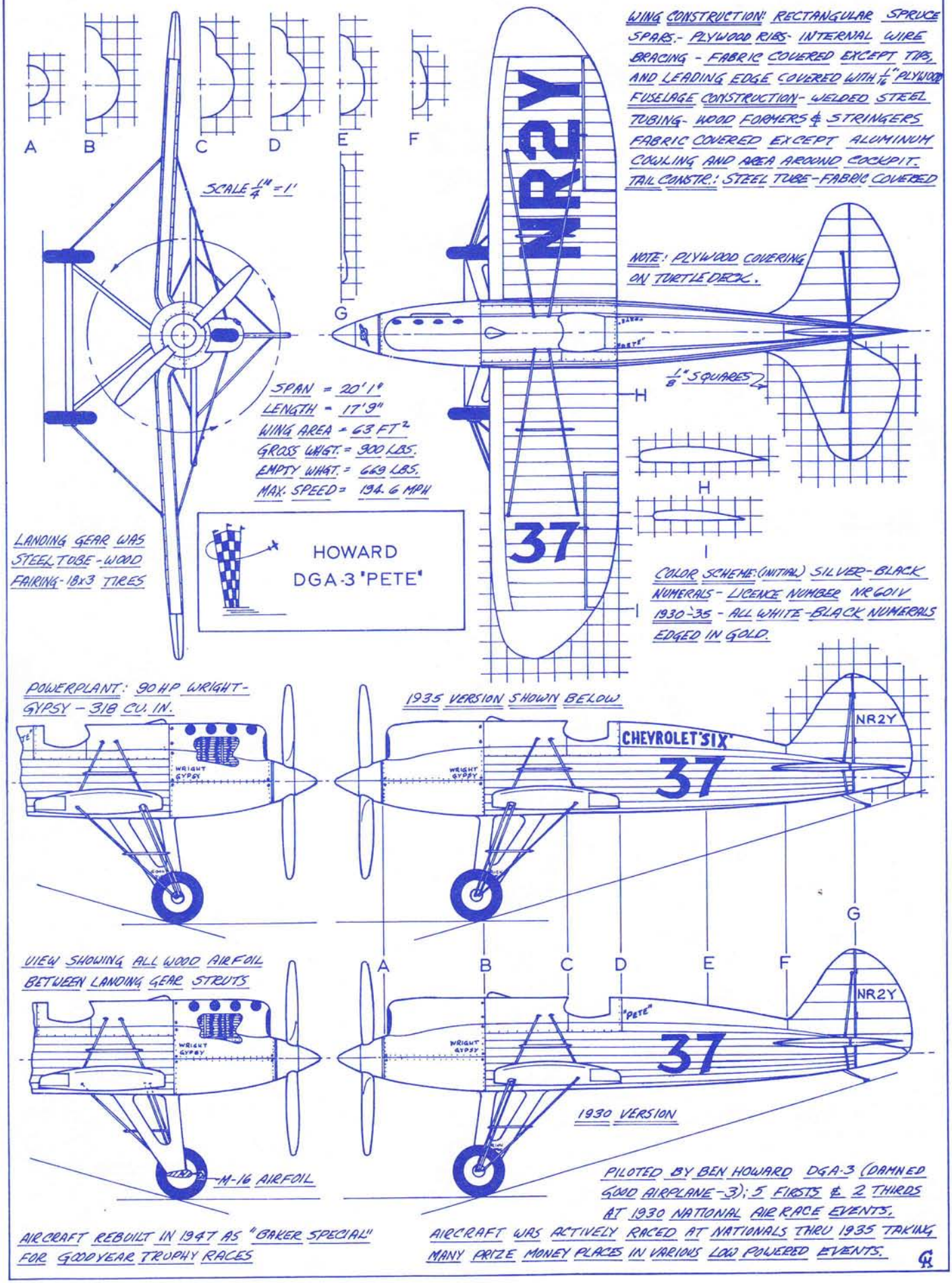
THE A-7147 WAS PREPARED FOR THE 1930 THOMPSON TROPHY RACE BY CAPTAIN ARTHUR PAGE AND THE U.S. NAVY

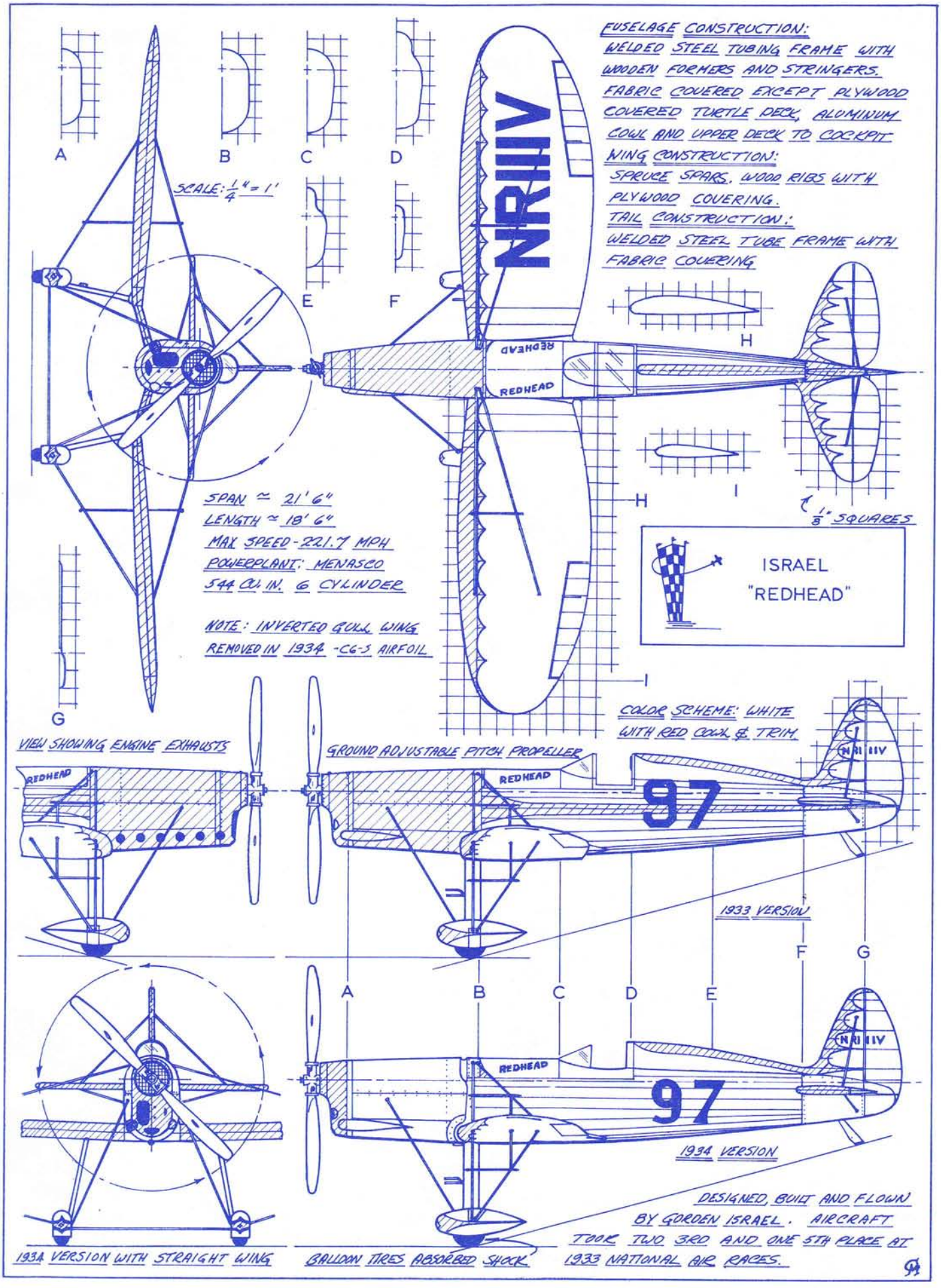
SPAN - 31'Y" LENGTH 22'10"
THIS AIRCRAFT WAS LAST SERVICE RACER AT MAJOR NATIONAL AIR RACES.

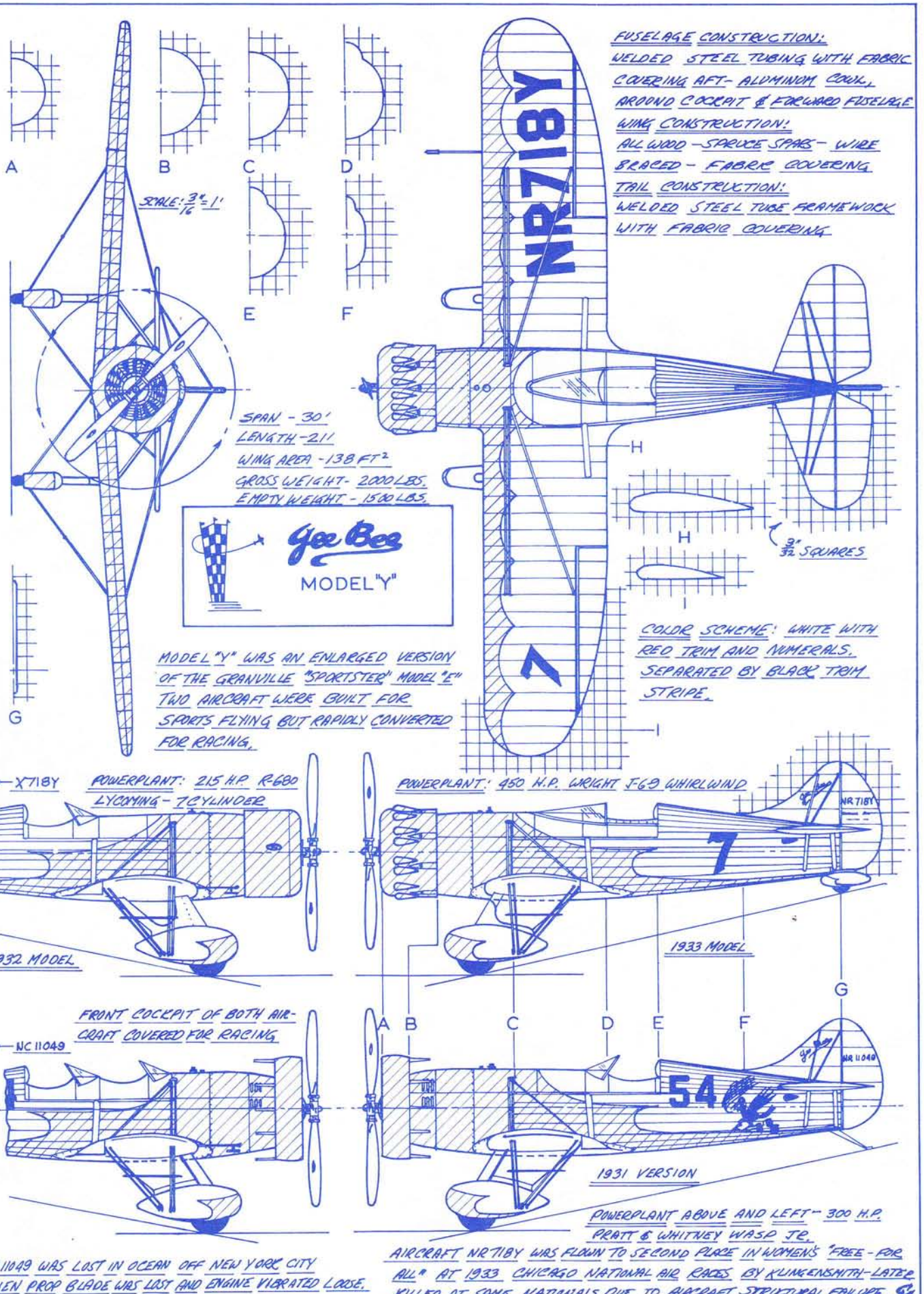
CAPT. PAGE AVERAGED 219 MPH FOR 17 LAPS OF THE THOMPSON BEFORE BEING OVERCOME BY CARBON MONOXIDE AND CRASHING. ESTIMATED TOP SPEED OF AIRCRAFT WAS CLOSE TO 250 MPH


WING CONSTRUCTION:
FABRIC COVERED
WOOD FRAMEWORK
1/8" SQUARES
NR-10538
H
I
M-6 AIRFOIL
SPAN-UPPER-21'
SPAN-LOWER-18'
LENGTH 19'6"
WING AREA-112 FT²
EMPTY WEIGHT-1580 LBS
GROSS WEIGHT-1895 LBS
MAX SPEED-202 MPH
COCKPIT SIDES
FOLD DOWN
COLOR SCHEME: BLACK FUSELAGE, GOLD WING & TAIL
LAIRD LC-DW-300
"SOLUTION"
POWERPLANT:
470 H.P. P&W. WASP JR.
PROPELLER:
8'5" DIA. FIXED
PITCH
1931 MODEL
PRATT & WHITNEY
"WASP JUNIOR"
SLIDING
WINDSHIELD
WHITE
1930 MODEL
WINNER OF 1930 THOMPSON TROPHY
RACE. PILOT "SPEED" HOLMAN
SCALE 1/4"=1'
FUSELAGE CONSTRUCTION: FABRIC COVERED STEEL TUBE.
A
B
C
D
E
F
G

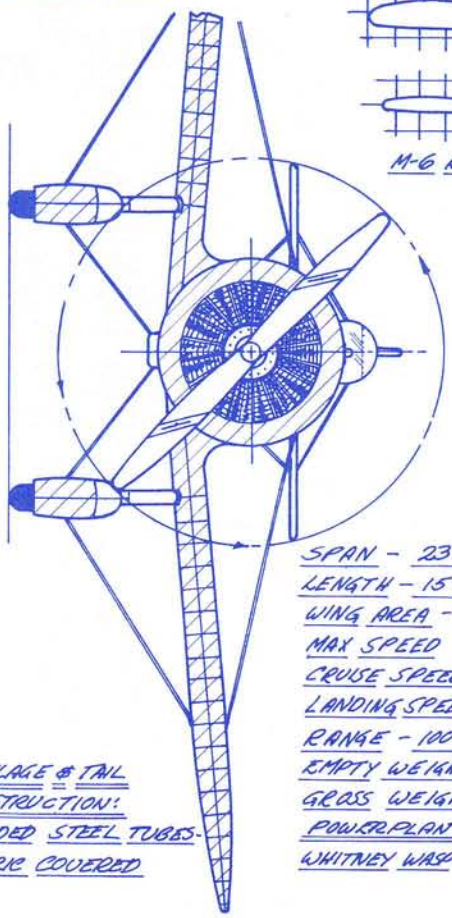

1/8" SQUARES
NR-I 2048
M-6 AIRFOIL
SPAN UPPER-21'
SPAN LOWER-18'
LENGTH-19'6"
WING AREA-112 FT²
EMPTY WEIGHT-1580LB
GROSS WEIGHT-2482 LB
MAX SPEED-265 MPH
COLOR SCHEME:
MEDIUM GREEN WITH
YELLOW WINGS & STAB.
LAIRD LC-DW-500
"SUPER SOLUTION"
POWERPLANT:
535 H.P. P&W WASP JR.
PROPELLER
8'3" DIA. FIXED
PITCH
1931 MODEL
400
NOTE: RETRACTABLE GEAR IN '32
1932 MODEL
COLOR SCHEME: SHELL
YELLOW WITH RED TRIM.
WINNER 1931 BENDIX TROPHY RACE
PILOT-JIMMY DOOLITTLE
SCALE 1/4"=1'
CONSTRUCTION WAS SAME AS "SOLUTION" LC-DW-300


A
B
C
D
E
F
G
H
I
SCALE 1/4" = 1'
NR2Y
37
HOWARD
DGA-3 "PETE"
WING CONSTRUCTION: RECTANGULAR SPRUCE SPARS - PLYWOOD RIBS - INTERNAL WIRE BRACING - FABRIC COVERED EXCEPT TIPS, AND LEADING EDGE COVERED WITH 1/16" PLYWOOD
FUSELAGE CONSTRUCTION - WELDED STEEL TUBING - WOOD FORMERS & STRINGERS FABRIC COVERED EXCEPT ALUMINUM COWLING AND AREA AROUND COCKPIT.
TAIL CONSTR.: STEEL TUBE - FABRIC COVERED
NOTE: PLYWOOD COVERING ON TURTLE DECK.
1/8" SQUARES
SPAN = 20'1"
LENGTH = 17'9"
WING AREA = 63 FT²
GROSS WHGT. = 900 LBS.
EMPTY WHGT. = 669 LBS.
MAX. SPEED = 194.6 MPH
LANDING GEAR WAS STEEL TUBE - WOOD FAIRING - 18x3 TIRES
COLOR SCHEME: (INITIAL) SILVER - BLACK NUMERALS - LICENCE NUMBER NR 601V
1930-35 - ALL WHITE - BLACK NUMERALS EDGED IN GOLD.
POWERPLANT: 90 HP WRIGHT-GYPSY - 318 CU. IN.
1935 VERSION SHOWN BELOW
CHEVROLET'SIX'
WRIGHT GYPSY
VIEW SHOWING ALL WOOD AIRFOIL BETWEEN LANDING GEAR STRUTS
M-16 AIRFOIL
"PETE"
1930 VERSION
PILOTED BY BEN HOWARD DGA-3 (DAMNED GOOD AIRPLANE-3); 5 FIRSTS & 2 THIRDS AT 1930 NATIONAL AIR RACE EVENTS.
AIRCRAFT REBUILT IN 1947 AS "BAKER SPECIAL" FOR GOODYEAR TROPHY RACES
AIRCRAFT WAS ACTIVELY RACED AT NATIONALS THRU 1935 TAKING MANY PRIZE MONEY PLACES IN VARIOUS LOW POWERED EVENTS.

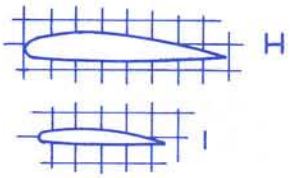

FUSELAGE CONSTRUCTION:
WELDED STEEL TUBING FRAME WITH WOODEN FORMERS AND STRINGERS. FABRIC COVERED EXCEPT PLYWOOD COVERED TURTLE DECK, ALUMINUM COWL AND UPPER DECK TO COCKPIT
WING CONSTRUCTION:
SPRUCE SPARS, WOOD RIBS WITH PLYWOOD COVERING.
TAIL CONSTRUCTION:
WELDED STEEL TUBE FRAME WITH FABRIC COVERING
SCALE: 1/4" = 1'
A
B
C
D
E
F
G
H
I
NRIIIV
REDHEAD
SPAN ≃ 21' 6"
LENGTH ≃ 18' 6"
MAX SPEED - 221.7 MPH
POWERPLANT: MENASCO 544 CU. IN. 6 CYLINDER
NOTE: INVERTED GULL WING REMOVED IN 1934 - CG-S AIRFOIL
1/8" SQUARES
ISRAEL
"REDHEAD"
COLOR SCHEME: WHITE WITH RED COWL & TRIM
VIEW SHOWING ENGINE EXHAUSTS
GROUND ADJUSTABLE PITCH PROPELLER
97
1933 VERSION
1934 VERSION
1934 VERSION WITH STRAIGHT WING
BALLOON TIRES ABSORBED SHOCK
DESIGNED, BUILT AND FLOWN BY GORDEN ISRAEL. AIRCRAFT TOOK TWO 3RD AND ONE 5TH PLACE AT 1933 NATIONAL AIR RACES.


A
B
C
D
E
F
G
H
I
SCALE: 3/16" = 1'
NR718Y
7
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBING WITH FABRIC COVERING AFT - ALUMINUM COWL AROUND COCKPIT & FORWARD FUSELAGE
WING CONSTRUCTION:
ALL WOOD - SPRUCE SPARS - WIRE BRACED - FABRIC COVERING
TAIL CONSTRUCTION:
WELDED STEEL TUBE FRAMEWORK WITH FABRIC COVERING
SPAN - 30'
LENGTH - 21'
WING AREA - 138 FT²
GROSS WEIGHT - 2000 LBS.
EMPTY WEIGHT - 1500 LBS.
3"/32 SQUARES
Gee Bee
MODEL "Y"
MODEL "Y" WAS AN ENLARGED VERSION OF THE GRANVILLE "SPORTSTER" MODEL "E" TWO AIRCRAFT WERE BUILT FOR SPORTS FLYING BUT RAPIDLY CONVERTED FOR RACING.
COLOR SCHEME: WHITE WITH RED TRIM AND NUMERALS, SEPARATED BY BLACK TRIM STRIPE.
←X718Y
POWERPLANT: 215 H.P. R-680 LYCOMING - 7 CYLINDER
1932 MODEL
POWERPLANT: 450 H.P. WRIGHT J-6-9 WHIRLWIND
NR 718Y
1933 MODEL
FRONT COCKPIT OF BOTH AIRCRAFT COVERED FOR RACING
←NC 11049
NR 11049
54
1931 VERSION
POWERPLANT ABOVE AND LEFT — 300 H.P. PRATT & WHITNEY WASP JR.
NR 11049 WAS LOST IN OCEAN OFF NEW YORK CITY WHEN PROP BLADE WAS LOST AND ENGINE VIBRATED LOOSE.
AIRCRAFT NR718Y WAS FLOWN TO SECOND PLACE IN WOMENS "FREE-FOR ALL" AT 1933 CHICAGO NATIONAL AIR RACES BY KLINGENSMITH - LATER KILLED AT SAME NATIONALS DUE TO AIRCRAFT STRUCTURAL FAILURE.

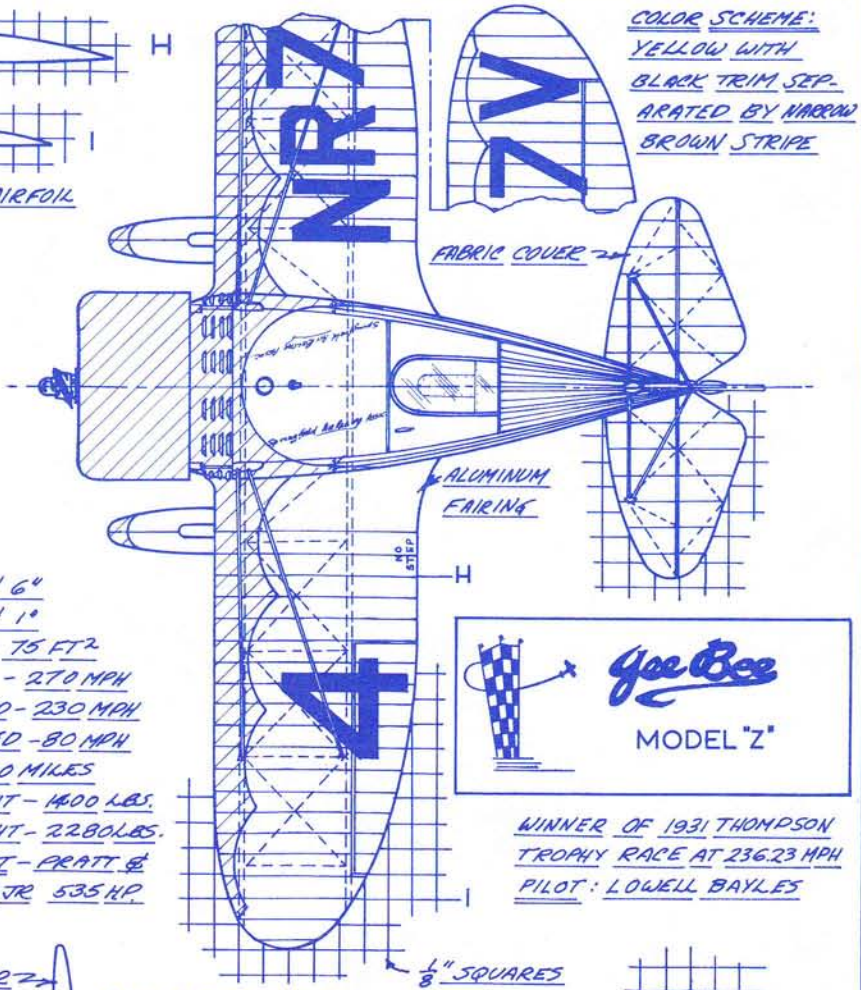
SCALE: 1/4" = 1'



FUSELAGE & TAIL CONSTRUCTION: WELDED STEEL TUBES - FABRIC COVERED



M-6 AIRFOIL



COLOR SCHEME: YELLOW WITH BLACK TRIM SEPARATED BY NARROW BROWN STRIPE

FABRIC COVER

ALUMINUM FAIRING

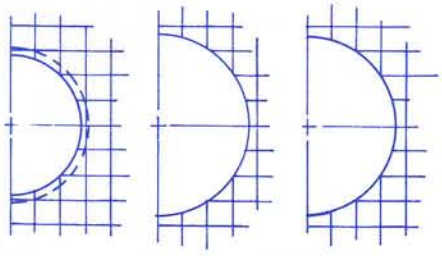
SPAN - 23' 6"
LENGTH - 15' 1"
WING AREA - 75 FT²
MAX SPEED - 270 MPH
CRUISE SPEED - 230 MPH
LANDING SPEED - 80 MPH
RANGE - 1000 MILES
EMPTY WEIGHT - 1400 LBS.
GROSS WEIGHT - 2280 LBS.
POWER PLANT - PRATT & WHITNEY WASP JR 535 H.P.

WINNER OF 1931 THOMPSON TROPHY RACE AT 236.23 MPH
PILOT: LOWELL BAYLES

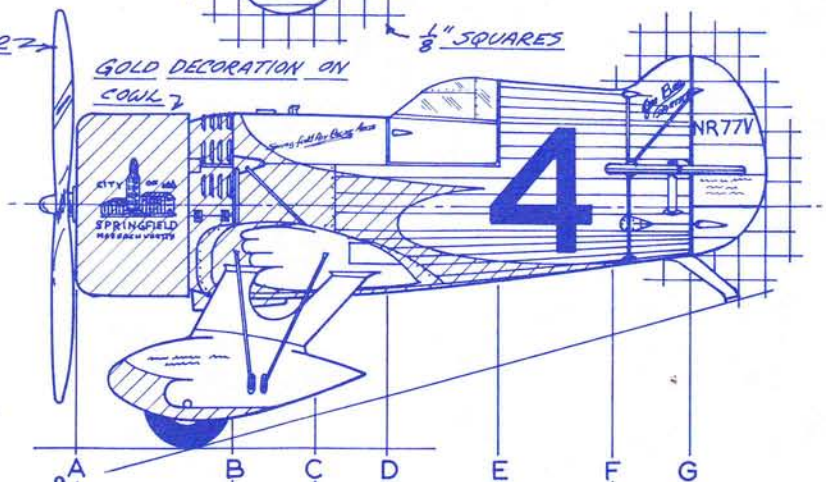
1/8" SQUARES

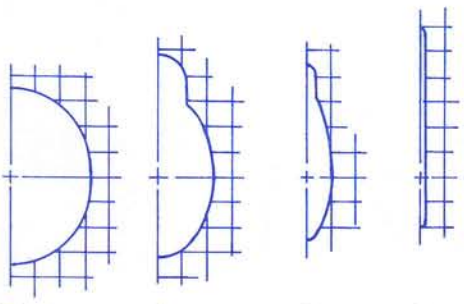
8'2" CURTISS FIXED PITCH (9'8") PROPELLER

GOLD DECORATION ON COWL

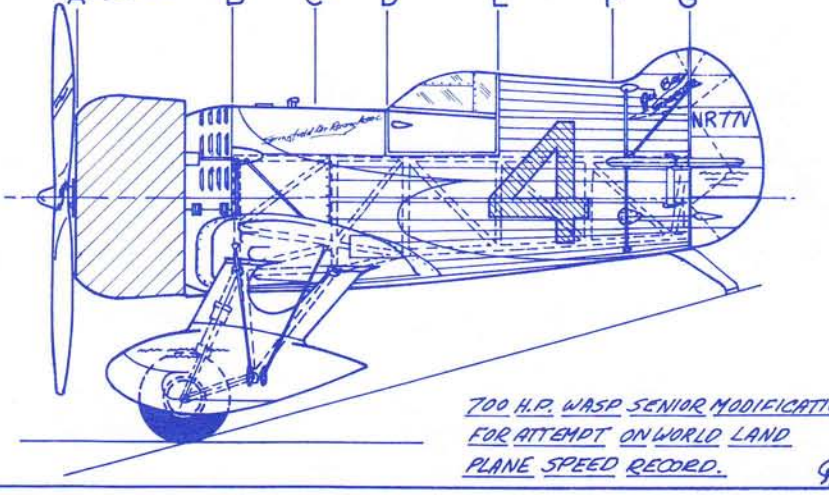


WING CONSTRUCTION: ALL WOOD - SPRUCE SPARS - WIRE BRACED - FABRIC COVERING. TORQUE TUBE AILERONS





NOTE LARGE SIZE NACA COWLING ON VIEW AT RIGHT - MAX SPEED 300 MPH+



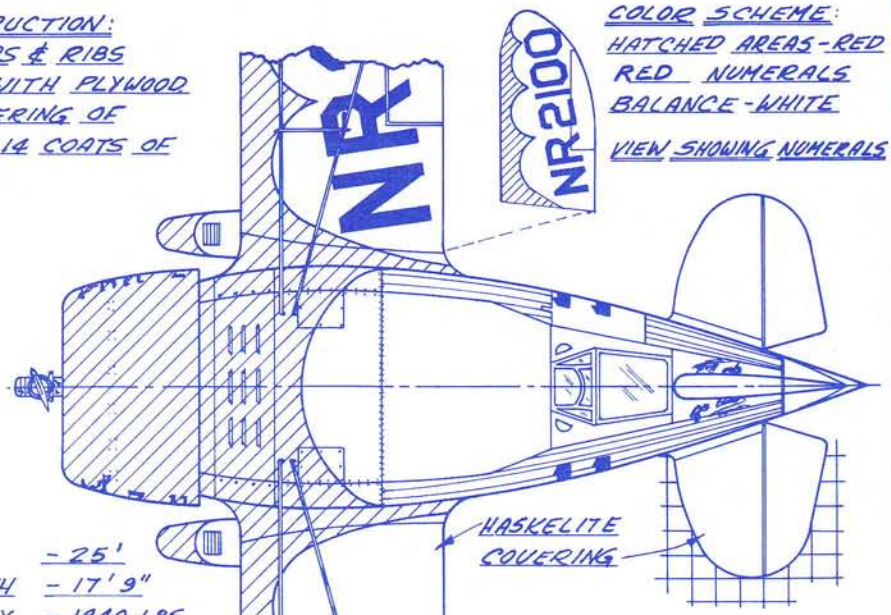
700 H.P. WASP SENIOR MODIFICATION FOR ATTEMPT ON WORLD LAND PLANE SPEED RECORD.

SCALE 1/4"=1'

WING CONSTRUCTION:
WOOD SPARS & RIBS
COVERED WITH PLYWOOD
FINAL COVERING OF
FABRIC & 14 COATS OF
DOPE!

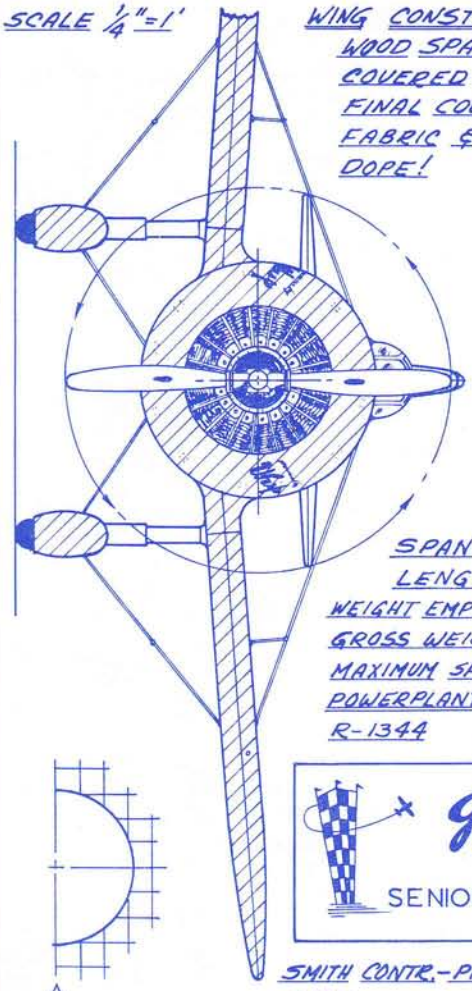
COLOR SCHEME:
HATCHED AREAS - RED
RED NUMERALS
BALANCE - WHITE

VIEW SHOWING NUMERALS

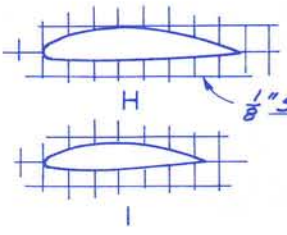


HASKELITE COVERING

SPAN - 25'
LENGTH - 17'9"
WEIGHT EMPTY - 1840 LBS.
GROSS WEIGHT - 2415 LBS.
MAXIMUM SPEED - 309 MPH
POWERPLANT - 800 HP P&W WASP SR.
R-1344 PITOT TUBE

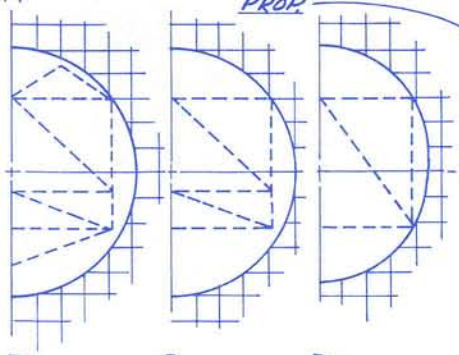


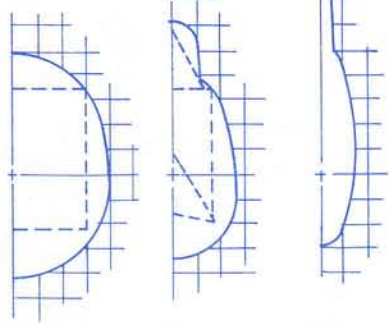
Gee Bee
R-1
SENIOR SPORTSTER



1/8" SQUARES

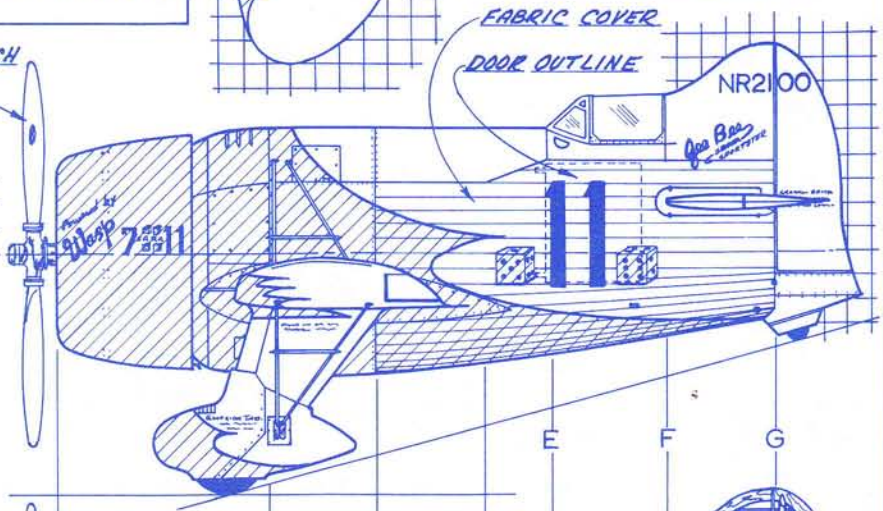
MODIFIED M-G AIRFOIL

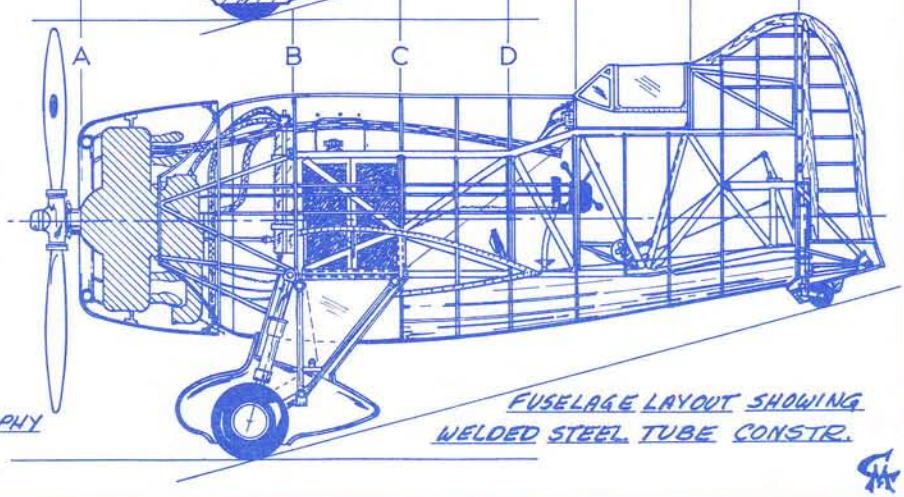




SMITH CONTR.-PITCH PROP.

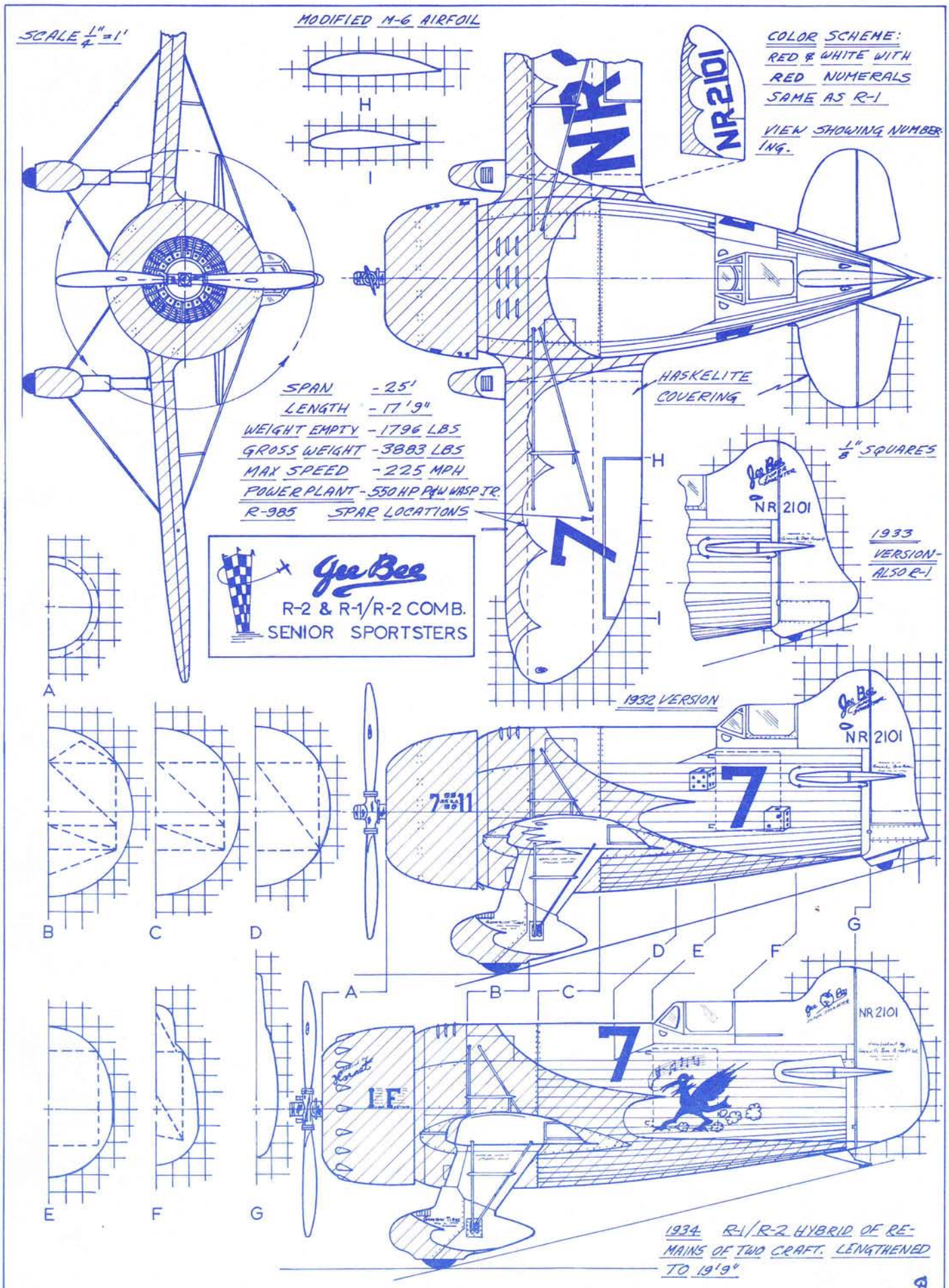
FABRIC COVER DOOR OUTLINE

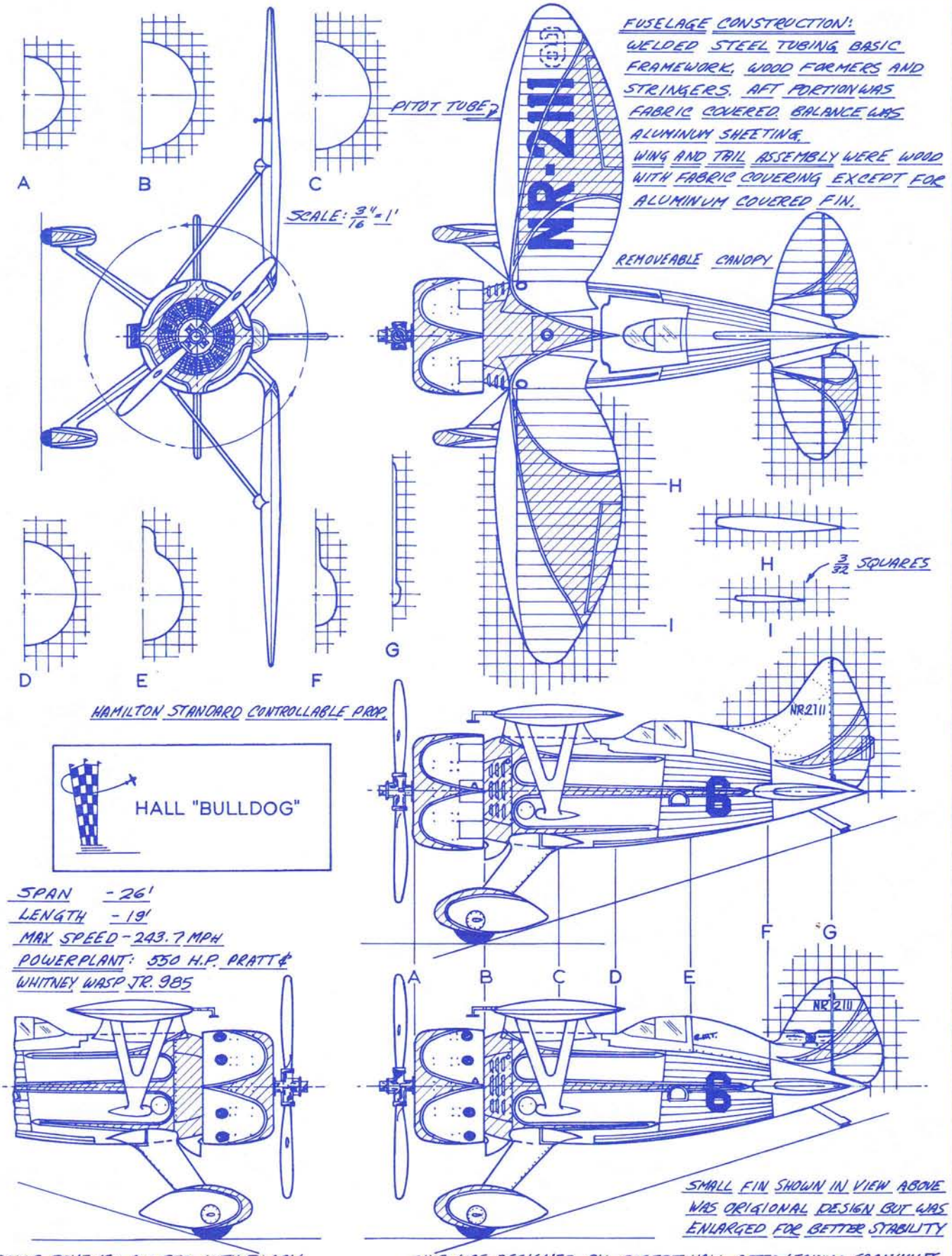


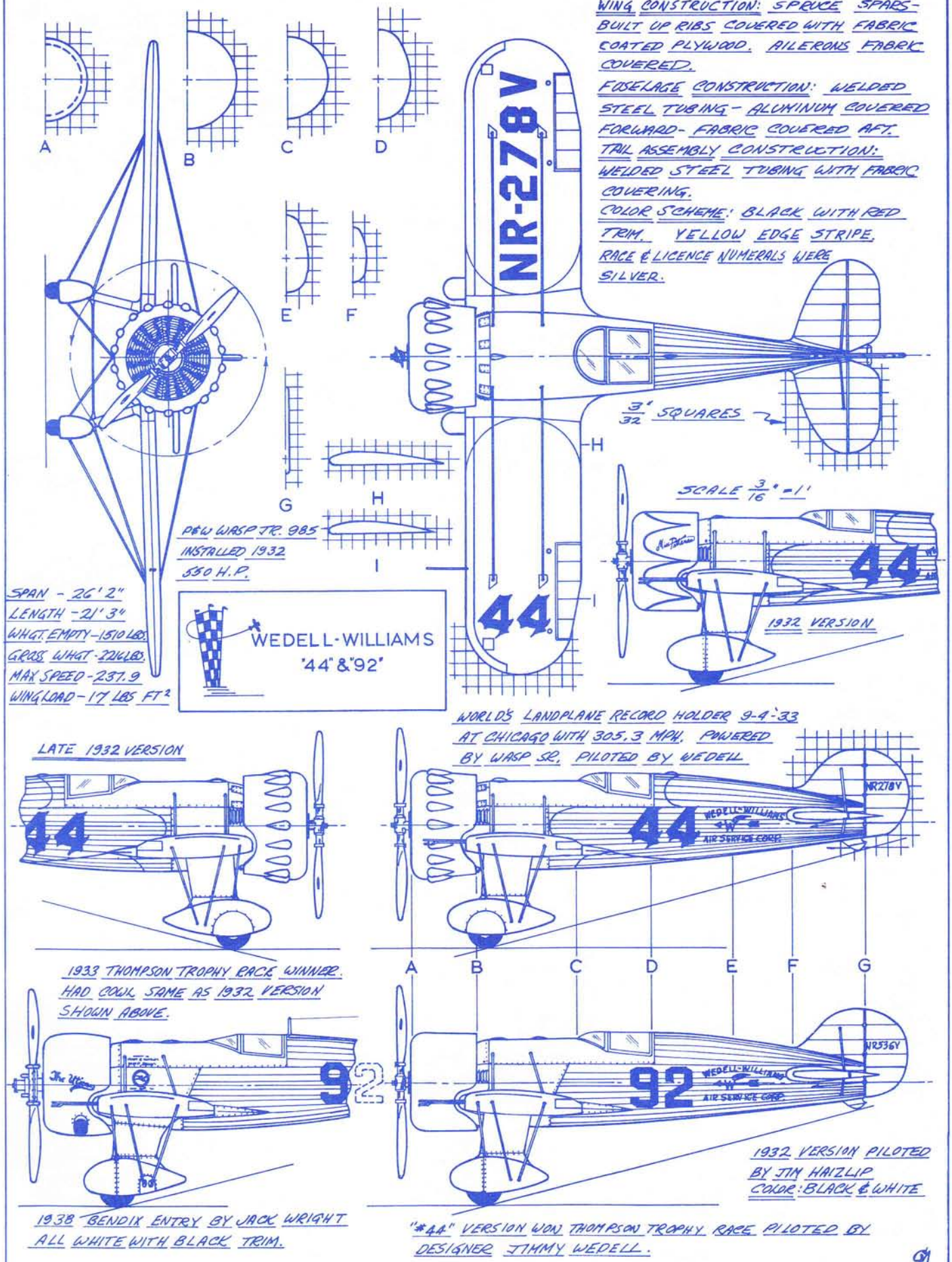


WINNER OF 1932 THOMPSON TROPHY RACE - FLOWN BY JIMMY DOOLITTLE.

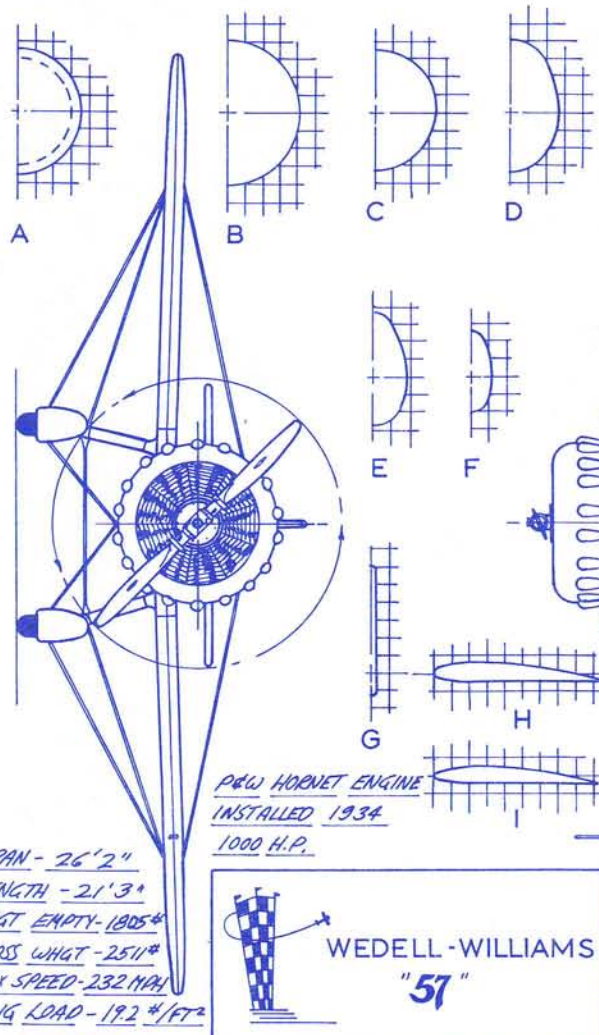
FUSELAGE LAYOUT SHOWING WELDED STEEL TUBE CONSTR.

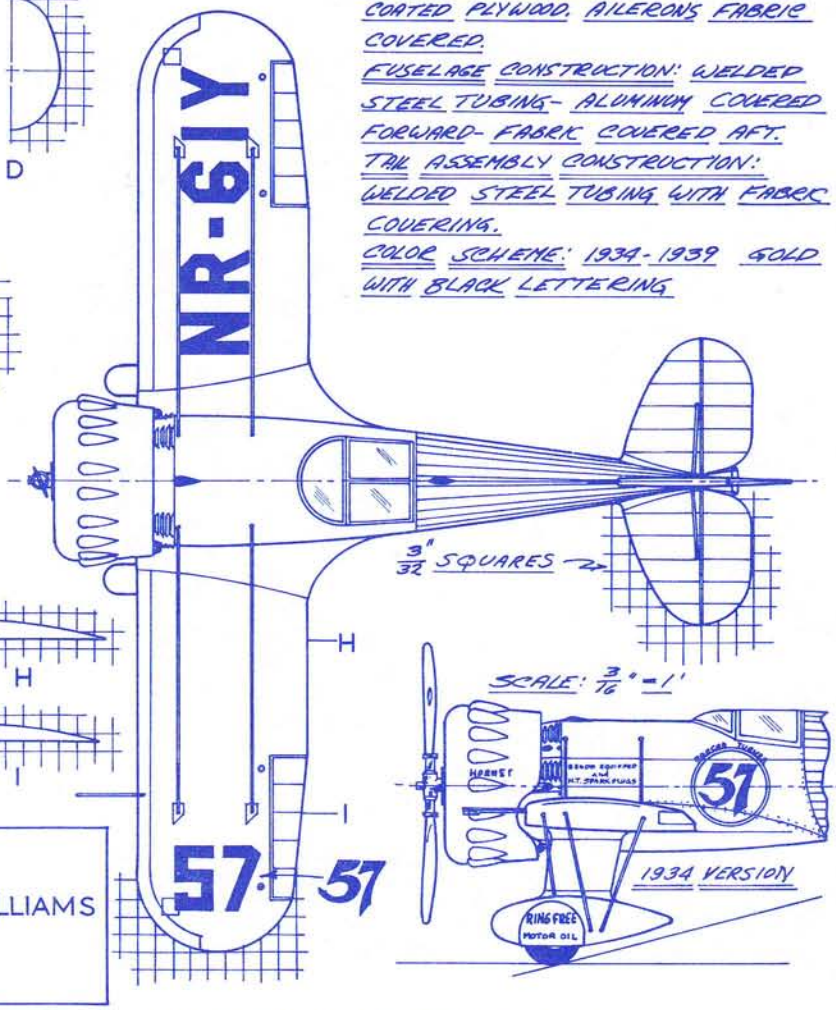

SCALE 1/4" = 1'
MODIFIED M-6 AIRFOIL
H
I
COLOR SCHEME:
RED & WHITE WITH
RED NUMERALS
SAME AS R-1
VIEW SHOWING NUMBERING.
NR2101
SPAN - 25'
LENGTH - 17'9"
WEIGHT EMPTY - 1796 LBS
GROSS WEIGHT - 3883 LBS
MAX SPEED - 225 MPH
POWER PLANT - 550 HP P&W WASP JR. R-985
SPAR LOCATIONS
HASKELITE COVERING
1/8" SQUARES
1933 VERSION - ALSO R-1
Gee Bee
R-2 & R-1/R-2 COMB.
SENIOR SPORTSTERS
A
B
C
D
1932 VERSION
E
F
G
1934 R-1/R-2 HYBRID OF REMAINS OF TWO CRAFT. LENGTHENED TO 19'9"


A
B
C
PITOT TUBE
SCALE: 3/16 = 1'
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING BASIC FRAMEWORK, WOOD FARMERS AND STRINGERS. AFT PORTION WAS FABRIC COVERED. BALANCE WAS ALUMINUM SHEETING. WING AND TAIL ASSEMBLY WERE WOOD WITH FABRIC COVERING EXCEPT FOR ALUMINUM COVERED FIN.
NR.211
REMOVEABLE CANOPY
H
I
H
3/32 SQUARES
I
D
E
F
G
HAMILTON STANDARD CONTROLLABLE PROP.
HALL "BULLDOG"
SPAN - 26'
LENGTH - 19'
MAX SPEED - 243.7 MPH
POWERPLANT: 550 H.P. PRATT & WHITNEY WASP JR. 985
NR.211
6
F
G
A
B
C
D
E
NR.211
6
SMALL FIN SHOWN IN VIEW ABOVE WAS ORIGIONAL DESIGN BUT WAS ENLARGED FOR BETTER STABILITY
COLOR SCHEME: ALL RED WITH BLACK TRIM SEPARATED BY A NARROW WHITE STRIPE. "6" ON RIGHT WING UNDERSIDE ONLY.
SHIP WAS DESIGNED BY ROBERT HALL AFTER LEAVING GRANVILLES. HE FLEW IT TO 6TH PLACE IN 1932 THOMPSON TROPHY RACE. PLANE WAS NEVER RACED AGAIN HOWEVER WAS FLOWN FOR SPORT.


WING CONSTRUCTION: SPRUCE SPARS - BUILT UP RIBS COVERED WITH FABRIC COATED PLYWOOD. AILERONS FABRIC COVERED.
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING - ALUMINUM COVERED FORWARD - FABRIC COVERED AFT.
TAIL ASSEMBLY CONSTRUCTION: WELDED STEEL TUBING WITH FABRIC COVERING.
COLOR SCHEME: BLACK WITH RED TRIM. YELLOW EDGE STRIPE. RACE & LICENCE NUMERALS WERE SILVER.
NR-278V
44
3/32 SQUARES
A
B
C
D
E
F
G
H
I
P&W WASP JR. 985 INSTALLED 1932 550 H.P.
SPAN - 26' 2"
LENGTH - 21' 3"
WHGT. EMPTY - 1510 LBS.
GROSS WHGT - 2216 LBS.
MAX SPEED - 237.9
WING LOAD - 17 LBS FT²
WEDELL-WILLIAMS "44" & "92"
SCALE 3/16" = 1'
1932 VERSION
WORLD'S LANDPLANE RECORD HOLDER 9-4-33 AT CHICAGO WITH 305.3 MPH. POWERED BY WASP SR. PILOTED BY WEDELL
LATE 1932 VERSION
1933 THOMPSON TROPHY RACE WINNER. HAD COWL SAME AS 1932 VERSION SHOWN ABOVE.
1938 BENDIX ENTRY BY JACK WRIGHT ALL WHITE WITH BLACK TRIM.
"#44" VERSION WON THOMPSON TROPHY RACE PILOTED BY DESIGNER JIMMY WEDELL.
1932 VERSION PILOTED BY JIM HAIZLIP
COLOR: BLACK & WHITE
NR278V
NR536V
92
WEDELL-WILLIAMS
AIR SERVICE CORP.

WING CONSTRUCTION: SPRUCE SPARS BUILT UP RIBS COVERED WITH FABRIC COATED PLYWOOD. AILERONS FABRIC COVERED.
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING - ALUMINUM COVERED FORWARD - FABRIC COVERED AFT.
TAIL ASSEMBLY CONSTRUCTION: WELDED STEEL TUBING WITH FABRIC COVERING.
COLOR SCHEME: 1934 - 1939 GOLD WITH BLACK LETTERING





P&W HORNET ENGINE INSTALLED 1934
1000 H.P.

SPAN - 26'2"
LENGTH - 21'3"
WHGT EMPTY - 1805#
GROSS WHGT - 2511#
MAX SPEED - 232 MPH
WING LOAD - 19.2 #/FT²

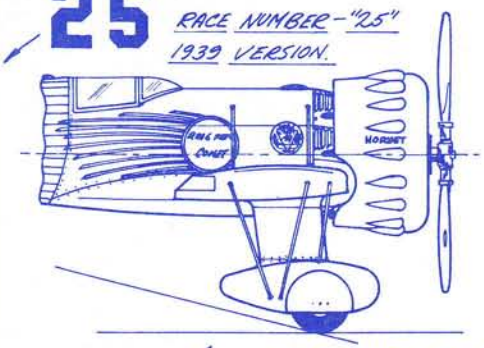
WEDELL-WILLIAMS
"57"

SCALE: 3/16" = 1'

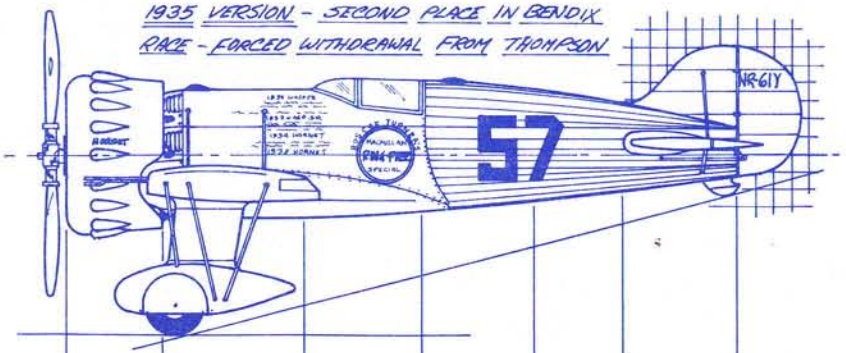
1934 VERSION

25

RACE NUMBER - "25"
1939 VERSION.

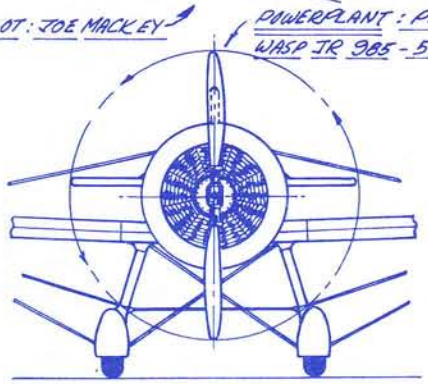


1935 VERSION - SECOND PLACE IN BENDIX RACE - FORCED WITHDRAWAL FROM THOMPSON

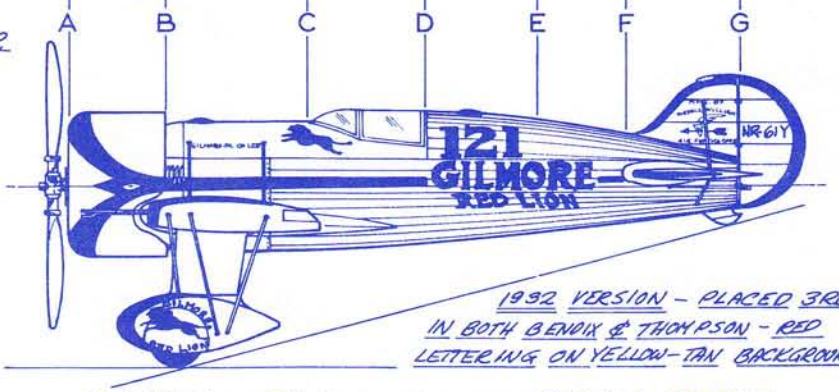


PILOT: JOE MACKLEY

POWERPLANT: P&W WASP JR 985 - 535 H.P.

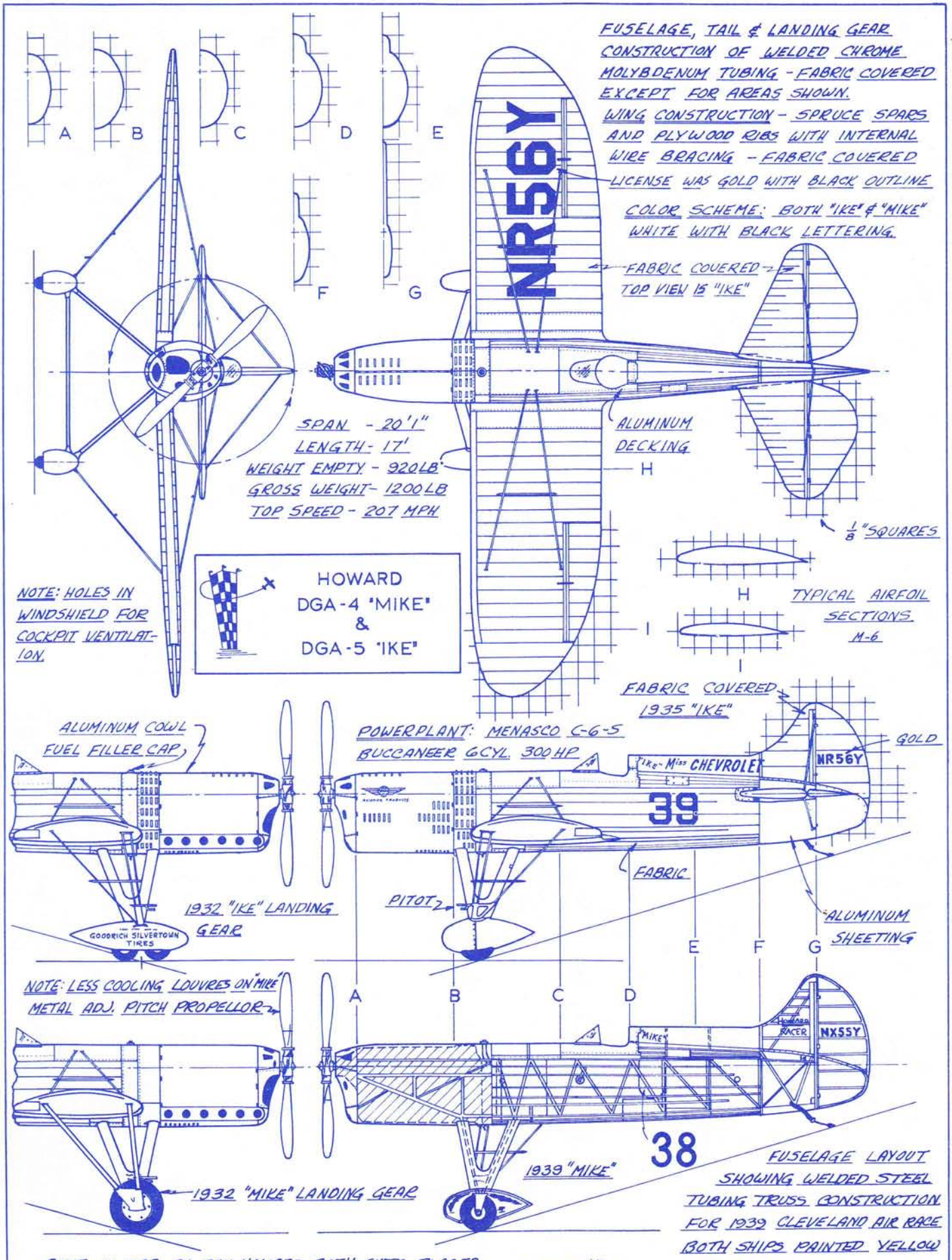


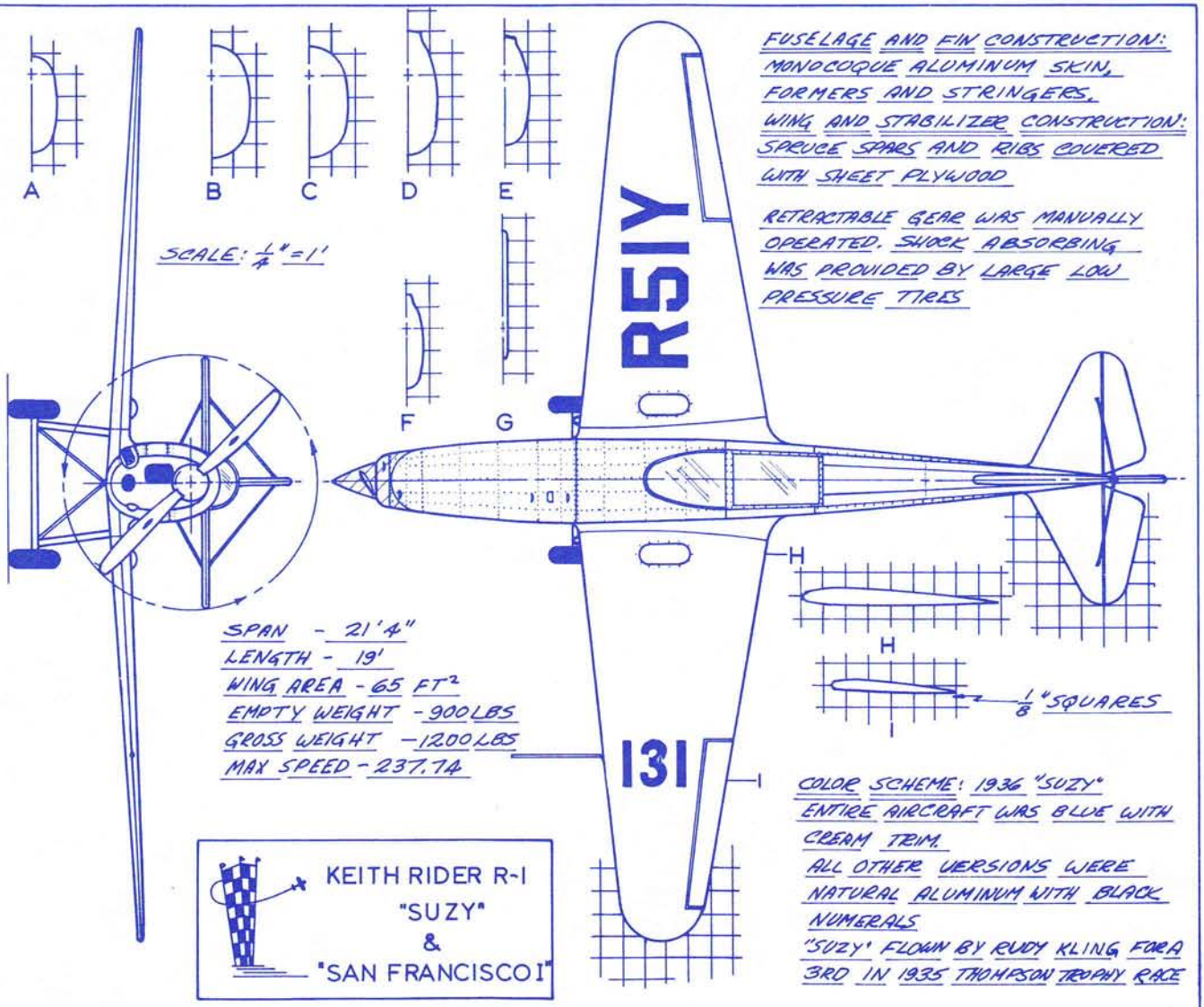
FRONT VIEW OF 1932 VERSION SHOWING WASP JR. COWLING.



1932 VERSION - PLACED 3RD IN BOTH BENDIX & THOMPSON - RED LETTERING ON YELLOW-TAN BACKGROUND

1934 VERSION SPONSORED BY HEINZ "57" WON THOMPSON TROPHY RACE - PILOT. ROSCOE TURNER


FUSELAGE, TAIL & LANDING GEAR CONSTRUCTION OF WELDED CHROME MOLYBDENUM TUBING - FABRIC COVERED EXCEPT FOR AREAS SHOWN.
WING CONSTRUCTION - SPRUCE SPARS AND PLYWOOD RIBS WITH INTERNAL WIRE BRACING - FABRIC COVERED
LICENSE WAS GOLD WITH BLACK OUTLINE
COLOR SCHEME: BOTH "IKE" & "MIKE" WHITE WITH BLACK LETTERING.
FABRIC COVERED
TOP VIEW IS "IKE"
NR56Y
A
B
C
D
E
F
G
H
I
SPAN - 20'1"
LENGTH - 17'
WEIGHT EMPTY - 920LB
GROSS WEIGHT - 1200LB
TOP SPEED - 207 MPH
ALUMINUM DECKING
1/8" SQUARES
NOTE: HOLES IN WINDSHIELD FOR COCKPIT VENTILATION.
HOWARD
DGA-4 "MIKE"
&
DGA-5 "IKE"
TYPICAL AIRFOIL SECTIONS.
M-6
FABRIC COVERED
1935 "IKE"
ALUMINUM COWL
FUEL FILLER CAP
POWERPLANT: MENASCO C-6-5
BUCCANEER 6CYL. 300 HP
GOLD
"IKE" Miss CHEVROLET
NR56Y
39
FABRIC
PITOT
1932 "IKE" LANDING GEAR
GOODRICH SILVERTOWN TIRES
ALUMINUM SHEETING
NOTE: LESS COOLING LOUVRES ON "MIKE"
METAL ADJ. PITCH PROPELLOR
"MIKE"
HOWARD RACER
NX55Y
38
1939 "MIKE"
1932 "MIKE" LANDING GEAR
FUSELAGE LAYOUT SHOWING WELDED STEEL TUBING TRUSS CONSTRUCTION FOR 1939 CLEVELAND AIR RACE
BOTH SHIPS PAINTED YELLOW BUT DID NOT FLY.
BUILT IN 1932 BY BEN HOWARD BOTH SHIPS PLACED IN VARIOUS THOMPSON TROPHY RACES 1932 THRU 1935.
SCALE 1/4" = 1'



SCALE: 1/4" = 1'

FUSELAGE AND FIN CONSTRUCTION: MONOCOQUE ALUMINUM SKIN, FORMERS AND STRINGERS. WING AND STABILIZER CONSTRUCTION: SPRUCE SPARS AND RIBS COVERED WITH SHEET PLYWOOD

RETRACTABLE GEAR WAS MANUALLY OPERATED. SHOCK ABSORBING WAS PROVIDED BY LARGE LOW PRESSURE TIRES

SPAN - 21'4"
LENGTH - 19'
WING AREA - 65 FT²
EMPTY WEIGHT - 900 LBS
GROSS WEIGHT - 1200 LBS
MAX SPEED - 237.74

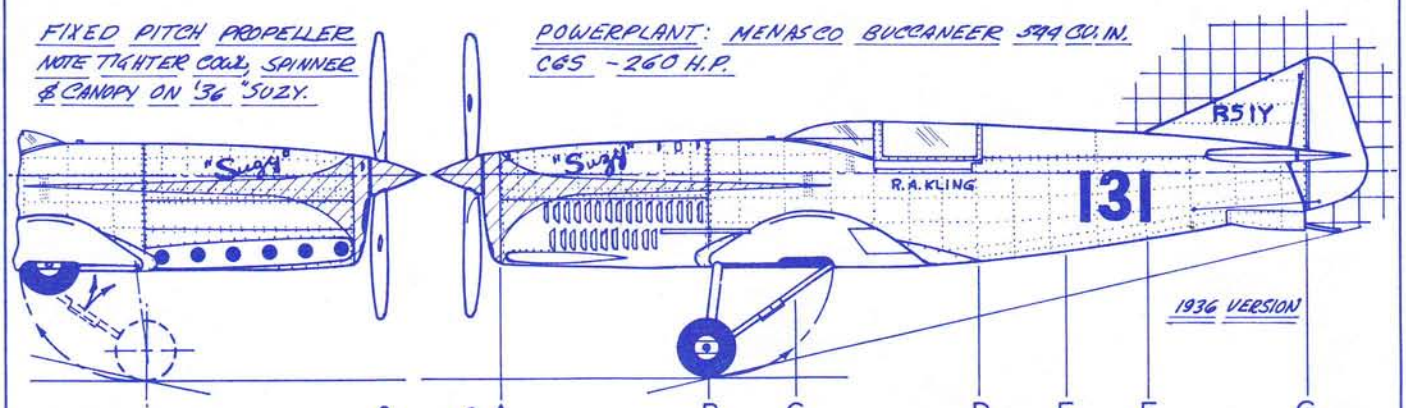
1/8" SQUARES

COLOR SCHEME: 1936 "SUZY" ENTIRE AIRCRAFT WAS BLUE WITH CREAM TRIM. ALL OTHER VERSIONS WERE NATURAL ALUMINUM WITH BLACK NUMERALS
"SUZY" FLOWN BY RUDY KLING FOR A 3RD IN 1935 THOMPSON TROPHY RACE

KEITH RIDER R-1 "SUZY" & "SAN FRANCISCO I"

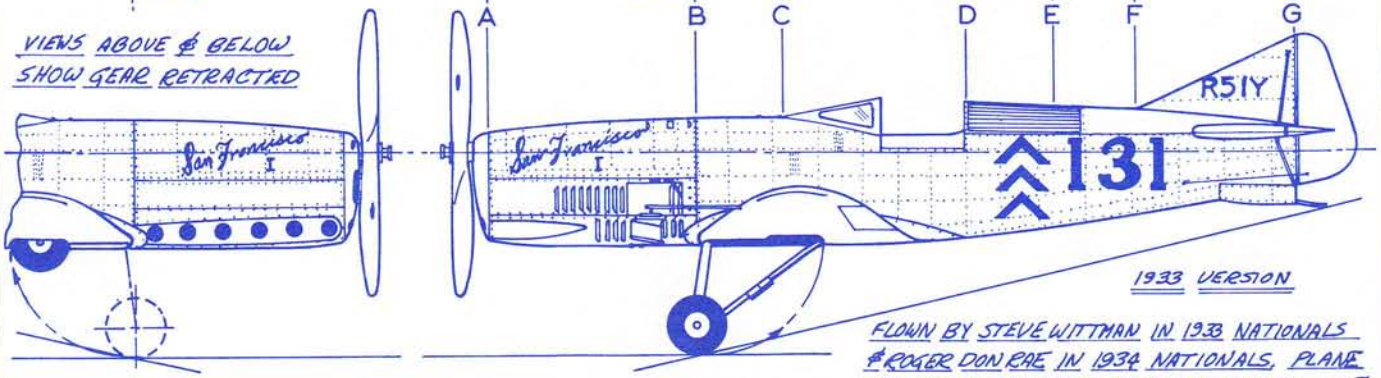
FIXED PITCH PROPELLER NOTE TIGHTER COWL, SPINNER & CANOPY ON '36 "SUZY.

POWERPLANT: MENASCO BUCCANEER 549 CU. IN. C6S - 260 H.P.



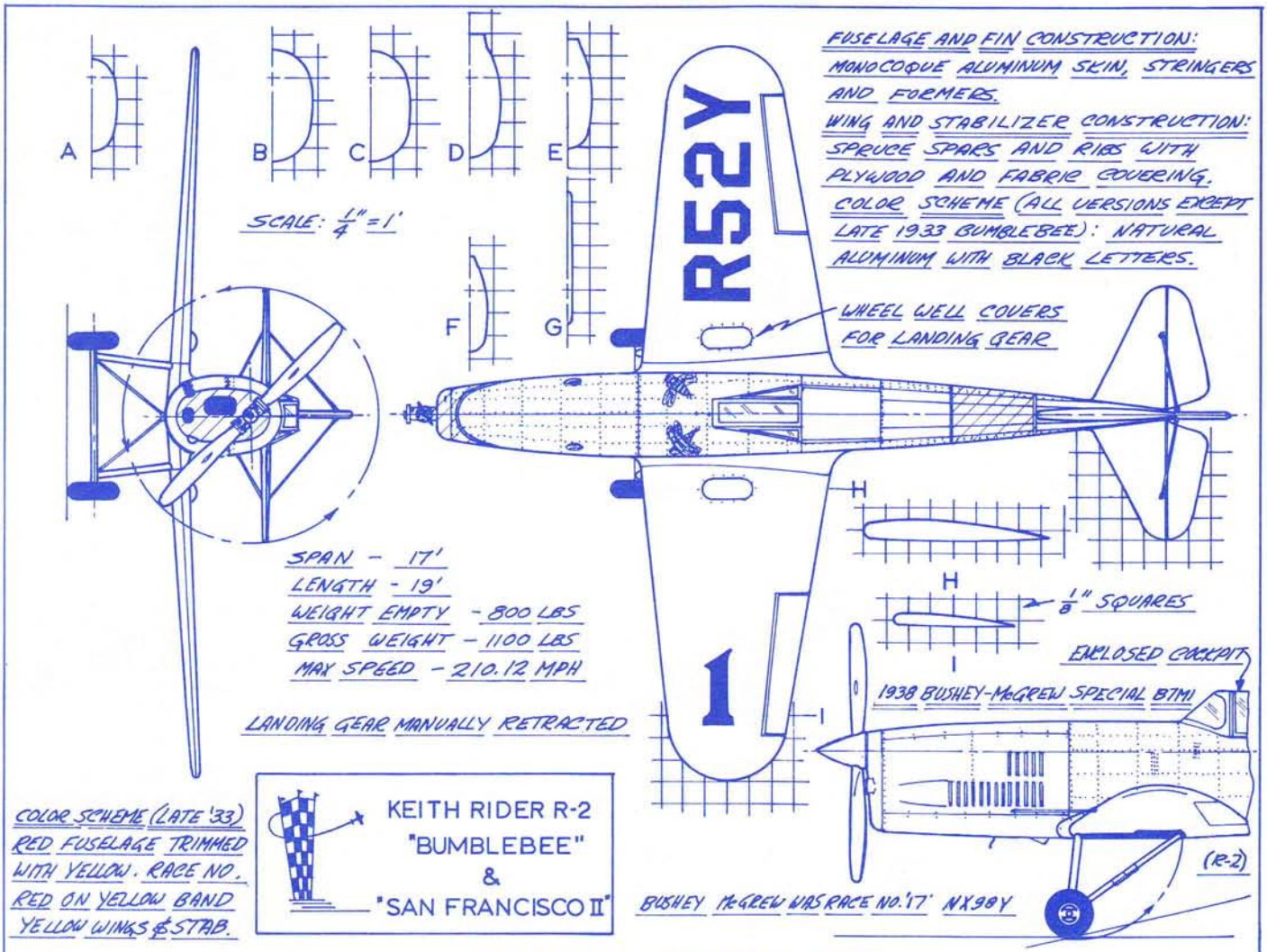
1936 VERSION

VIEWS ABOVE & BELOW SHOW GEAR RETRACTED



1933 VERSION

FLOWN BY STEVE WITTMAN IN 1933 NATIONALS & ROGER DON RAE IN 1934 NATIONALS. PLANE WON PLACES IN MANY NATIONAL EVENTS.

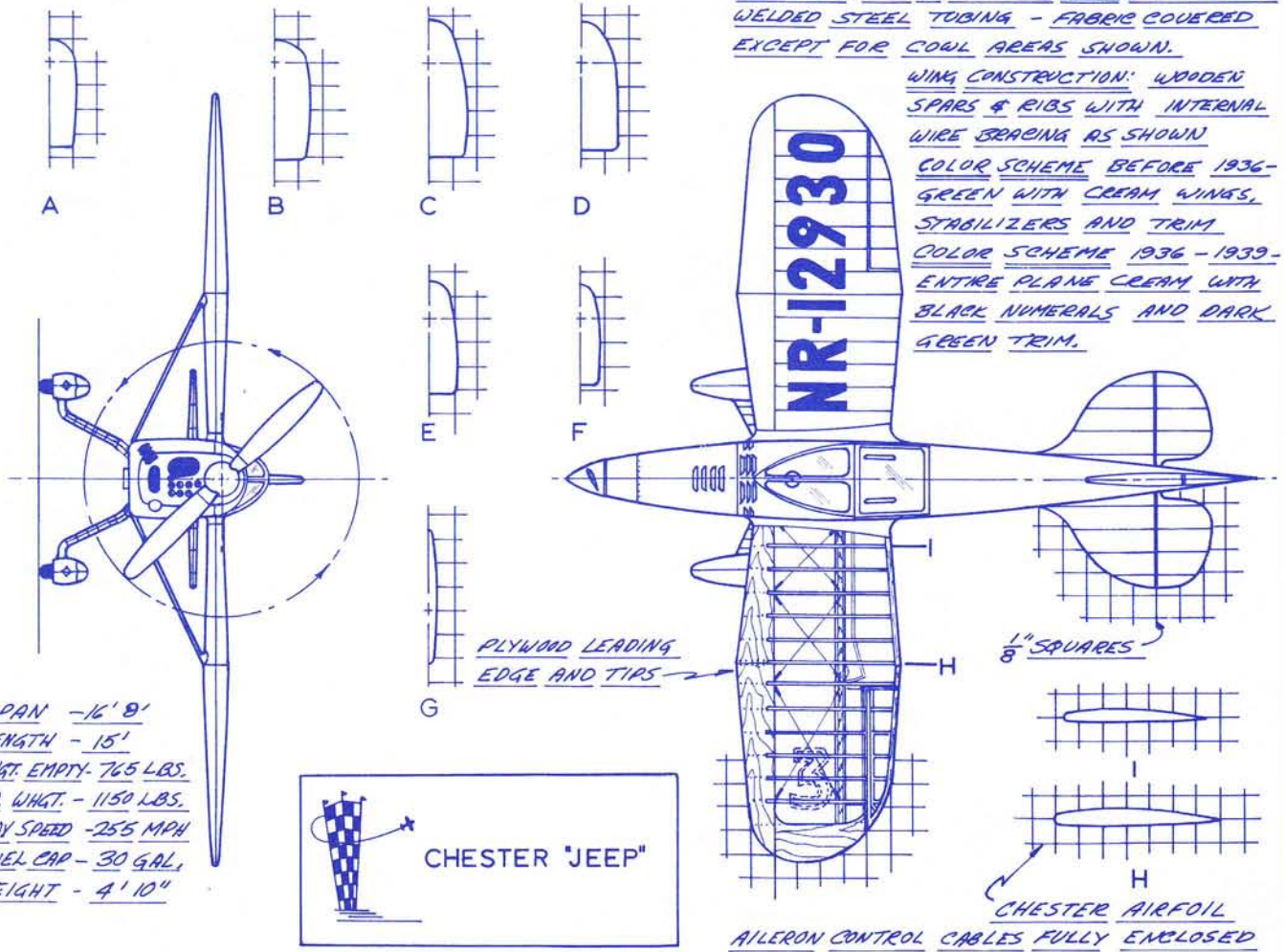

A
B
C
D
E
F
G
H
I
R52Y
1
SCALE: 1/4" = 1'
FUSELAGE AND FIN CONSTRUCTION: MONOCOQUE ALUMINUM SKIN, STRINGERS AND FORMERS.
WING AND STABILIZER CONSTRUCTION: SPRUCE SPARS AND RIBS WITH PLYWOOD AND FABRIC COVERING.
COLOR SCHEME (ALL VERSIONS EXCEPT LATE 1933 BUMBLEBEE): NATURAL ALUMINUM WITH BLACK LETTERS.
WHEEL WELL COVERS FOR LANDING GEAR
1/8" SQUARES
SPAN - 17'
LENGTH - 19'
WEIGHT EMPTY - 800 LBS
GROSS WEIGHT - 1100 LBS
MAX SPEED - 210.12 MPH
LANDING GEAR MANUALLY RETRACTED
ENCLOSED COCKPIT
1938 BUSHEY-McGREW SPECIAL B7M1
(R-2)
BUSHEY McGREW WAS RACE NO. '17' NX98Y
COLOR SCHEME (LATE '33) RED FUSELAGE TRIMMED WITH YELLOW. RACE NO. RED ON YELLOW BAND YELLOW WINGS & STAB.
KEITH RIDER R-2
"BUMBLEBEE"
&
"SAN FRANCISCO II"
PROPELLER: FIXED PITCH IN 1932-33 ADJUSTABLE PITCH IN 1934
POWERPLANT: MENASCO C-45 PIRATE 365 CU.IN. MODIFIED TO PRODUCE 200 H.P.
BUMBLEBEE
EARLY 1933
LATE 1933
NOTE TIGHTER FITTING COWL ON 1934 BUMBLEBEE - ALSO LESS COOLING LOUVRES
San Francisco II
132
EARLY TIP GUARDS
1931 & 1932 VERSION
LANDING GEAR RETRACTED REARWARD LEAVING HALF OF WHEELS EXPOSED IN EVENT OF GEAR UP LANDING. WING TIP GUARDS USED ONLY ON INITIAL FLIGHTS
FLOWN TO 1ST PLACE IN 400 CU IN EVENT AT '31 NATIONALS BY ROBERT CLAMPETT. IN 1932-'33-'34 BUMBLEBEE PLACED IN MANY EVENTS AT THE NATIONALS FLOWN BY GEORGE HAGUE & EARL ORTMAN

FUSELAGE, TAIL & LANDING GEAR CONSTRUCTION: WELDED STEEL TUBING - FABRIC COVERED EXCEPT FOR COWL AREAS SHOWN.

WING CONSTRUCTION: WOODEN SPARS & RIBS WITH INTERNAL WIRE BRACING AS SHOWN

COLOR SCHEME BEFORE 1936 - GREEN WITH CREAM WINGS, STABILIZERS AND TRIM

COLOR SCHEME 1936 - 1939 - ENTIRE PLANE CREAM WITH BLACK NUMERALS AND DARK GREEN TRIM.

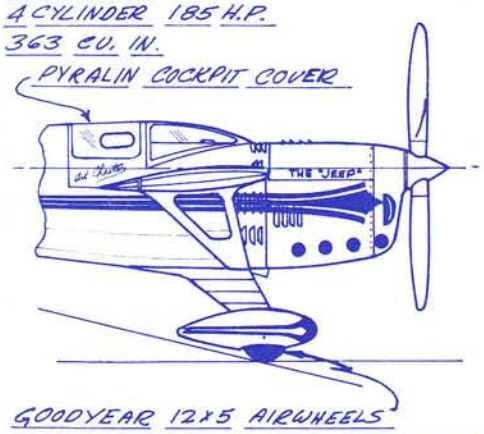


SPAN - 16' 8"
LENGTH - 15'
WHGT. EMPTY - 765 LBS.
GR. WHGT. - 1150 LBS.
MAX SPEED - 255 MPH
FUEL CAP - 30 GAL.
HEIGHT - 4' 10"

AILERON CONTROL CABLES FULLY ENCLOSED INSIDE FABRIC COVERED WING.

POWERPLANT: MENASCO C-4S
4 CYLINDER 185 H.P.
363 CU. IN.

PYRALIN COCKPIT COVER



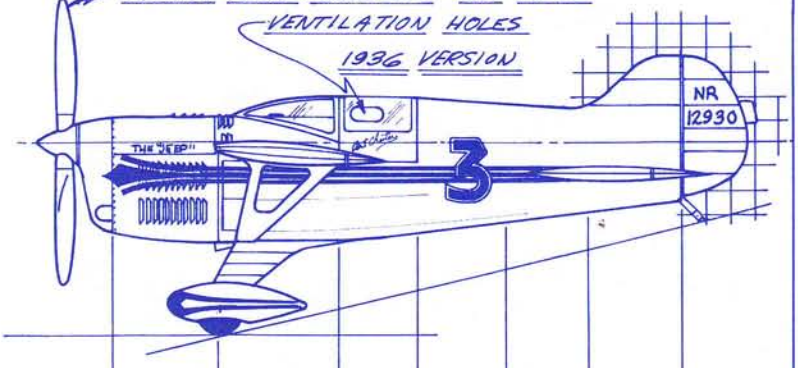
GOODYEAR 12x5 AIRWHEELS

NOTE NON AIR FOIL SHAPE ON TAIL SURFACES OF 1933 VERSION

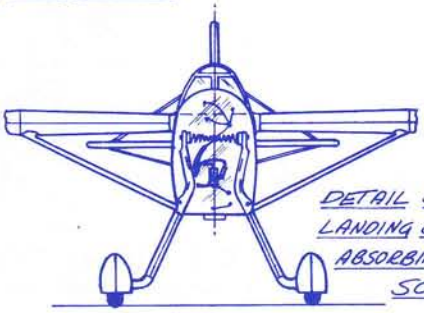
CHESTER METAL PROPELLER - ONE PIECE

VENTILATION HOLES

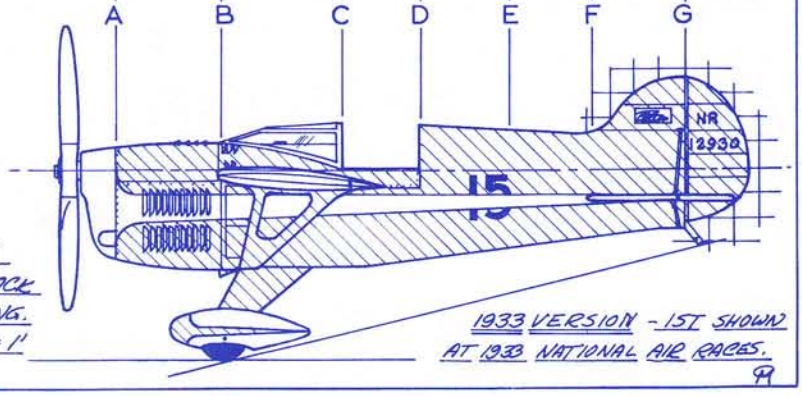
1936 VERSION



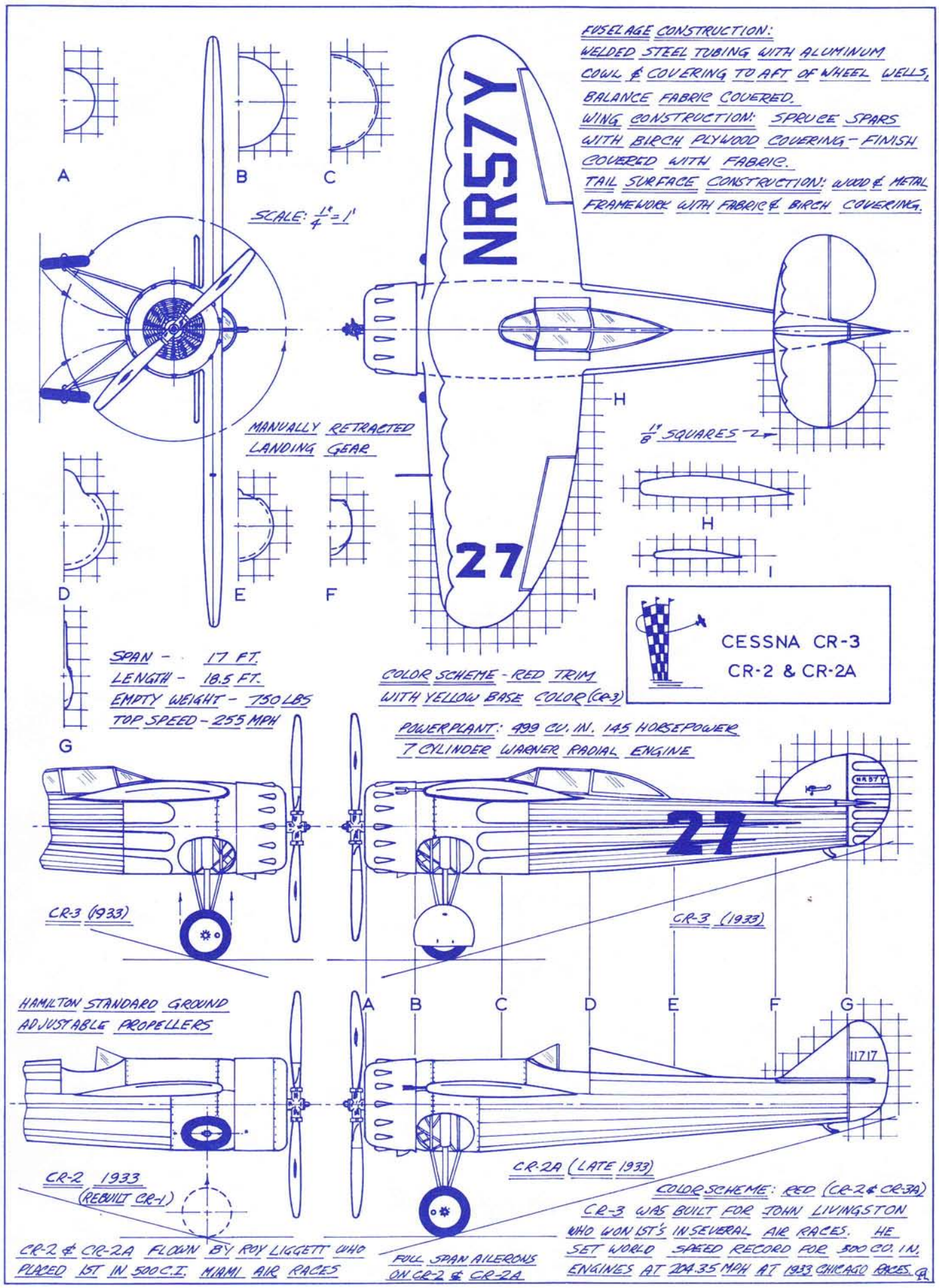
A B C D E F G

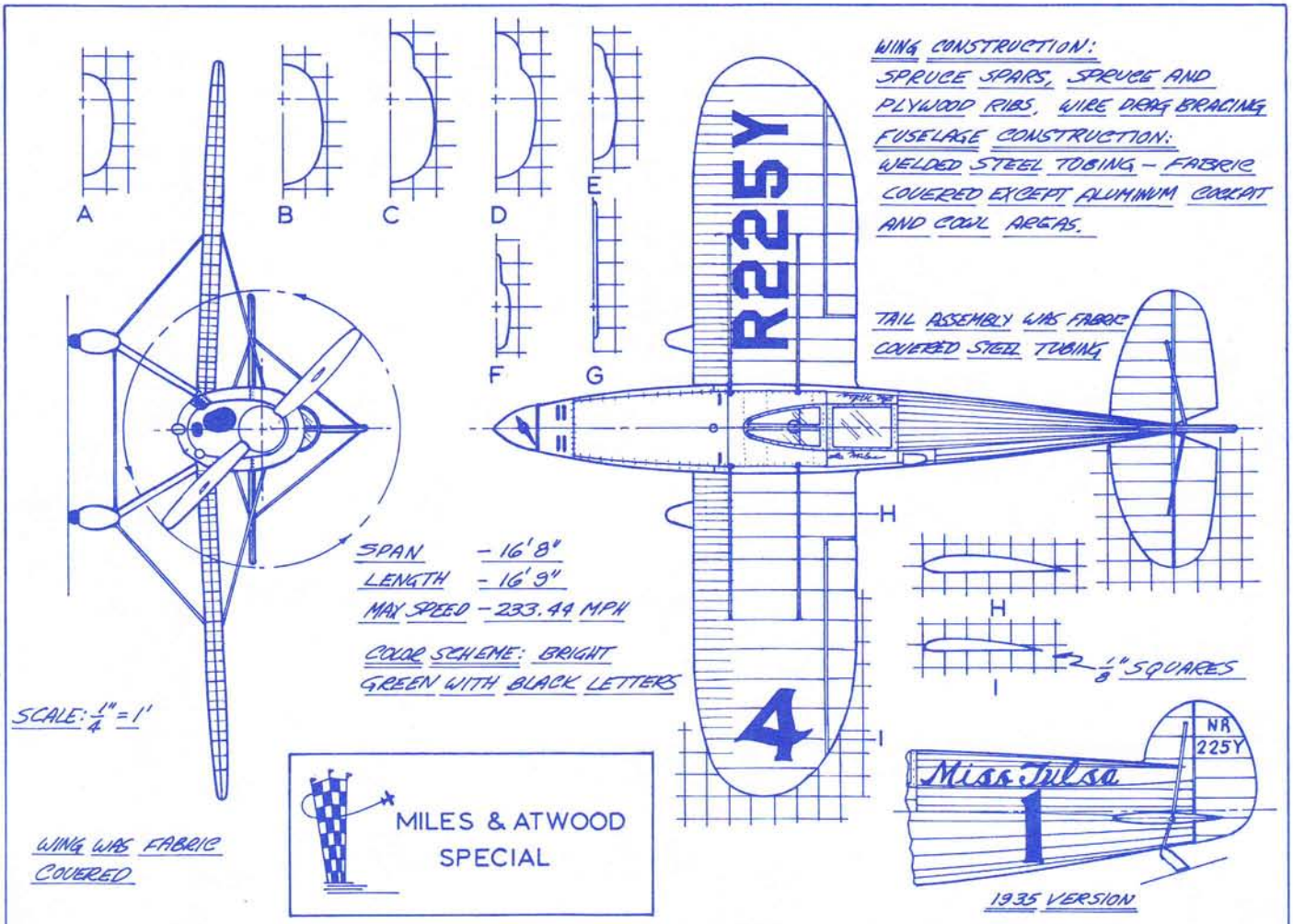


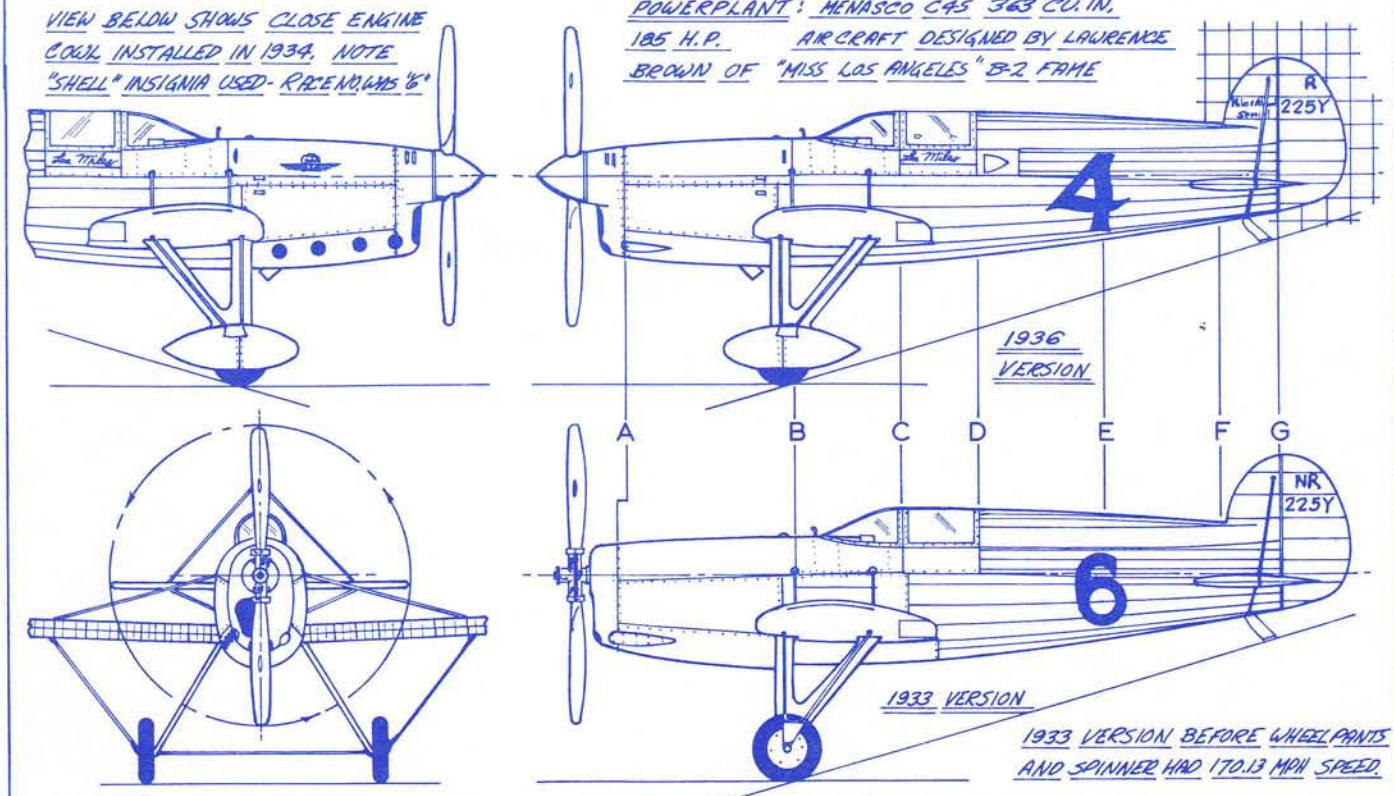
DETAIL SHOWING LANDING GEAR SHOCK ABSORBING ARRANG.
SCALE 1/4" = 1'

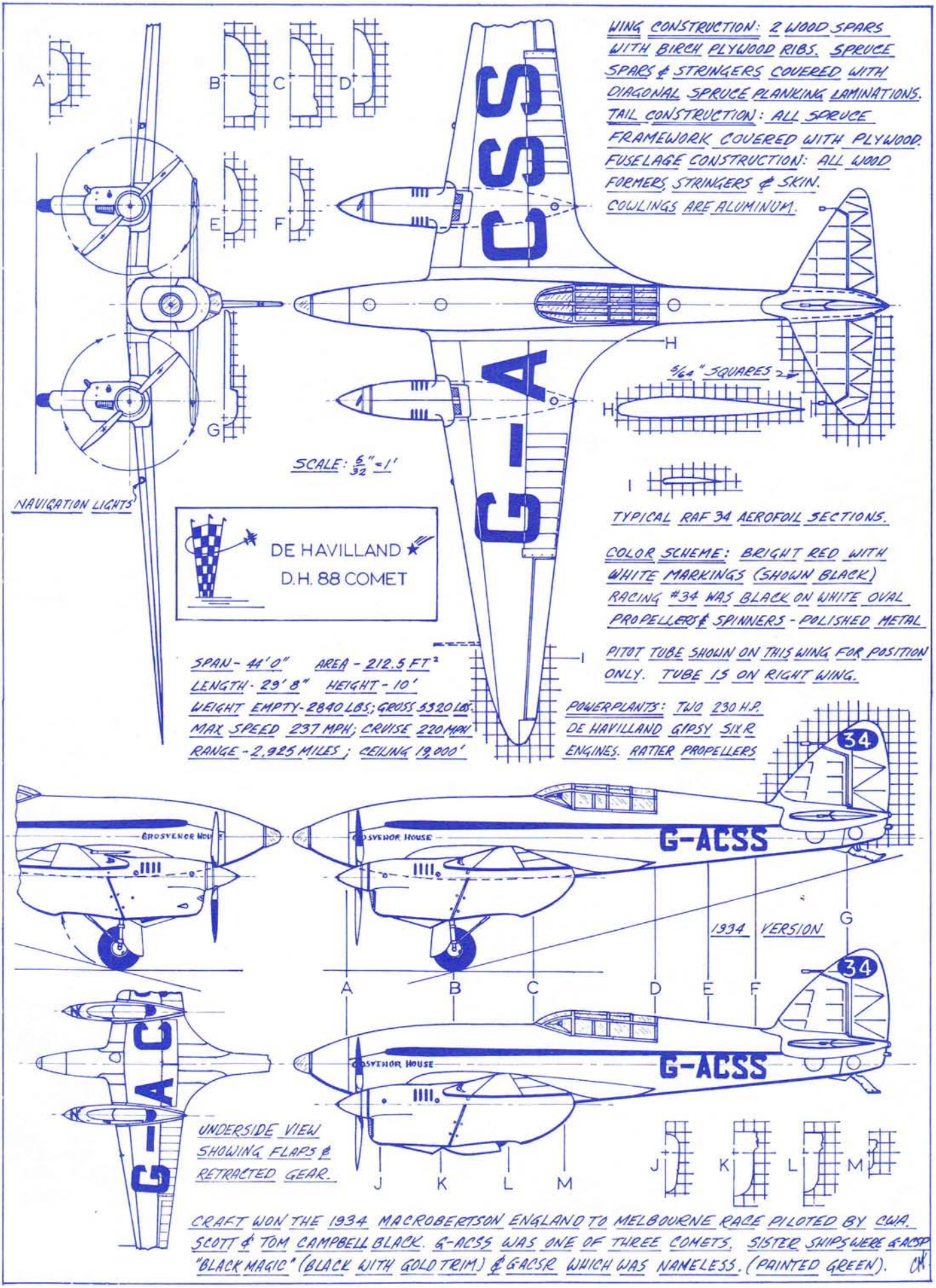


1933 VERSION - 1ST SHOWN AT 1933 NATIONAL AIR RACES.


FUSELAGE CONSTRUCTION:
WELDED STEEL TUBING WITH ALUMINUM COWL & COVERING TO AFT OF WHEEL WELLS, BALANCE FABRIC COVERED.
WING CONSTRUCTION: SPRUCE SPARS WITH BIRCH PLYWOOD COVERING - FINISH COVERED WITH FABRIC.
TAIL SURFACE CONSTRUCTION: WOOD & METAL FRAMEWORK WITH FABRIC & BIRCH COVERING.
SCALE: 1" = 1'
NR57Y
27
MANUALLY RETRACTED LANDING GEAR
1" SQUARES
A
B
C
D
E
F
G
H
I
CESSNA CR-3
CR-2 & CR-2A
SPAN - 17 FT.
LENGTH - 18.5 FT.
EMPTY WEIGHT - 750 LBS
TOP SPEED - 255 MPH
COLOR SCHEME - RED TRIM WITH YELLOW BASE COLOR (CR-3)
POWERPLANT: 499 CU. IN. 145 HORSEPOWER 7 CYLINDER WARNER RADIAL ENGINE
CR-3 (1933)
CR-3 (1933)
HAMILTON STANDARD GROUND ADJUSTABLE PROPELLERS
CR-2 1933 (REBUILT CR-1)
CR-2A (LATE 1933)
CR-2 & CR-2A FLOWN BY ROY LIGGETT WHO PLACED 1ST IN 500 C.I. MIAMI AIR RACES
FULL SPAN AILERONS ON CR-2 & CR-2A
COLOR SCHEME: RED (CR-2 & CR-3A)
CR-3 WAS BUILT FOR JOHN LIVINGSTON WHO WON 1ST'S IN SEVERAL AIR RACES. HE SET WORLD SPEED RECORD FOR 500 CU. IN. ENGINES AT 204.35 MPH AT 1933 CHICAGO RACES.


A
B
C
D
E
F
G
R225Y
4
H
I
SCALE: 1/4" = 1'
SPAN - 16'8"
LENGTH - 16'9"
MAX SPEED - 233.44 MPH
COLOR SCHEME: BRIGHT GREEN WITH BLACK LETTERS
WING CONSTRUCTION: SPRUCE SPARS, SPRUCE AND PLYWOOD RIBS, WIRE DRAG BRACING
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING - FABRIC COVERED EXCEPT ALUMINUM COCKPIT AND COWL AREAS.
TAIL ASSEMBLY WAS FABRIC COVERED STEEL TUBING
1/8" SQUARES
WING WAS FABRIC COVERED
MILES & ATWOOD SPECIAL
NR 225Y
Miss Tulsa
1
1935 VERSION


VIEW BELOW SHOWS CLOSE ENGINE COWL INSTALLED IN 1934. NOTE "SHELL" INSIGNIA USED - RACE NO. WAS "6"
POWERPLANT: MENASCO C4S 363 CU. IN. 185 H.P. AIRCRAFT DESIGNED BY LAWRENCE BROWN OF "MISS LOS ANGELES" B-2 FAME
R 225Y
4
1936 VERSION
A
B
C
D
E
F
G
NR 225Y
6
1933 VERSION
1933 VERSION BEFORE WHEEL PANTS AND SPINNER HAD 170.13 MPH SPEED.
ABOVE VIEW SHOWING WIRE BRACING ON 1933 VERSION WITH LARGE COWL AND NO WHEEL PANTS.
AIRCRAFT FLOWN BY LEE MILES IN NATIONAL AIR RACES 1933-1937. MILES WON 1934 GREVE TROPHY RACE AT 206.2 MPH. IN FOLLOWING YEARS THROUGH 1936 AIRCRAFT WON PRIZE MONEY IN VARIOUS RACES

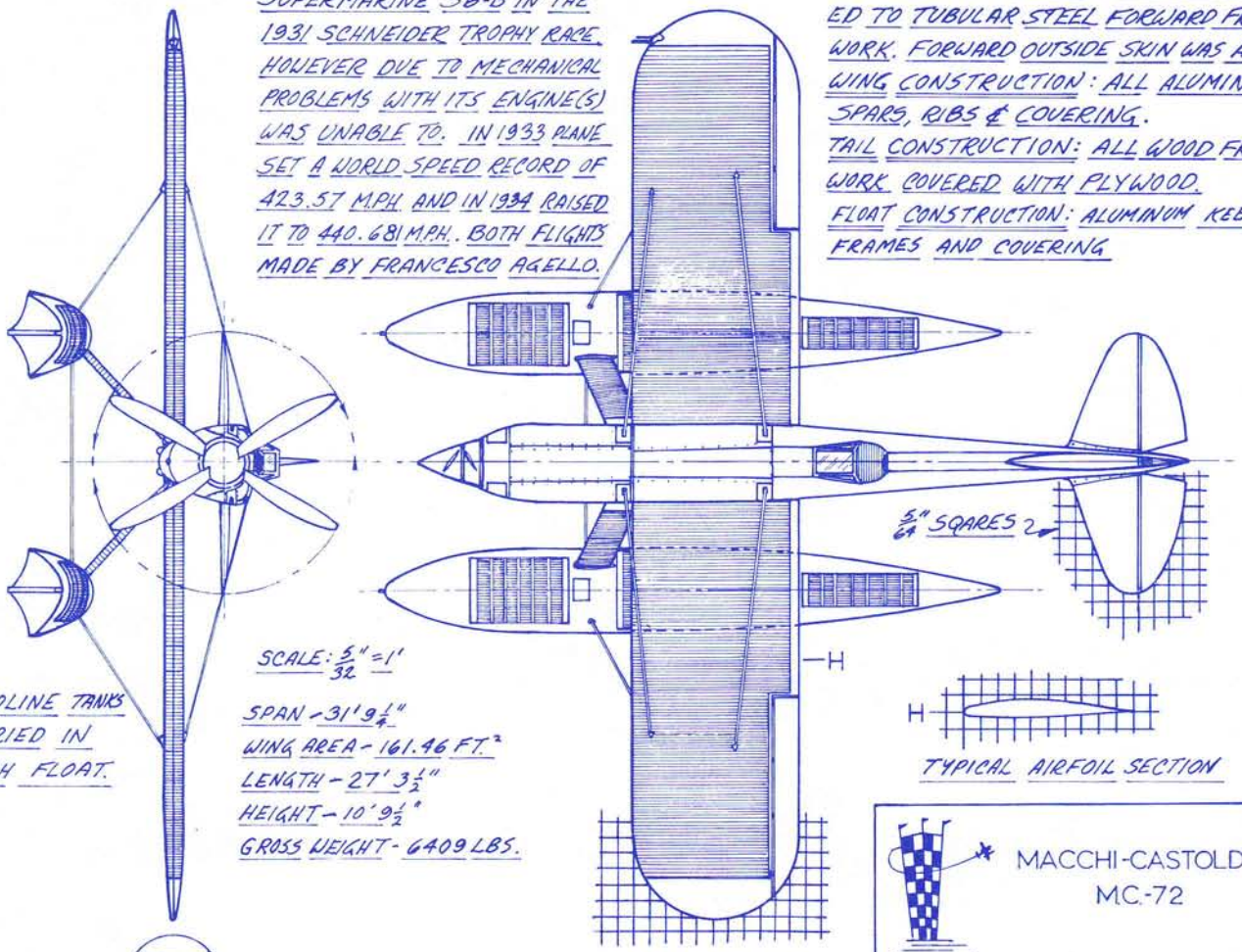


CRAFT WON THE 1934 MACROBERTSON ENGLAND TO MELBOURNE RACE PILOTED BY C.W.A. SCOTT & TOM CAMPBELL BLACK. G-ACSS WAS ONE OF THREE COMETS. SISTER SHIPS WERE G-ACSP "BLACK MAGIC" (BLACK WITH GOLD TRIM) & G-ACSR WHICH WAS NAMELESS. (PAINTED GREEN). CM

11" 16.5"

THIS AIRCRAFT WAS BUILT TO COMPETE AGAINST THE SUPERMARINE S6-B IN THE 1931 SCHNEIDER TROPHY RACE. HOWEVER DUE TO MECHANICAL PROBLEMS WITH ITS ENGINE(S) WAS UNABLE TO. IN 1933 PLANE SET A WORLD SPEED RECORD OF 423.57 M.P.H. AND IN 1934 RAISED IT TO 440.681 M.P.H.. BOTH FLIGHTS MADE BY FRANCESCO AGELLO.

FUSELAGE CONSTRUCTION: REAR PORTION WAS WOOD FRAMES PLYWOOD COVERED IN MONOCOQUE STYLE. THIS WAS BOLTED TO TUBULAR STEEL FORWARD FRAMEWORK. FORWARD OUTSIDE SKIN WAS ALUM.
WING CONSTRUCTION: ALL ALUMINUM SPARS, RIBS & COVERING.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK COVERED WITH PLYWOOD.
FLOAT CONSTRUCTION: ALUMINUM KEEL, FRAMES AND COVERING



GASOLINE TANKS CARRIED IN EACH FLOAT.

SCALE: 5/32" = 1'

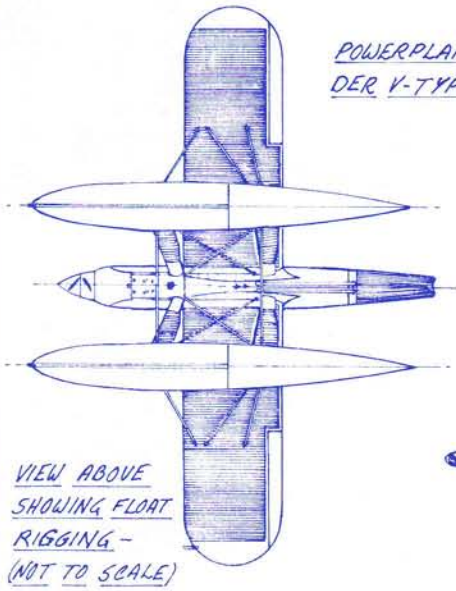
SPAN - 31' 9 1/4"
WING AREA - 161.46 FT.²
LENGTH - 27' 3 1/2"
HEIGHT - 10' 9 1/2"
GROSS WEIGHT - 6409 LBS.

H

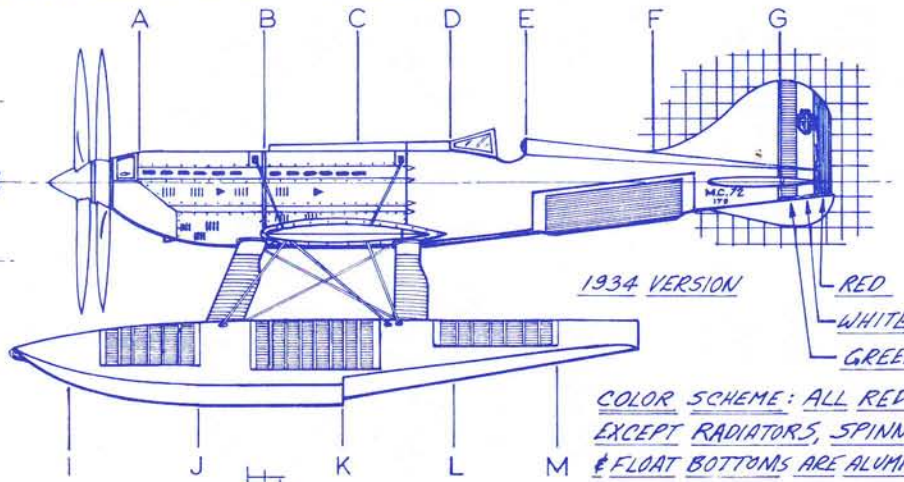
TYPICAL AIRFOIL SECTION

MACCHI-CASTOLDI
MC-72

POWERPLANT: ONE 2800 H.P FIAT A.S.6 24 CYLINDER V-TYPE (2 A.S.5 V-12's TANDEM COUPLED.)



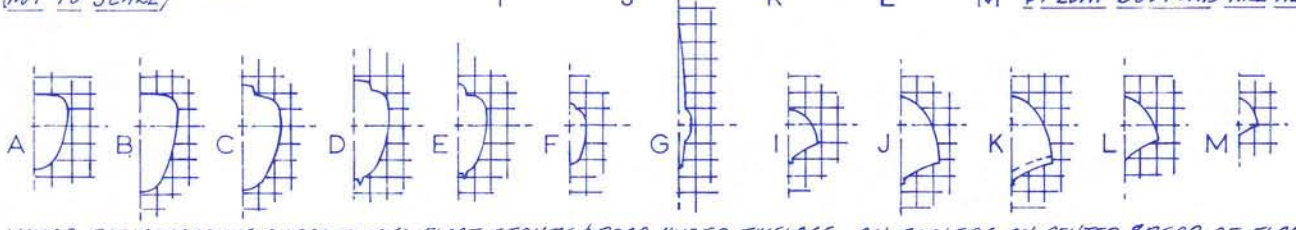
VIEW ABOVE SHOWING FLOAT RIGGING - (NOT TO SCALE)



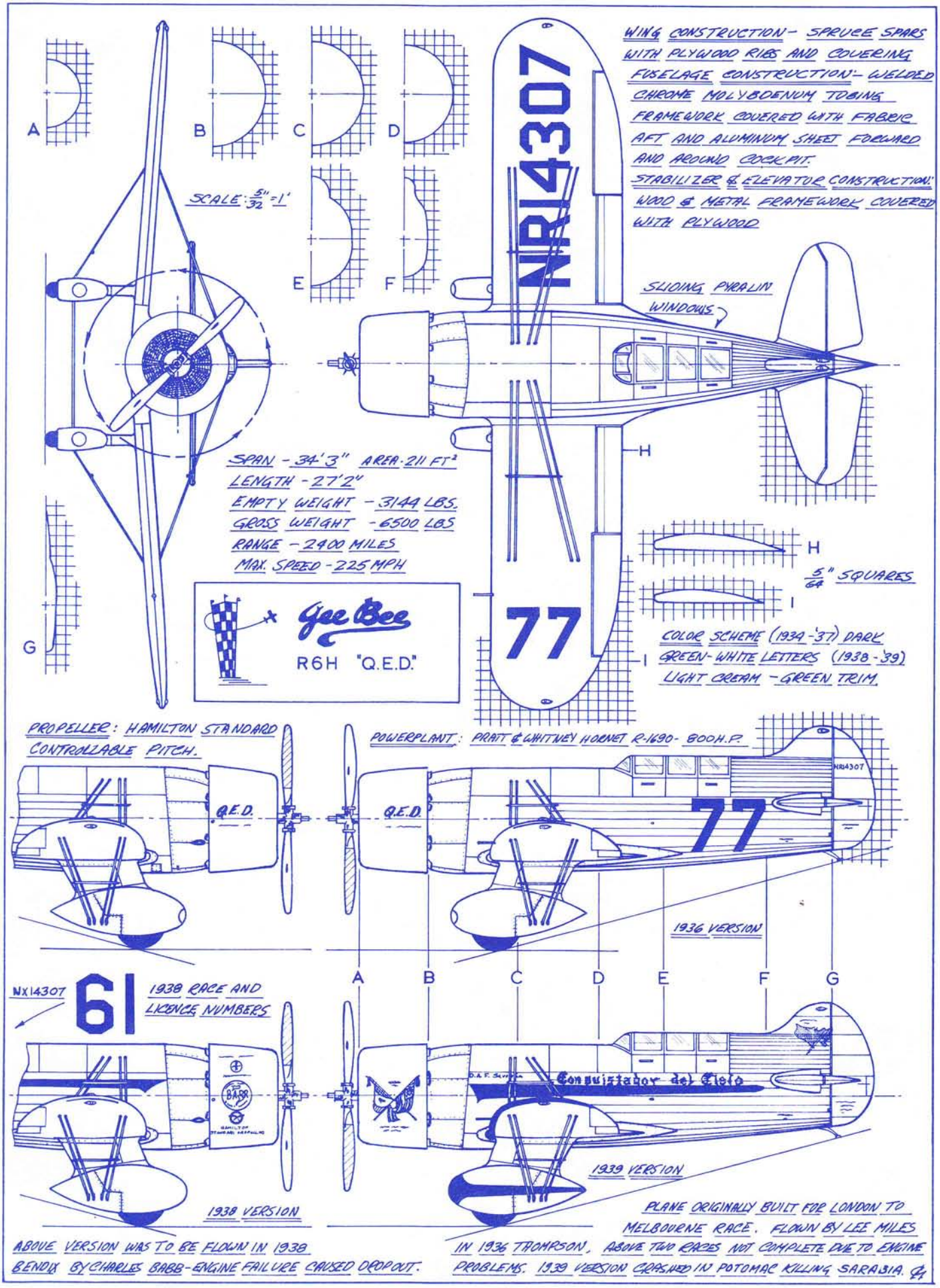
1934 VERSION

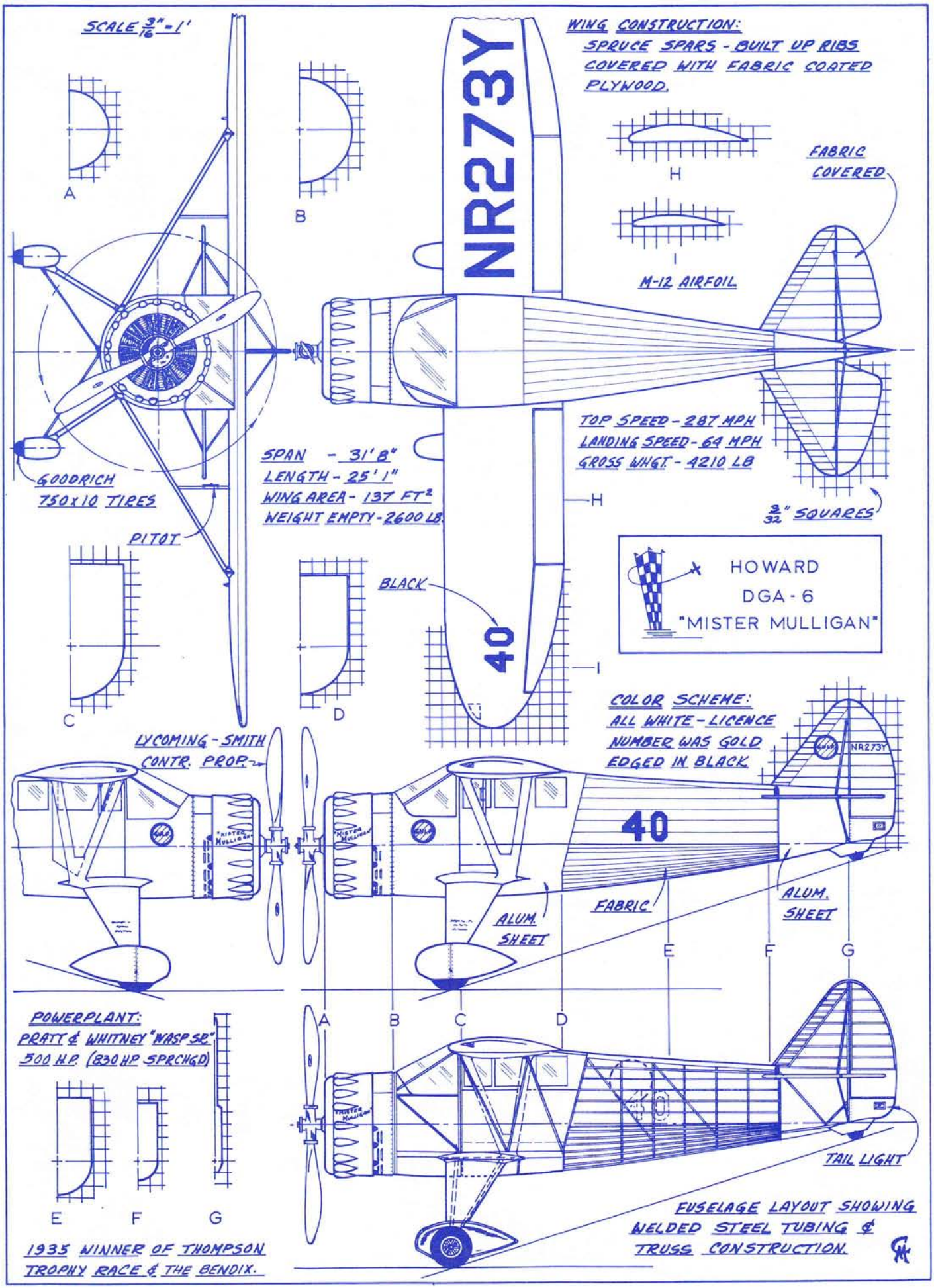
RED
WHITE
GREEN

COLOR SCHEME: ALL RED EXCEPT RADIATORS, SPINNER & FLOAT BOTTOMS ARE ALUMINUM.



WATER RADIATORS ON FORWARD FLOATS, FLOAT STRUTS & REAR UNDER FUSELAGE. OIL COOLERS ON CENTER & REAR OF FLOATS CK

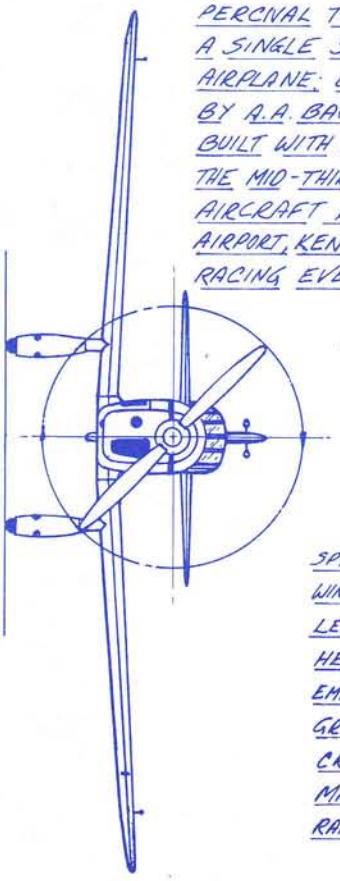

WING CONSTRUCTION- SPRUCE SPARS WITH PLYWOOD RIBS AND COVERING
FUSELAGE CONSTRUCTION- WELDED CHROME MOLYBDENUM TUBING FRAMEWORK COVERED WITH FABRIC AFT AND ALUMINUM SHEET FORWARD AND AROUND COCKPIT.
STABILIZER & ELEVATOR CONSTRUCTION: WOOD & METAL FRAMEWORK COVERED WITH PLYWOOD
SCALE: 5"/32 = 1'
A
B
C
D
E
F
G
H
I
SLIDING PYRALIN WINDOWS
NR14307
77
SPAN - 34'3" AREA - 211 FT²
LENGTH - 27'2"
EMPTY WEIGHT - 3144 LBS.
GROSS WEIGHT - 6500 LBS
RANGE - 2400 MILES
MAX. SPEED - 225 MPH
Gee Bee
R6H "Q.E.D."
5"/64 SQUARES
COLOR SCHEME (1934-'37) DARK GREEN- WHITE LETTERS (1938-'39) LIGHT CREAM - GREEN TRIM.
PROPELLER: HAMILTON STANDARD CONTROLLABLE PITCH.
POWERPLANT: PRATT & WHITNEY HORNET R-1690- 800 H.P.
Q.E.D.
1936 VERSION
NX14307
61
1938 RACE AND LICENCE NUMBERS
1938 VERSION
1939 VERSION
ABOVE VERSION WAS TO BE FLOWN IN 1938 BENDIX BY CHARLES BABB- ENGINE FAILURE CAUSED DROPOUT.
PLANE ORIGINALLY BUILT FOR LONDON TO MELBOURNE RACE. FLOWN BY LEE MILES IN 1936 THOMPSON. ABOVE TWO RACES NOT COMPLETE DUE TO ENGINE PROBLEMS. 1939 VERSION CRASHED IN POTOMAC KILLING SARABIA.

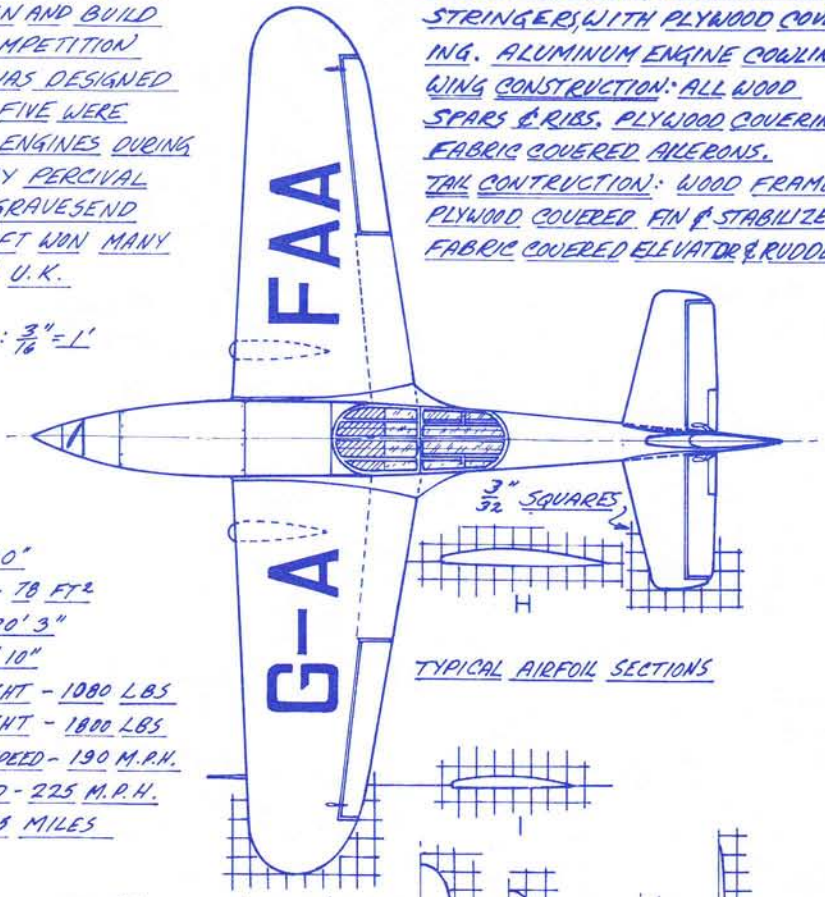

SCALE 3/16" = 1'
WING CONSTRUCTION:
SPRUCE SPARS - BUILT UP RIBS
COVERED WITH FABRIC COATED
PLYWOOD.
NR273Y
FABRIC
COVERED
M-12 AIRFOIL
TOP SPEED - 287 MPH
LANDING SPEED - 64 MPH
GROSS WHGT. - 4210 LB
SPAN - 31' 8"
LENGTH - 25' 1"
WING AREA - 137 FT²
WEIGHT EMPTY - 2600 LB
GOODRICH
750x10 TIRES
PITOT
3/32" SQUARES
BLACK
HOWARD
DGA-6
"MISTER MULLIGAN"
COLOR SCHEME:
ALL WHITE - LICENCE
NUMBER WAS GOLD
EDGED IN BLACK.
LYCOMING - SMITH
CONTR. PROP.
ALUM.
SHEET
FABRIC
ALUM.
SHEET
POWERPLANT:
PRATT & WHITNEY "WASP SR"
500 H.P. (830 HP SPRCHGD)
TAIL LIGHT
FUSELAGE LAYOUT SHOWING
WELDED STEEL TUBING &
TRUSS CONSTRUCTION.
1935 WINNER OF THOMPSON
TROPHY RACE & THE BENDIX.

THE "MEW GULL" IS ACTUALLY A SECOND ATTEMPT BY EDGAR PERCIVAL TO DESIGN AND BUILD A SINGLE SEAT COMPETITION AIRPLANE. CRAFT WAS DESIGNED BY A.A. BAGE AND FIVE WERE BUILT WITH VARIOUS ENGINES DURING THE MID-THIRTIES BY PERCIVAL AIRCRAFT LTD. @ GRAVESEND AIRPORT, KENT. CRAFT WON MANY RACING EVENTS IN U.K.

FUSELAGE CONSTRUCTION: ALL WOOD FORMERS, LONGERONS, STRINGERS, WITH PLYWOOD COVERING. ALUMINUM ENGINE COWLING.
WING CONSTRUCTION: ALL WOOD SPARS & RIBS. PLYWOOD COVERING. FABRIC COVERED AILERONS.
TAIL CONTRUCTION: WOOD FRAMES. PLYWOOD COVERED FIN & STABILIZER, FABRIC COVERED ELEVATOR & RUDDER

SCALE: $\frac{3}{16}$" = 1'

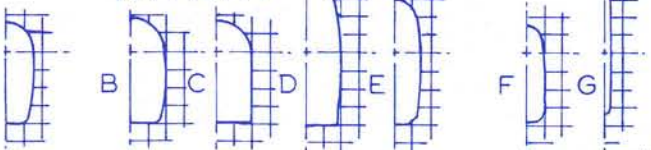


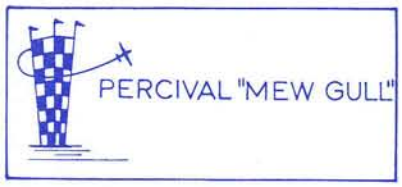


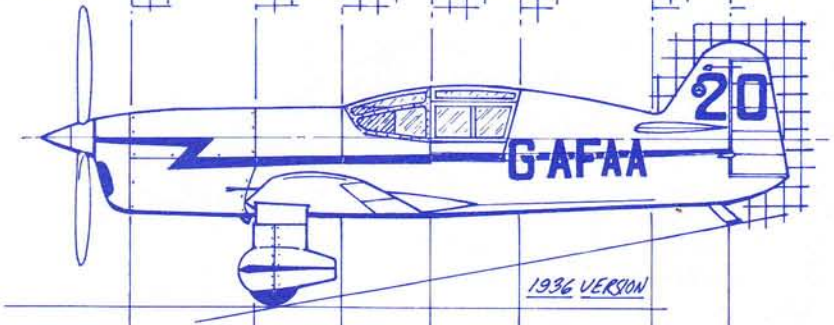
SPAN - 24'0"
WING AREA - 78 FT²
LENGTH - 20'3"
HEIGHT - 6'10"
EMPTY WEIGHT - 1080 LBS
GROSS WEIGHT - 1800 LBS
CRUISING SPEED - 190 M.P.H.
MAX. SPEED - 225 M.P.H.
RANGE - 573 MILES

TYPICAL AIRFOIL SECTIONS

POWERPLANT: ONE AIR COOLED 6 CYLINDER 205 HORSEPOWER DE HAVILLAND GIPSY SIX SERIES II
PROPELLER: DE HAVILLAND ALL METAL VARIABLE PITCH AIRSCREW.
NOTE: WHEEL PANTS WERE DURAL.

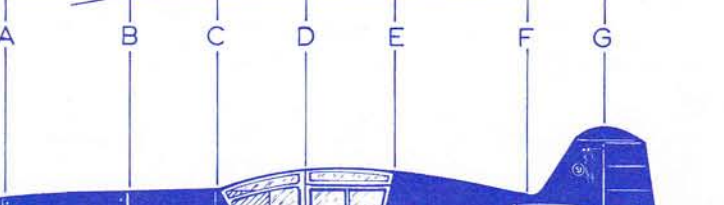


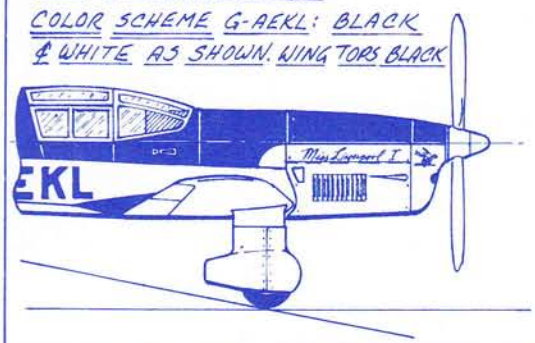




1936 VERSION

COLOR SCHEME G-AFAA: ALL WHITE WITH BLACK MARKINGS.
COLOR SCHEME G-AEKL: BLACK & WHITE AS SHOWN. WING TOPS BLACK

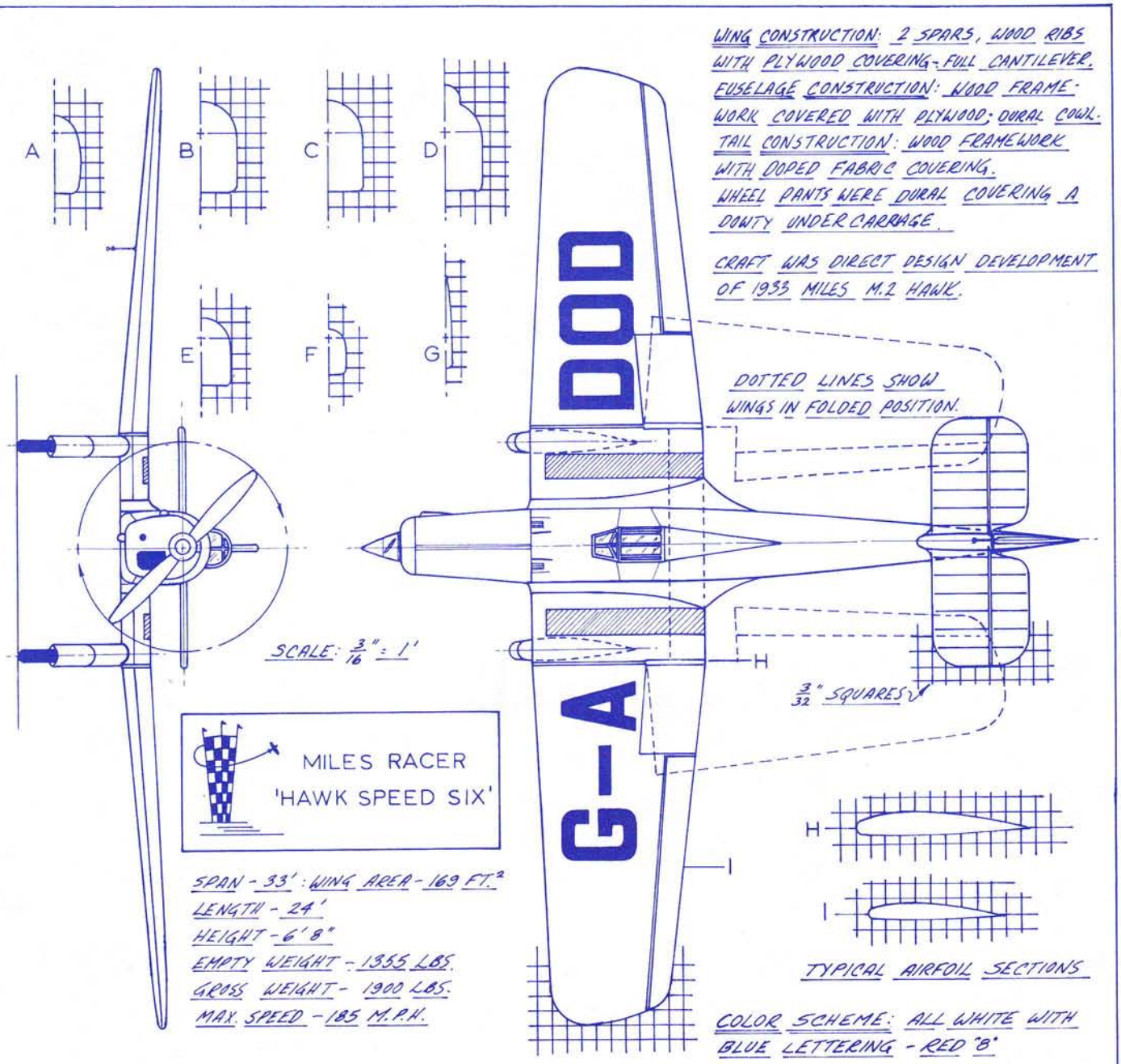






1935 VERSION

CA



WING CONSTRUCTION: 2 SPARS, WOOD RIBS WITH PLYWOOD COVERING - FULL CANTILEVER.
FUSELAGE CONSTRUCTION: WOOD FRAMEWORK COVERED WITH PLYWOOD; DURAL COWL.
TAIL CONSTRUCTION: WOOD FRAMEWORK WITH DOPED FABRIC COVERING.
WHEEL PANTS WERE DURAL COVERING A DOWTY UNDERCARRIAGE.

CRAFT WAS DIRECT DESIGN DEVELOPMENT OF 1933 MILES M.2 HAWK.

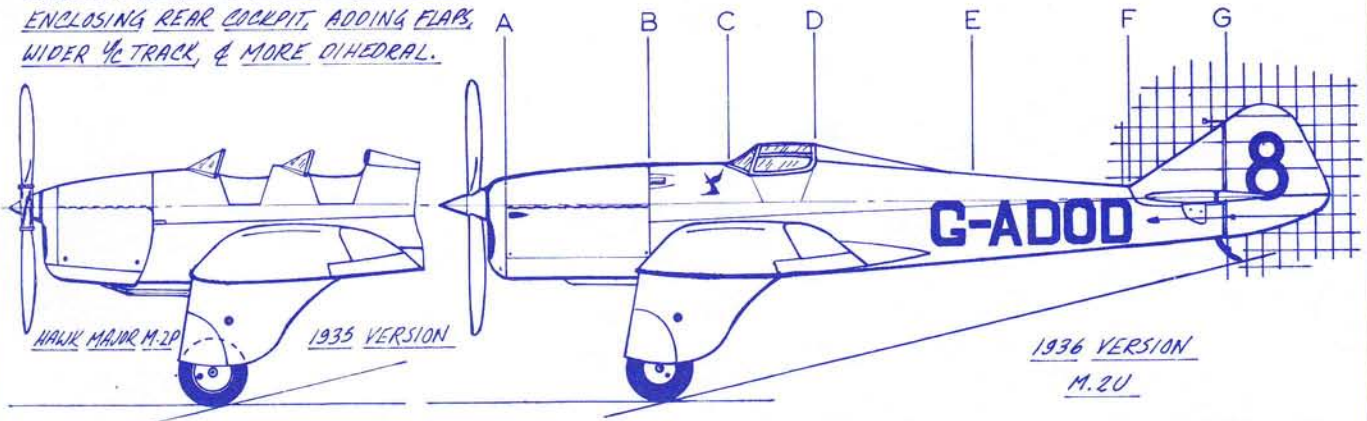
DOTTED LINES SHOW WINGS IN FOLDED POSITION.

TYPICAL AIRFOIL SECTIONS

COLOR SCHEME: ALL WHITE WITH BLUE LETTERING - RED "8"

POWERPLANT: DE HAVILLAND 200 H.P. GIPSY SIX R. - TURNING METAL FIXED PITCH PROPELLER.

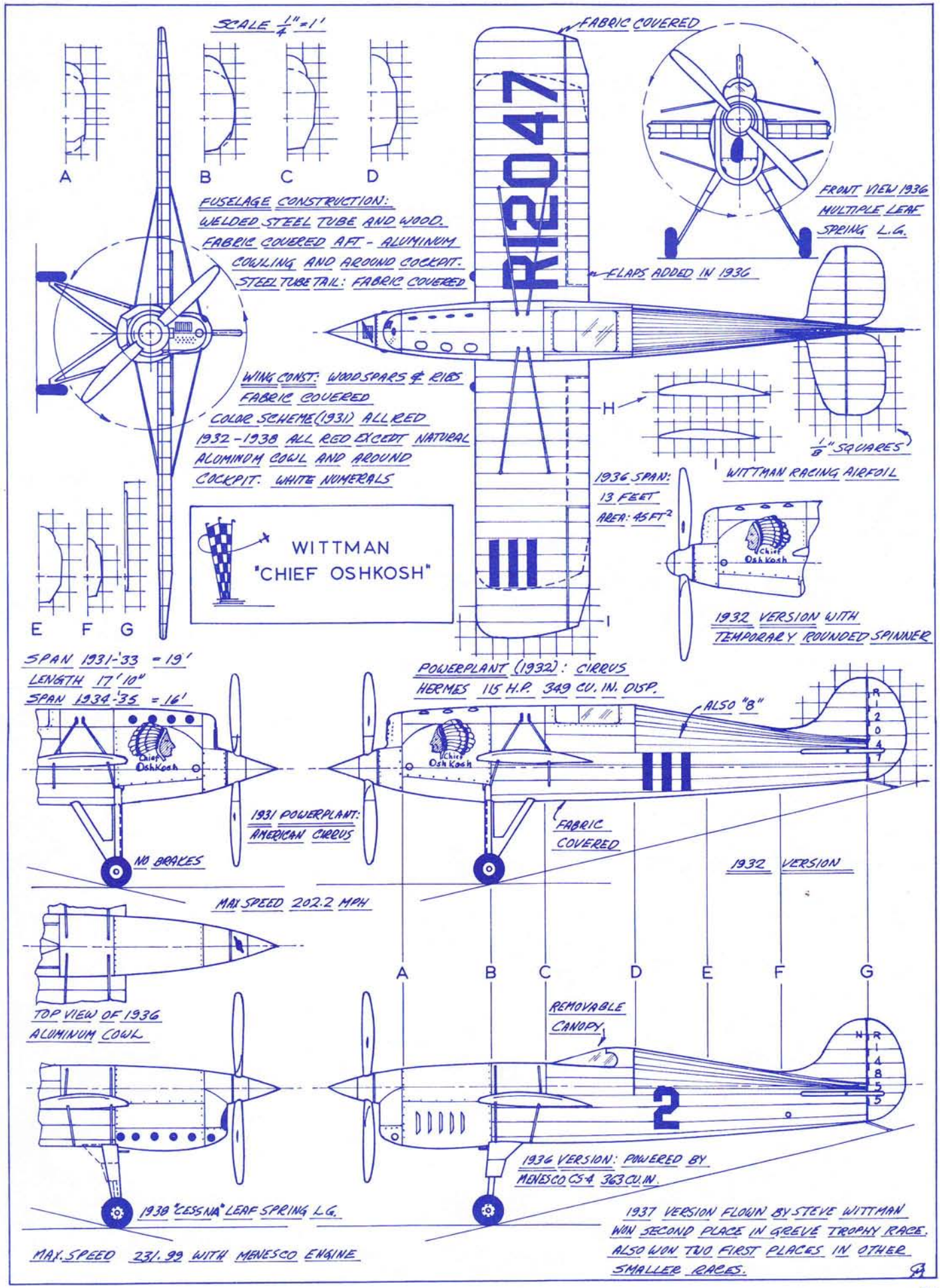
HAWK MAJOR M·2P WAS MADE INTO 'SPEED SIX' BY ADDITION OF LARGE ENGINE, REMOVAL OF FRONT COCKPIT, ENCLOSING REAR COCKPIT, ADDING FLAPS, WIDER ½ TRACK, & MORE DIHEDRAL.

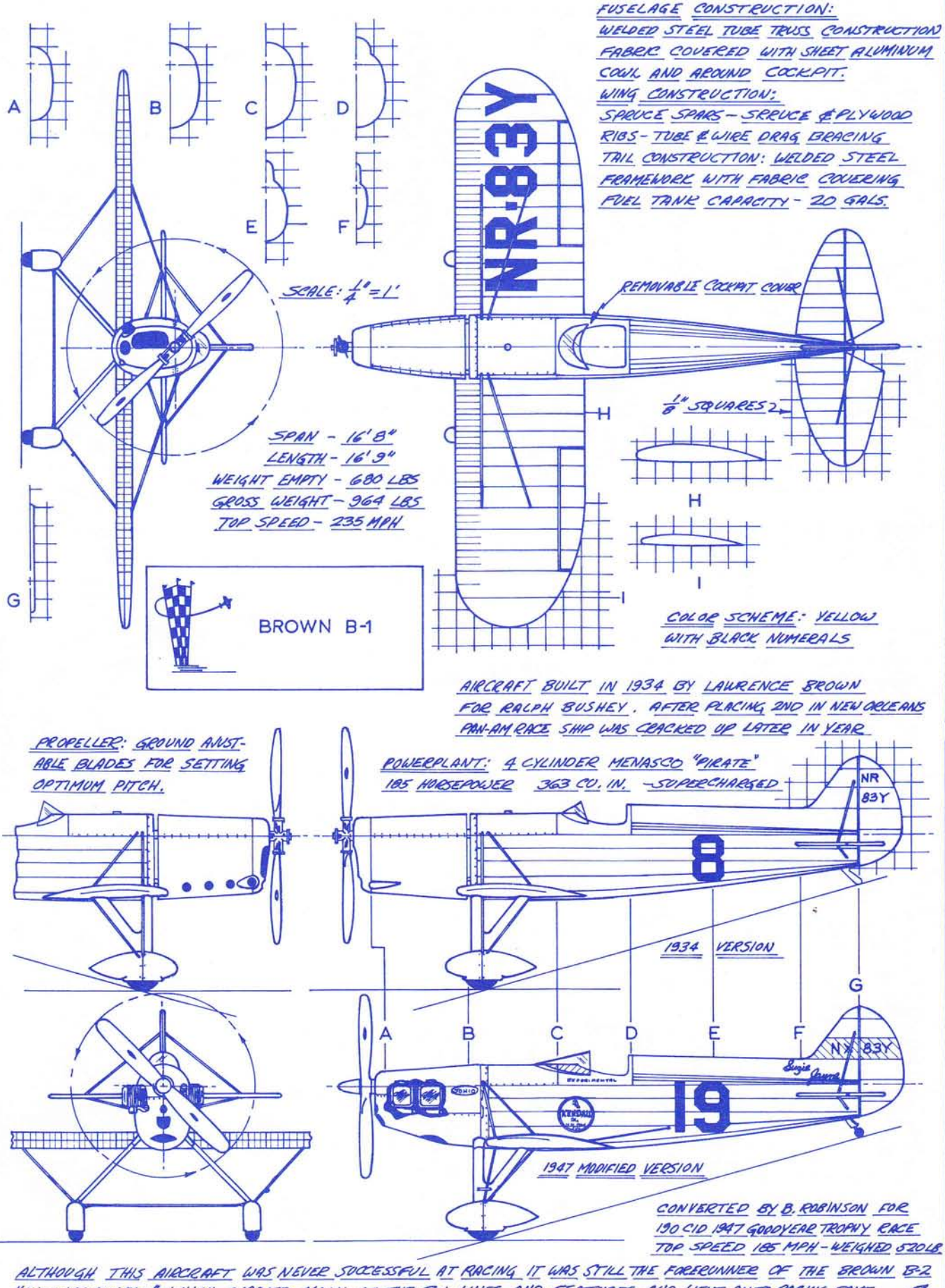


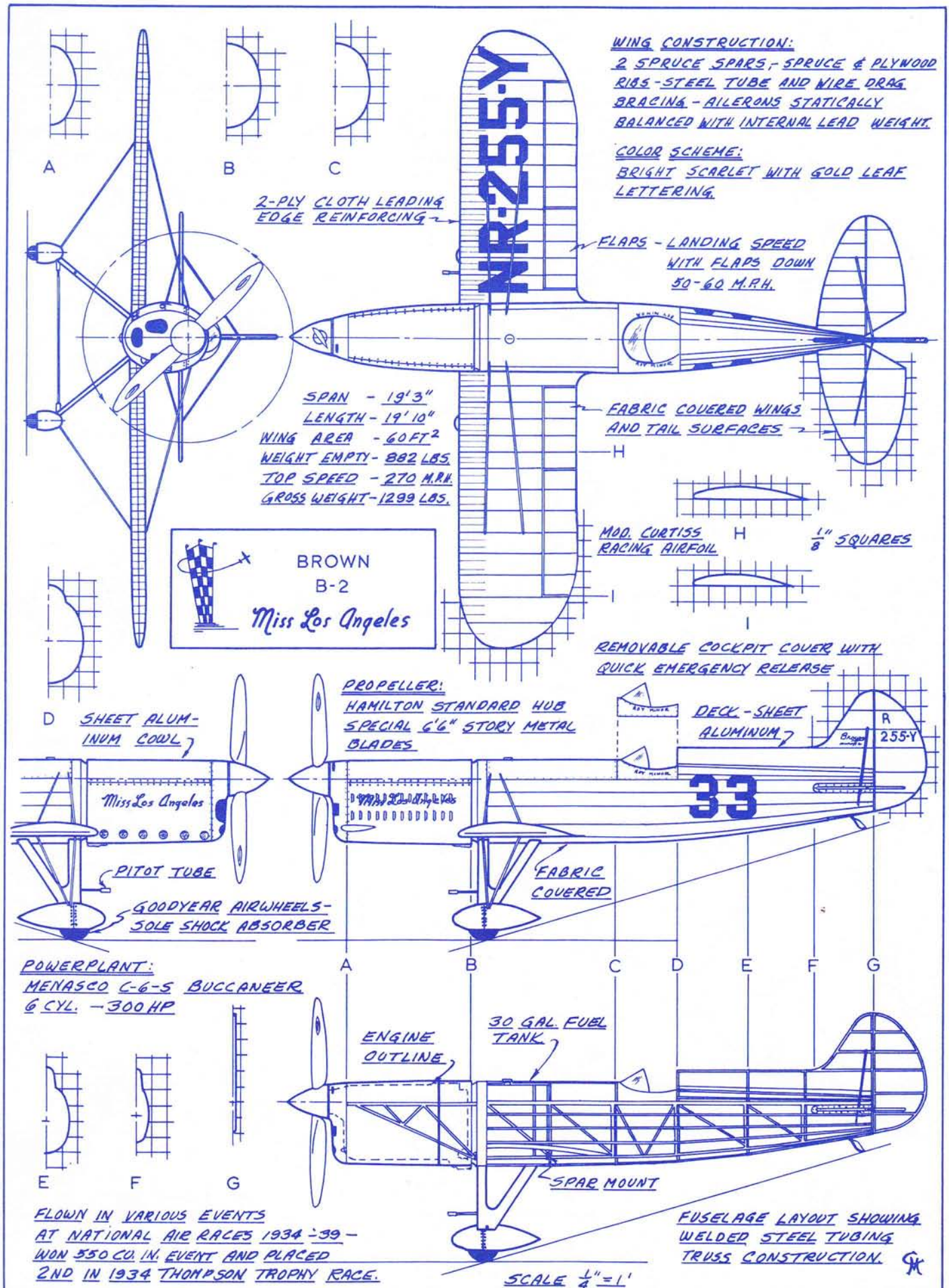
HAWK MAJOR M·2P 1935 VERSION

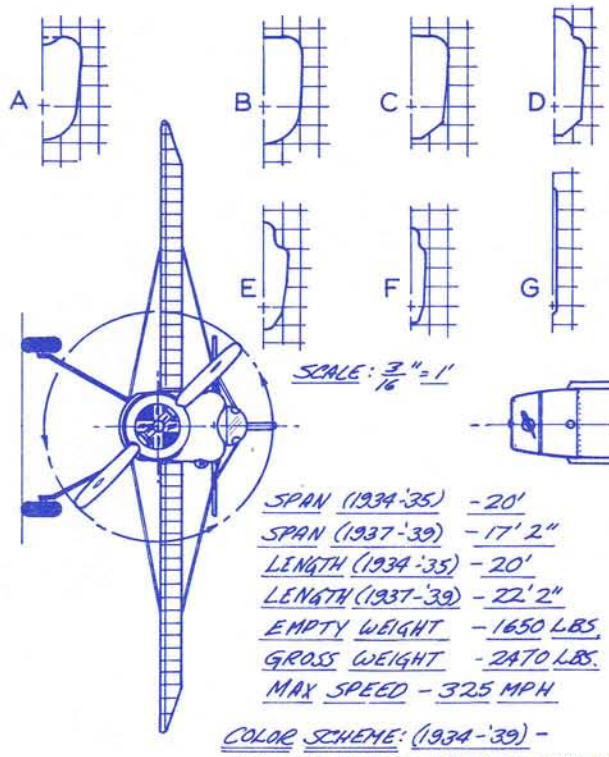
1936 VERSION M.2U

ONE OF 3 'HAWK SPEED SIX' AIRCRAFT 'G-ADOD' FLOWN BY RUTH FONTES COMPETED IN 1936 KING'S CUP RACE. LATER CRAFT WAS FLOWN BY FLT CLOUSTON IN THE SCHLESINGER RACE. PLANE DESIGNED BY F.G. MILES; BUILT BY PHILLIPS & POWIS A/C LTD. UK

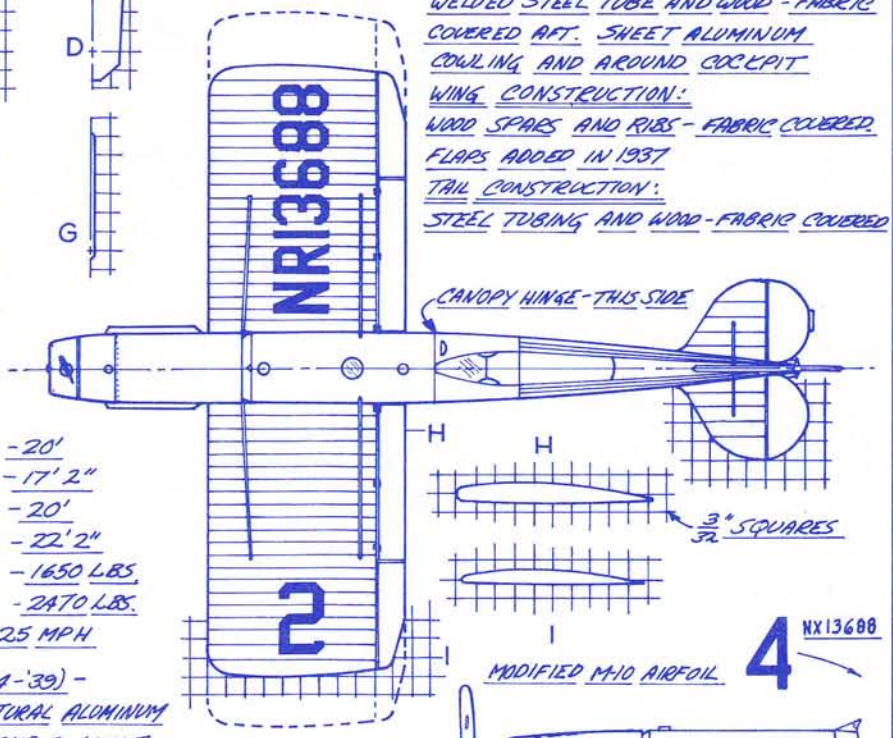

SCALE 1/4" = 1'
A
B
C
D
E
F
G
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBE AND WOOD.
FABRIC COVERED AFT - ALUMINUM
COWLING AND AROUND COCKPIT.
STEEL TUBE TAIL: FABRIC COVERED
WING CONST: WOOD SPARS & RIBS
FABRIC COVERED
COLOR SCHEME (1931) ALL RED
1932 - 1938 ALL RED EXCEPT NATURAL
ALOMINUM COWL AND AROUND
COCKPIT. WHITE NUMERALS
WITTMAN
"CHIEF OSHKOSH"
SPAN 1931-'33 = 19'
LENGTH 17' 10"
SPAN 1934-'35 = 16'
1931 POWERPLANT:
AMERICAN CIRRUS
NO BRAKES
MAX SPEED 202.2 MPH
TOP VIEW OF 1936
ALUMINUM COWL
1938 "CESSNA" LEAF SPRING L.G.
MAX. SPEED 231.99 WITH MENESCO ENGINE
FABRIC COVERED
RI2047
FRONT VIEW 1936
MULTIPLE LEAF
SPRING L.G.
FLAPS ADDED IN 1936
H
I
1/8" SQUARES
1936 SPAN:
13 FEET
AREA: 45 FT²
WITTMAN RACING AIRFOIL
1932 VERSION WITH
TEMPORARY ROUNDED SPINNER
POWERPLANT (1932): CIRRUS
HERMES 115 H.P. 349 CU. IN. DISP.
ALSO "8"
FABRIC
COVERED
1932 VERSION
REMOVABLE
CANOPY
1936 VERSION: POWERED BY
MENESCO CS-4 363 CU. IN.
1937 VERSION FLOWN BY STEVE WITTMAN
WIN SECOND PLACE IN GREVE TROPHY RACE.
ALSO WON TWO FIRST PLACES IN OTHER
SMALLER RACES.


FUSELAGE CONSTRUCTION:
WELDED STEEL TUBE TRUSS CONSTRUCTION
FABRIC COVERED WITH SHEET ALUMINUM
COWL AND AROUND COCKPIT.
WING CONSTRUCTION:
SPRUCE SPARS - SPRUCE & PLYWOOD
RIBS - TUBE & WIRE DRAG BRACING
TAIL CONSTRUCTION: WELDED STEEL
FRAMEWORK WITH FABRIC COVERING
FUEL TANK CAPACITY - 20 GALS.
A
B
C
D
E
F
G
H
I
SCALE: 1/4" = 1'
NR.83Y
REMOVABLE COCKPIT COVER
1/8" SQUARES
SPAN - 16'8"
LENGTH - 16'9"
WEIGHT EMPTY - 680 LBS
GROSS WEIGHT - 964 LBS
TOP SPEED - 235 MPH
BROWN B-1
COLOR SCHEME: YELLOW
WITH BLACK NUMERALS
AIRCRAFT BUILT IN 1934 BY LAWRENCE BROWN
FOR RALPH BUSHEY. AFTER PLACING 2ND IN NEW ORLEANS
PAN-AM RACE SHIP WAS CRACKED UP LATER IN YEAR
PROPELLER: GROUND ADJUST-
ABLE BLADES FOR SETTING
OPTIMUM PITCH.
POWERPLANT: 4 CYLINDER MENASCO "PIRATE"
185 HORSEPOWER 363 CU. IN. -SUPERCHARGED
NR
83Y
8
1934 VERSION
A
B
C
D
E
F
G
NX 83Y
19
1947 MODIFIED VERSION
CONVERTED BY B. ROBINSON FOR
190 CID 1947 GOODYEAR TROPHY RACE
TOP SPEED 185 MPH - WEIGHED 520LB.
ALTHOUGH THIS AIRCRAFT WAS NEVER SUCCESSFUL AT RACING IT WAS STILL THE FORERUNNER OF THE BROWN B-2
"MISS LOS ANGELES" WHICH CARRIED MANY OF THE B-1 LINES AND FEATURES AND WENT ON TO RACING FAME


WING CONSTRUCTION:
2 SPRUCE SPARS - SPRUCE & PLYWOOD RIBS - STEEL TUBE AND WIRE DRAG BRACING - AILERONS STATICALLY BALANCED WITH INTERNAL LEAD WEIGHT.
COLOR SCHEME:
BRIGHT SCARLET WITH GOLD LEAF LETTERING.
2-PLY CLOTH LEADING EDGE REINFORCING
FLAPS - LANDING SPEED WITH FLAPS DOWN 50-60 M.P.H.
NR-255-Y
SPAN - 19'3"
LENGTH - 19'10"
WING AREA - 60 FT²
WEIGHT EMPTY - 882 LBS.
TOP SPEED - 270 M.P.H.
GROSS WEIGHT - 1299 LBS.
FABRIC COVERED WINGS AND TAIL SURFACES
MOD. CURTISS RACING AIRFOIL
1/8" SQUARES
BROWN
B-2
Miss Los Angeles
REMOVABLE COCKPIT COVER WITH QUICK EMERGENCY RELEASE
PROPELLER:
HAMILTON STANDARD HUB
SPECIAL 6'6" STORY METAL BLADES
SHEET ALUMINUM COWL
DECK - SHEET ALUMINUM
R 255-Y
33
PITOT TUBE
GOODYEAR AIRWHEELS - SOLE SHOCK ABSORBER
FABRIC COVERED
POWERPLANT:
MENASCO C-6-S BUCCANEER
6 CYL. - 300 HP
ENGINE OUTLINE
30 GAL. FUEL TANK
SPAR MOUNT
FUSELAGE LAYOUT SHOWING WELDED STEEL TUBING TRUSS CONSTRUCTION.
FLOWN IN VARIOUS EVENTS AT NATIONAL AIR RACES 1934 - '39 - WON 550 CU. IN. EVENT AND PLACED 2ND IN 1934 THOMPSON TROPHY RACE.
SCALE 1/4" = 1'



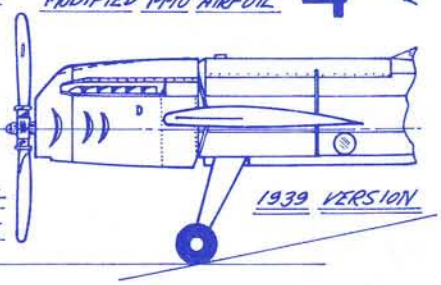
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBE AND WOOD - FABRIC COVERED AFT. SHEET ALUMINUM COWLING AND AROUND COCKPIT
WING CONSTRUCTION:
WOOD SPARS AND RIBS - FABRIC COVERED. FLAPS ADDED IN 1937
TAIL CONSTRUCTION:
STEEL TUBING AND WOOD - FABRIC COVERED



SPAN (1934-'35) - 20'
SPAN (1937-'39) - 17' 2"
LENGTH (1934-'35) - 20'
LENGTH (1937-'39) - 22' 2"
EMPTY WEIGHT - 1650 LBS.
GROSS WEIGHT - 2470 LBS.
MAX SPEED - 325 MPH

COLOR SCHEME: (1934-'39) - ALL RED EXCEPT NATURAL ALUMINUM COWL AND AROUND COCKPIT - WHITE NUMERALS.

MODIFIED M-10 AIRFOIL



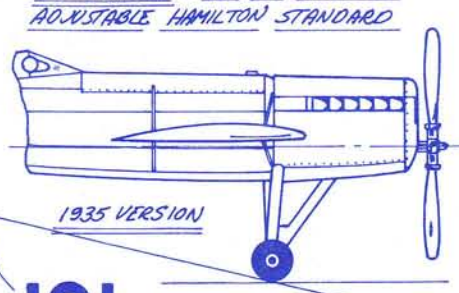
1939 VERSION

SPINNER REMOVED IN '39 - COLOR SCHEME - ALL RED, WHITE NUMBERS

COOLANT RADIATOR WAS LOCATED BEHIND COOLING FAN IN SPINNER ON 1937-'38 VERSIONS

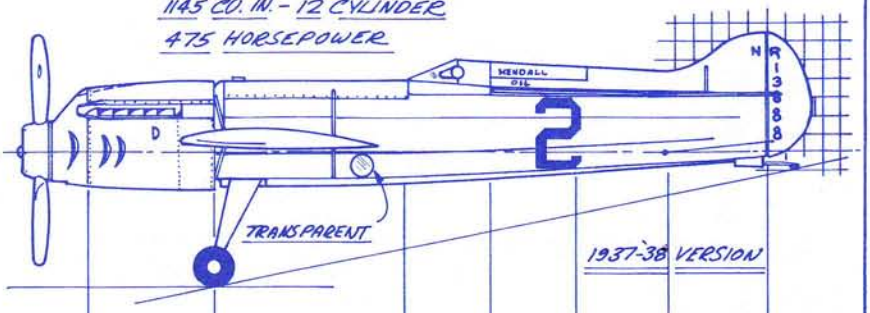


PROPELLER: 78" DIA. GROUND ADJUSTABLE HAMILTON STANDARD



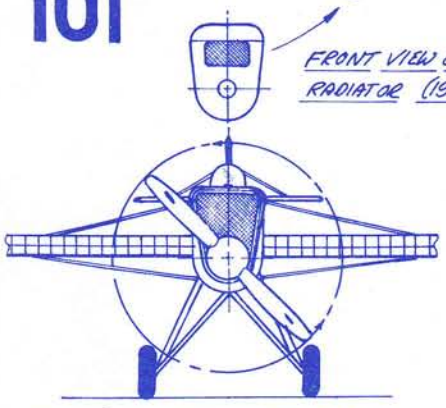
1935 VERSION

POWERPLANT: CURTISS D-12
1145 CU. IN. - 12 CYLINDER
475 HORSEPOWER



1937-'38 VERSION

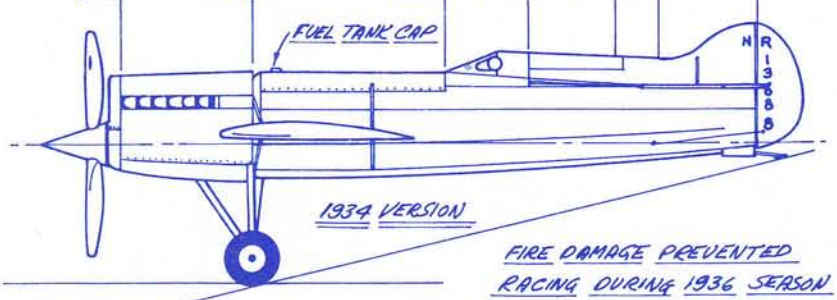
101



FRONT VIEW OF RADIATOR (1935)

FRONT VIEW SHOWING 1934 RADIATOR AND TRI-POD LANDING GEAR CONSTRUCTION

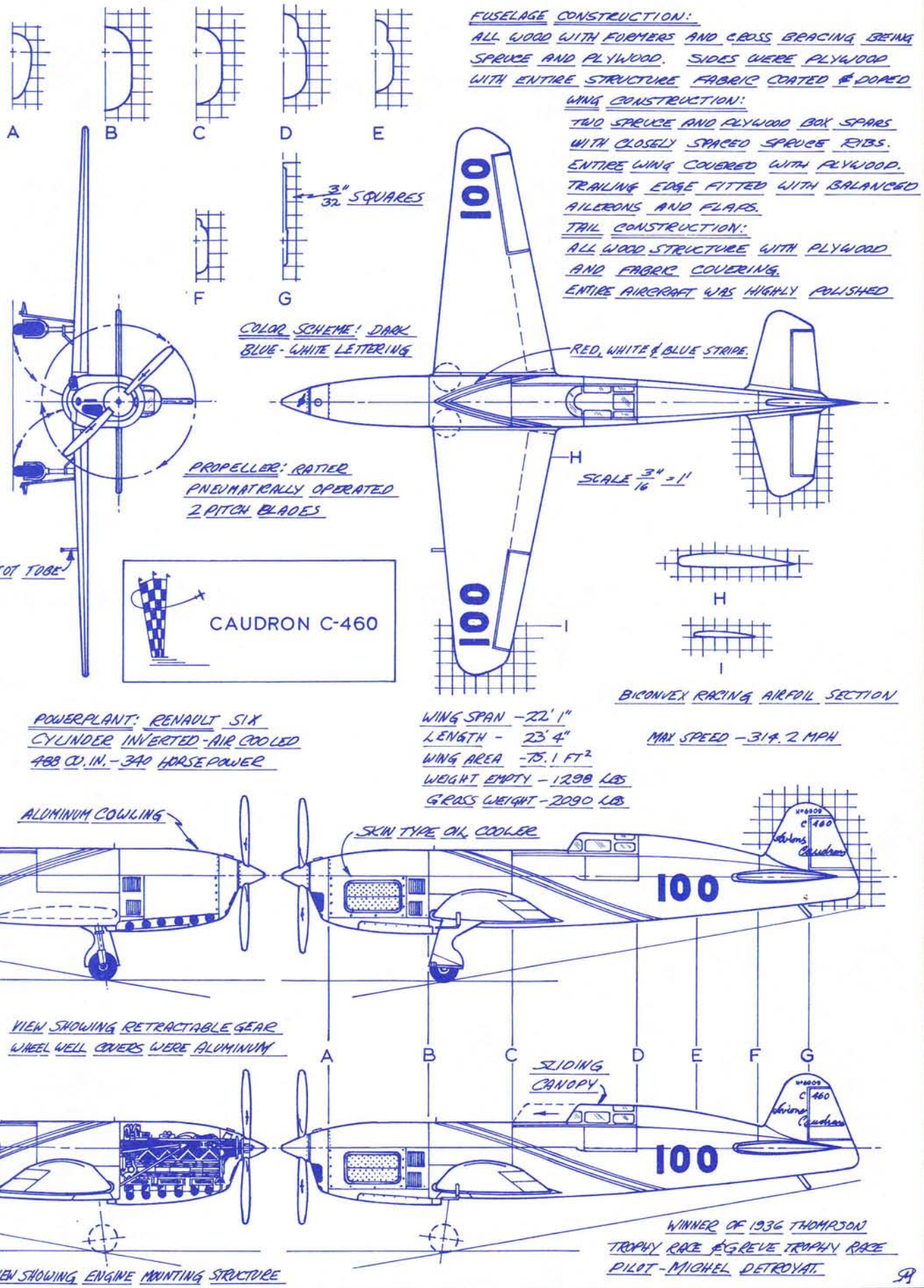
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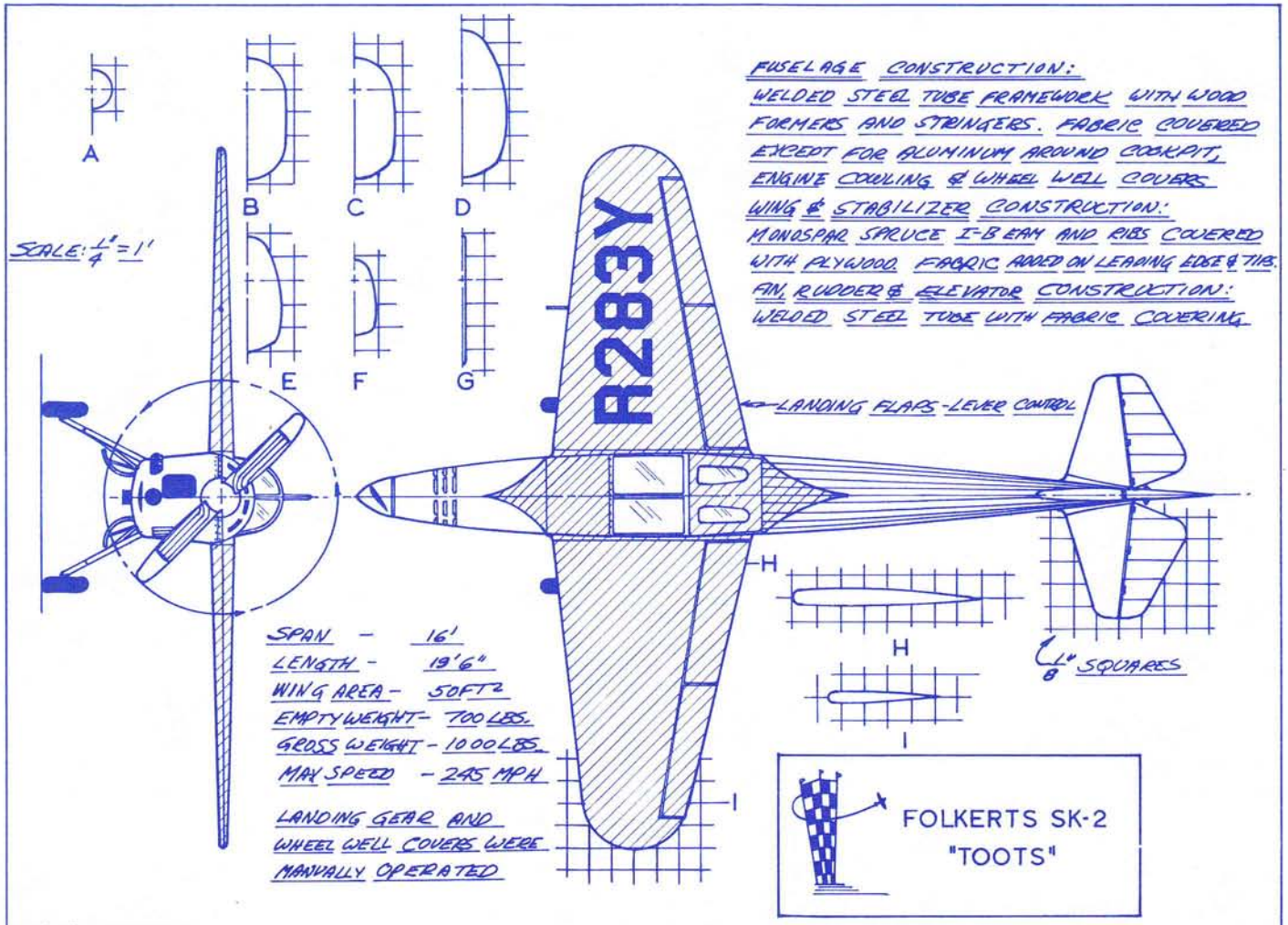


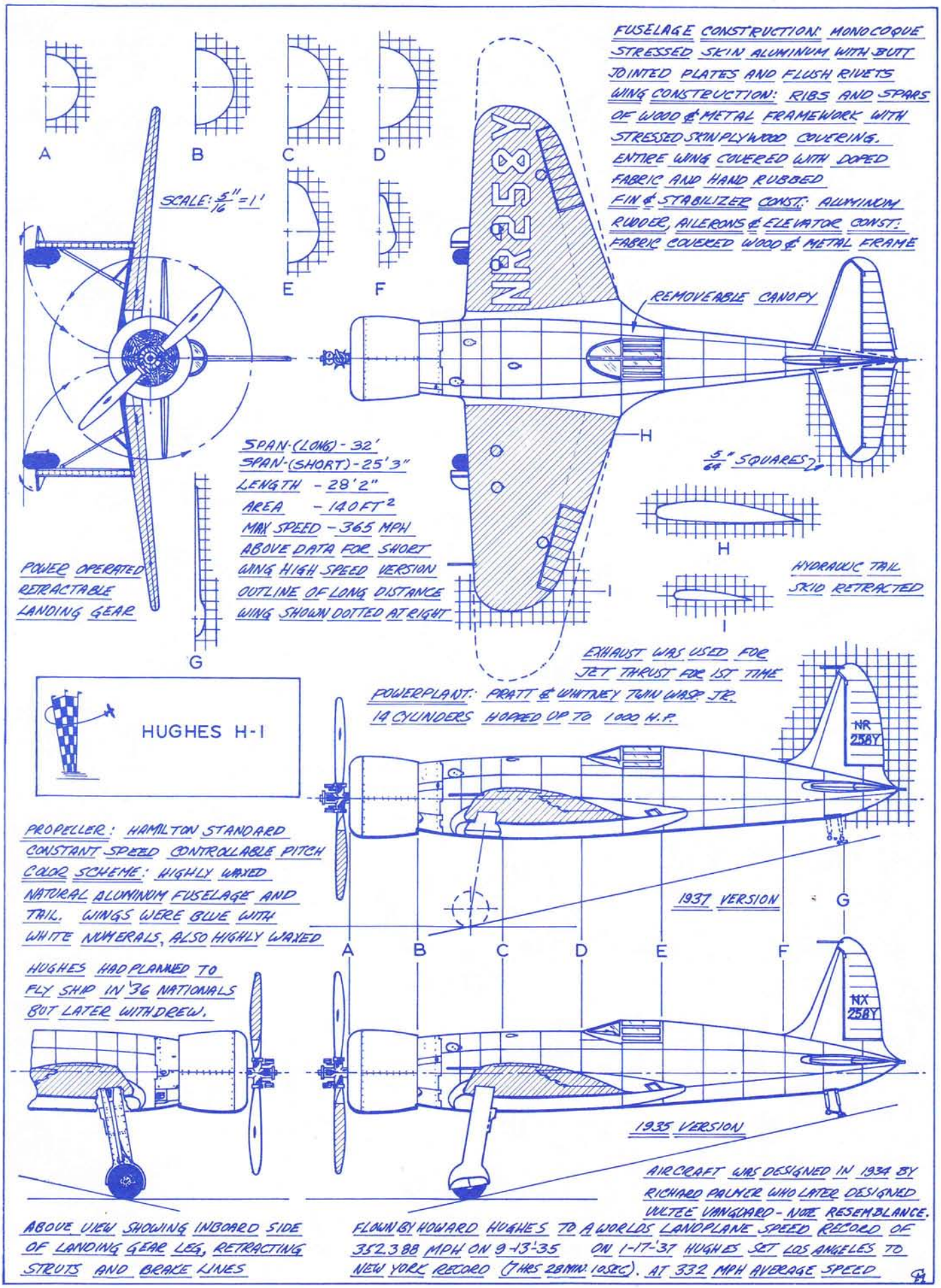
1934 VERSION

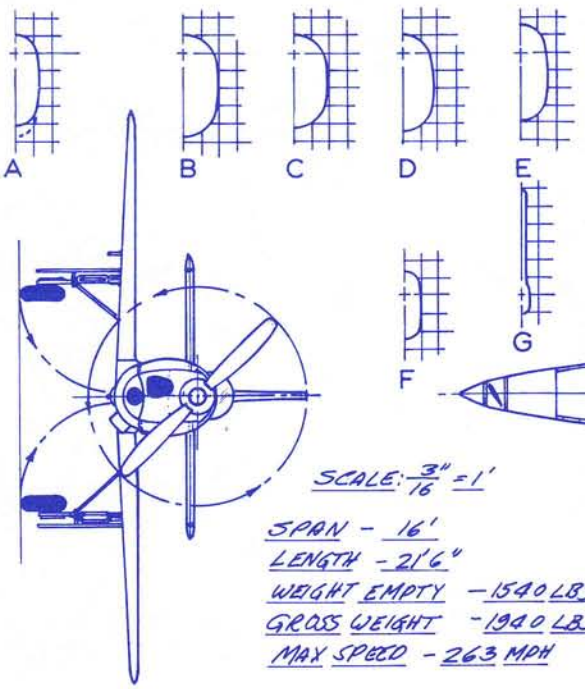
FIRE DAMAGE PREVENTED RACING DURING 1936 SEASON

DESIGNED, BUILT & FLOWN BY STEVE WITTMAN. PLACED 2ND IN 1935 THOMPSON TROPHY RACE, 5TH IN 1937, 3RD IN 1938 AND 5TH IN 1939

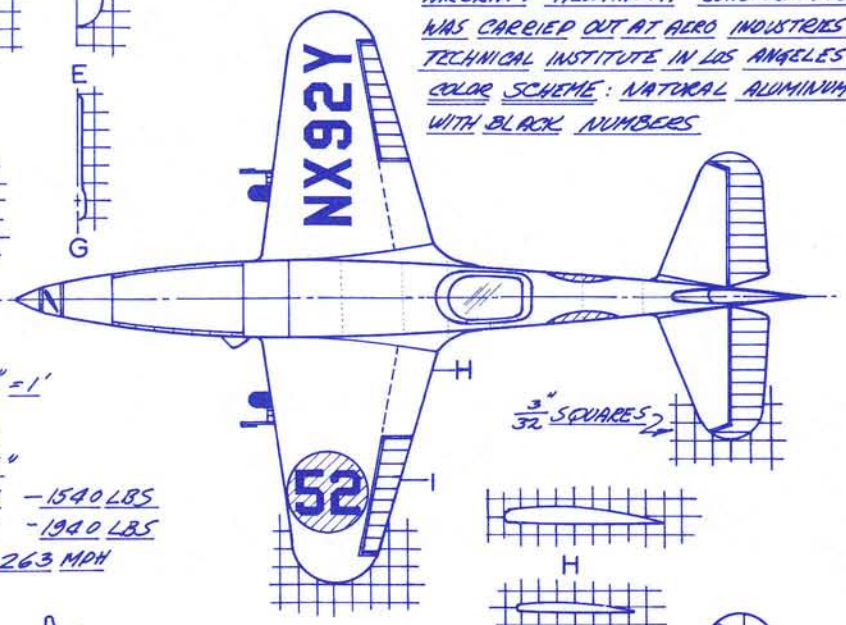

FUSELAGE CONSTRUCTION:
ALL WOOD WITH FORMERS AND CROSS BRACING BEING SPRUCE AND PLYWOOD. SIDES WERE PLYWOOD WITH ENTIRE STRUCTURE FABRIC COATED & DOPED
WING CONSTRUCTION:
TWO SPRUCE AND PLYWOOD BOX SPARS WITH CLOSELY SPACED SPRUCE RIBS. ENTIRE WING COVERED WITH PLYWOOD. TRAILING EDGE FITTED WITH BALANCED AILERONS AND FLAPS.
TAIL CONSTRUCTION:
ALL WOOD STRUCTURE WITH PLYWOOD AND FABRIC COVERING.
ENTIRE AIRCRAFT WAS HIGHLY POLISHED
A
B
C
D
E
F
G
3/32" SQUARES
COLOR SCHEME: DARK BLUE - WHITE LETTERING
RED, WHITE & BLUE STRIPE.
PROPELLER: RATIER PNEUMATICALLY OPERATED 2 PITCH BLADES
PITOT TUBE
CAUDRON C-460
SCALE 3/16" = 1'
H
I
BICONVEX RACING AIRFOIL SECTION
POWERPLANT: RENAULT SIX CYLINDER INVERTED-AIR COOLED 488 CU. IN. - 340 HORSEPOWER
WING SPAN - 22' 1"
LENGTH - 23' 4"
WING AREA - 75.1 FT²
WEIGHT EMPTY - 1298 LBS
GROSS WEIGHT - 2090 LBS
MAX SPEED - 314.2 MPH
ALUMINUM COWLING
SKIN TYPE OIL COOLER
VIEW SHOWING RETRACTABLE GEAR WHEEL WELL COVERS WERE ALUMINUM
SLIDING CANOPY
VIEW SHOWING ENGINE MOUNTING STRUCTURE
WINNER OF 1936 THOMPSON TROPHY RACE & GREVE TROPHY RACE
PILOT - MICHEL DETROYAT.


A
B
C
D
E
F
G
H
I
R283Y
SCALE: 1/4" = 1'
FUSELAGE CONSTRUCTION:
WELDED STEEL TUBE FRAMEWORK WITH WOOD FORMERS AND STRINGERS. FABRIC COVERED EXCEPT FOR ALUMINUM AROUND COCKPIT, ENGINE COOLING & WHEEL WELL COVERS
WING & STABILIZER CONSTRUCTION:
MONOSPAR SPRUCE I-BEAM AND RIBS COVERED WITH PLYWOOD. FABRIC ADDED ON LEADING EDGE & TIPS.
FIN, RUDDER & ELEVATOR CONSTRUCTION:
WELDED STEEL TUBE WITH FABRIC COVERING
LANDING FLAPS - LEVER CONTROL
SPAN - 16'
LENGTH - 19'6"
WING AREA - 50FT²
EMPTY WEIGHT - 700 LBS.
GROSS WEIGHT - 1000 LBS.
MAX SPEED - 245 MPH
LANDING GEAR AND WHEEL WELL COVERS WERE MANUALLY OPERATED
1" SQUARES
FOLKERTS SK-2
"TOOTS"
PROPELLER SHAFT EXTENDED 1 FT. TO TAKE WOODEN "FAHLIN" PROP.
POWERPLANT - MENASCO CAS PIRATE SUPERCHARGED 363 CU. IN. 185 H.P.
CANOPY OPENS TO LEFT SIDE
"Toots"
R 283Y
5X12 GOODRICH TIRES
VIEW BELOW SHOWS ENGINE MOUNTING TRUSSWORK
VENTILATION PORTS
FUSELAGE YELLOW
BUILT FOR 1936 NATIONAL AIR RACES BY CLAYTON FOLKERTS.
COLOR SCHEME (1936) BROWN WINGS AND DIAMOND SHAPED AREA AROUND COCKPIT. YELLOW NUMBERS ON WING WITH BROWN LETTERING ON FUSELAGE. (1937) RED WITH BLACK TRIM.
FLOWN BY HAROLD NEUMANN AT '36 NATIONALS. AIRCRAFT PLACED 2ND IN GREVE AND 4TH IN THOMPSON TROPHY RACES CALLED "MISS DETROIT" IN 1937 AND FLOWN IN NATIONALS THAT YEAR BY R.O. RAE


FUSELAGE CONSTRUCTION: MONOCOQUE STRESSED SKIN ALUMINUM WITH BUTT JOINTED PLATES AND FLUSH RIVETS
WING CONSTRUCTION: RIBS AND SPARS OF WOOD & METAL FRAMEWORK WITH STRESSED SKIN PLYWOOD COVERING. ENTIRE WING COVERED WITH DOPED FABRIC AND HAND RUBBED
FIN & STABILIZER CONST.: ALUMINUM RUDDER, AILERONS & ELEVATOR CONST.: FABRIC COVERED WOOD & METAL FRAME
A
B
C
D
E
F
G
H
I
SCALE: 5/16" = 1'
NR 258Y
REMOVEABLE CANOPY
5/64" SQUARES
SPAN-(LONG) - 32'
SPAN-(SHORT) - 25'3"
LENGTH - 28'2"
AREA - 140 FT²
MAX SPEED - 365 MPH
ABOVE DATA FOR SHORT WING HIGH SPEED VERSION
OUTLINE OF LONG DISTANCE WING SHOWN DOTTED AT RIGHT
POWER OPERATED RETRACTABLE LANDING GEAR
HYDRAULIC TAIL SKID RETRACTED
EXHAUST WAS USED FOR JET THRUST FOR 1ST TIME
POWERPLANT: PRATT & WHITNEY TWIN WASP JR. 14 CYLINDERS HOPED UP TO 1000 H.P.
HUGHES H-1
PROPELLER: HAMILTON STANDARD CONSTANT SPEED CONTROLLABLE PITCH
COLOR SCHEME: HIGHLY WAXED NATURAL ALUMINUM FUSELAGE AND TAIL. WINGS WERE BLUE WITH WHITE NUMERALS, ALSO HIGHLY WAXED
1937 VERSION
HUGHES HAD PLANNED TO FLY SHIP IN '36 NATIONALS BUT LATER WITHDREW.
NX 258Y
1935 VERSION
AIRCRAFT WAS DESIGNED IN 1934 BY RICHARD PALMER WHO LATER DESIGNED VULTEE VANGUARD - NOTE RESEMBLANCE.
ABOVE VIEW SHOWING INBOARD SIDE OF LANDING GEAR LEG, RETRACTING STRUTS AND BRAKE LINES
FLOWN BY HOWARD HUGHES TO A WORLDS LANDPLANE SPEED RECORD OF 352.388 MPH ON 9-13-35 ON 1-17-37 HUGHES SET LOS ANGELES TO NEW YORK RECORD (7 HRS 28 MIN. 10 SEC). AT 332 MPH AVERAGE SPEED

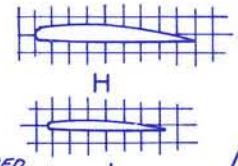


CONSTRUCTION OF FUSELAGE, WINGS AND TAIL ASSEMBLY WAS ENTIRELY AIRCRAFT ALUMINUM.* CONSTRUCTION WAS CARRIED OUT AT AERO INDUSTRIES TECHNICAL INSTITUTE IN LOS ANGELES
COLOR SCHEME: NATURAL ALUMINUM WITH BLACK NUMBERS

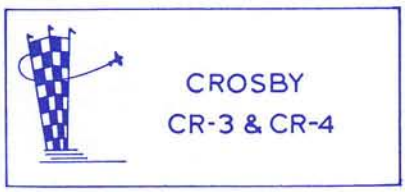


SCALE: $\frac{3''}{16} = 1'$

SPAN - 16'
LENGTH - 21'6"
WEIGHT EMPTY - 1540 LBS
GROSS WEIGHT - 1940 LBS
MAX SPEED - 263 MPH

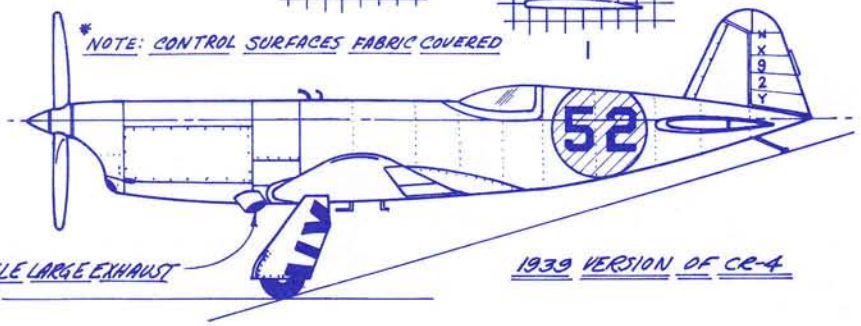


$\frac{3''}{32}$ SQUARES



CROSBY
CR-3 & CR-4

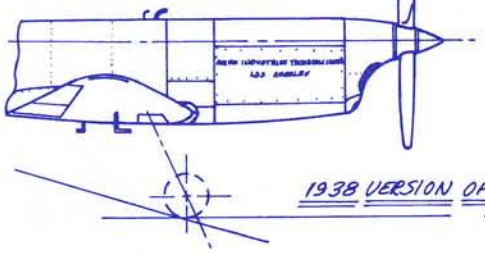
*NOTE: CONTROL SURFACES FABRIC COVERED



NOTE SINGLE LARGE EXHAUST

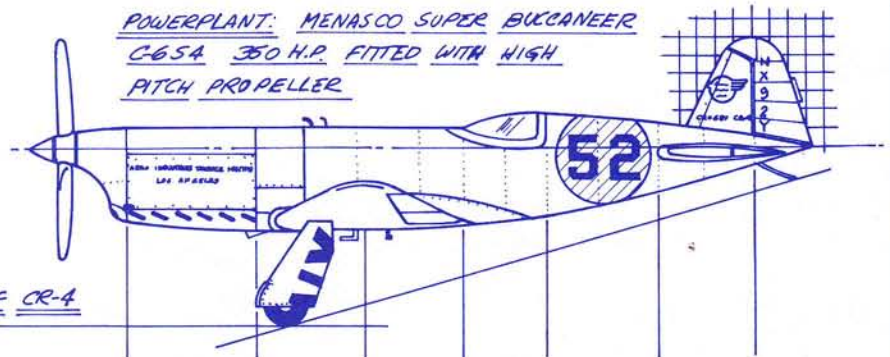
1939 VERSION OF CR-4

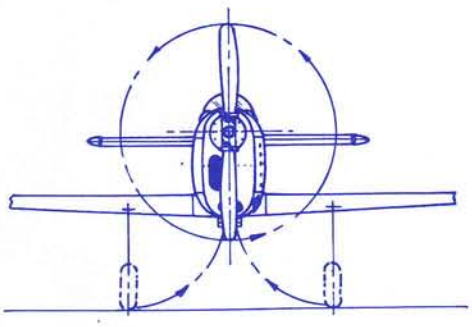
VIEW BELOW SHOWS LANDING GEAR IN RETRACTED POSITION
PITOT TUBE SHOWN ON UNDER-SIDE OF RIGHT WING.

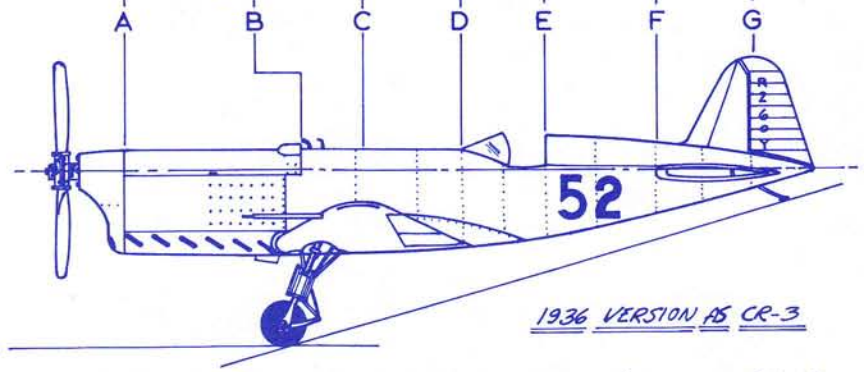


1938 VERSION OF CR-4

POWERPLANT: MENASCO SUPER BUCCANEER C-6S4 350 H.P. FITTED WITH HIGH PITCH PROPELLER



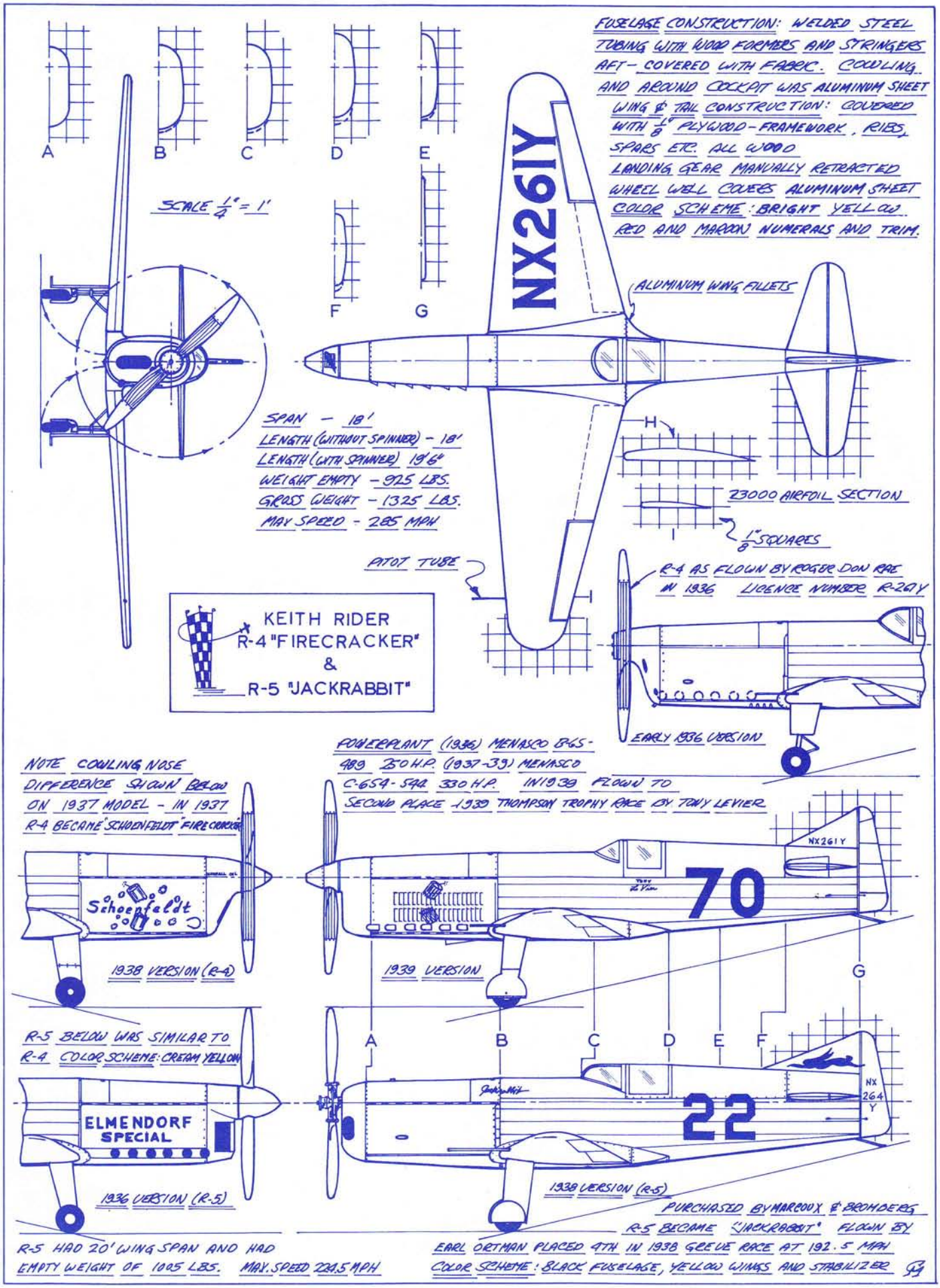


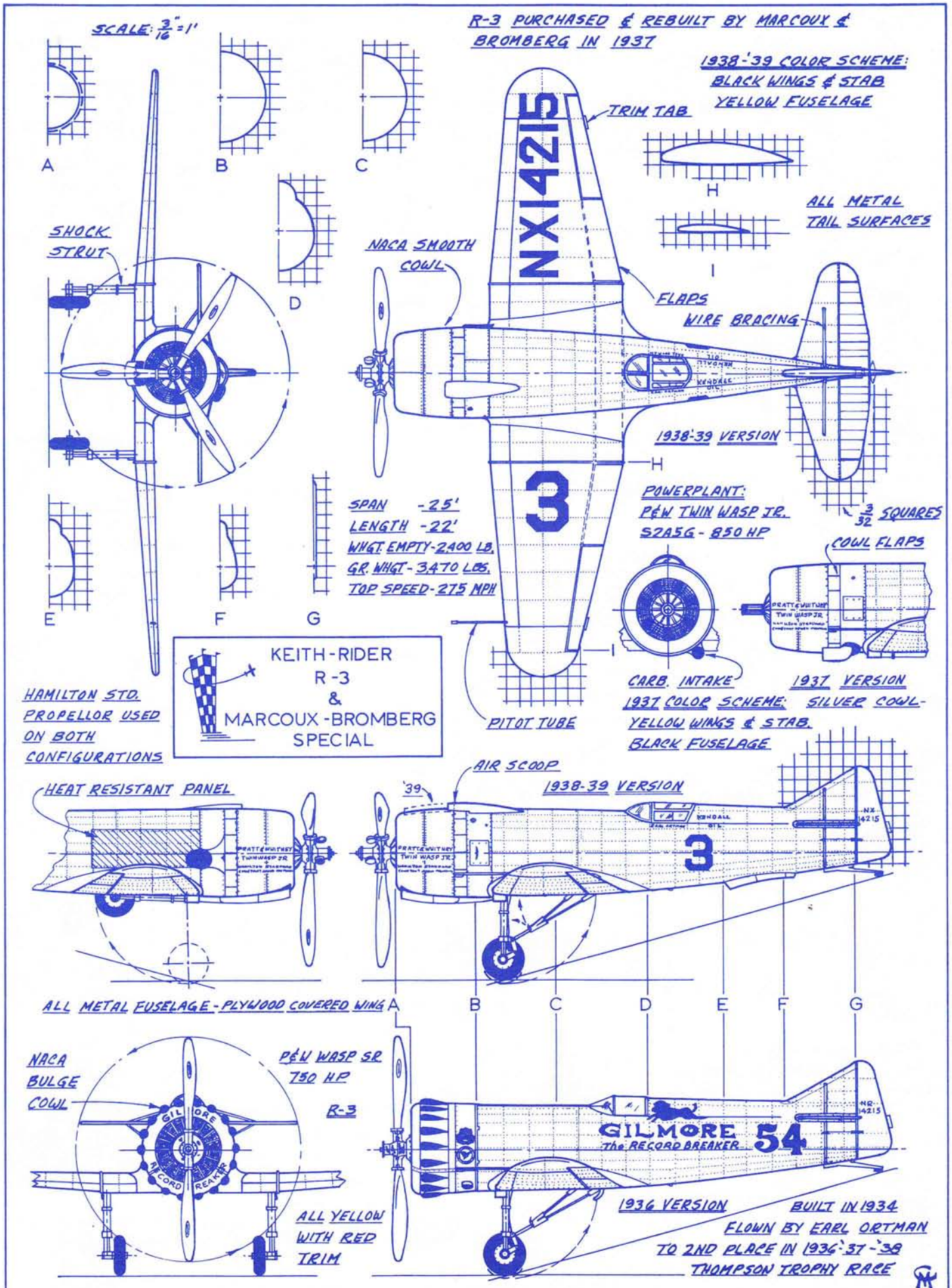


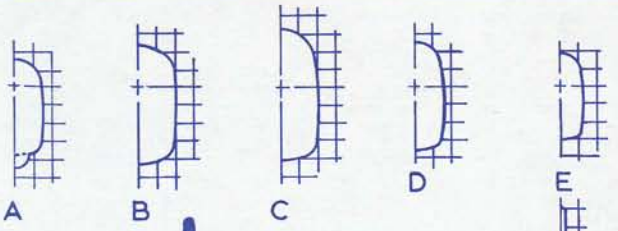
1936 VERSION AS CR-3

CR-3 WAS MODIFIED AND RE-LICENSED TO BECOME CR-4. AIRCRAFT WAS FITTED WITH SPLIT TRAILING EDGE FLAPS

AIRCRAFT WAS DESIGNED, WINDTUNNEL TESTED, BUILT AND RACED BY HARRY CROSBY. IN 1936 THOMPSON TROPHY RACE SHIP FINISHED 6TH IN 1939 THOMPSON CROSBY FINISHED 4TH


FUSELAGE CONSTRUCTION: WELDED STEEL TUBING WITH WOOD FORMERS AND STRINGERS AFT - COVERED WITH FABRIC. COWLING AND AROUND COCKPIT WAS ALUMINUM SHEET
WING & TAIL CONSTRUCTION: COVERED WITH 1/8" PLYWOOD - FRAMEWORK, RIBS, SPARS ETC. ALL WOOD
LANDING GEAR MANUALLY RETRACTED
WHEEL WELL COVERS ALUMINUM SHEET
COLOR SCHEME: BRIGHT YELLOW, RED AND MAROON NUMERALS AND TRIM.
A
B
C
D
E
F
G
SCALE 1/4" = 1'
NX261Y
ALUMINUM WING FILLETS
H
I
23000 AIRFOIL SECTION
1/8" SQUARES
SPAN - 18'
LENGTH (WITHOUT SPINNER) - 18'
LENGTH (WITH SPINNER) 19'6"
WEIGHT EMPTY - 925 LBS.
GROSS WEIGHT - 1325 LBS.
MAX SPEED - 285 MPH
PITOT TUBE
KEITH RIDER
R-4 "FIRECRACKER"
&
R-5 "JACKRABBIT"
R-4 AS FLOWN BY ROGER DON RAE IN 1936 LICENCE NUMBER R-261Y
EARLY 1936 VERSION
POWERPLANT (1936) MENASCO B6S-489 250 H.P. (1937-39) MENASCO C-654-542 330 H.P. IN 1939 FLOWN TO SECOND PLACE 1939 THOMPSON TROPHY RACE BY TONY LEVIER
NOTE COWLING NOSE DIFFERENCE SHOWN BELOW ON 1937 MODEL - IN 1937 R-4 BECAME "SCHOENFELDT FIRECRACKER"
Schoenfeldt
1938 VERSION (R-4)
NX261Y
70
1939 VERSION
R-5 BELOW WAS SIMILAR TO R-4 COLOR SCHEME: CREAM YELLOW
ELMENDORF SPECIAL
1936 VERSION (R-5)
A
B
C
D
E
F
G
NX 264 Y
22
1938 VERSION (R-5)
PURCHASED BY MARCOUX & BROMBERG
R-5 BECAME "JACKRABBIT" FLOWN BY EARL ORTMAN PLACED 4TH IN 1938 GREVE RACE AT 192.5 MPH
COLOR SCHEME: BLACK FUSELAGE, YELLOW WINGS AND STABILIZER
R-5 HAD 20' WING SPAN AND HAD EMPTY WEIGHT OF 1005 LBS. MAX. SPEED 224.5 MPH

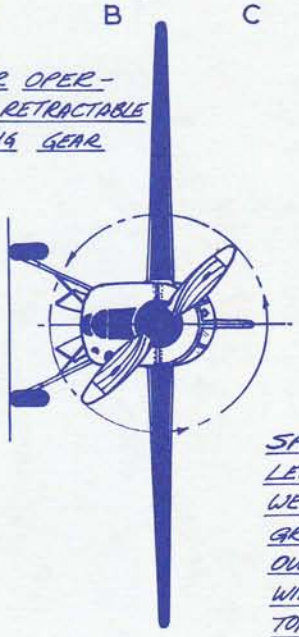

SCALE: 3/16" = 1'
R-3 PURCHASED & REBUILT BY MARCOUX & BROMBERG IN 1937
1938-'39 COLOR SCHEME: BLACK WINGS & STAB YELLOW FUSELAGE
TRIM TAB
ALL METAL TAIL SURFACES
SHOCK STRUT
NACA SMOOTH COWL
FLAPS
WIRE BRACING
NX14215
3
1938-'39 VERSION
POWERPLANT: P&W TWIN WASP JR. S2A5G - 850 HP
3/32 SQUARES
SPAN -25'
LENGTH -22'
WHGT. EMPTY-2400 LB.
GR. WHGT - 3470 LBS.
TOP SPEED-275 MPH
COWL FLAPS
CARB. INTAKE
1937 VERSION
1937 COLOR SCHEME: SILVER COWL-YELLOW WINGS & STAB. BLACK FUSELAGE
PITOT TUBE
HAMILTON STD. PROPELLOR USED ON BOTH CONFIGURATIONS
KEITH-RIDER R-3 & MARCOUX-BROMBERG SPECIAL
HEAT RESISTANT PANEL
AIR SCOOP
1938-39 VERSION
ALL METAL FUSELAGE - PLYWOOD COVERED WING
NACA BULGE COWL
P&W WASP SR 750 HP
R-3
ALL YELLOW WITH RED TRIM
GILMORE The RECORD BREAKER 54
1936 VERSION
BUILT IN 1934
FLOWN BY EARL ORTMAN TO 2ND PLACE IN 1936-'37-'38 THOMPSON TROPHY RACE

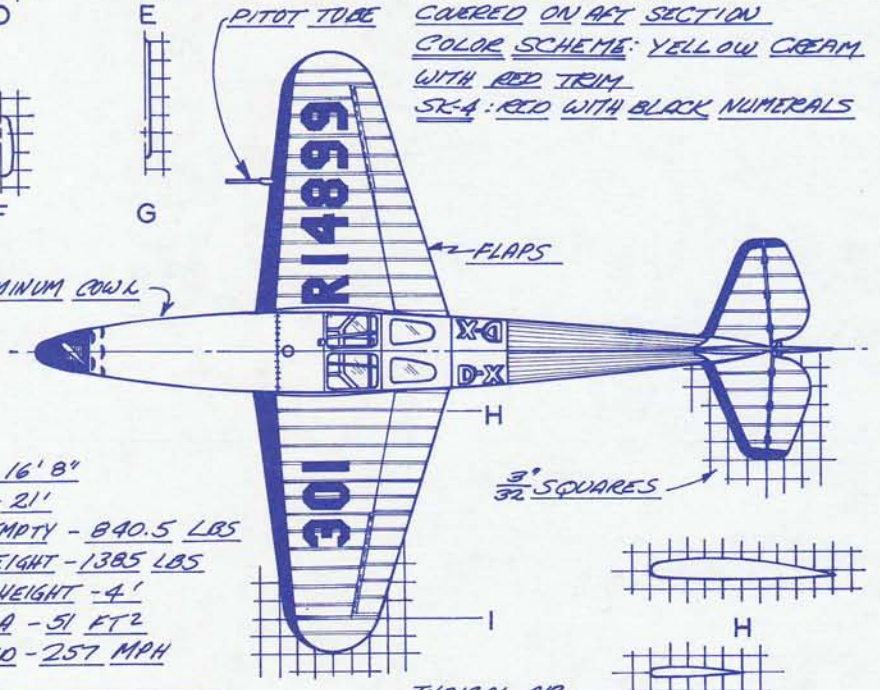


WING CONSTRUCTION: MONOSPAR SPRUCE AND PLYWOOD - FABRIC COVERED - PLYWOOD LEADING EDGE FUSELAGE, TAIL & LANDING GEAR OF WELDED STEEL TUBING - FABRIC COVERED ON AFT SECTION

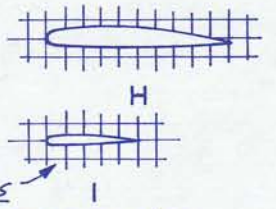
COLOR SCHEME: YELLOW CREAM WITH RED TRIM
SK-4: RED WITH BLACK NUMERALS

LEVER OPERATED RETRACTABLE LANDING GEAR





SPAN – 16' 8"
LENGTH – 21'
WEIGHT EMPTY – 840.5 LBS
GROSS WEIGHT – 1385 LBS
OVERALL HEIGHT – 4'
WING AREA – 51 FT²
TOP SPEED – 257 MPH



TYPICAL AIRFOIL SECTIONS

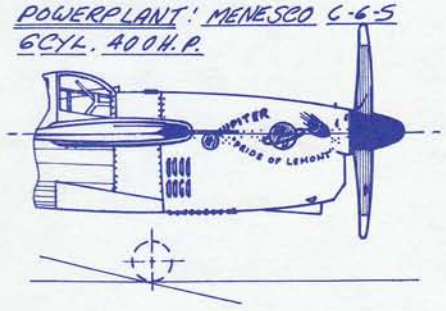
61 GALLONS OF FUEL CARRIED IN 2 TANKS FORWARD OF PILOT



FOLKERTS
SK-3 & SK-4

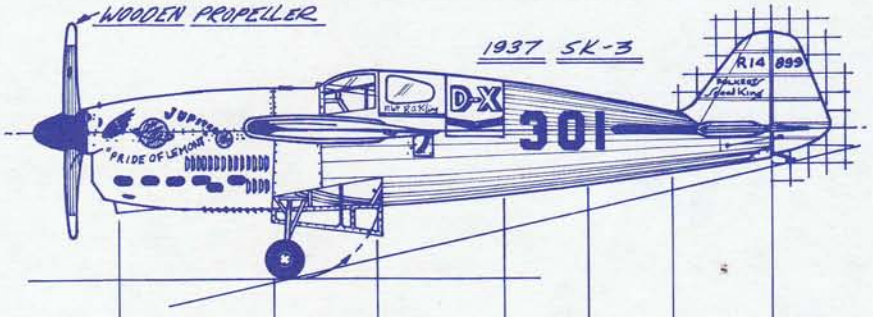
SK-3 FLOWN BY RODY KLING WON 1937 THOMPSON TROPHY RACE. SK-4 WAS SIMILAR IN DESIGN AND INTENDED FOR USE IN 1938 RACING SEASON

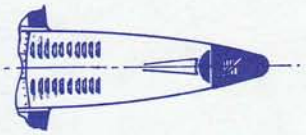
POWERPLANT: MENASCO C-6-S
6 CYL. 400 H.P.



WOODEN PROPELLER

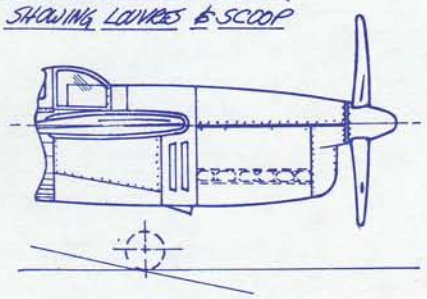
1937 SK-3

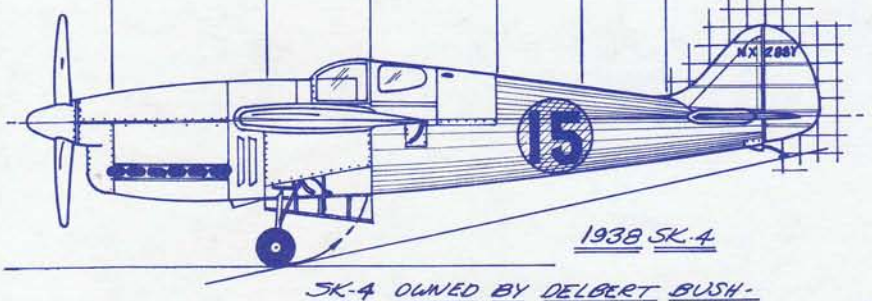




A B C D E F G

BOTTOM VIEW OF SK-3 SHOWING LOUVRES & SCOOP



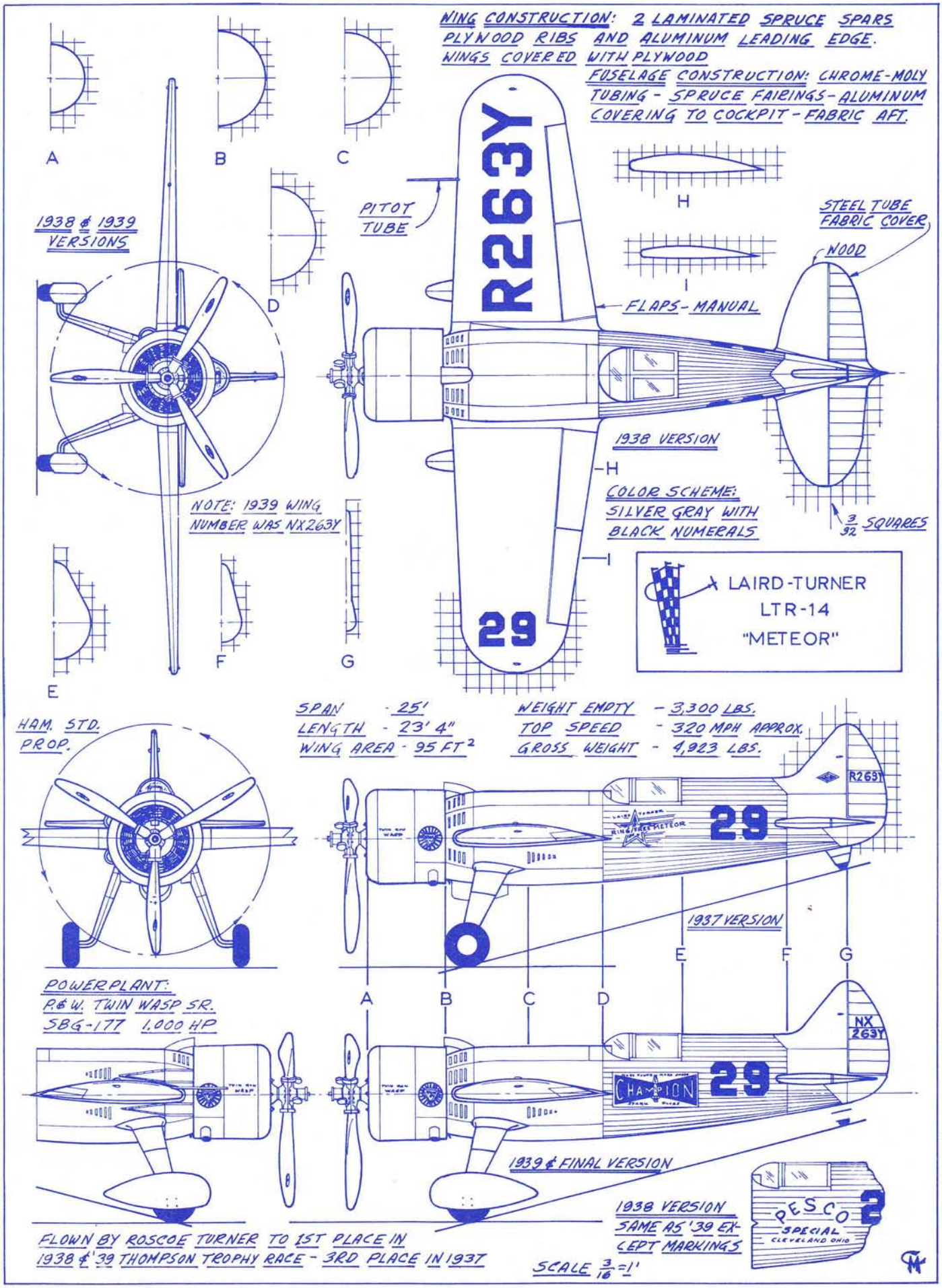


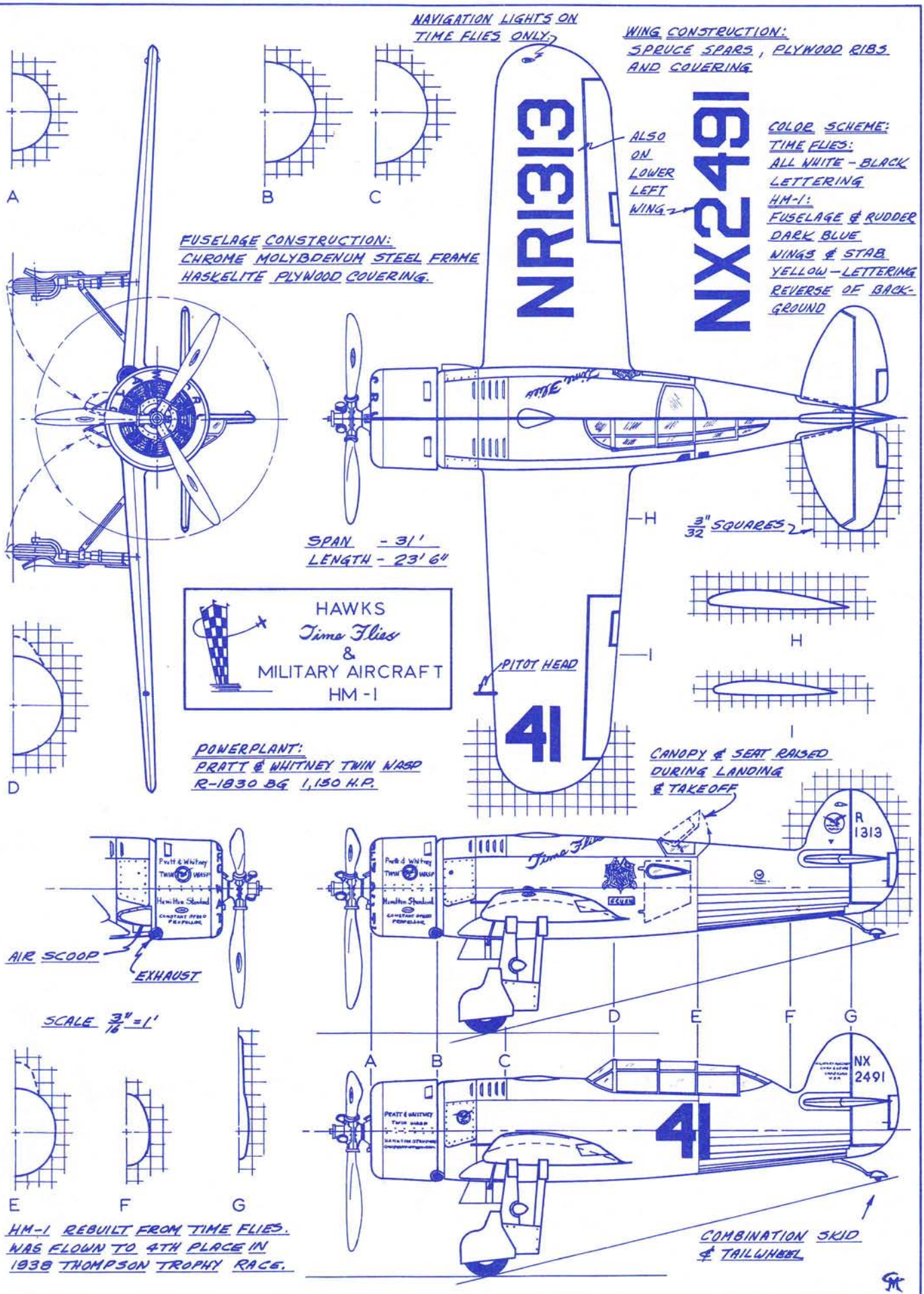
1938 SK-4

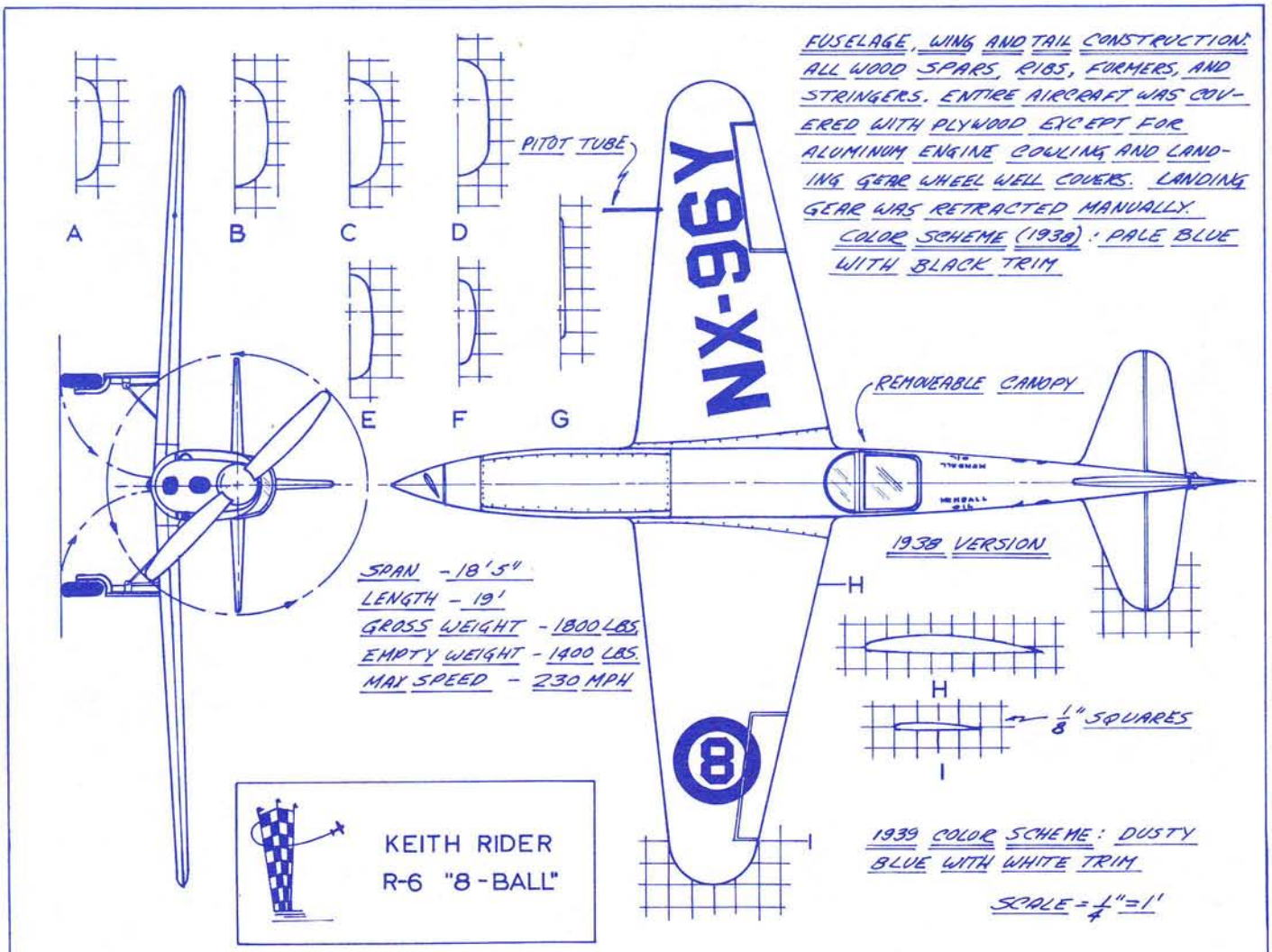
SCALE: 3/16" = 1'

SK-4 OWNED BY DELBERT BUSH - CRASHED QUALIFYING FOR 1939 NATIONALS

135% to 1/4"


WING CONSTRUCTION: 2 LAMINATED SPRUCE SPARS PLYWOOD RIBS AND ALUMINUM LEADING EDGE. WINGS COVERED WITH PLYWOOD
FUSELAGE CONSTRUCTION: CHROME-MOLY TUBING - SPRUCE FAIRINGS - ALUMINUM COVERING TO COCKPIT - FABRIC AFT.
A
B
C
D
E
F
G
H
I
1938 & 1939 VERSIONS
PITOT TUBE
STEEL TUBE FABRIC COVER
WOOD
FLAPS - MANUAL
R263Y
29
1938 VERSION
COLOR SCHEME: SILVER GRAY WITH BLACK NUMERALS
3/32 SQUARES
NOTE: 1939 WING NUMBER WAS NX263Y
LAIRD-TURNER LTR-14 "METEOR"
SPAN - 25'
LENGTH - 23' 4"
WING AREA - 95 FT²
WEIGHT EMPTY - 3,300 LBS.
TOP SPEED - 320 MPH APPROX.
GROSS WEIGHT - 4,923 LBS.
HAM. STD. PROP.
R263Y
1937 VERSION
POWERPLANT: P&W. TWIN WASP SR. SBG-1TT 1,000 HP
NX 263Y
CHAMPION
1939 & FINAL VERSION
1938 VERSION SAME AS '39 EXCEPT MARKINGS
RESCO
SPECIAL CLEVELAND OHIO
FLOWN BY ROSCOE TURNER TO 1ST PLACE IN 1938 & '39 THOMPSON TROPHY RACE - 3RD PLACE IN 1937
SCALE 3/16 = 1'


NAVIGATION LIGHTS ON TIME FLIES ONLY
WING CONSTRUCTION: SPRUCE SPARS, PLYWOOD RIBS AND COVERING
NR1313
ALSO ON LOWER LEFT WING
NX2491
COLOR SCHEME: TIME FLIES: ALL WHITE - BLACK LETTERING HM-1: FUSELAGE & RUDDER DARK BLUE WINGS & STAB YELLOW - LETTERING REVERSE OF BACKGROUND
FUSELAGE CONSTRUCTION: CHROME MOLYBDENUM STEEL FRAME HASKELITE PLYWOOD COVERING.
A
B
C
D
H
I
3" 32 SQUARES
SPAN - 31'
LENGTH - 23' 6"
HAWKS
Time Flies
&
MILITARY AIRCRAFT
HM-1
PITOT HEAD
41
POWERPLANT: PRATT & WHITNEY TWIN WASP R-1830 BG 1,150 H.P.
CANOPY & SEAT RAISED DURING LANDING & TAKEOFF
R 1313
AIR SCOOP
EXHAUST
SCALE 3" 16 = 1'
E
F
G
NX 2491
COMBINATION SKID & TAILWHEEL
HM-1 REBUILT FROM TIME FLIES. WAS FLOWN TO 4TH PLACE IN 1938 THOMPSON TROPHY RACE.



FUSELAGE, WING AND TAIL CONSTRUCTION: ALL WOOD SPARS, RIBS, FORMERS, AND STRINGERS. ENTIRE AIRCRAFT WAS COVERED WITH PLYWOOD EXCEPT FOR ALUMINUM ENGINE COWLING AND LANDING GEAR WHEEL WELL COVERS. LANDING GEAR WAS RETRACTED MANUALLY.

COLOR SCHEME (1938): PALE BLUE WITH BLACK TRIM

1938 VERSION

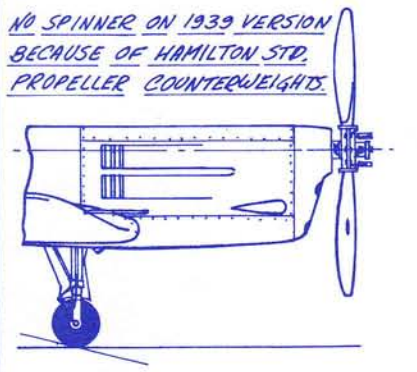
SPAN - 18'5"
LENGTH - 19'
GROSS WEIGHT - 1800 LBS.
EMPTY WEIGHT - 1400 LBS.
MAX SPEED - 230 MPH

1939 COLOR SCHEME: DUSTY BLUE WITH WHITE TRIM

SCALE = 1/4" = 1'

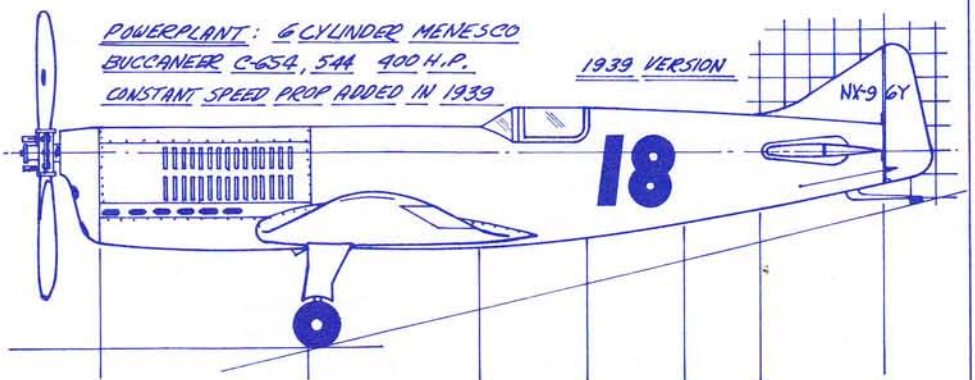
KEITH RIDER
R-6 "8-BALL"

NO SPINNER ON 1939 VERSION BECAUSE OF HAMILTON STD. PROPELLER COUNTERWEIGHTS.

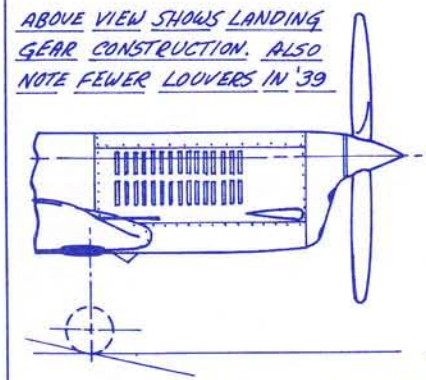


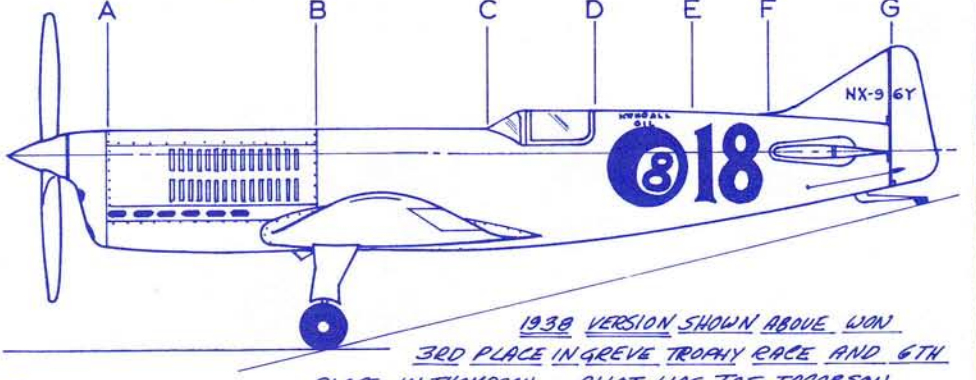
POWERPLANT: 6 CYLINDER MENESCO BUCCANEER C-654, 544 400 H.P. CONSTANT SPEED PROP ADDED IN 1939

1939 VERSION



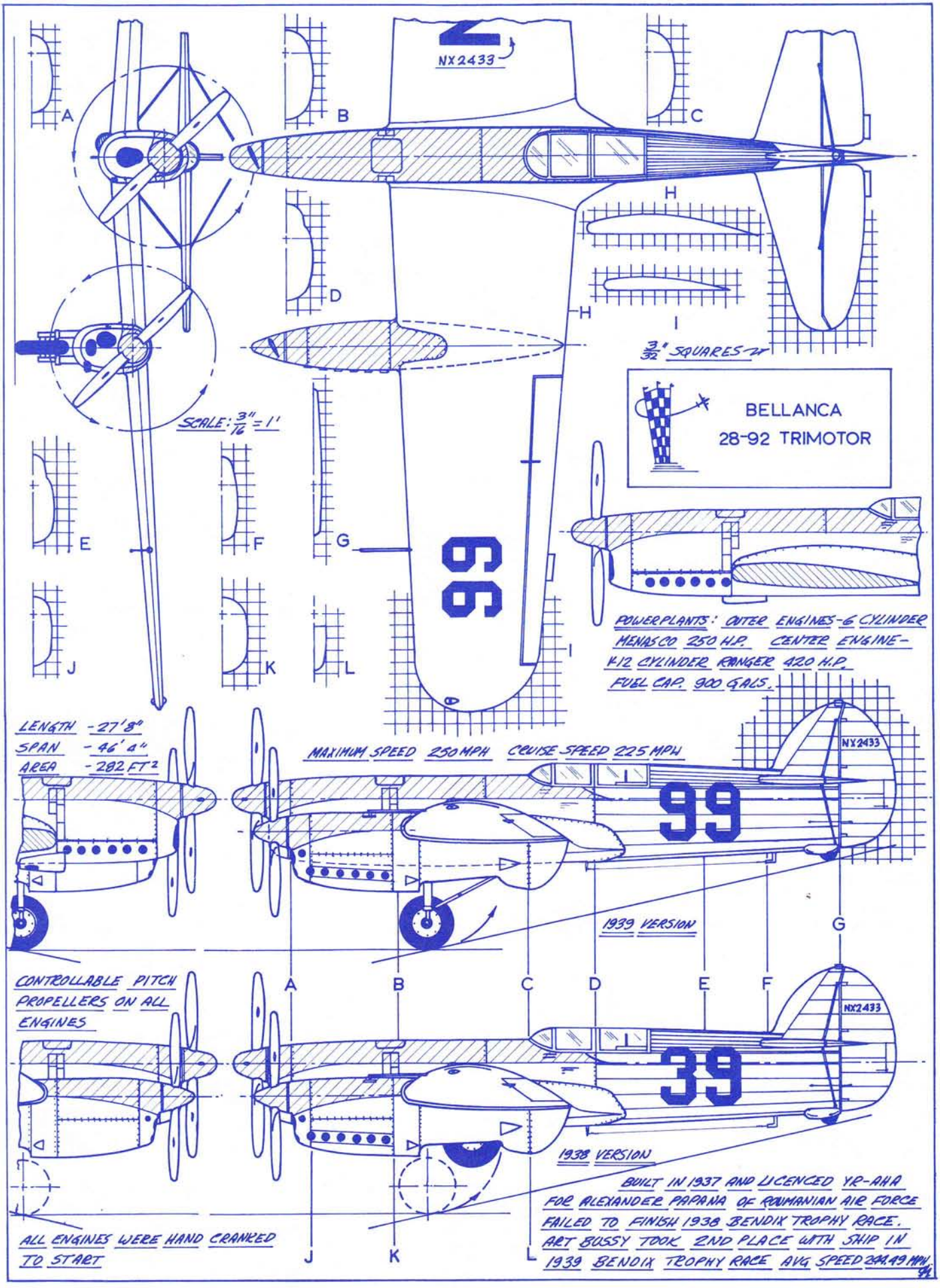
ABOVE VIEW SHOWS LANDING GEAR CONSTRUCTION. ALSO NOTE FEWER LOUVERS IN '39

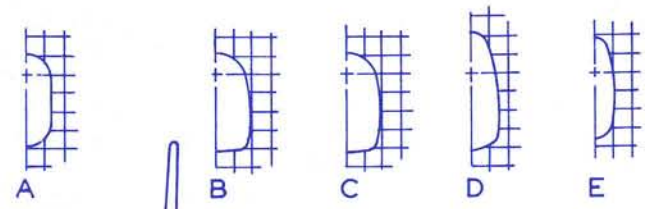




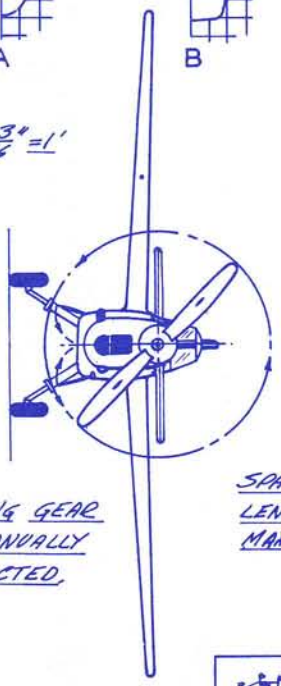
ABOVE VIEW SHOWS LANDING GEAR IN RETRACTED POSITION

1938 VERSION SHOWN ABOVE WON 3RD PLACE IN GREVE TROPHY RACE AND 6TH PLACE IN THOMPSON. PILOT WAS JOE JACOBSON.


NX2433
A
B
C
D
H
H
I
3/32" SQUARES
SCALE: 3"/16 = 1'
BELLANCA
28-92 TRIMOTOR
E
F
G
J
K
L
I
99
POWERPLANTS: OUTER ENGINES-6 CYLINDER MENASCO 250 H.P. CENTER ENGINE-V-12 CYLINDER RANGER 420 H.P.
FUEL CAP. 900 GALS.
LENGTH -27'8"
SPAN -46'4"
AREA -282 FT²
MAXIMUM SPEED 250 MPH CRUISE SPEED 225 MPH
NX2433
99
1939 VERSION
G
CONTROLLABLE PITCH PROPELLERS ON ALL ENGINES
A
B
C
D
E
F
NX2433
39
1938 VERSION
ALL ENGINES WERE HAND CRANKED TO START
J
K
L
BUILT IN 1937 AND LICENCED YR-AHA FOR ALEXANDER PAPANA OF ROUMANIAN AIR FORCE FAILED TO FINISH 1938 BENDIX TROPHY RACE. ART BUSSY TOOK 2ND PLACE WITH SHIP IN 1939 BENDIX TROPHY RACE AVG SPEED 294.49 MPH

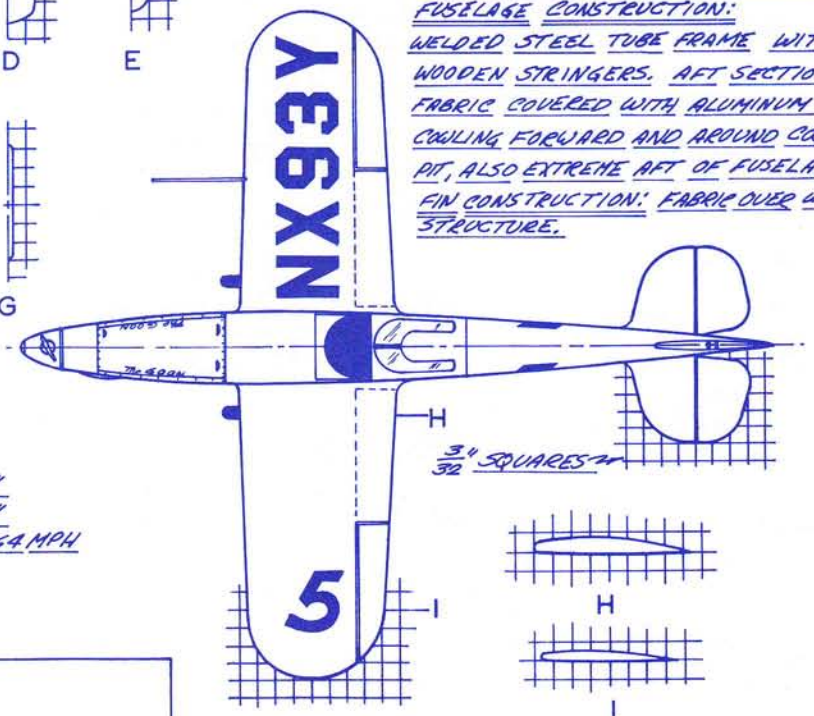


SCALE $\frac{3}{16}$" = 1'



LANDING GEAR WAS MANUALLY RETRACTED.





$\frac{3}{32}$" SQUARES

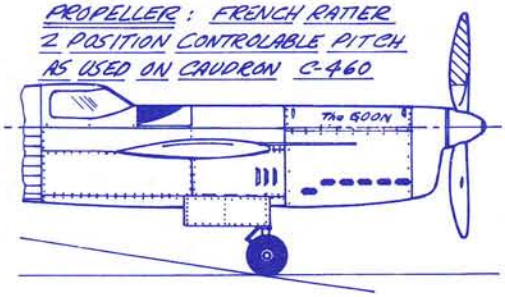
SPAN - 18'6"
LENGTH - 20'6"
MAX SPEED - 264 MPH

WING AND STABILIZER CONSTRUCTION: SPRUCE RIBS AND SPARS COVERED WITH PLYWOOD AND DOPED FABRIC. FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAME WITH WOODEN STRINGERS. AFT SECTION FABRIC COVERED WITH ALUMINUM COWLING FORWARD AND AROUND COCK PIT, ALSO EXTREME AFT OF FUSELAGE FIN CONSTRUCTION: FABRIC OVER WOOD STRUCTURE.

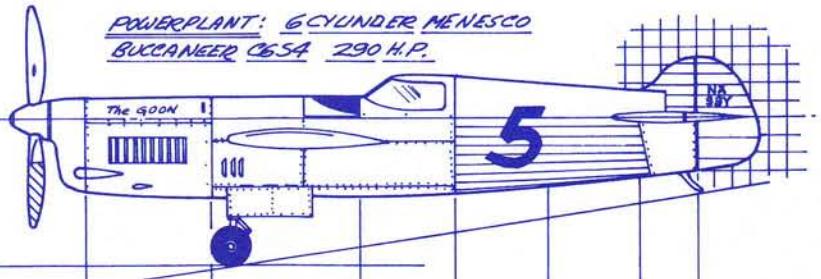


COLOR SCHEME: LIGHT CREAM WITH BLACK LETTERS AND TRIM. CIRCLED "FIVE" WAS FOR MOVIE MAKING PURPOSES ONLY

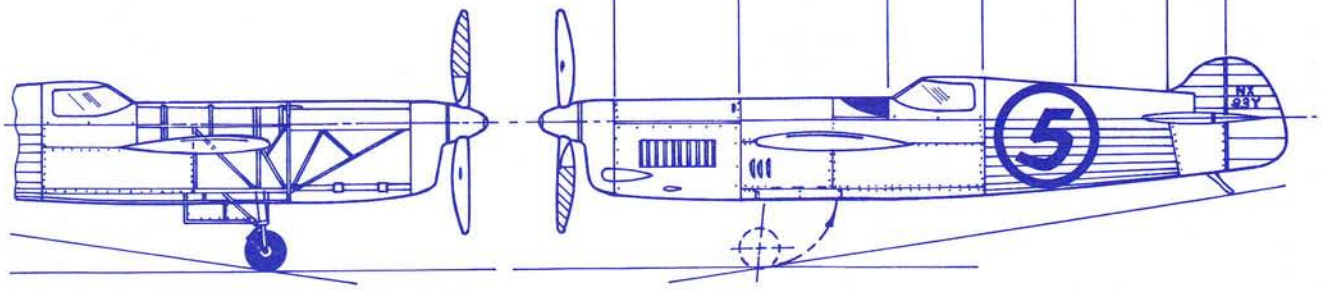
PROPELLER: FRENCH RATIER 2 POSITION CONTROLABLE PITCH AS USED ON CAUDRON C-460



POWERPLANT: 6 CYLINDER MENESCO BUCCANEER C6S4 290 H.P.

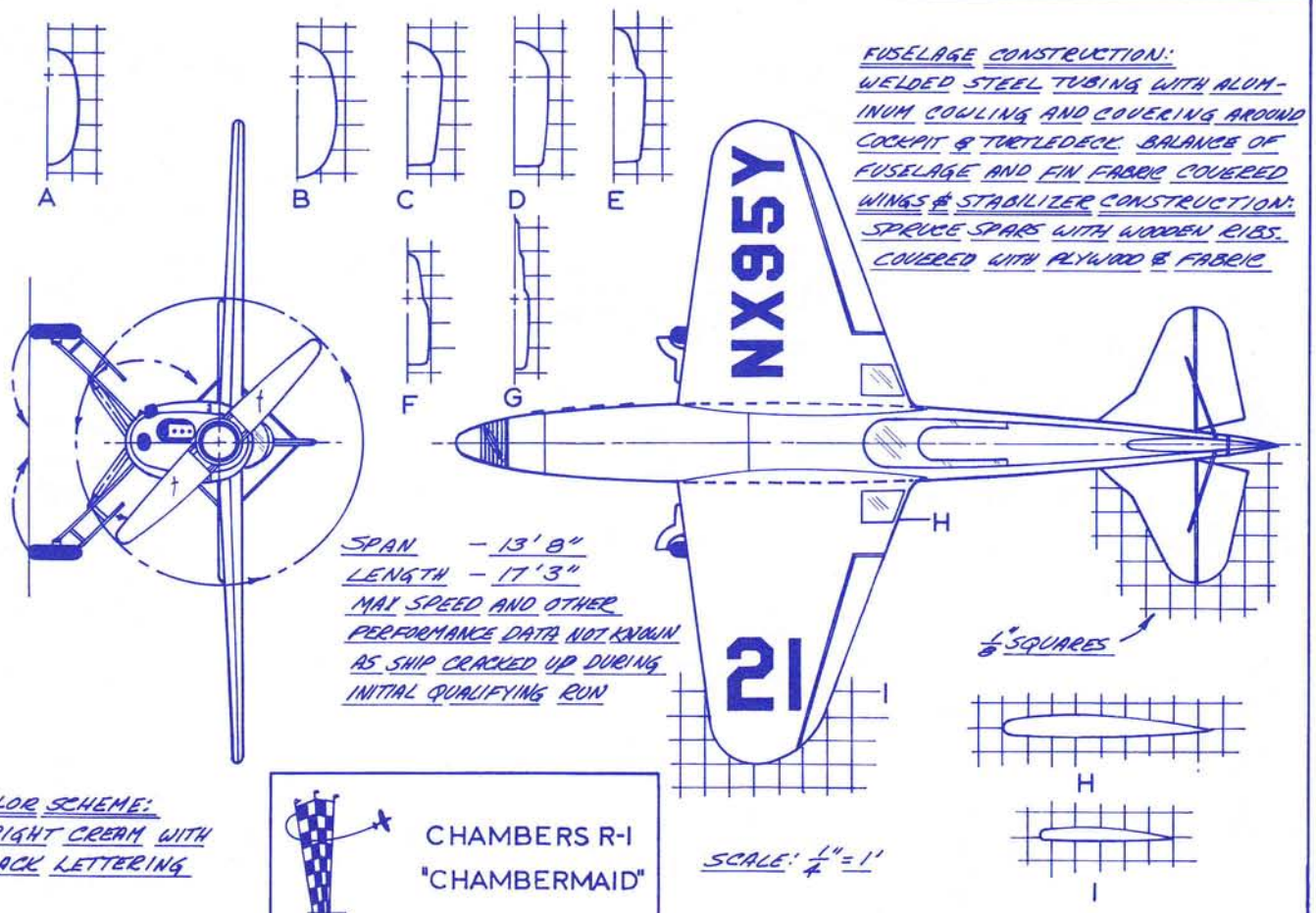


LANDING GEAR DOORS WERE AUTOMATICALLY CLOSED BY RETRACTION OF GEAR LEAVING FUSELAGE BOTTOM SMOOTH.



ABOVE VIEW SHOWS ENGINE MOUNTING, FUEL TANK BETWEEN COCKPIT AND FIREWALL AND VIEW OF RETRACTABLE LANDING GEAR OLEO SHOCK STRUT.

INTRODUCED AT THE 1938 NATIONAL AIR RACES BY ART CHESTER THE GOON WON 2ND PLACE IN THE GREVE TROPHY RACE AT 250.42 MPH. IN THE '38 THOMPSON CHESTER WAS FORCED OUT WITH PROPELLER PROBLEM. IN 1939 CHESTER WON GREVE RACE AT 263.39 MPH BUT AGAIN HAD TO WITHDRAW FROM THOMPSON WITH ENGINE TROUBLES.



FUSELAGE CONSTRUCTION: WELDED STEEL TUBING WITH ALUMINUM COWLING AND COVERING AROUND COCKPIT & TURTLEDECK. BALANCE OF FUSELAGE AND FIN FABRIC COVERED WINGS & STABILIZER CONSTRUCTION: SPRUCE SPARS WITH WOODEN RIBS. COVERED WITH PLYWOOD & FABRIC

SPAN – 13'8"
LENGTH – 17'3"
MAX SPEED AND OTHER PERFORMANCE DATA NOT KNOWN AS SHIP CRACKED UP DURING INITIAL QUALIFYING RUN

1/8" SQUARES

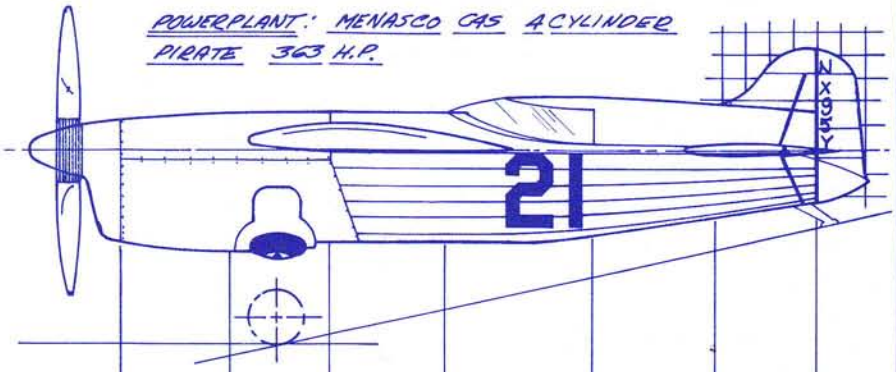
COLOR SCHEME: BRIGHT CREAM WITH BLACK LETTERING

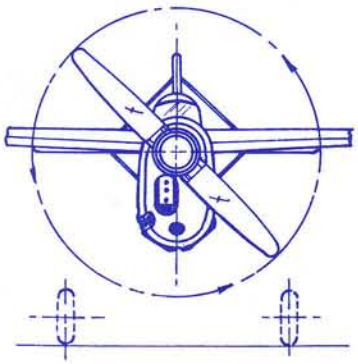


CHAMBERS R-I
"CHAMBERMAID"

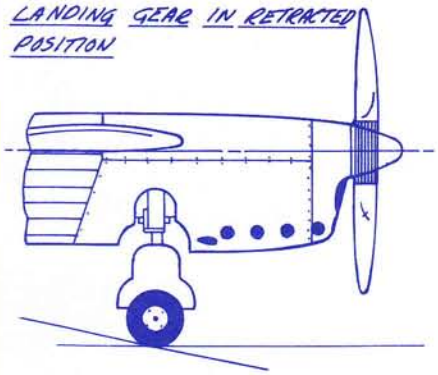
SCALE: 1/4" = 1'

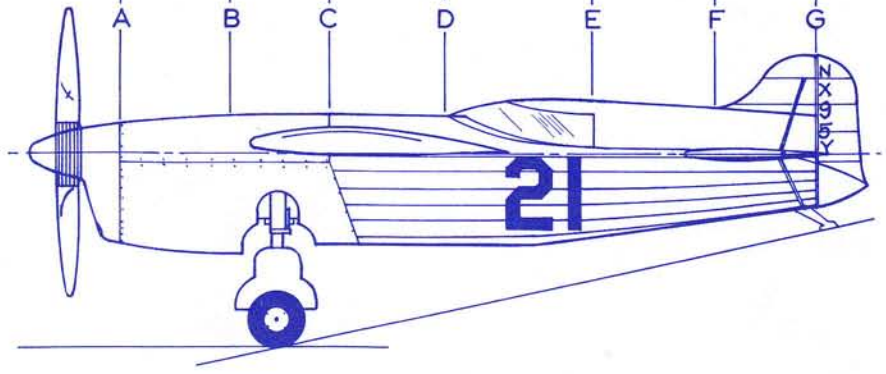
POWERPLANT: MENASCO CAS 4 CYLINDER PIRATE 363 H.P.





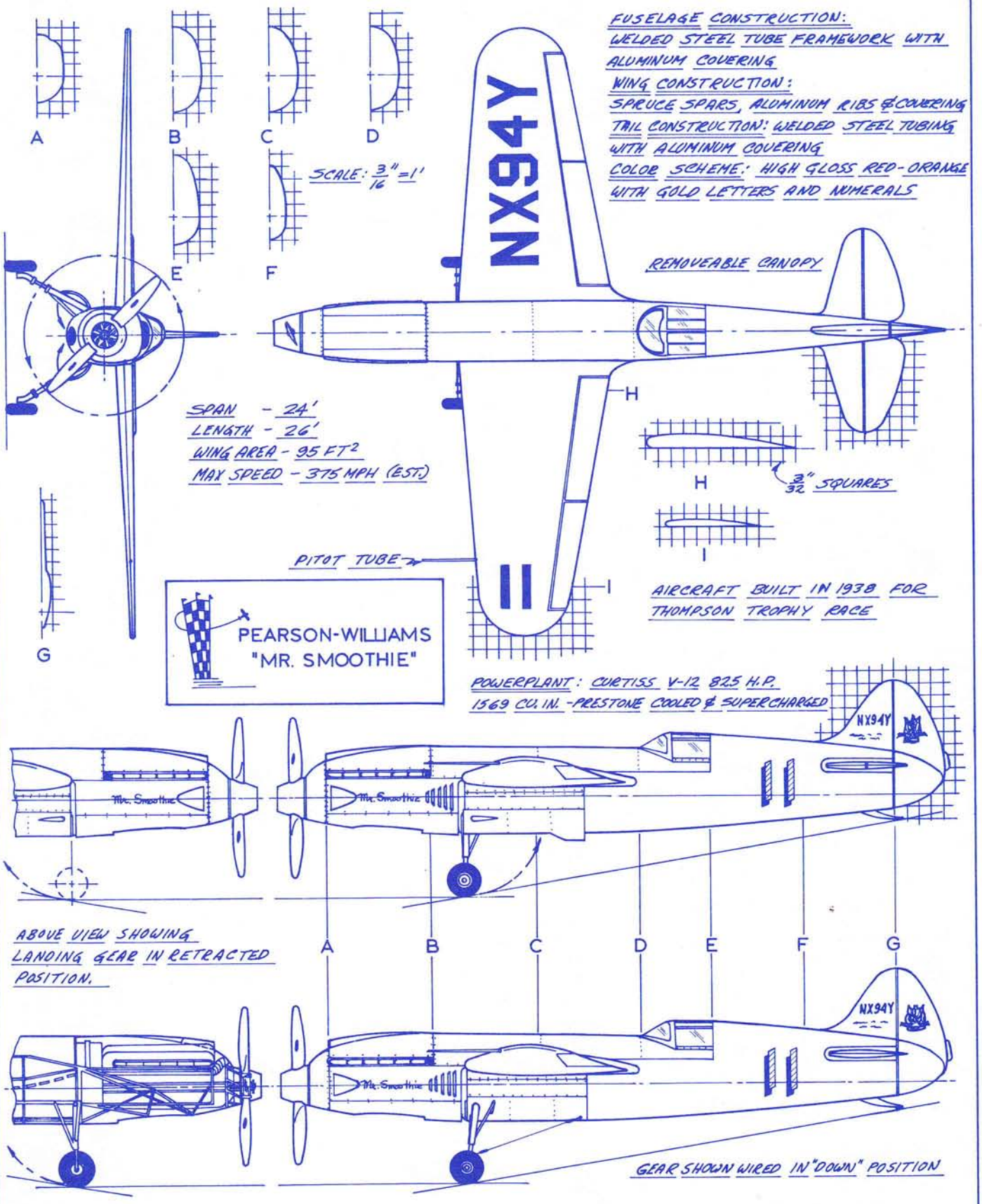
ABOVE VIEWS SHOWS LANDING GEAR IN RETRACTED POSITION





LEAF SPRING RETRACTABLE LANDING GEAR WAS USED AND RETRACTED INTO FUSELAGE SIDES

BUILT FOR THE 1938 NATIONALS BY RUSSELL CHAMBERS. DURING LANDING AFTER QUALIFYING RUN 'CHAMBERMAID' CRACKED UP DESTROYING ITSELF AND TAKING CHAMBERS LIFE



FUSELAGE CONSTRUCTION:
WELDED STEEL TUBE FRAMEWORK WITH ALUMINUM COVERING
WING CONSTRUCTION:
SPRUCE SPARS, ALUMINUM RIBS & COVERING
TAIL CONSTRUCTION: WELDED STEEL TUBING WITH ALUMINUM COVERING
COLOR SCHEME: HIGH GLOSS RED-ORANGE WITH GOLD LETTERS AND NUMERALS

SPAN - 24'
LENGTH - 26'
WING AREA - 95 FT²
MAX SPEED - 375 MPH (EST.)

AIRCRAFT BUILT IN 1938 FOR THOMPSON TROPHY RACE

POWERPLANT: CURTISS V-12 825 H.P. 1569 CU. IN. -PRESTONE COOLED & SUPERCHARGED

ABOVE VIEW SHOWING LANDING GEAR IN RETRACTED POSITION.

GEAR SHOWN WIRED IN "DOWN" POSITION

ABOVE VIEW SHOWING TUBULAR ENGINE MOUNTS AND ENGINE COOLING FAN BEHIND PROPELLER

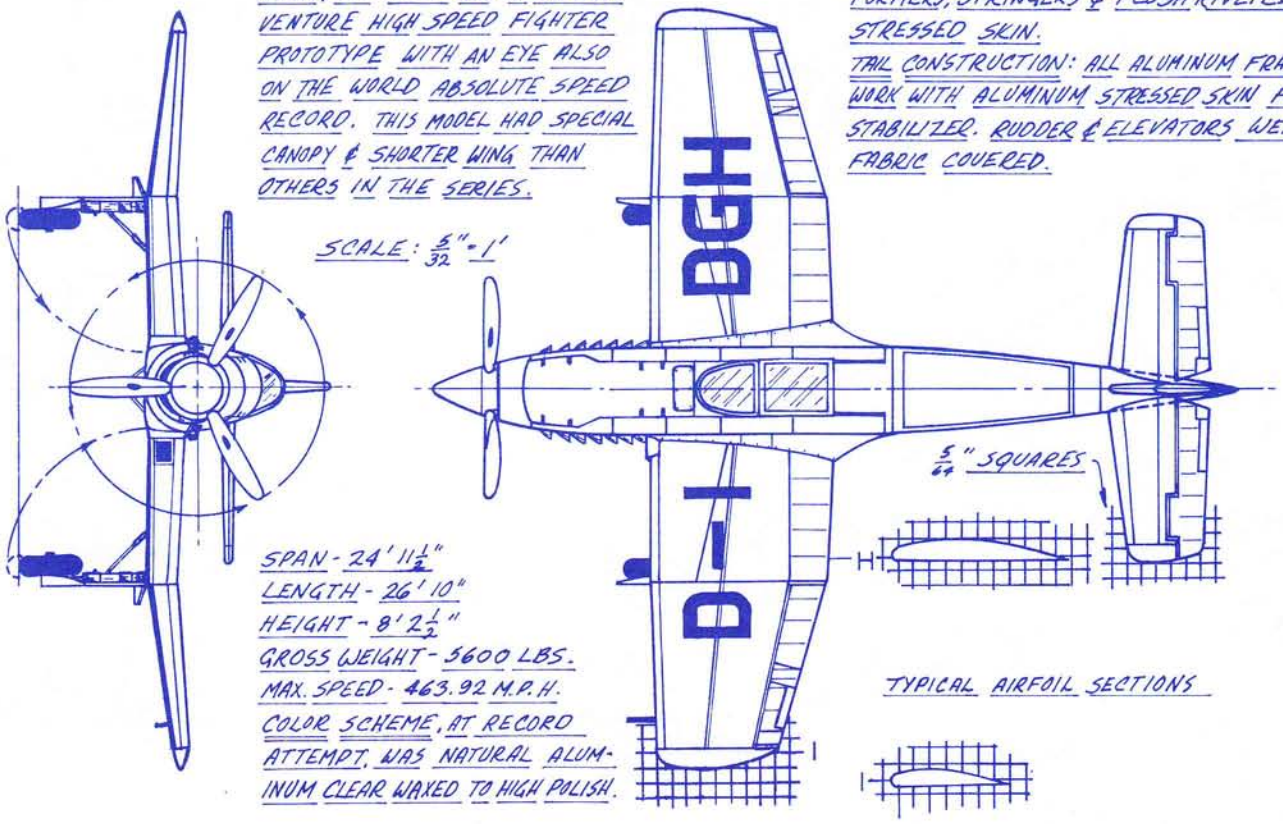
AIRCRAFT WAS TO BE FLOWN BY LELAND WILLIAMS IN 1938 THOMPSON TROPHY RACE. DURING TESTING, RETRACTABLE GEAR WAS DAMAGED AND THEREAFTER WAS SEEN WITH GEAR WIRED IN 'DOWN' POSITION. DUE TO FURTHER PROBLEMS PLANE WAS NEVER RACED.

GH

DESIGNED BY SIEGFRIED GÜNTER & KARL SCHWARZLER OF THE HEINKEL WORKS, THE HE100 WAS A PRIVATE VENTURE HIGH SPEED FIGHTER PROTOTYPE WITH AN EYE ALSO ON THE WORLD ABSOLUTE SPEED RECORD. THIS MODEL HAD SPECIAL CANOPY & SHORTER WING THAN OTHERS IN THE SERIES.

WING CONSTRUCTION: ALUMINUM SPARS AND RIBS WITH FLUSH RIVETED STRESSED SKIN. AILERONS WERE FABRIC COVERED.
FUSELAGE CONSTRUCTION: ALL ALUMINUM FORMERS, STRINGERS & FLUSH RIVETED STRESSED SKIN.
TAIL CONSTRUCTION: ALL ALUMINUM FRAMEWORK WITH ALUMINUM STRESSED SKIN FIN & STABILIZER. RUDDER & ELEVATORS WERE FABRIC COVERED.

SCALE: $\frac{5}{32}$" = 1'

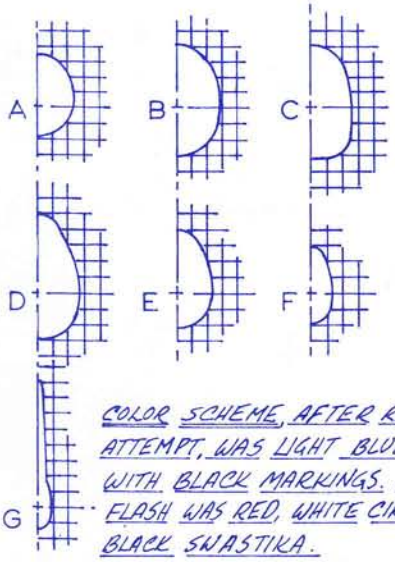


SPAN - 24' 11½"
LENGTH - 26' 10"
HEIGHT - 8' 2½"
GROSS WEIGHT - 5600 LBS.
MAX. SPEED - 463.92 M.P.H.
COLOR SCHEME, AT RECORD ATTEMPT, WAS NATURAL ALUMINUM CLEAR WAXED TO HIGH POLISH.

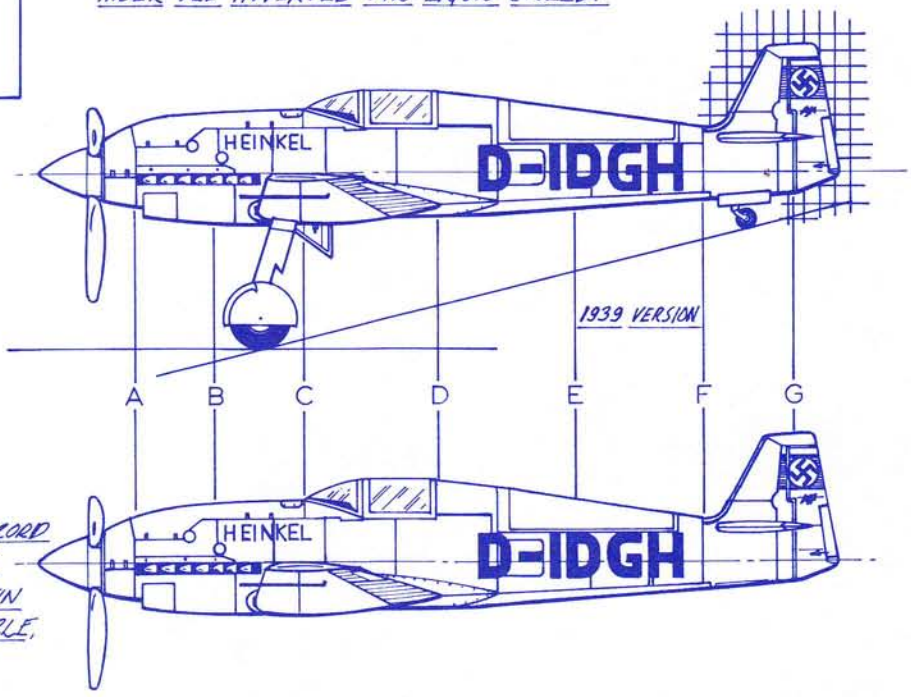
TYPICAL AIRFOIL SECTIONS



POWERPLANT: DAIMLER-BENZ DB 601 R - 1800 HORSEPOWER @ 3000 RPM WITH METHYL ALCHOHOL INJECTION. ENGINE WAS 12 CYLINDER VEE INVERTED AND LIQUID COOLED.



COLOR SCHEME, AFTER RECORD ATTEMPT, WAS LIGHT BLUE WITH BLACK MARKINGS. FIN FLASH WAS RED, WHITE CIRCLE, BLACK SWASTIKA.



AT ORANIENBURG MARCH 30, 1939 CAPTAIN HANS DIETERLE SET WORLD SPEED RECORD AT 463.92 MPH. WHICH LASTED 3 WKS. CMG

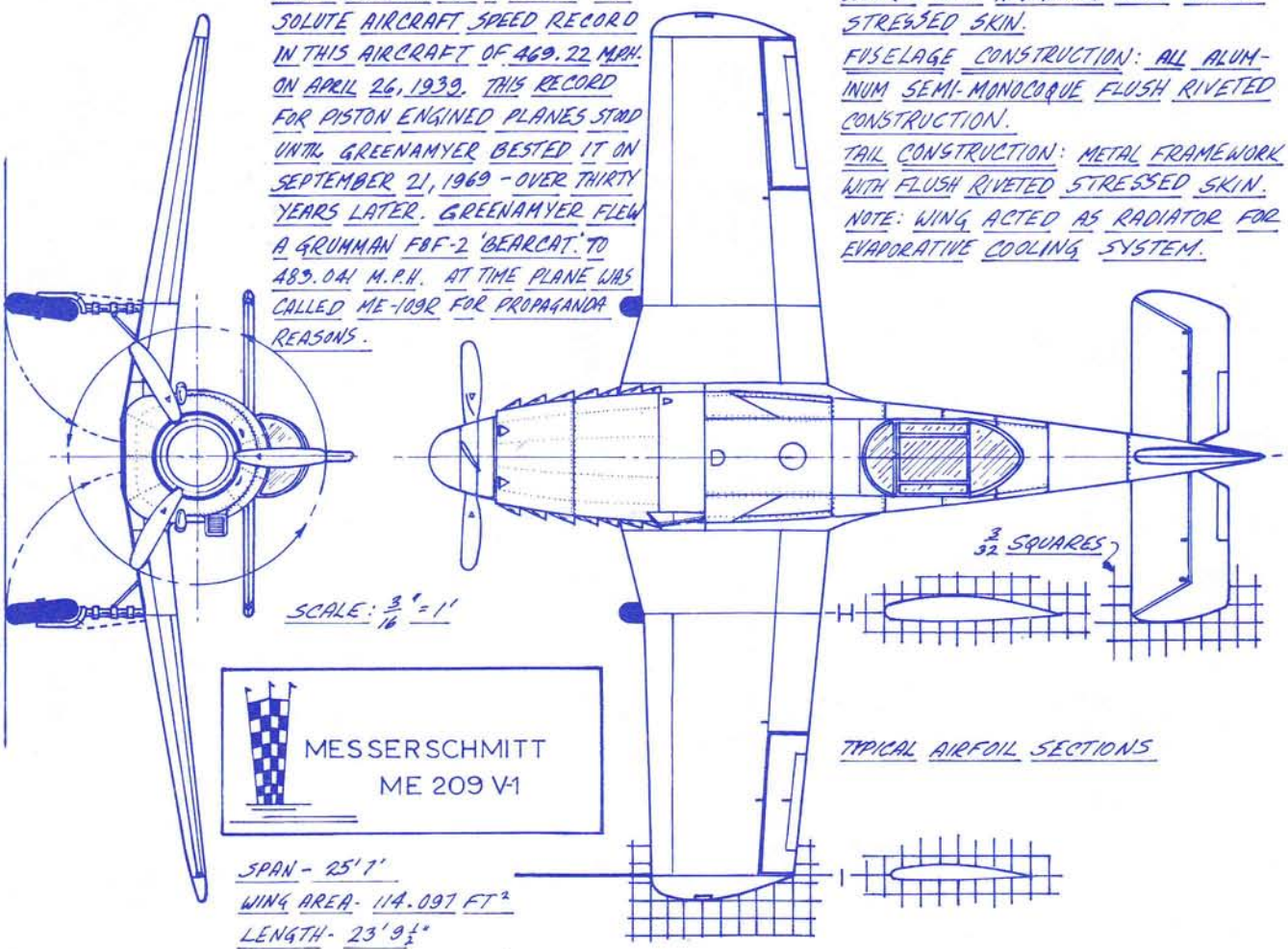
MESSERSCHMITT'S CHIEF TEST PILOT FRITZ WENDEL, SET A WORLD ABSOLUTE AIRCRAFT SPEED RECORD IN THIS AIRCRAFT OF 469.22 M.P.H. ON APRIL 26, 1939. THIS RECORD FOR PISTON ENGINED PLANES STOOD UNTIL GREENAMYER BESTED IT ON SEPTEMBER 21, 1969 - OVER THIRTY YEARS LATER. GREENAMYER FLEW A GRUMMAN F8F-2 'BEARCAT' TO 483.041 M.P.H. AT TIME PLANE WAS CALLED ME-109R FOR PROPAGANDA REASONS.

WING CONSTRUCTION: ALUMINUM RIBS, SPARS COVERED WITH ALUMINUM FLUSH RIVETED STRESSED SKIN.

FUSELAGE CONSTRUCTION: ALL ALUMINUM SEMI-MONOCOQUE FLUSH RIVETED CONSTRUCTION.

TAIL CONSTRUCTION: METAL FRAMEWORK WITH FLUSH RIVETED STRESSED SKIN.

NOTE: WING ACTED AS RADIATOR FOR EVAPORATIVE COOLING SYSTEM.



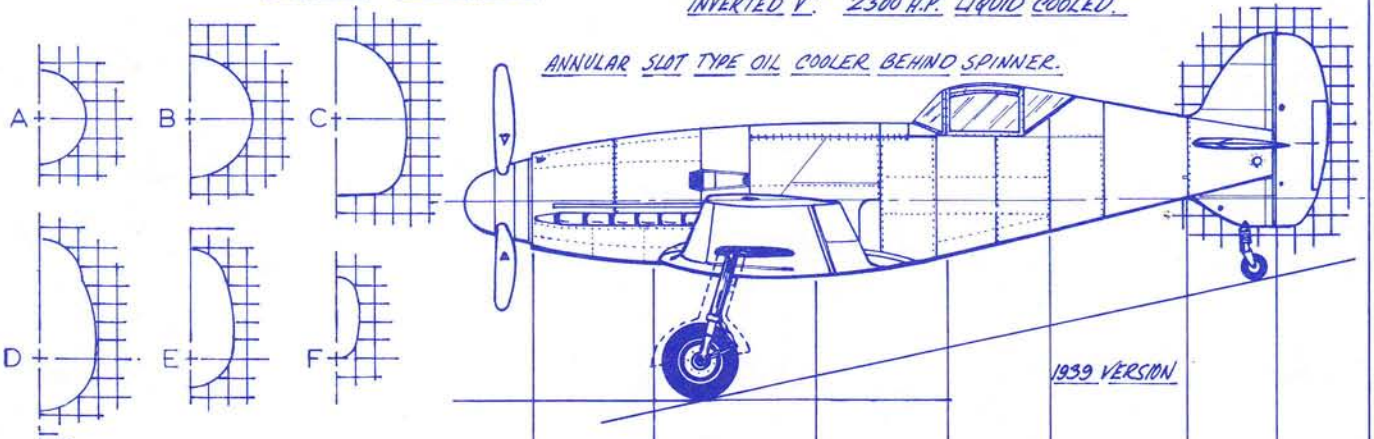
MESSERSCHMITT ME 209 V-1

TYPICAL AIRFOIL SECTIONS

SPAN - 25'7"
WING AREA - 114.097 FT²
LENGTH - 23'9½"
GROSS WEIGHT - 5545 LBS.
MAX. SPEED - 469.22 M.P.H.

POWERPLANT: DAIMLER-BENZ DB 601 ARJ 12 CYLINDER INVERTED "V". 2300 H.P. LIQUID COOLED.

ANNULAR SLOT TYPE OIL COOLER BEHIND SPINNER.

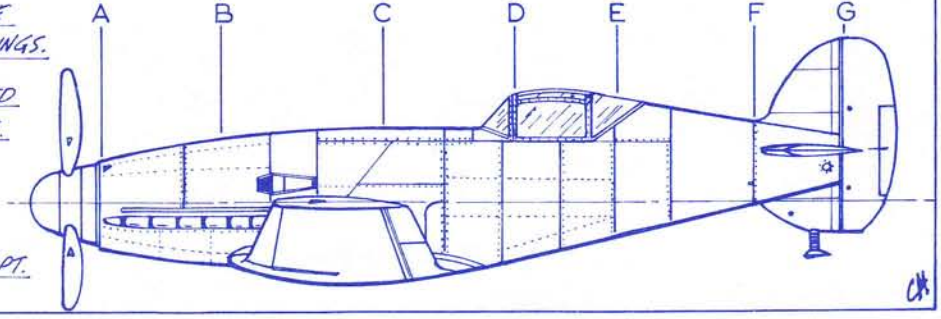


1939 VERSION

COLOR SCHEME: DARK BLUE OVERALL - NO KNOWN MARKINGS.

TAIL SKID (LOWER VIEW) USED DURING RECORD ATTEMPT.

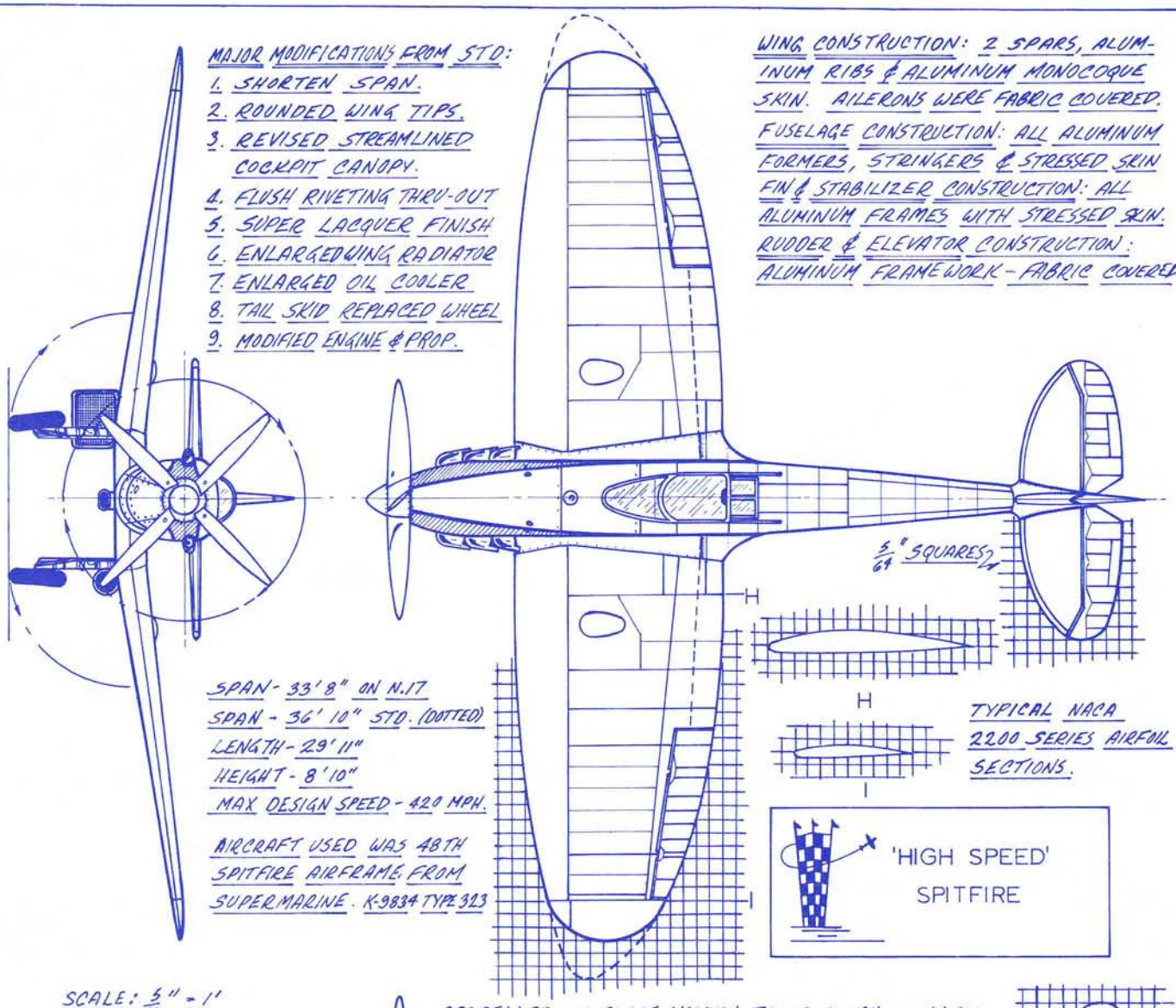
HYDRAULICALLY OPERATED MAIN LANDING GEAR HAD WHEEL WELL COVERS (SHOWN DOTTED) AT RECORD ATTEMPT.



CH

MAJOR MODIFICATIONS FROM STD:
1. SHORTEN SPAN.
2. ROUNDED WING TIPS.
3. REVISED STREAMLINED COCKPIT CANOPY.
4. FLUSH RIVETING THRU-OUT
5. SUPER LACQUER FINISH
6. ENLARGED WING RADIATOR
7. ENLARGED OIL COOLER
8. TAIL SKID REPLACED WHEEL
9. MODIFIED ENGINE & PROP.

WING CONSTRUCTION: 2 SPARS, ALUMINUM RIBS & ALUMINUM MONOCOQUE SKIN. AILERONS WERE FABRIC COVERED.
FUSELAGE CONSTRUCTION: ALL ALUMINUM FORMERS, STRINGERS & STRESSED SKIN
FIN & STABILIZER CONSTRUCTION: ALL ALUMINUM FRAMES WITH STRESSED SKIN.
RUDDER & ELEVATOR CONSTRUCTION: ALUMINUM FRAMEWORK - FABRIC COVERED



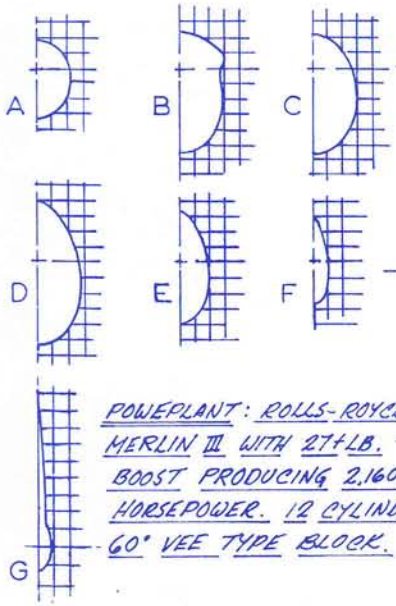
SPAN - 33' 8" ON N.17
SPAN - 36' 10" STD. (DOTTED)
LENGTH - 29' 11"
HEIGHT - 8' 10"
MAX DESIGN SPEED - 420 MPH.

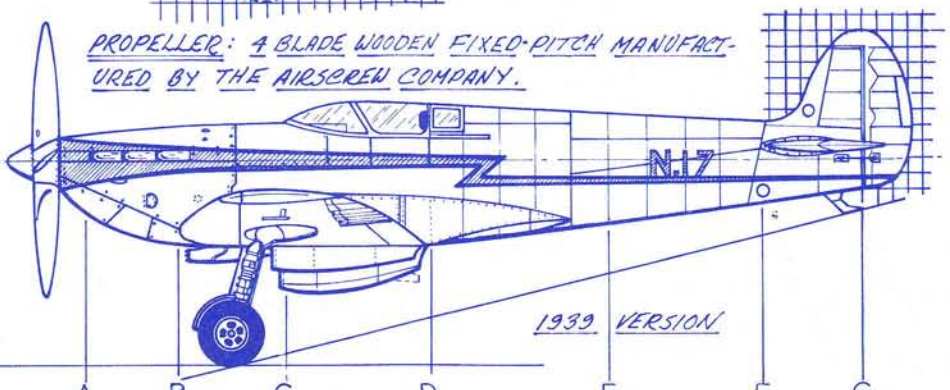
AIRCRAFT USED WAS 48TH SPITFIRE AIRFRAME FROM SUPERMARINE. K-9834 TYPE 323

TYPICAL NACA 2200 SERIES AIRFOIL SECTIONS.

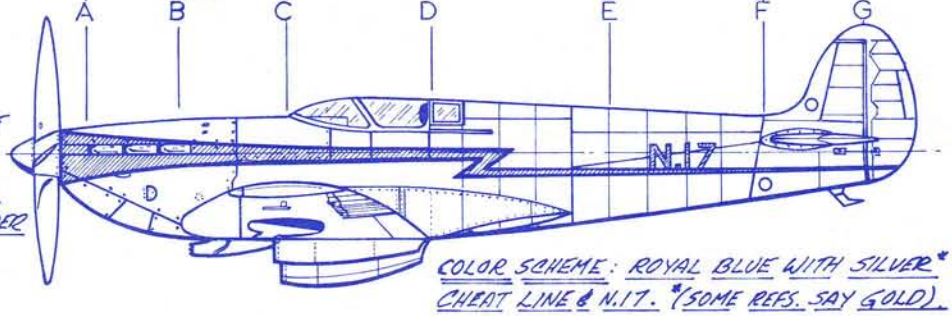
SCALE: 5/32" = 1'

PROPELLER: 4 BLADE WOODEN FIXED-PITCH MANUFACTURED BY THE AIRSCREW COMPANY.





1939 VERSION



POWERPLANT: ROLLS-ROYCE MERLIN III WITH 27+LB. BOOST PRODUCING 2,160 HORSEPOWER. 12 CYLINDER 60° VEE TYPE BLOCK.

COLOR SCHEME: ROYAL BLUE WITH SILVER* CHEAT LINE & N.17. *(SOME REFS. SAY GOLD).

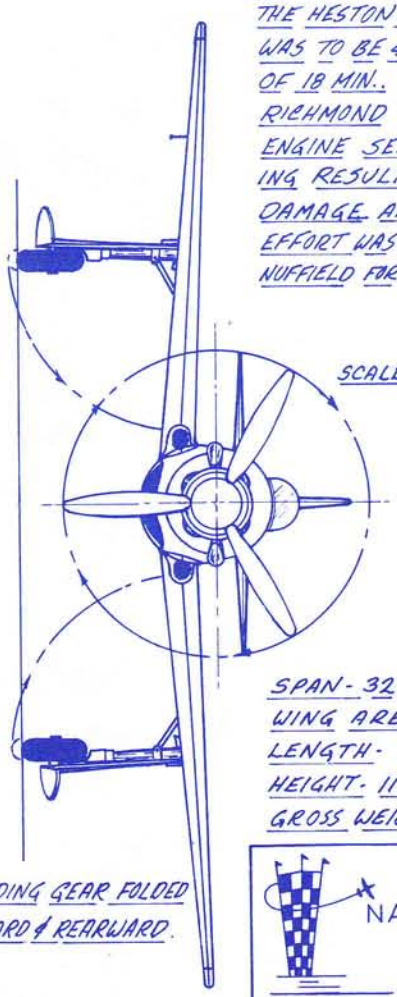
ALTHOUGH FLOWN FOR TEST, CRAFT DID NOT TRY FOR WORLD SPEED RECORD AS THE HEINKEL HE-100 V-8 RAISED THE RECORD TO 463.67 ON MARCH 30, 1939. THIS MARK WAS SOMEWHAT ABOVE N.17'S DESIGN POTENTIAL. CM

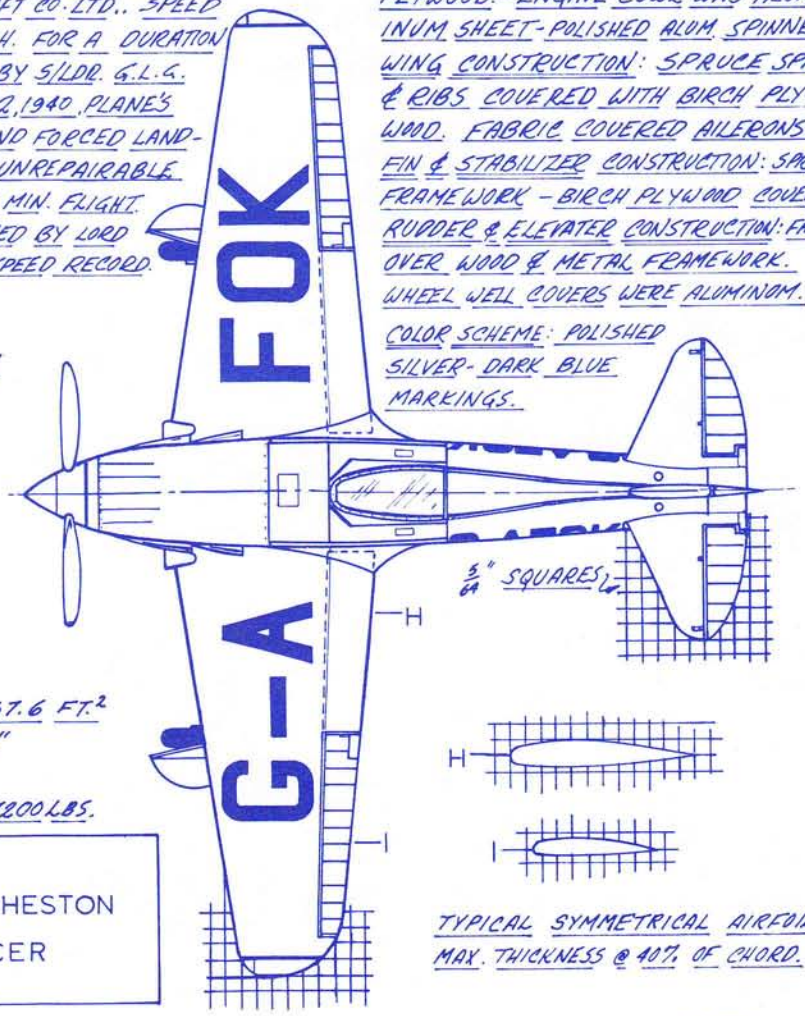
THE HESTON TYPE 'S' RACER WAS DESIGNED BY A.E. HAGG & G. CORNWALL & BUILT BY THE HESTON AIRCRAFT CO. LTD.. SPEED WAS TO BE 480 M.P.H. FOR A DURATION OF 18 MIN.. FLOWN BY S/LDR. G.L.G. RICHMOND JUNE 12, 1940. PLANE'S ENGINE SEIZED AND FORCED LANDING RESULTED IN UNREPAIRABLE DAMAGE AFTER 5 MIN. FLIGHT. EFFORT WAS FINANCED BY LORD NUFFIELD FOR WORLD SPEED RECORD.

FUSELAGE CONSTRUCTION: SPRUCE FORMERS & LONGERONS. ENTIRE ASSEMBLY COVERED WITH BIRCH PLYWOOD - ENGINE COWL WAS ALUMINUM SHEET - POLISHED ALUM. SPINNER. WING CONSTRUCTION: SPRUCE SPARS & RIBS COVERED WITH BIRCH PLYWOOD. FABRIC COVERED AILERONS. FIN & STABILIZER CONSTRUCTION: SPRUCE FRAMEWORK - BIRCH PLYWOOD COVER. RUDDER & ELEVATER CONSTRUCTION: FABRIC OVER WOOD & METAL FRAMEWORK. WHEEL WELL COVERS WERE ALUMINUM.

COLOR SCHEME: POLISHED SILVER - DARK BLUE MARKINGS.

SCALE: $\frac{5}{32}" = 1'$





$\frac{5}{64}$" SQUARES

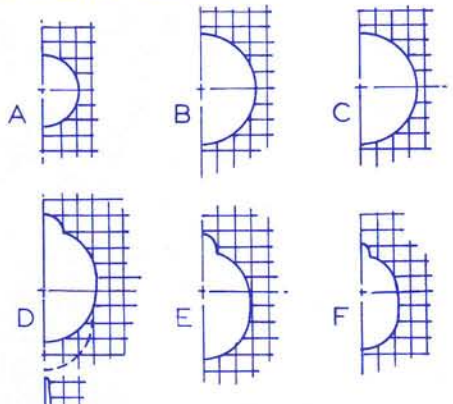
SPAN - 32' $\frac{1}{2}$"
WING AREA - 167.6 FT.^{2}
LENGTH - 24' 7$\frac{1}{4}$"
HEIGHT - 11' 10"
GROSS WEIGHT - 7200 LBS.

LANDING GEAR FOLDED UPWARD & REARWARD.

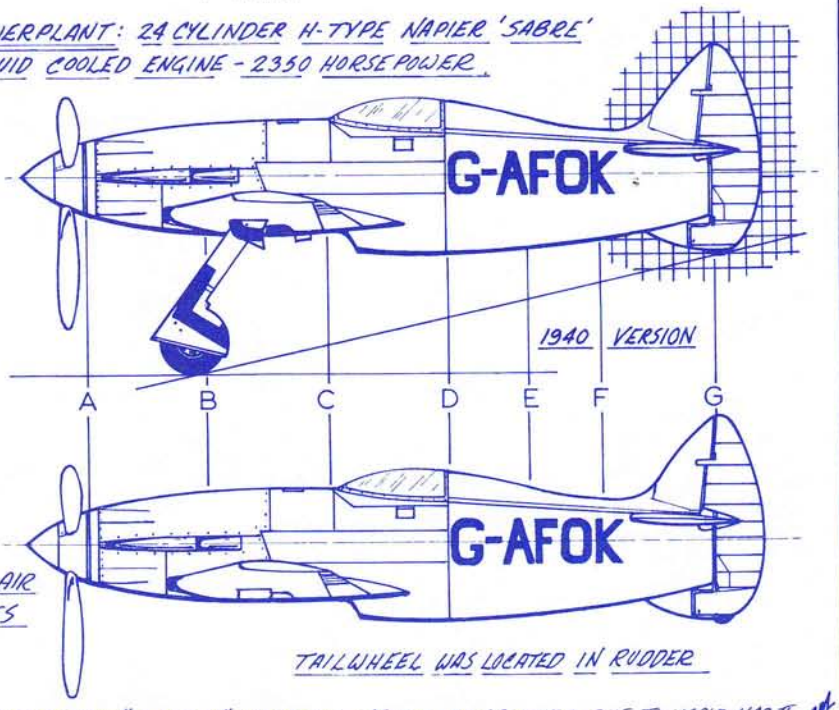
NAPIER-HESTON RACER

TYPICAL SYMMETRICAL AIRFOIL MAX. THICKNESS @ 40% OF CHORD.

PROPELLER: 3 BLADE D.H.-HAMILTON CONSTANT SPEED.



POWERPLANT: 24 CYLINDER H-TYPE NAPIER 'SABRE' LIQUID COOLED ENGINE - 2350 HORSEPOWER.



COOLANT RADIATOR LOCATED ON PLANE'S UNDERSIDE WITH AIR OUTLET UNDER STAB - BOTH SIDES OF RUDDER POST.

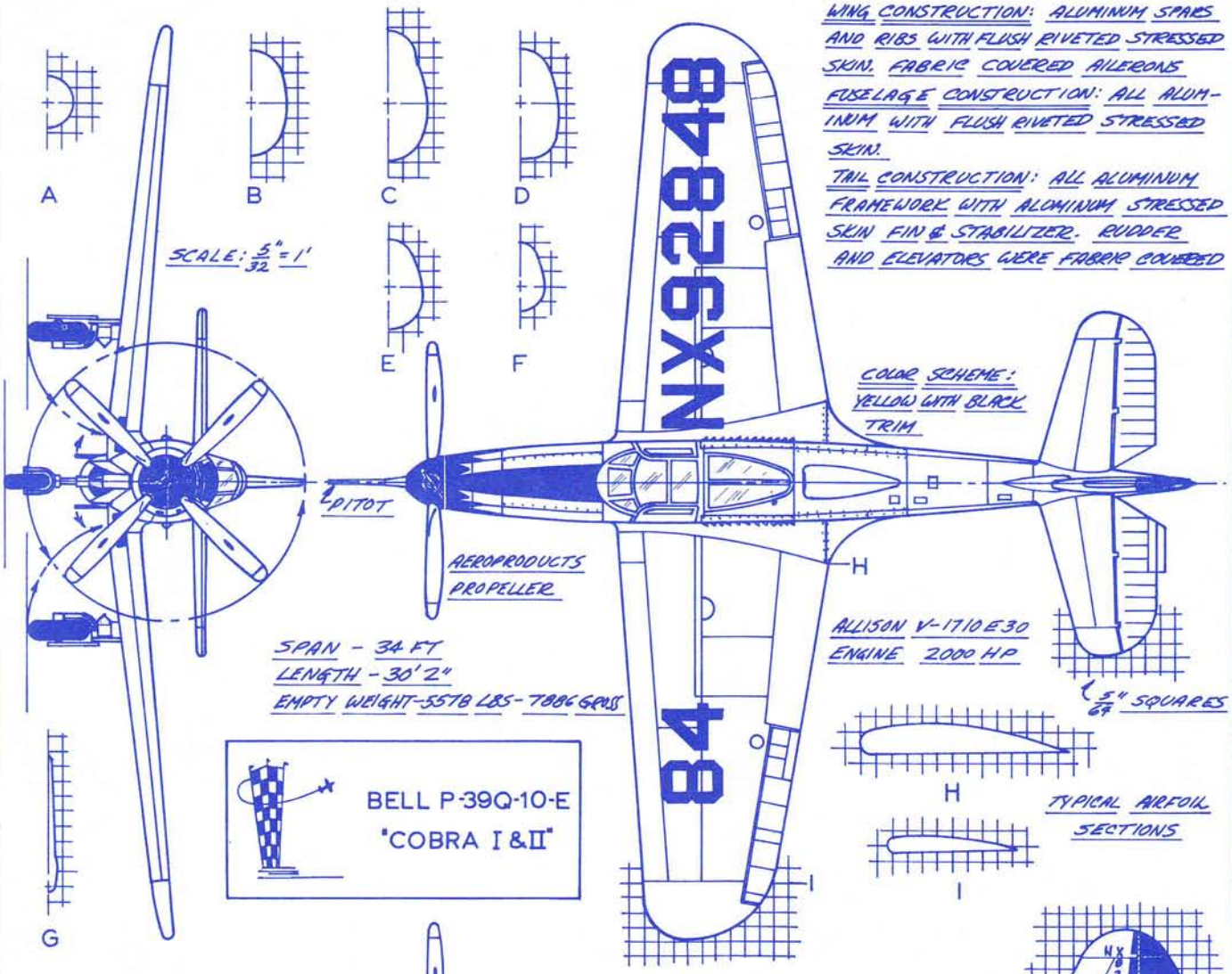
TAILWHEEL WAS LOCATED IN RUDDER

SISTER SHIP OF ABOVE CRAFT WAS LICENSED "G-AFOL" HOWEVER NEVER COMPLETED DUE TO WORLD WAR II.

WING CONSTRUCTION: ALUMINUM SPARS AND RIBS WITH FLUSH RIVETED STRESSED SKIN. FABRIC COVERED AILERONS.
FUSELAGE CONSTRUCTION: ALL ALUMINUM WITH FLUSH RIVETED STRESSED SKIN.
TAIL CONSTRUCTION: ALL ALUMINUM FRAMEWORK WITH ALUMINUM STRESSED SKIN FIN & STABILIZER. RUDDER AND ELEVATORS WERE FABRIC COVERED

A B C D E F G

SCALE: 5/32" = 1'



COLOR SCHEME: YELLOW WITH BLACK TRIM

SPAN - 34 FT
LENGTH - 30' 2"
EMPTY WEIGHT - 5578 LBS - 7886 GROSS

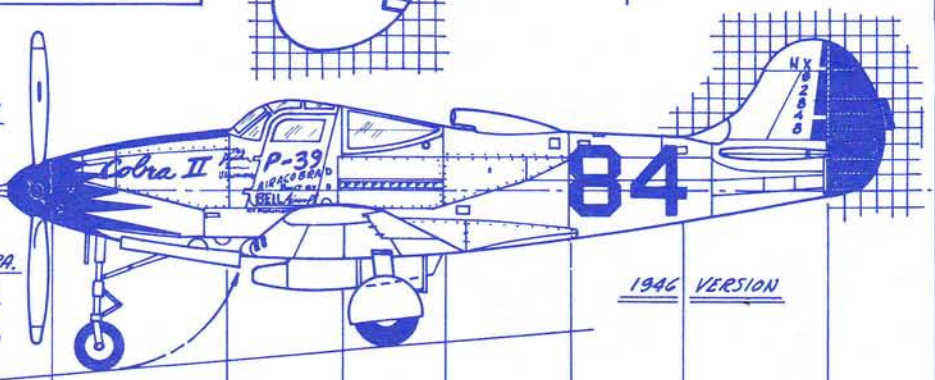
ALLISON V-1710 E30 ENGINE 2000 H.P.

5/64" SQUARES

TYPICAL AIRFOIL SECTIONS

BELL P-39Q-10-E
"COBRA I & II"

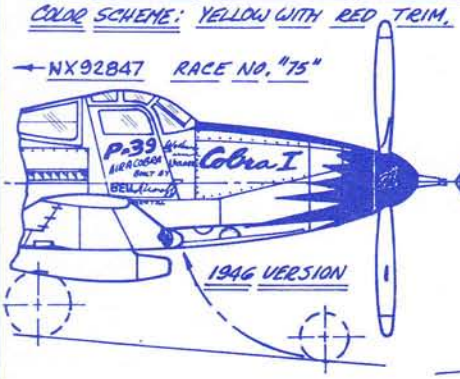
THOUGH NEVER A POPULAR FIGHTER DURING WORLD WAR II DUE TO LACK OF PERFORMANCE. THESE RACING "COBRAS" WERE FITTED WITH THE MORE POWERFUL ENGINES USED ON THE P-63 KINGCOBRA. THE RESULTS WERE A TREMENDOUS INCREASE IN SPEED & PERFORMANCE.



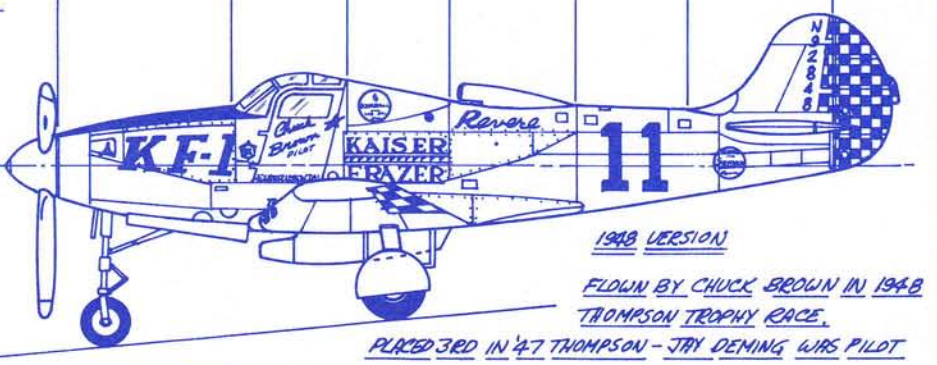
1946 VERSION

COBRA I BELOW CRASHED DUE TO REAR FUSELAGE STRUCTURAL FAILURE.
COLOR SCHEME: YELLOW WITH RED TRIM.

← NX92847 RACE NO. "75"



1946 VERSION

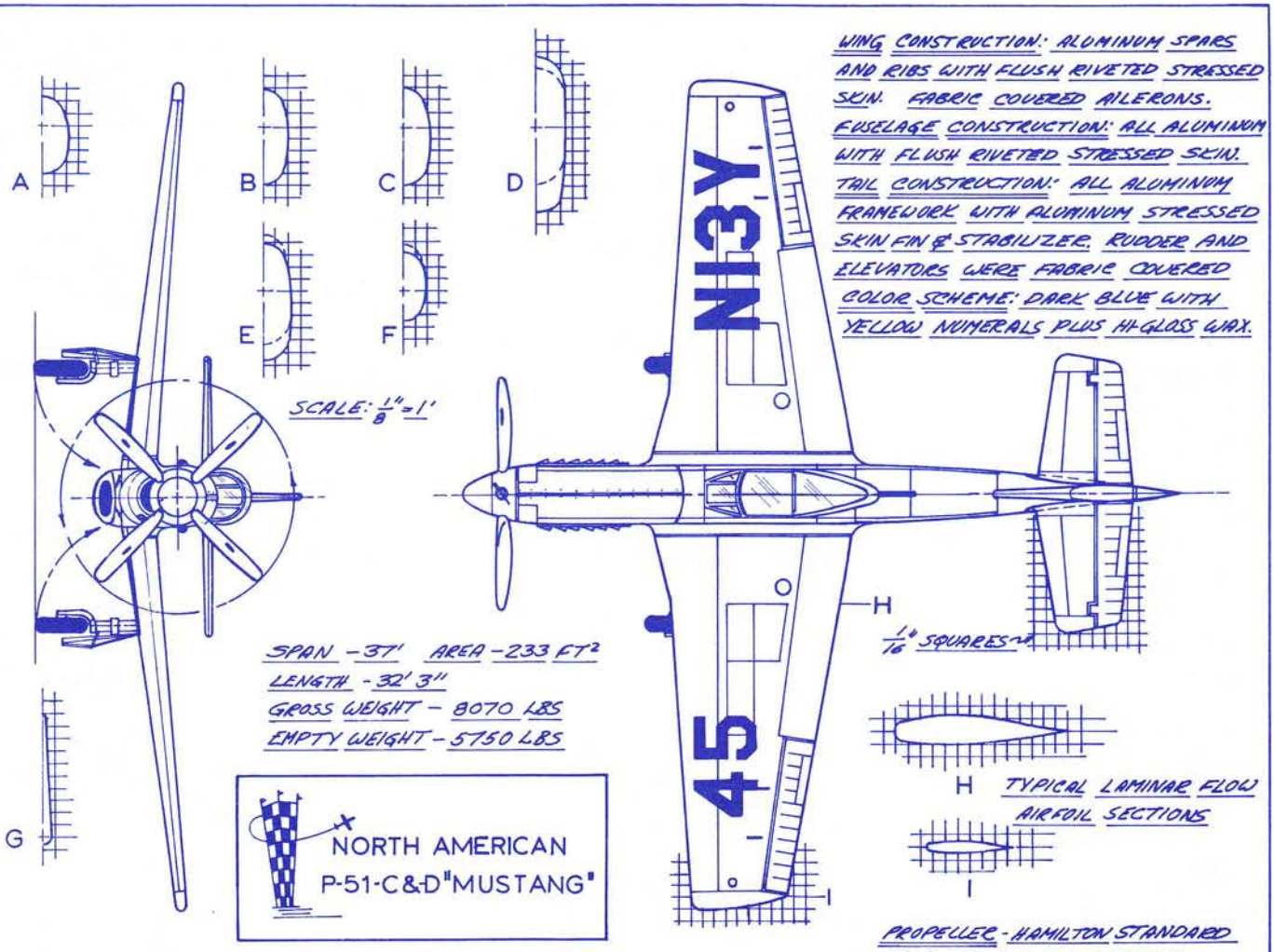


1948 VERSION

FLOWN BY CHUCK BROWN IN 1948 THOMPSON TROPHY RACE.
PLACED 3RD IN '47 THOMPSON - JAY DEMING WAS PILOT

ABOVE VIEW SHOWING LANDING GEAR RETRACTED AND WHEEL WELL DOORS CLOSED

COBRA II FLOWN BY TEX JOHNSTON WON THE 1946 THOMPSON TROPHY RACE AT AVERAGE SPEED OF 373.908 MILES PER HOUR.



WING CONSTRUCTION: ALUMINUM SPARS AND RIBS WITH FLUSH RIVETED STRESSED SKIN. FABRIC COVERED AILERONS. FUSELAGE CONSTRUCTION: ALL ALUMINUM WITH FLUSH RIVETED STRESSED SKIN. TAIL CONSTRUCTION: ALL ALUMINUM FRAMEWORK WITH ALUMINUM STRESSED SKIN FIN & STABILIZER. RUDDER AND ELEVATORS WERE FABRIC COVERED COLOR SCHEME: DARK BLUE WITH YELLOW NUMERALS PLUS HI-GLOSS WAX.

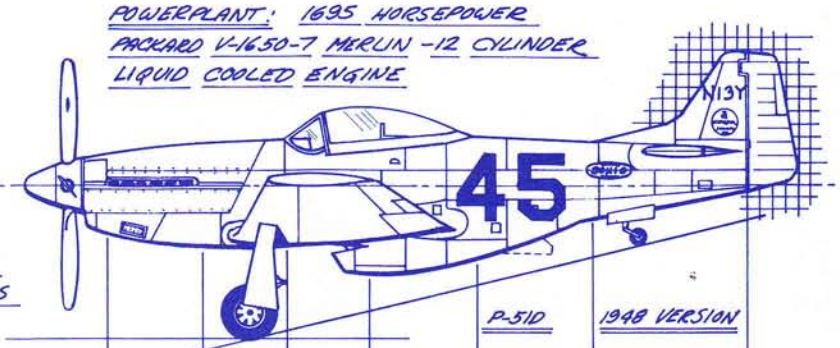
SPAN - 37' AREA - 233 FT²
LENGTH - 32' 3"
GROSS WEIGHT - 8070 LBS
EMPTY WEIGHT - 5750 LBS

H TYPICAL LAMINAR FLOW AIRFOIL SECTIONS

PROPELLER - HAMILTON STANDARD 11'2" CONTROLLABLE PITCH

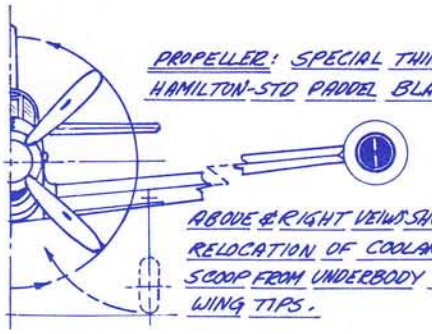
THE P-51 MUSTANG OF WORLD WAR II, PERHAPS THE BEST FIGHTER OF THE PERIOD, FLEW ON TO FAME AT THE NATIONAL AIR RACES 1946-1949. IT WON EVERY BENDIX TROPHY RACE DURING THIS PERIOD - THE FIRST THREE YEARS FLOWN BY PAUL MANTZ AND IN 1949 FLOWN BY JOE DE BONA. MANY OF THESE EXCELLENT MACHINES ARE STILL BEING FLOWN IN AIR RACES TODAY - OVER THIRTY YEARS AFTER THE PROTOTYPE FLEW!

POWERPLANT: 1695 HORSEPOWER PACKARD V-1650-7 MERLIN -12 CYLINDER LIQUID COOLED ENGINE

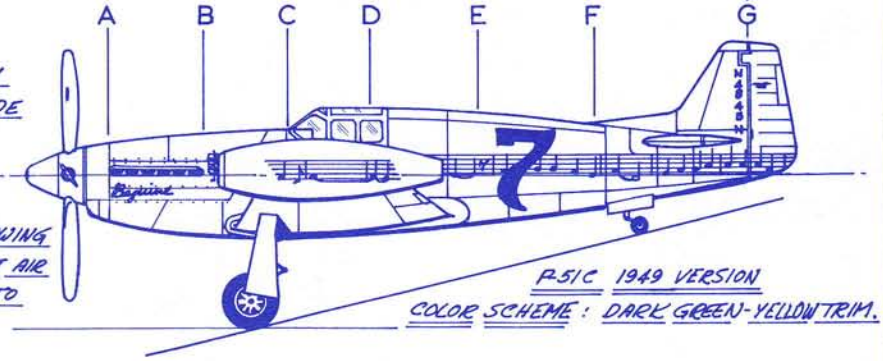


A B C D E F G

PROPELLER: SPECIAL THIN HAMILTON-STD PADDEL BLADE

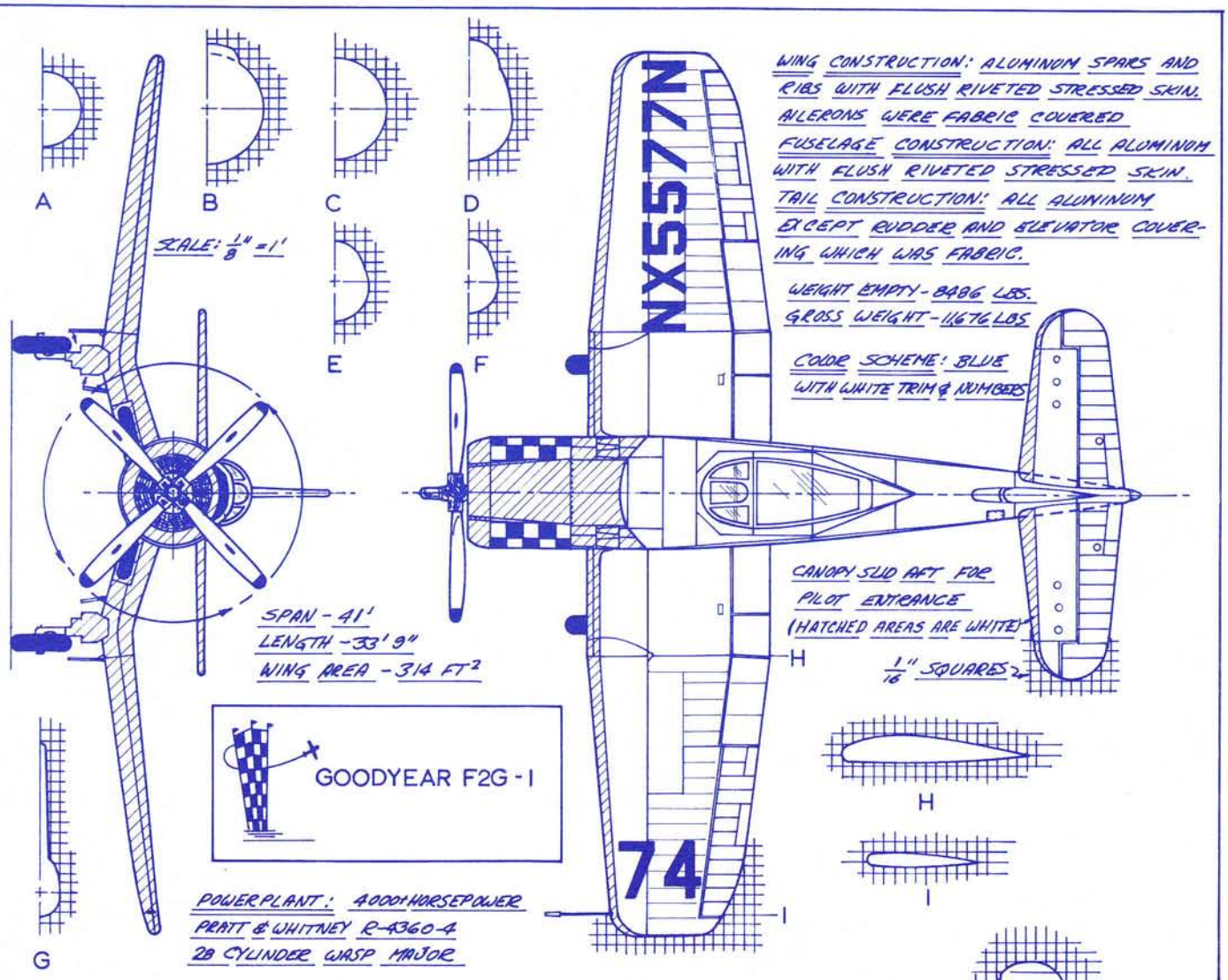


ABOVE & RIGHT VIEWS SHOWING RELOCATION OF COOLANT AIR SCOOP FROM UNDERBODY TO WING TIPS.



P-51C 1949 VERSION
COLOR SCHEME: DARK GREEN-YELLOW TRIM.

ABOVE AIRCRAFT NO. 45 WAS WINNER OF 1948 THOMPSON TROPHY RACE FLOWN BY ANSON JOHNSON AT AN AVERAGE SPEED OF 383.767 MILES PER HOUR. WILLIAM ODOM CRASHED NO. 7 DURING THE 1949 THOMPSON ALTHOUGH THE MUCH MODIFIED AIRCRAFT WOULD POSSIBLY HAVE WON HAD THIS NOT BEEN THE CASE.



WING CONSTRUCTION: ALUMINUM SPARS AND RIBS WITH FLUSH RIVETED STRESSED SKIN. AILERONS WERE FABRIC COVERED

FUSELAGE CONSTRUCTION: ALL ALUMINUM WITH FLUSH RIVETED STRESSED SKIN.

TAIL CONSTRUCTION: ALL ALUMINUM EXCEPT RUDDER AND ELEVATOR COVERING WHICH WAS FABRIC.

WEIGHT EMPTY - 8486 LBS.
GROSS WEIGHT - 11,676 LBS

COLOR SCHEME: BLUE WITH WHITE TRIM & NUMBERS

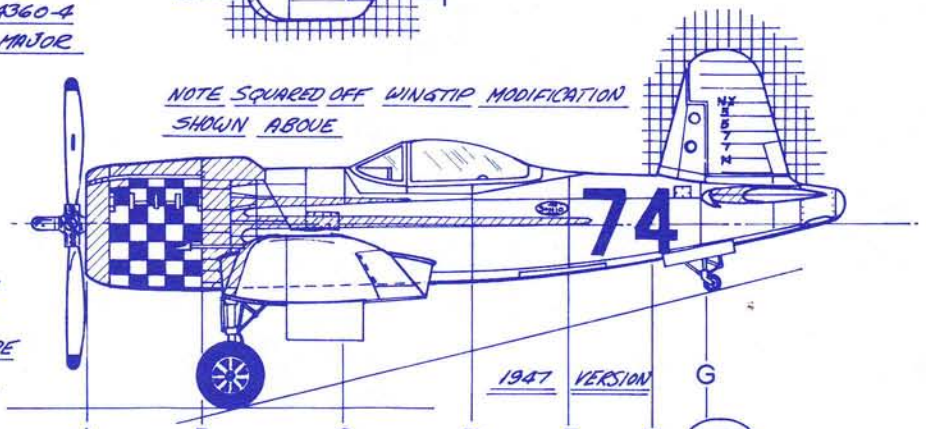
CANOPY SLID AFT FOR PILOT ENTRANCE

(HATCHED AREAS ARE WHITE)

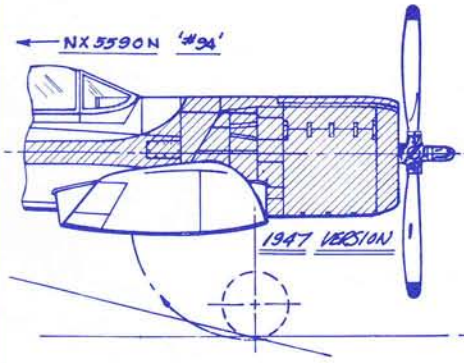
POWERPLANT: 4000+ HORSEPOWER PRATT & WHITNEY R-4360-4 28 CYLINDER WASP MAJOR

THE GOODYEAR F2G-1 WAS A DEVELOPEMENT OF THE FAMOUS CHANCE-VOUGHT 'CORSAIR' F4U-4 NAVAL FIGHTER AIRCRAFT OF WORLD WAR II. THE PRIMARY MODIFICATION WAS THE ADDITION OF THE BIG P&W ENGINE FOR SUPER-PERFORMANCE AGAINST ENEMY SUICIDE AIRCRAFT - ONLY 5 BUILT AT WARS END.

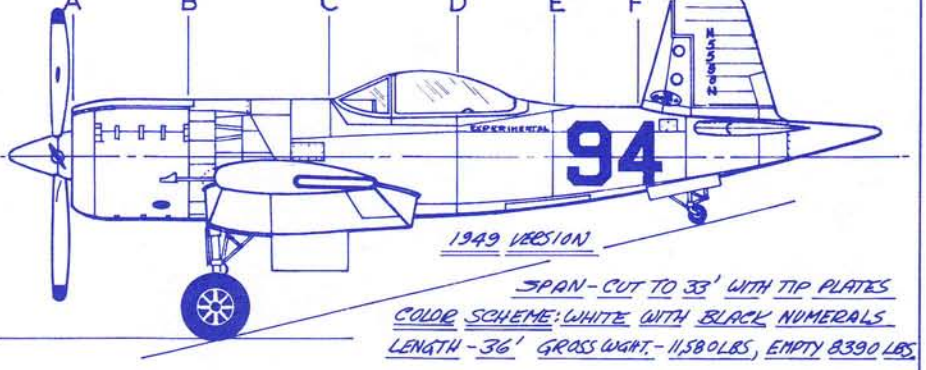
NOTE SQUARED OFF WINGTIP MODIFICATION SHOWN ABOVE



1947 VERSION



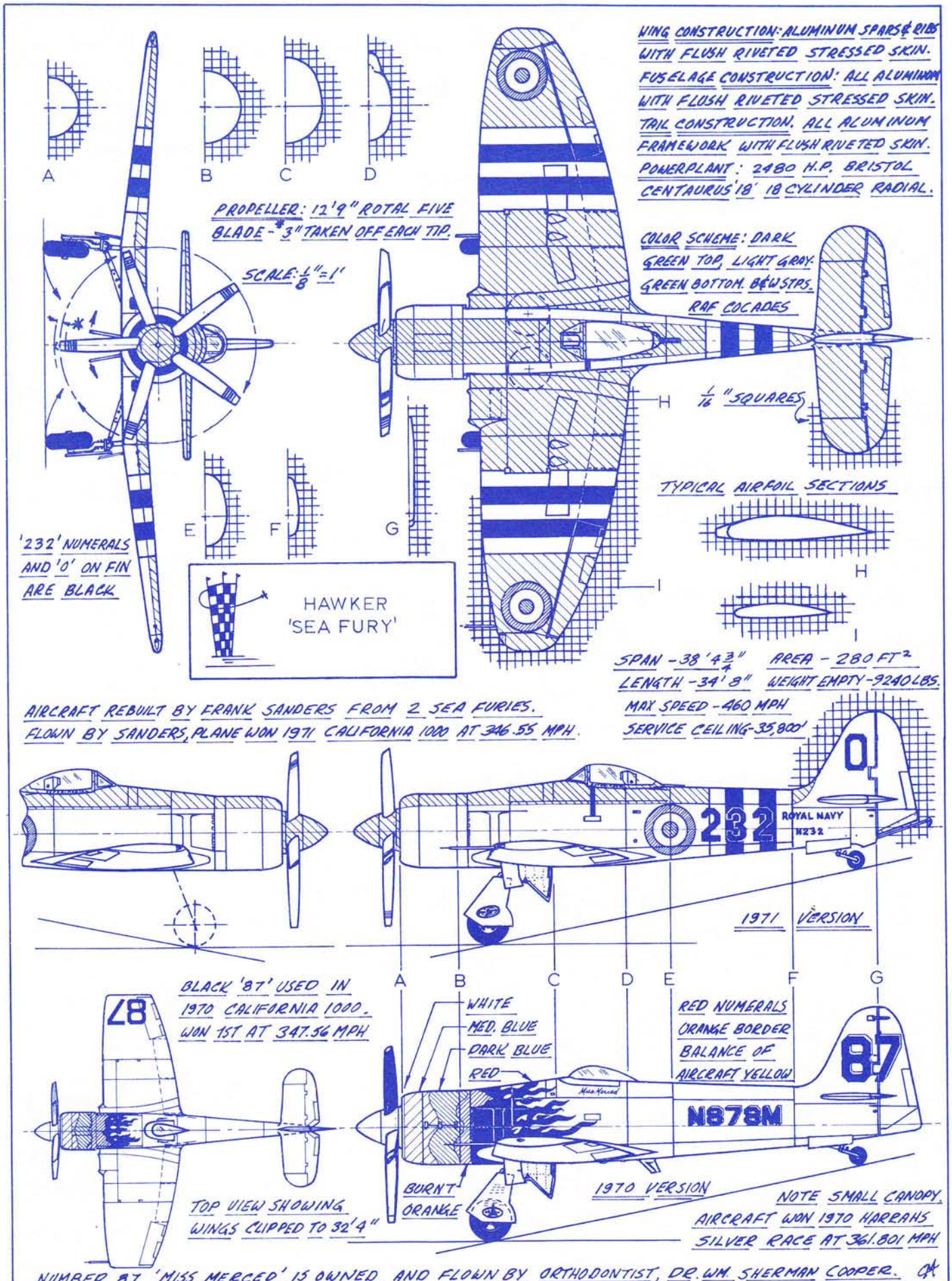
1947 VERSION

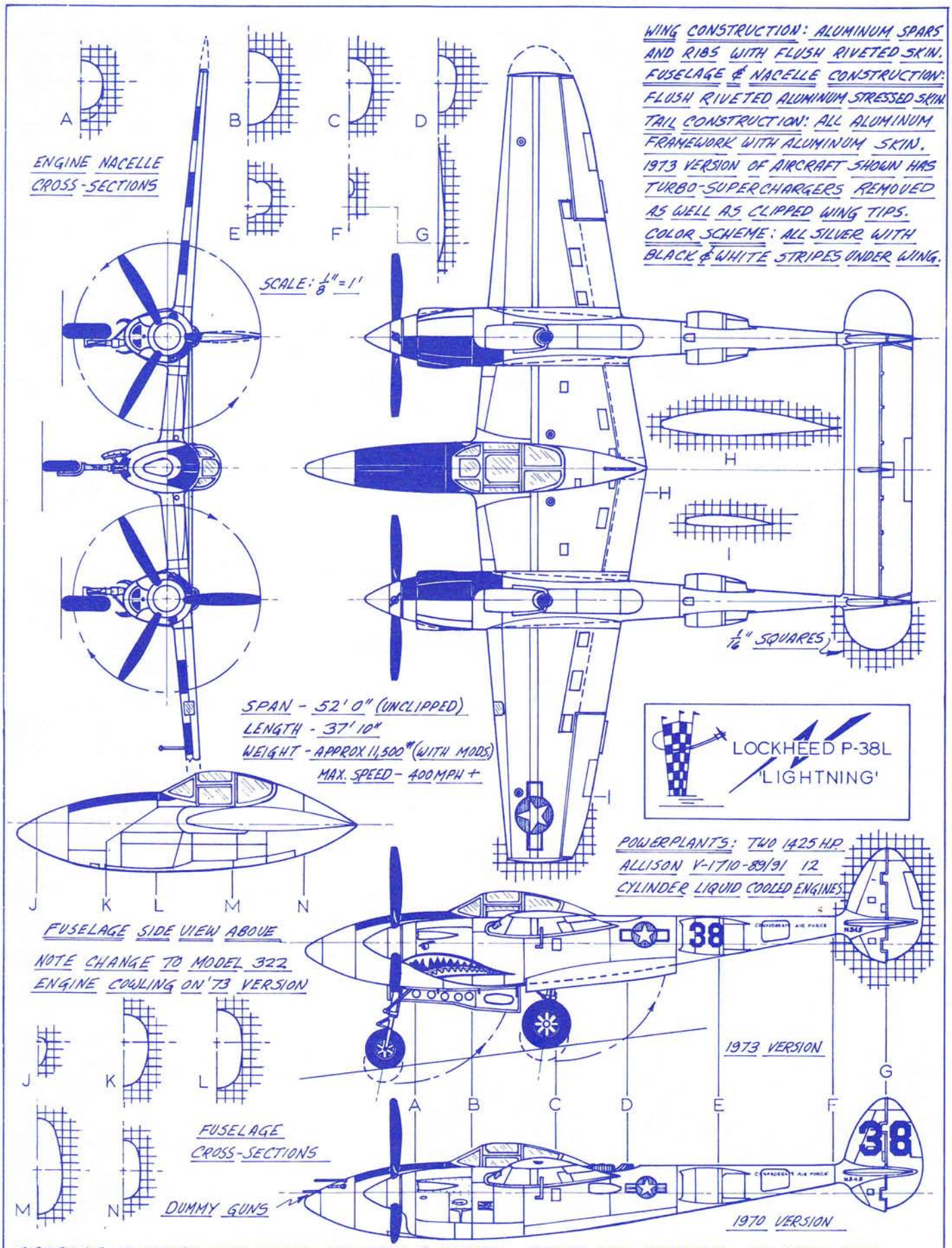


1949 VERSION

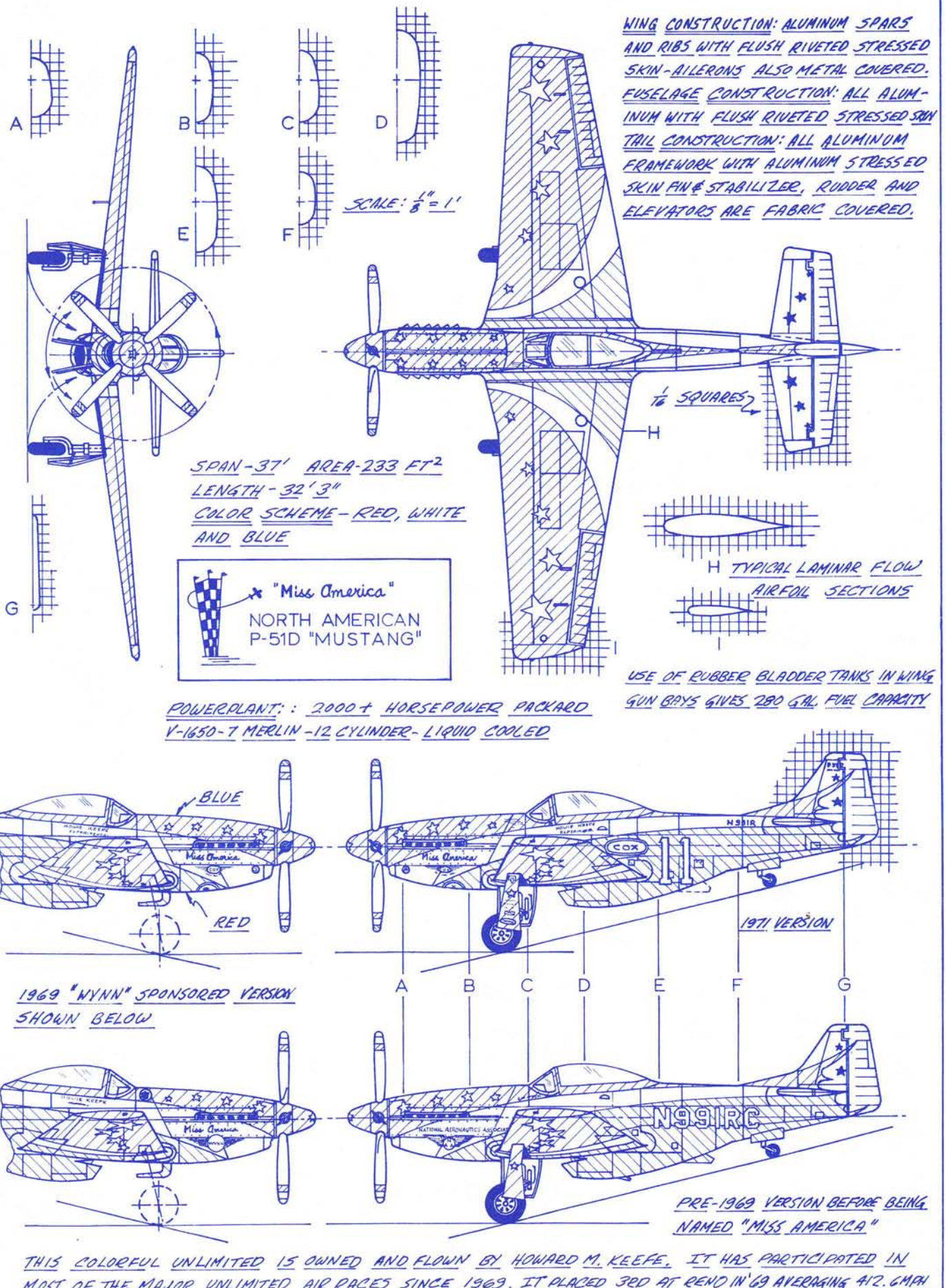
SPAN - CUT TO 33' WITH TIP PLATES
COLOR SCHEME: WHITE WITH BLACK NUMERALS
LENGTH - 36' GROSS WGHT. - 11,580 LBS, EMPTY 8390 LBS.

THE ABOVE TWO AIRCRAFT WERE FLOWN TO THOMPSON TROPHY RACE VICTORIES BY OWNER-PILOT COOK CLELAND. NO. 74 WON THE 1947 RACE AVERAGING 396.131 MPH, NO. 94 WON IN 1949 WITH AVERAGE SPEED OF 397.071 MPH


WING CONSTRUCTION: ALUMINUM SPARS & RIBS WITH FLUSH RIVETED STRESSED SKIN.
FUSELAGE CONSTRUCTION: ALL ALUMINUM WITH FLUSH RIVETED STRESSED SKIN.
TAIL CONSTRUCTION. ALL ALUMINUM FRAMEWORK WITH FLUSH RIVETED SKIN.
POWERPLANT: 2480 H.P. BRISTOL CENTAURUS '18' 18 CYLINDER RADIAL.
PROPELLER: 12'9" ROTAL FIVE BLADE - 3" TAKEN OFF EACH TIP.
SCALE: 1/8" = 1'
COLOR SCHEME: DARK GREEN TOP, LIGHT GRAY-GREEN BOTTOM. B&W STPS. RAF COCADES
1/16" SQUARES
TYPICAL AIRFOIL SECTIONS
A
B
C
D
E
F
G
H
I
'232' NUMERALS AND '0' ON FIN ARE BLACK
HAWKER 'SEA FURY'
SPAN - 38'4 3/4" AREA - 280 FT²
LENGTH - 34'8" WEIGHT EMPTY - 9240 LBS.
MAX SPEED - 460 MPH
SERVICE CEILING - 35,800'
AIRCRAFT REBUILT BY FRANK SANDERS FROM 2 SEA FURIES.
FLOWN BY SANDERS, PLANE WON 1971 CALIFORNIA 1000 AT 346.55 MPH.
0
232
ROYAL NAVY
N232
1971 VERSION
BLACK '87' USED IN 1970 CALIFORNIA 1000. WON 1ST AT 347.56 MPH
WHITE
MED. BLUE
DARK BLUE
RED
RED NUMERALS ORANGE BORDER BALANCE OF AIRCRAFT YELLOW
87
N878M
BURNT ORANGE
1970 VERSION
NOTE SMALL CANOPY. AIRCRAFT WON 1970 HARRAHS SILVER RACE AT 361.801 MPH
TOP VIEW SHOWING WINGS CLIPPED TO 32'4"
NUMBER 87 'MISS MERCED' IS OWNED AND FLOWN BY ORTHODONTIST, DR. WM. SHERMAN COOPER.



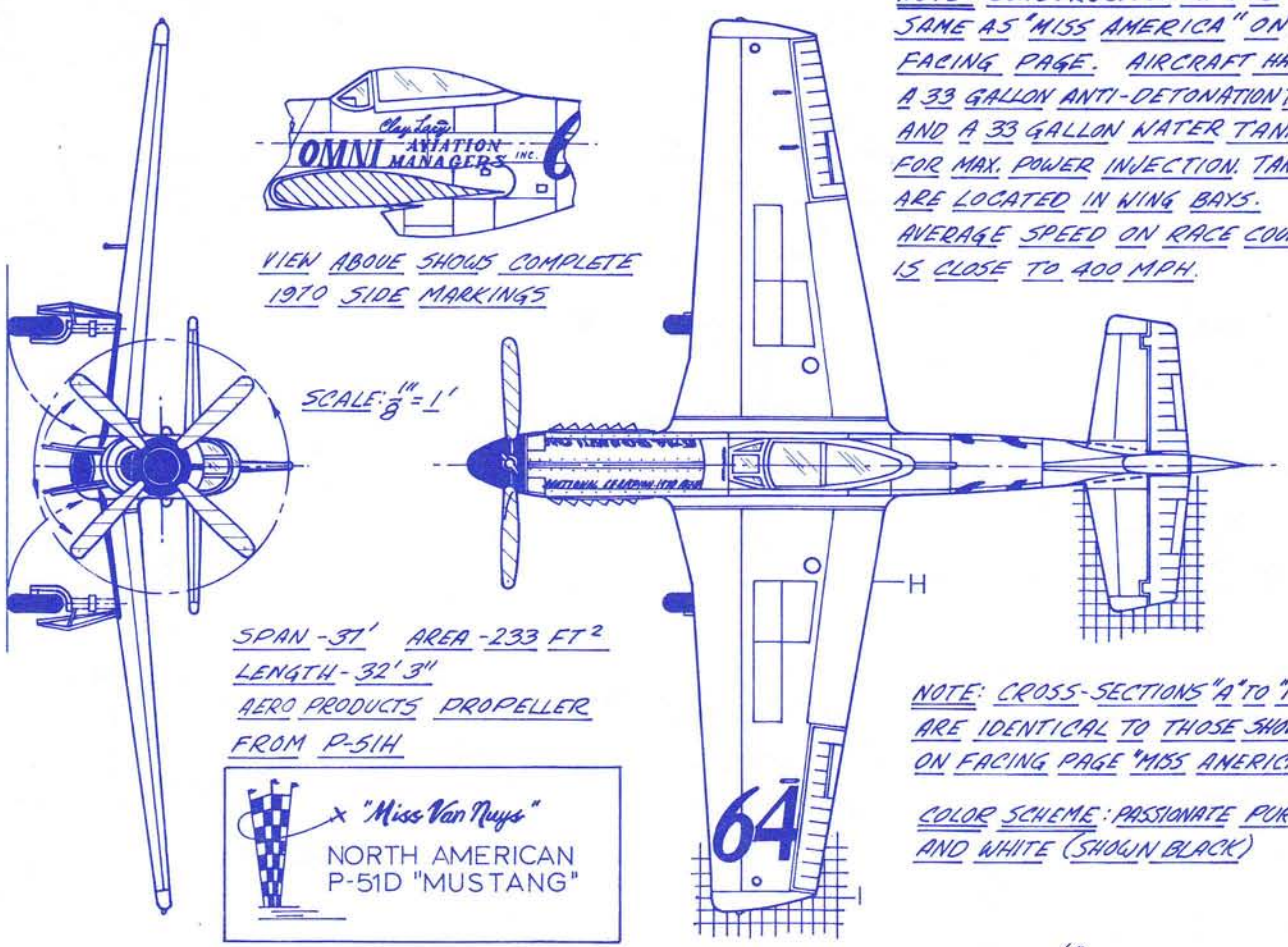
AIRCRAFT IS OWNED AND RACED BY GARY R. LEVITZ. CRAFT HAS COMPETED AT MIAMI AND THE RENO NATIONAL CHAMPIONSHIPS. CRAFT, WHILE FAST, HAS DIFFICULTY COMPETING WITH F-51'S & BEARCATS. CJ



THIS COLORFUL UNLIMITED IS OWNED AND FLOWN BY HOWARD M. KEEFE. IT HAS PARTICIPATED IN MOST OF THE MAJOR UNLIMITED AIR RACES SINCE 1969. IT PLACED 3RD AT RENO IN '69 AVERAGING 412. CMPH GH

NOTE: CONSTRUCTION DATA IS SAME AS "MISS AMERICA" ON FACING PAGE. AIRCRAFT HAS A 33 GALLON ANTI-DETONATION TANK AND A 33 GALLON WATER TANK FOR MAX. POWER INJECTION. TANKS ARE LOCATED IN WING BAYS. AVERAGE SPEED ON RACE COURSE IS CLOSE TO 400 MPH.

VIEW ABOVE SHOWS COMPLETE 1970 SIDE MARKINGS



SCALE: 1/8" = 1'

SPAN - 37' AREA - 233 FT²
LENGTH - 32' 3"
AERO PRODUCTS PROPELLER FROM P-51H

NORTH AMERICAN
P-51D "MUSTANG"

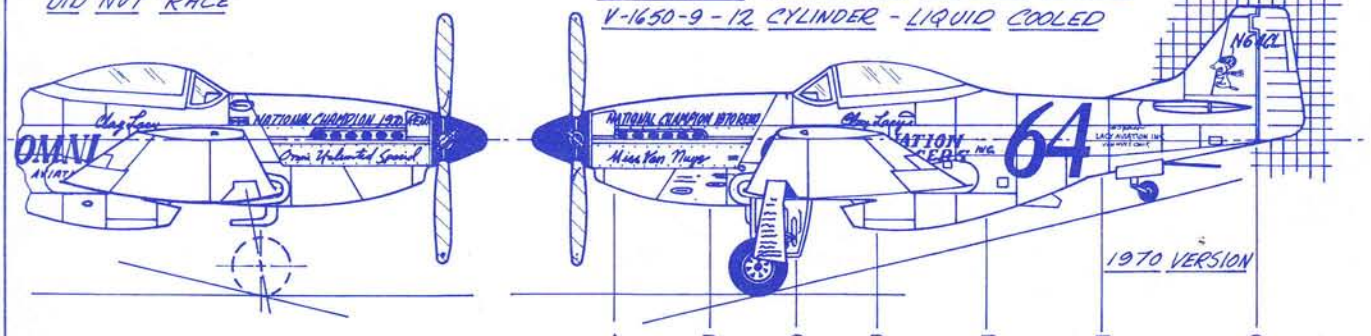
NOTE: CROSS-SECTIONS "A" TO "I" ARE IDENTICAL TO THOSE SHOWN ON FACING PAGE "MISS AMERICA"

COLOR SCHEME: PASSIONATE PURPLE AND WHITE (SHOWN BLACK)

1/16" SQUARES

1971 VERSION SHOWN BELOW DID NOT RACE

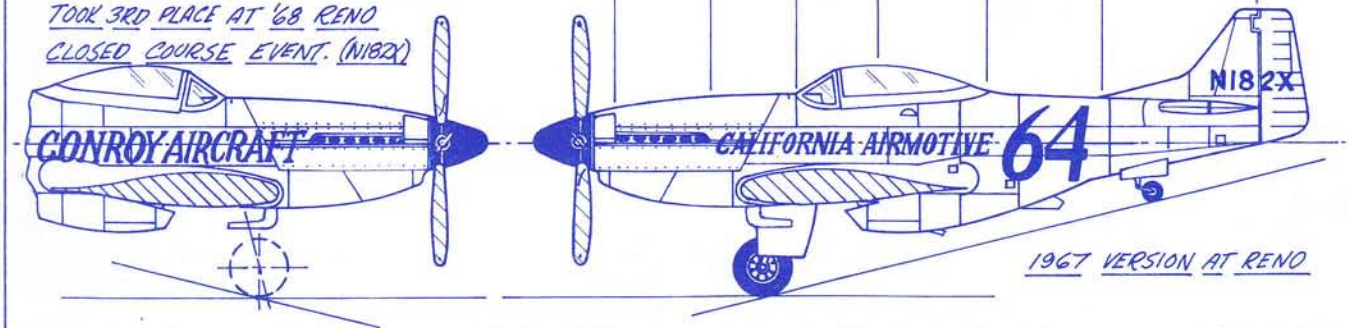
POWERPLANT: 2000+ H.P. PACKARD MERLIN V-1650-9 - 12 CYLINDER - LIQUID COOLED



1970 VERSION

A B C D E F G

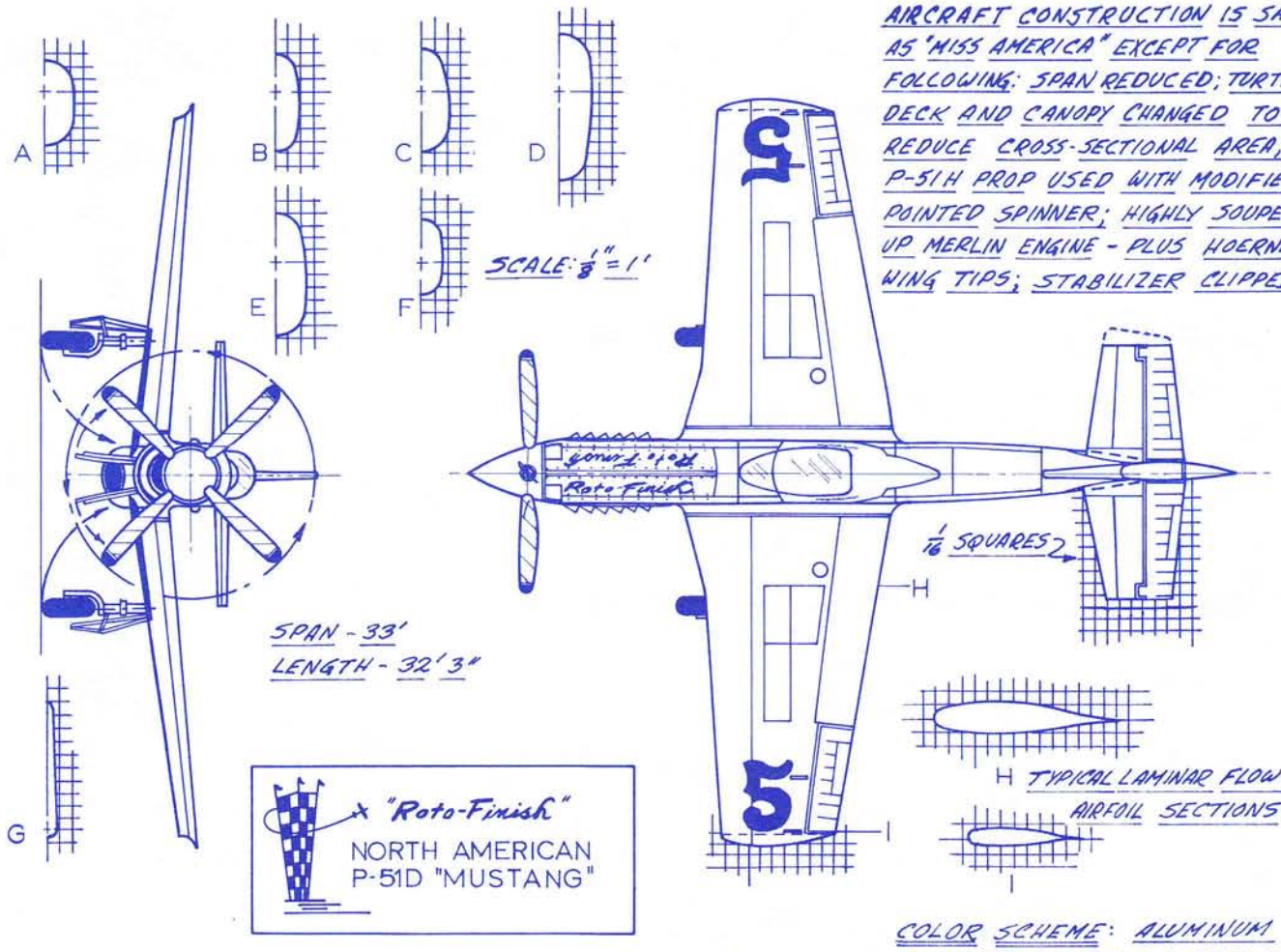
1968 VERSION SHOWN BELOW TOOK 3RD PLACE AT '68 RENO CLOSED COURSE EVENT. (N182X)



1967 VERSION AT RENO

AIRCRAFT IS OWNED AND FLOWN BY CLAY LACY. AIRCRAFT HAS BEEN FLOWN IN ALL UNLIMITED RACES FROM 1964 UNTIL 1971 WHEN MAGNETO FAILURE MADE QUALIFICATION IMPOSSIBLE

AIRCRAFT CONSTRUCTION IS SAME AS "MISS AMERICA" EXCEPT FOR FOLLOWING: SPAN REDUCED; TURTLE DECK AND CANOPY CHANGED TO REDUCE CROSS-SECTIONAL AREA; P-51H PROP USED WITH MODIFIED POINTED SPINNER; HIGHLY SOUPED UP MERLIN ENGINE - PLUS HOERNER WING TIPS; STABILIZER CLIPPED



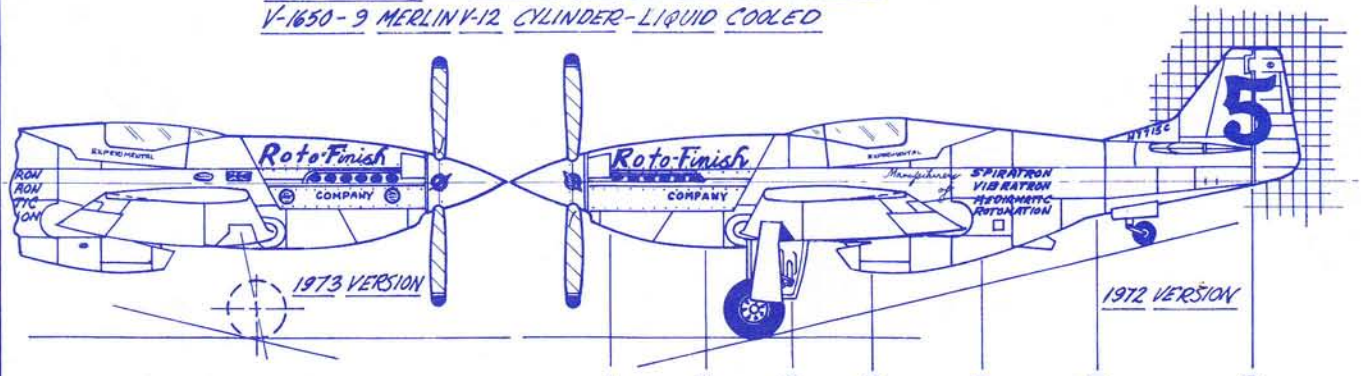
SPAN - 33'
LENGTH - 32'3"

H TYPICAL LAMINAR FLOW AIRFOIL SECTIONS

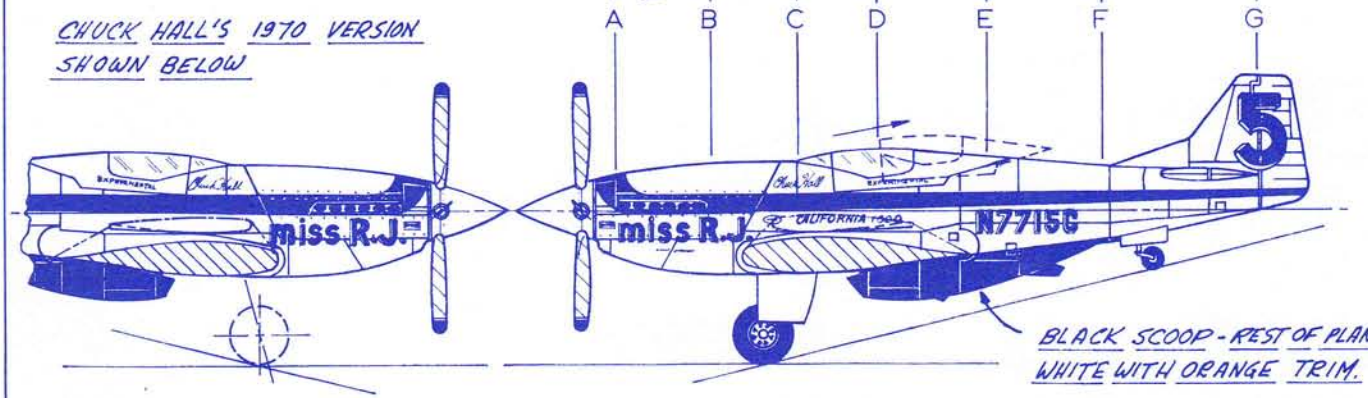
"Roto-Finish"
NORTH AMERICAN
P-51D "MUSTANG"

COLOR SCHEME: ALUMINUM SILVER PAINT - BLACK MARKINGS

POWERPLANT: 2000+ HORSEPOWER PACKARD V-1650-9 MERLIN V-12 CYLINDER-LIQUID COOLED

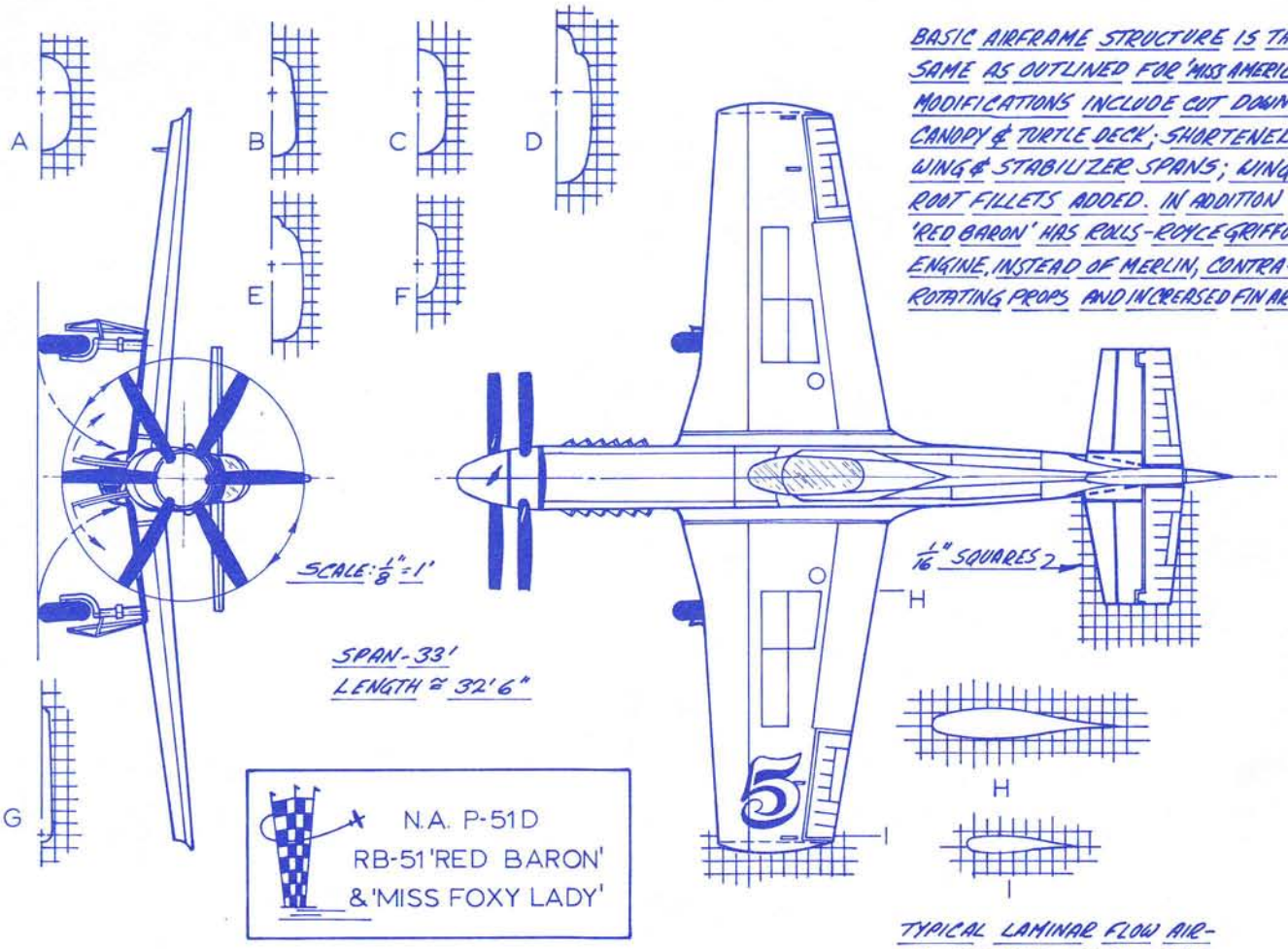


CHUCK HALL'S 1970 VERSION SHOWN BELOW



BLACK SCOOP - REST OF PLANE WHITE WITH ORANGE TRIM.

AIRCRAFT WAS PURCHASED AND FLOWN BY GUNTHER W. BALZ AT RENO IN 1971 AND 1972 HE WON THE UNLIMITED EVENT IN 1972 @ 416.19 MPH.

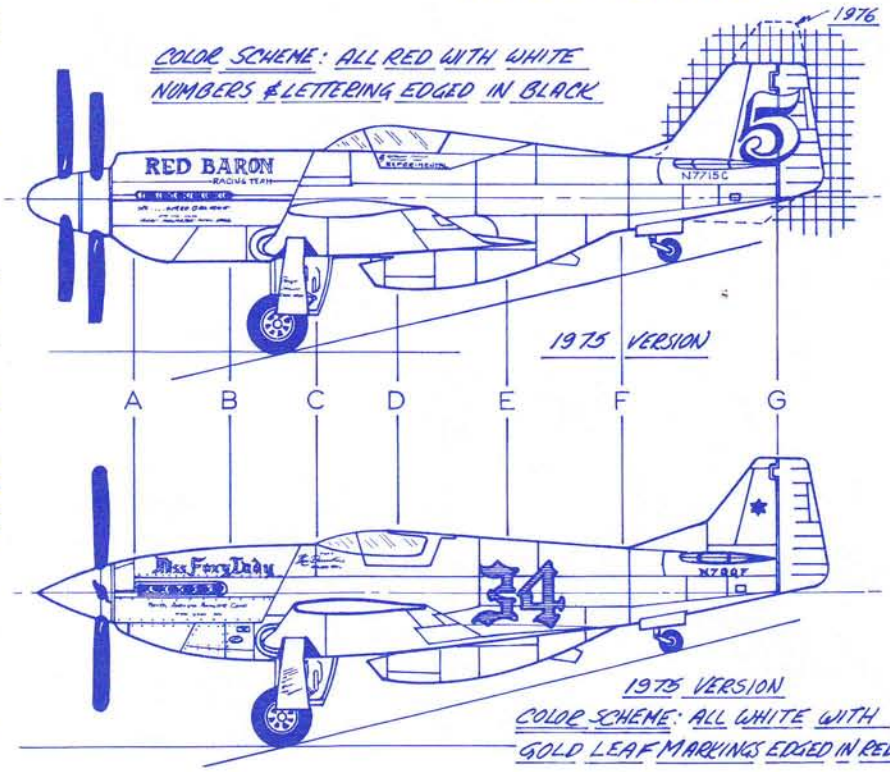


BASIC AIRFRAME STRUCTURE IS THE SAME AS OUTLINED FOR 'MISS AMERICA.' MODIFICATIONS INCLUDE CUT DOWN CANOPY & TURTLE DECK; SHORTENED WING & STABILIZER SPANS; WING ROOT FILLETS ADDED. IN ADDITION 'RED BARON' HAS ROLLS-ROYCE GRIFFON ENGINE, INSTEAD OF MERLIN, CONTRA-ROTATING PROPS AND INCREASED FIN AREA.

SPAN - 33'
LENGTH ≈ 32'6"

TYPICAL LAMINAR FLOW AIR-FOIL SECTIONS SHOWN ABOVE.

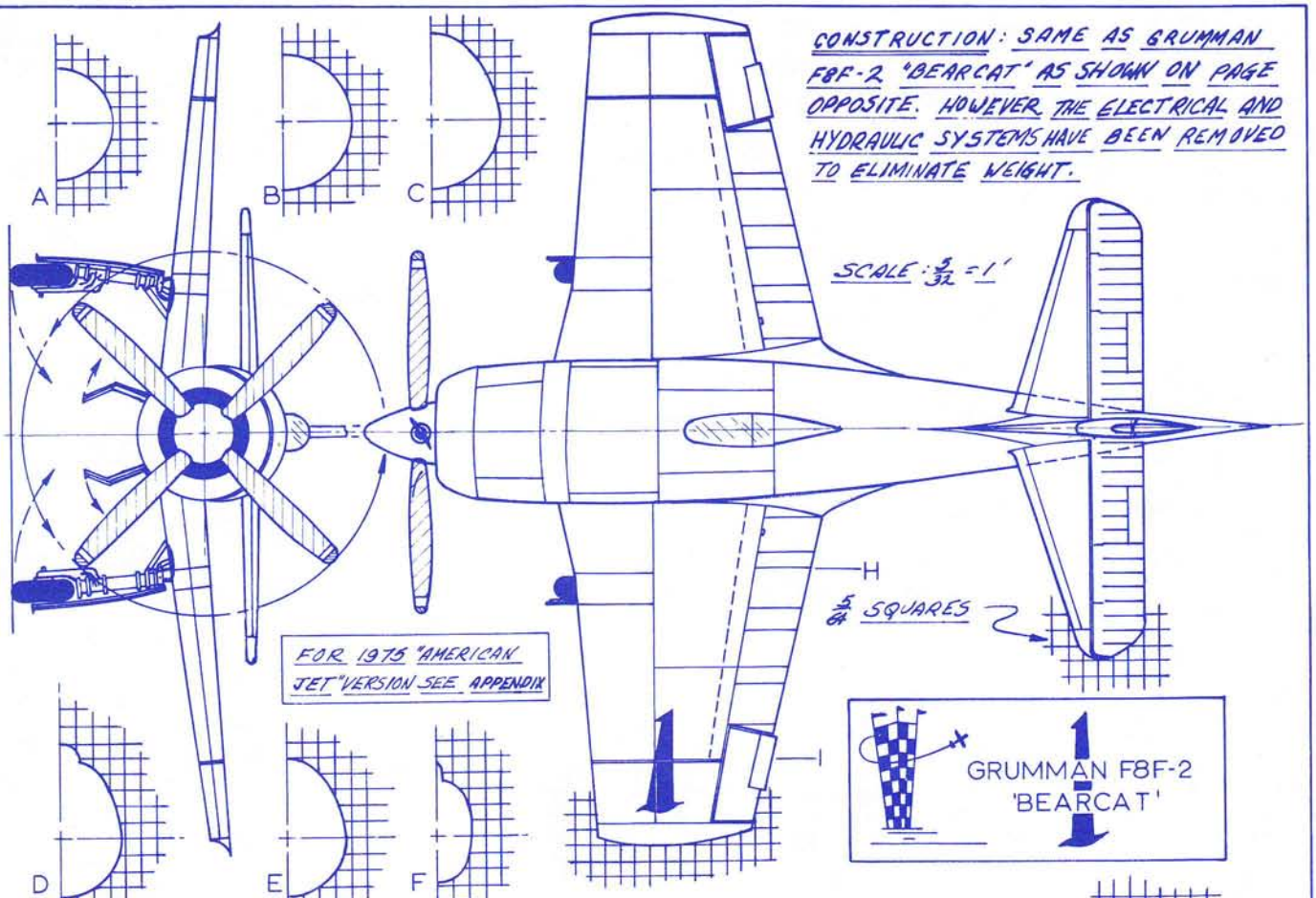
THESE TWO HIGHLY MODIFIED P51D "MUSTANGS" ARE THE LATEST IN THE CONTINUING EFFORT TO GAIN EVER MORE PERFORMANCE OUT OF THE FAMOUS WORLD WAR II FIGHTER. THE PROTOTYPE 'MUSTANG' ROARED DOWN THE RUNWAY OCTOBER 26, 1940, OVER 35 YEARS AGO, ON ITS MAIDEN FLIGHT. ORDERED BY THE BRITISH FOR THE RAF, THE USAAF WANTED NO PART OF IT AT THE TIME. LATER, THE P-51 WAS RATED AS THE BEST OF THE WORLD WAR II FIGHTERS AND "THE MOST AERO-DYNAMICALLY PERFECT PURSUIT PLANE IN EXISTANCE." THE MUST-ANG RETURNED TO COMBAT DUR-ING THE KOREAN WAR THEN STAYED ON TO SERVE IN MANY NATIONAL GUARD & RESERVE SQUADRONS THRU 1955. P51'S WON ALL THE POST WAR BENDIX TROPHY RACES - 1946 THRU 1949



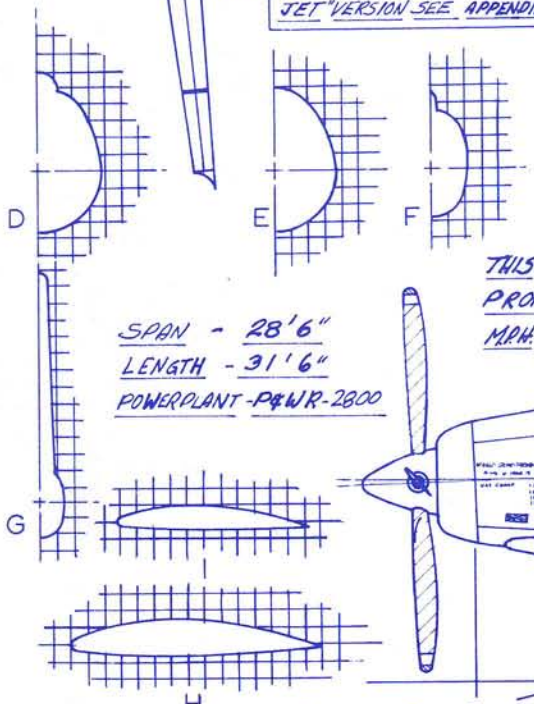
AT MOJAVE '75 ROY McCLAIN QUALIFIED #5 @ 401.52 M.P.H. KEN BURNSTINE, #34, WAS 7TH @ 355.97 DUE TO CUT PYLON. AT RENO 1975 McCLAIN FLEW TO 2ND PLACE @ 427.31 MPH IN CHAMPIONSHIP RACE. BURNSTINE (34) PLACED 4TH.

CONSTRUCTION: SAME AS GRUMMAN F8F-2 'BEARCAT' AS SHOWN ON PAGE OPPOSITE. HOWEVER THE ELECTRICAL AND HYDRAULIC SYSTEMS HAVE BEEN REMOVED TO ELIMINATE WEIGHT.

SCALE: $\frac{3}{32}$ = 1'

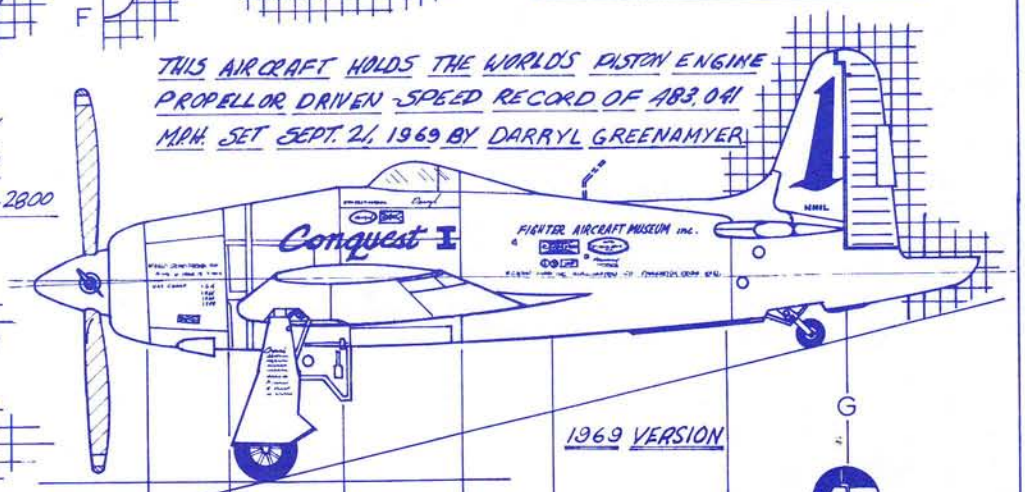


FOR 1975 "AMERICAN JET" VERSION SEE APPENDIX

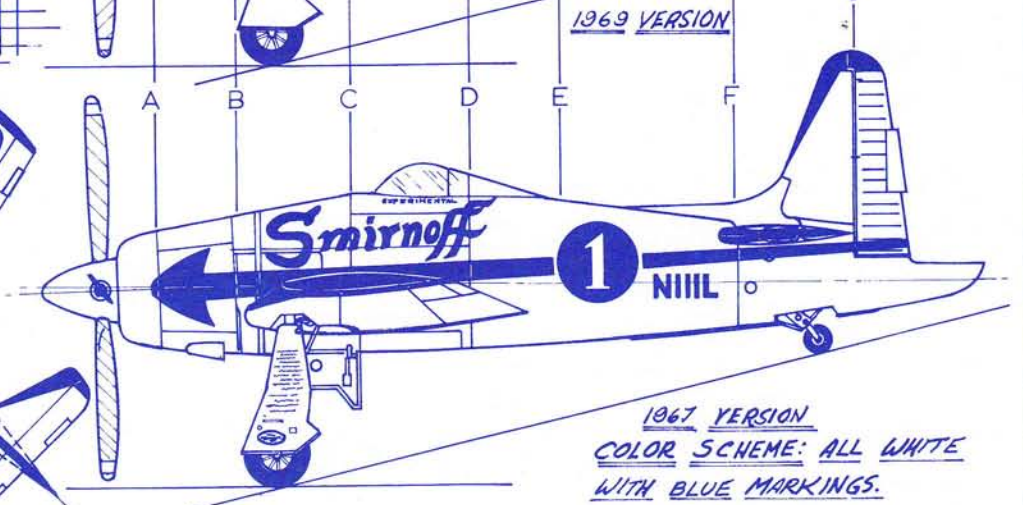


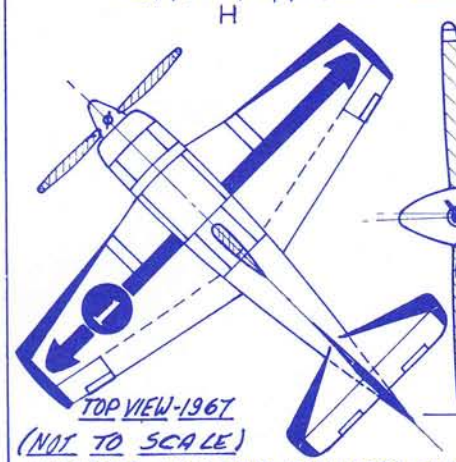
THIS AIRCRAFT HOLDS THE WORLDS PISTON ENGINE PROPELLOR DRIVEN SPEED RECORD OF 483.041 M.P.H. SET SEPT. 21, 1969 BY DARRYL GREENAMYER.

SPAN - 28'6"
LENGTH - 31'6"
POWERPLANT - P&WR-2800



1969 VERSION

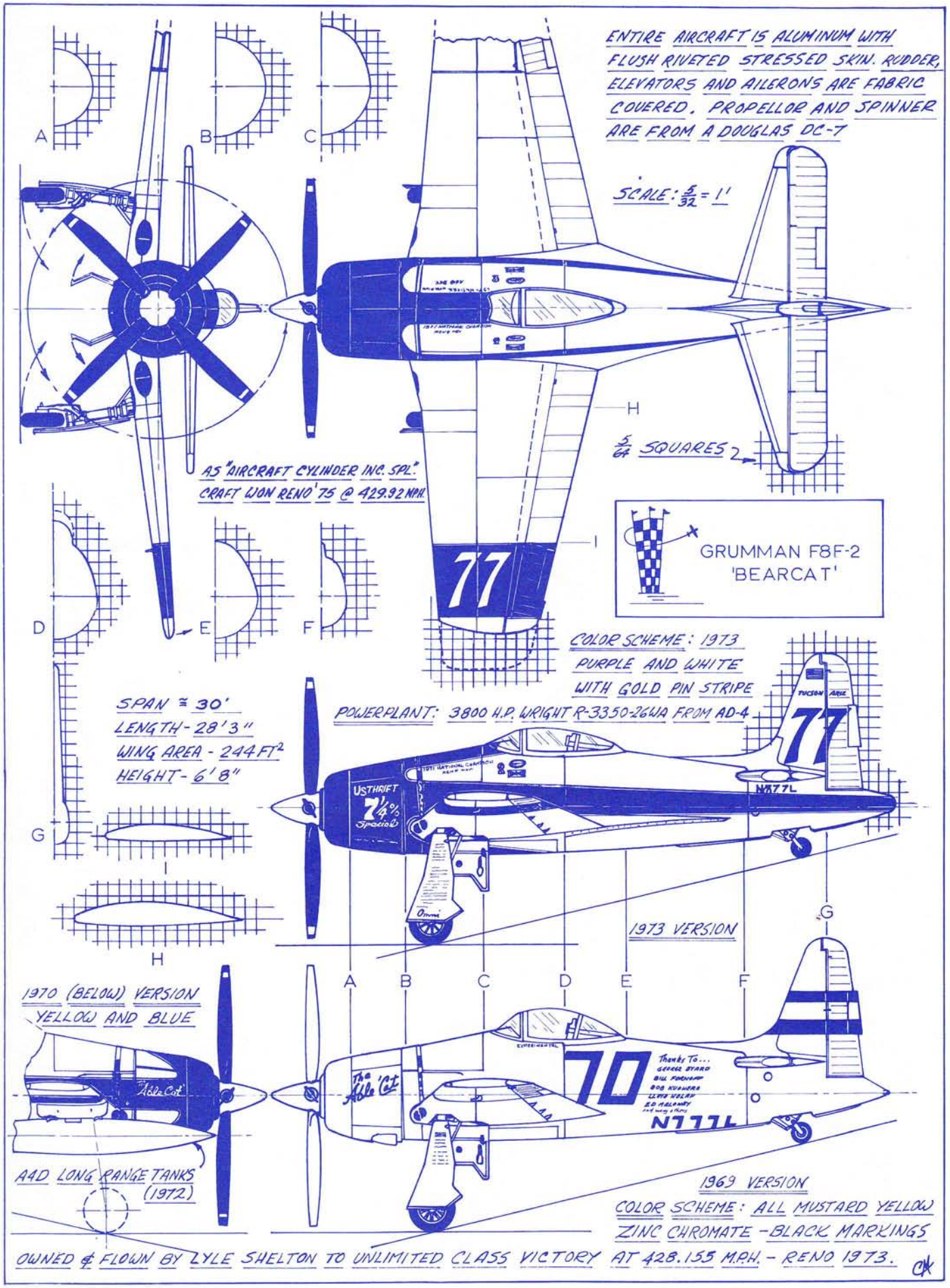


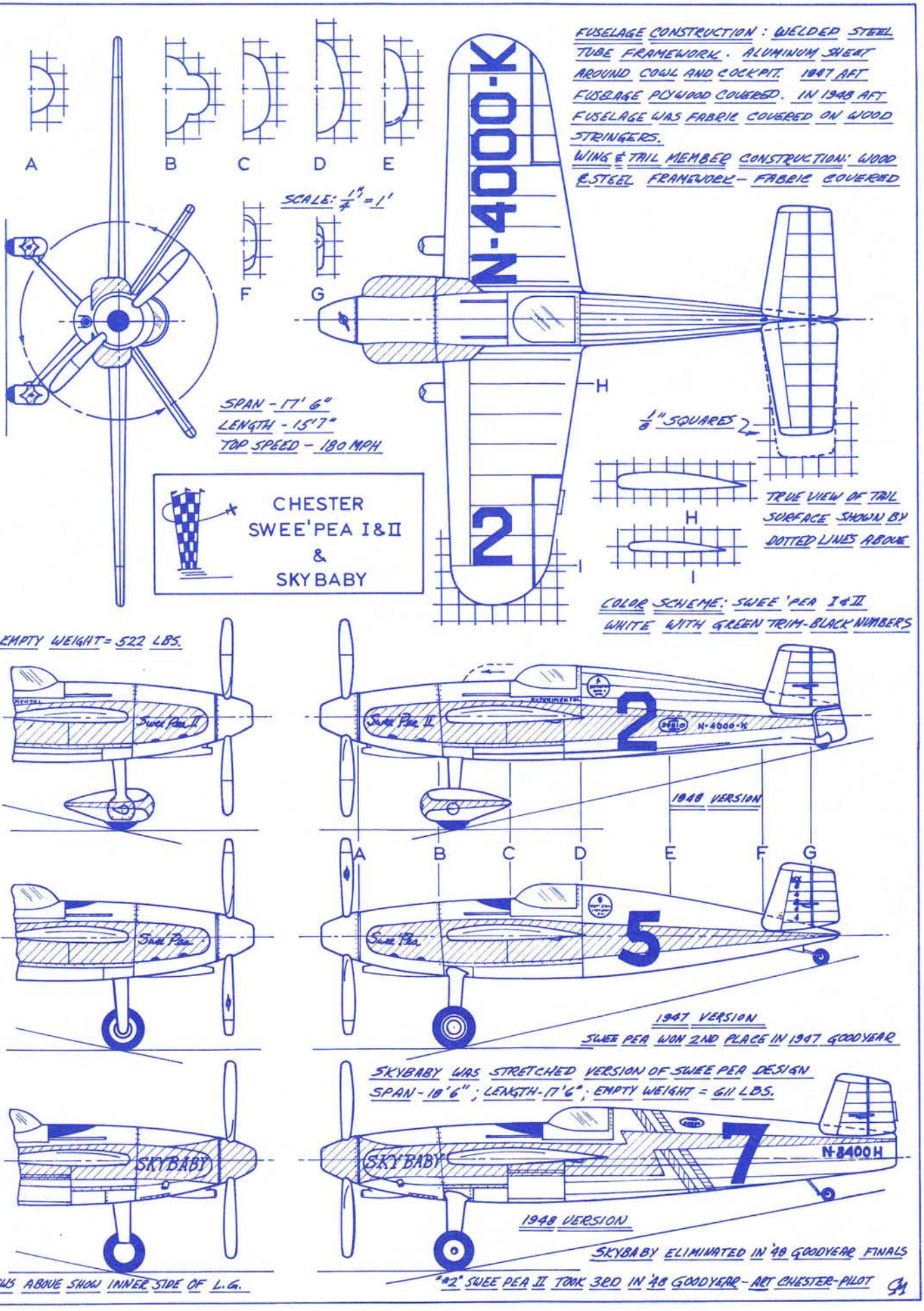


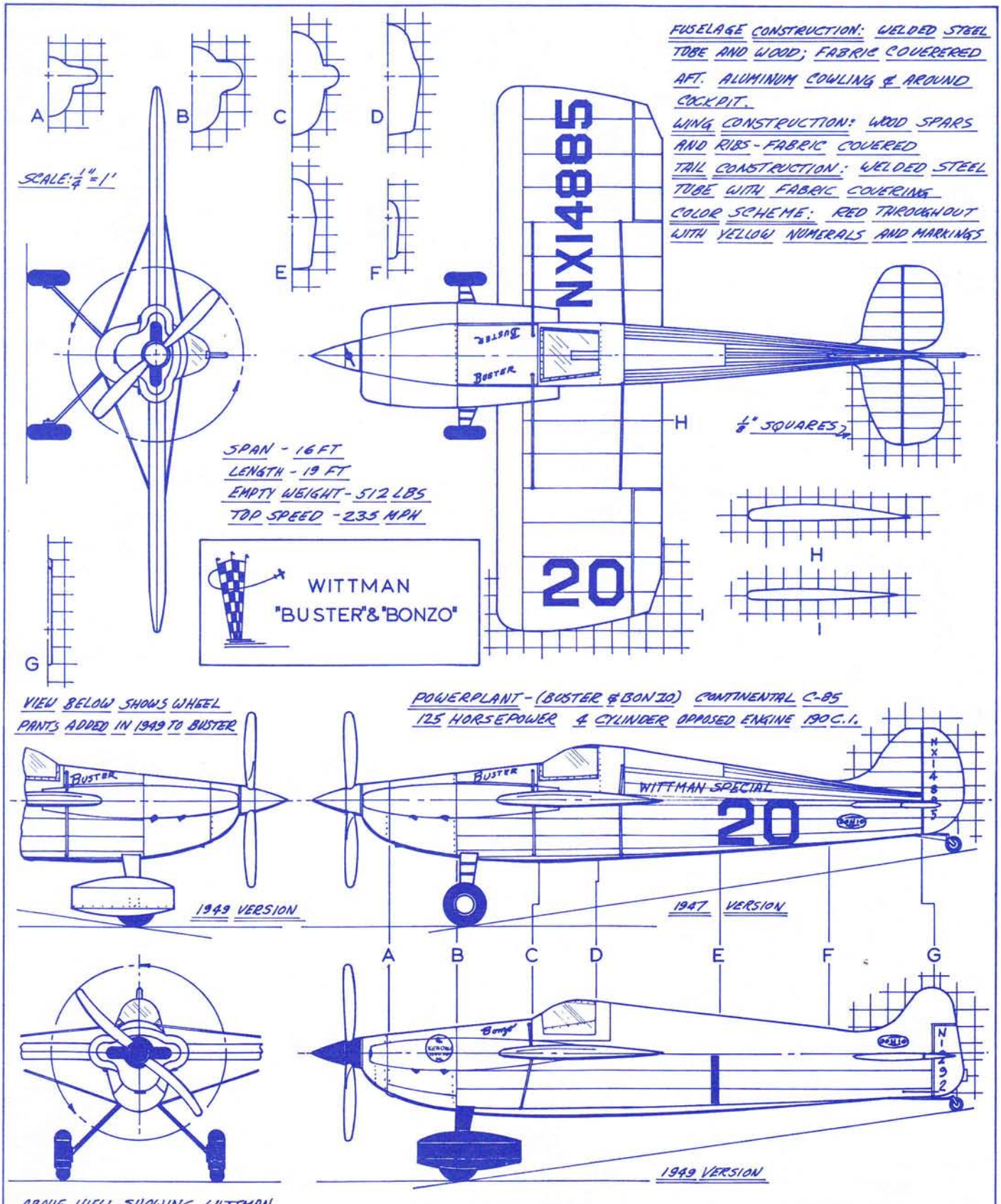
TOP VIEW-1967
(NOT TO SCALE)

1967 VERSION
COLOR SCHEME: ALL WHITE WITH BLUE MARKINGS.

AIRCRAFT WON RENO UNLIMITED CLASS IN 1965, 1966, 1967, 1968, 1969 & 1971 - PILOT WAS DARRYL GREENAMYER. CK


ENTIRE AIRCRAFT IS ALUMINUM WITH FLUSH RIVETED STRESSED SKIN. RUDDER, ELEVATORS AND AILERONS ARE FABRIC COVERED. PROPELLOR AND SPINNER ARE FROM A DOUGLAS DC-7
SCALE: 5/32 = 1'
5/64 SQUARES
AS "AIRCRAFT CYLINDER INC. SPL." CRAFT WON RENO '75 @ 429.92 MPH.
GRUMMAN F8F-2 'BEARCAT'
COLOR SCHEME: 1973 PURPLE AND WHITE WITH GOLD PIN STRIPE
SPAN = 30'
LENGTH - 28'3"
WING AREA - 244 FT²
HEIGHT - 6'8"
POWERPLANT: 3800 H.P. WRIGHT R-3350-26WA FROM AD-4
1973 VERSION
1970 (BELOW) VERSION YELLOW AND BLUE
A B C D E F G H I
A&D LONG RANGE TANKS (1972)
1969 VERSION
COLOR SCHEME: ALL MUSTARD YELLOW ZINC CHROMATE - BLACK MARKINGS
OWNED & FLOWN BY LYLE SHELTON TO UNLIMITED CLASS VICTORY AT 428.155 M.P.H. - RENO 1973.


FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK. ALUMINUM SHEET AROUND COWL AND COCKPIT. 1947 AFT FUSELAGE PLYWOOD COVERED. IN 1948 AFT FUSELAGE WAS FABRIC COVERED ON WOOD STRINGERS.
WING & TAIL MEMBER CONSTRUCTION: WOOD & STEEL FRAMEWORK – FABRIC COVERED
A B C D E F G H I
SCALE: 1" = 1'
N-4000-K
2
SPAN - 17' 6"
LENGTH - 15'7"
TOP SPEED - 180 MPH
CHESTER SWEE'PEA I&II & SKYBABY
1/8" SQUARES
TRUE VIEW OF TAIL SURFACE SHOWN BY DOTTED LINES ABOVE
COLOR SCHEME: SWEE 'PEA I&II WHITE WITH GREEN TRIM-BLACK NUMBERS
EMPTY WEIGHT = 522 LBS.
Swee Pea II
1948 VERSION
Swee Pea
5
1947 VERSION
SWEE PEA WON 2ND PLACE IN 1947 GOODYEAR
SKYBABY WAS STRETCHED VERSION OF SWEE PEA DESIGN
SPAN - 18'6"; LENGTH - 17'6"; EMPTY WEIGHT = 611 LBS.
SKYBABY
7
N-8400H
1948 VERSION
SKYBABY ELIMINATED IN '48 GOODYEAR FINALS
VIEWS ABOVE SHOW INNER SIDE OF L.G.
"#2" SWEE PEA II TOOK 3RD IN '48 GOODYEAR – ART CHESTER-PILOT



FUSELAGE CONSTRUCTION: WELDED STEEL TUBE AND WOOD; FABRIC COVERED AFT. ALUMINUM COWLING & AROUND COCKPIT.
WING CONSTRUCTION: WOOD SPARS AND RIBS - FABRIC COVERED
TAIL CONSTRUCTION: WELDED STEEL TUBE WITH FABRIC COVERING
COLOR SCHEME: RED THROUGHOUT WITH YELLOW NUMERALS AND MARKINGS

SPAN - 16 FT
LENGTH - 19 FT
EMPTY WEIGHT - 512 LBS
TOP SPEED - 235 MPH

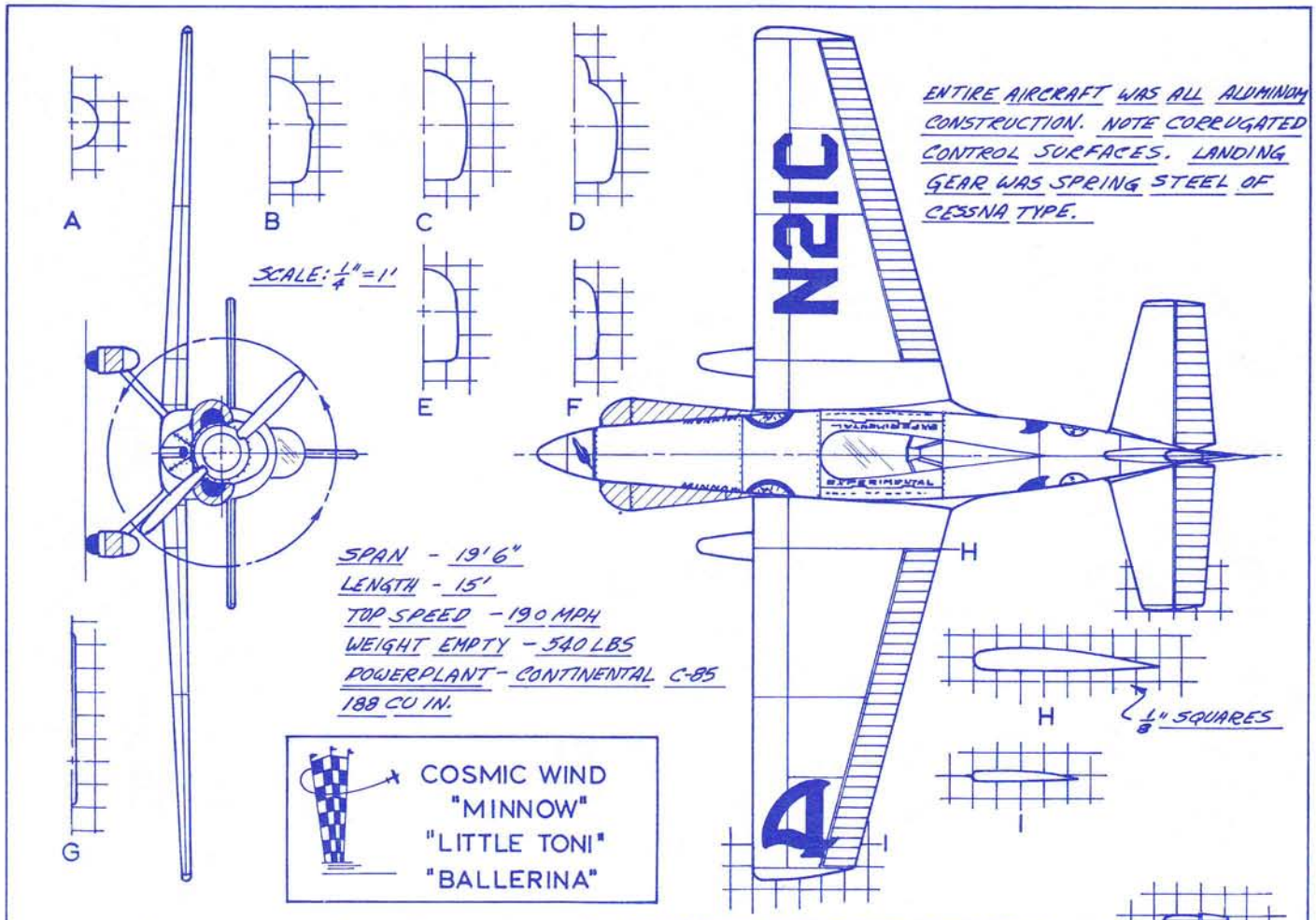
VIEW BELOW SHOWS WHEEL PANTS ADDED IN 1949 TO BUSTER

POWERPLANT - (BUSTER & BONZO) CONTINENTAL C-85 125 HORSEPOWER 4 CYLINDER OPPOSED ENGINE 190 C.I.

ABOVE VIEW SHOWING WITTMAN SCIMITAR PROP WHICH CHANGED PITCH IN FLIGHT

ABOVE VIEW SHOWS BONZO - SISTER SHIP TO BUSTER. SPAN - 15'4"
LENGTH - 19' EMPTY WEIGHT - 509 LBS. TOP SPEED - 235 MPH
COLOR SCHEME: YELLOW WITH RED NUMERALS & MARKINGS

FLOWN BY WILLIAM BRENNAND BUSTER #20 WON 1947 AND 1949 GOODYEAR TROPHY RACES, ALSO THE 1948 CONTINENTAL TROPHY RACE. AIRCRAFT NOW MAY BE SEEN IN THE SMITHSONIAN INSTITUTION HALL OF FAMOUS AIRCRAFT.
BONZO, FLOWN BY OWNER, DESIGNER STEVE WITTMAN WON THE CONTINENTAL TROPHY IN 1949, 1950 & 1952.
IN 1948 WITTMAN PLACED SECOND IN GOODYEAR TROPHY RACE AT 168.69 MILES PER HOUR.

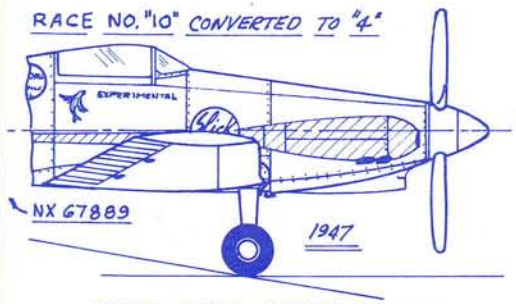


ENTIRE AIRCRAFT WAS ALL ALUMINUM CONSTRUCTION. NOTE CORRUGATED CONTROL SURFACES. LANDING GEAR WAS SPRING STEEL OF CESSNA TYPE.

SPAN - 19'6"
LENGTH - 15'
TOP SPEED - 190 MPH
WEIGHT EMPTY - 540 LBS
POWERPLANT - CONTINENTAL C-85
188 CU IN.

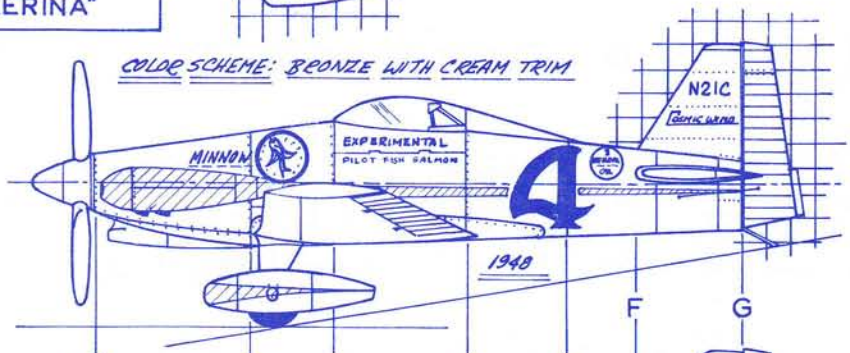
COSMIC WIND
"MINNOW"
"LITTLE TONI"
"BALLERINA"

RACE NO. "10" CONVERTED TO "4"



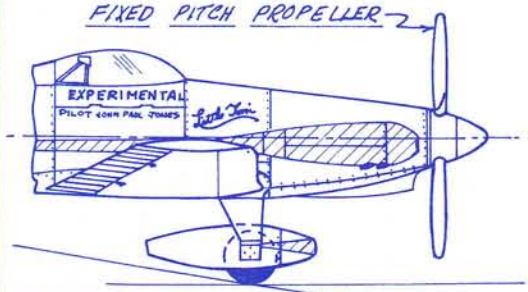
1947

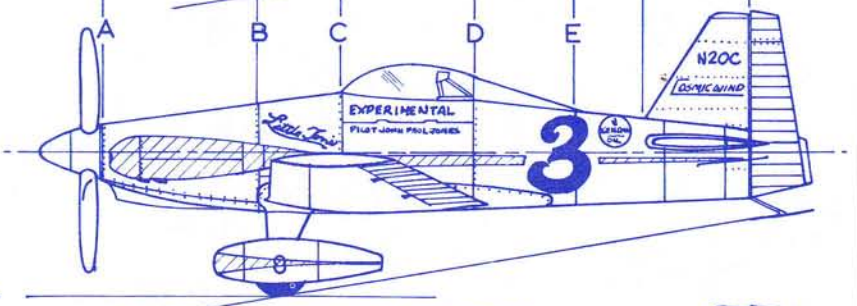
COLOR SCHEME: BRONZE WITH CREAM TRIM



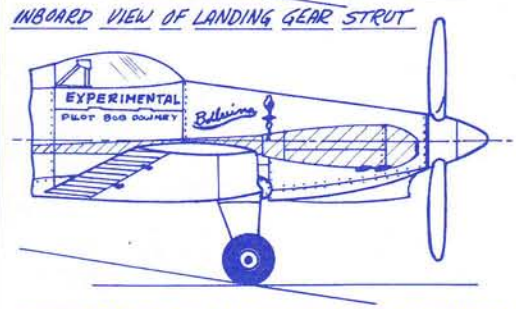
1948

FIXED PITCH PROPELLER

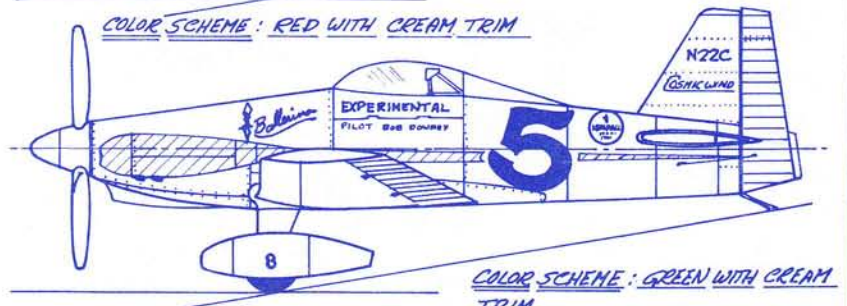




INBOARD VIEW OF LANDING GEAR STRUT

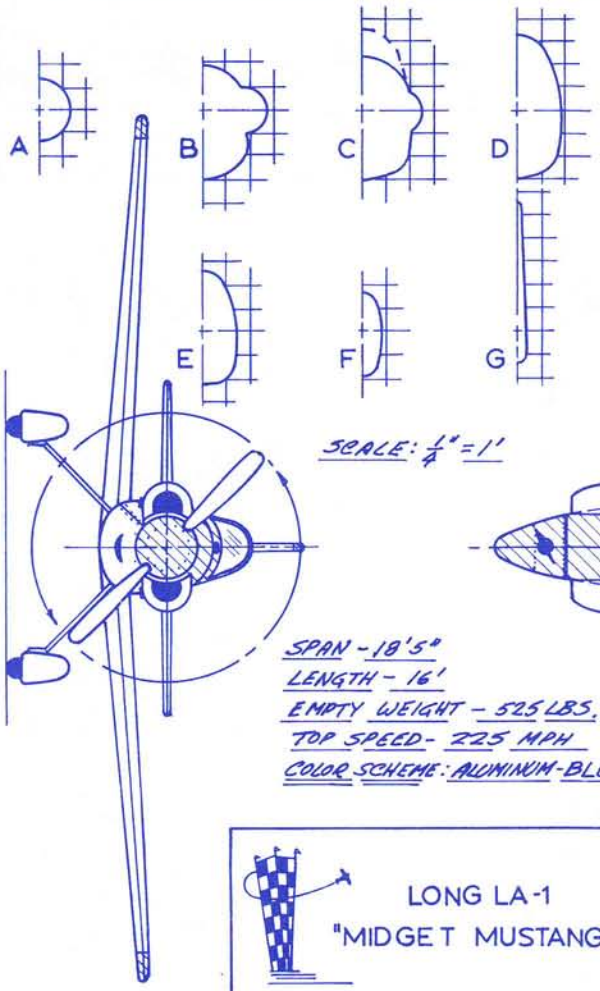


COLOR SCHEME: RED WITH CREAM TRIM



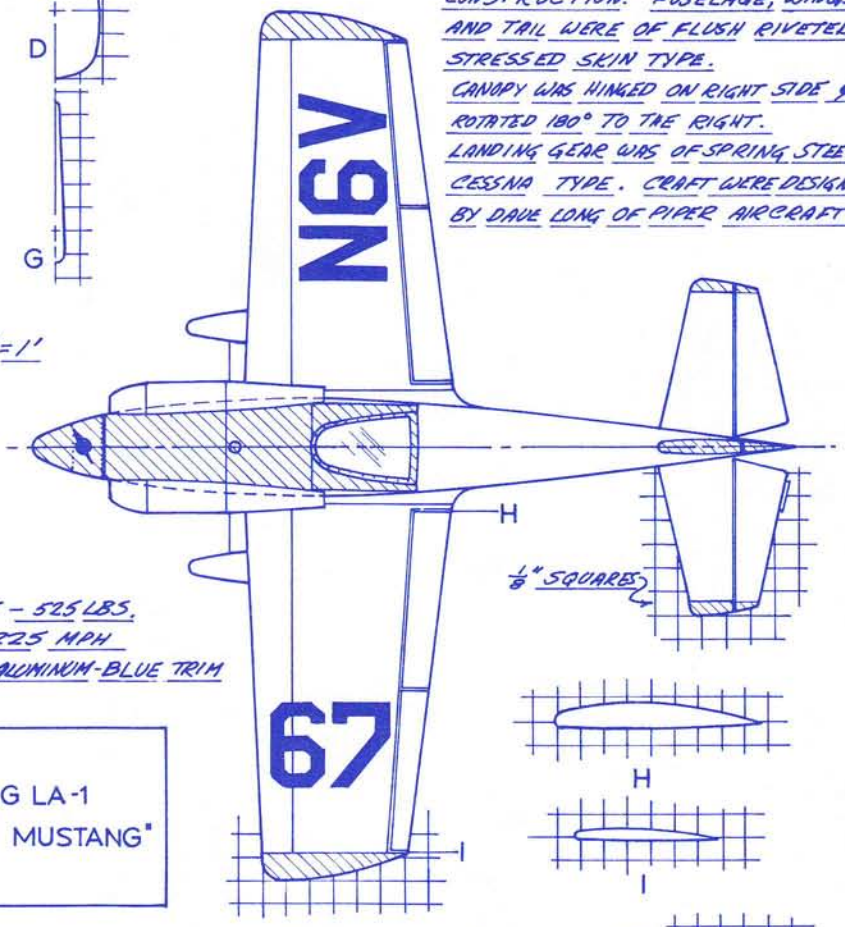
COLOR SCHEME: GREEN WITH CREAM TRIM.

NUMBER "4" FLOWN BY HERMAN "FISH" SALMON TO 1ST PLACE IN 1948 GOODYEAR TROPHY RACE. NUMBER "3" WAS 5TH



SCALE: 1/4" = 1'

ENTIRE AIRCRAFT WAS ALL ALUMINUM CONSTRUCTION. FUSELAGE, WINGS AND TAIL WERE OF FLUSH RIVETED STRESSED SKIN TYPE. CANOPY WAS HINGED ON RIGHT SIDE & ROTATED 180° TO THE RIGHT. LANDING GEAR WAS OF SPRING STEEL CESSNA TYPE. CRAFT WERE DESIGNED BY DAVE LONG OF PIPER AIRCRAFT

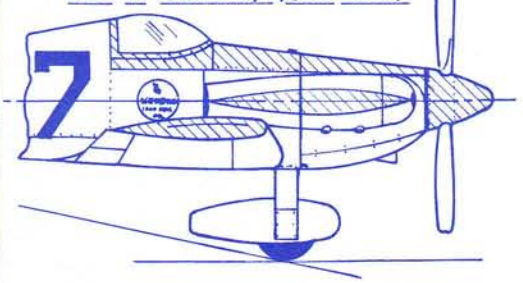


1/8" SQUARES

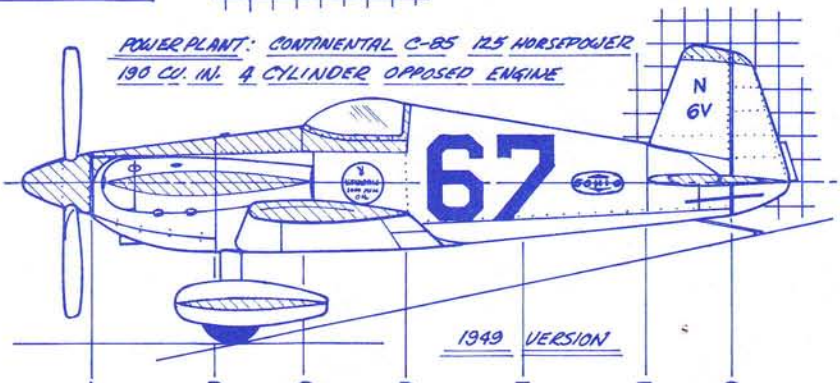
SPAN - 18'5"
LENGTH - 16'
EMPTY WEIGHT - 525 LBS.
TOP SPEED - 225 MPH
COLOR SCHEME: ALUMINUM-BLUE TRIM

LONG LA-1
"MIDGET MUSTANG"

VIEW BELOW SHOWS INBOARD VIEW OF LANDING GEAR STRUT



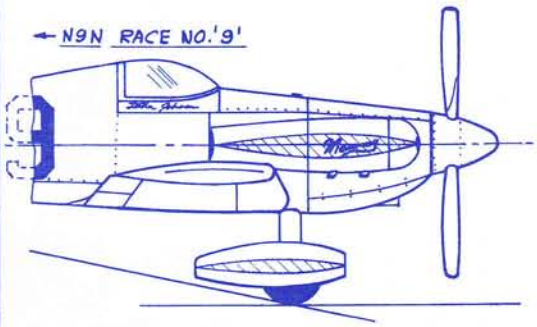
POWERPLANT: CONTINENTAL C-85 125 HORSEPOWER 190 CU. IN. 4 CYLINDER OPPOSED ENGINE

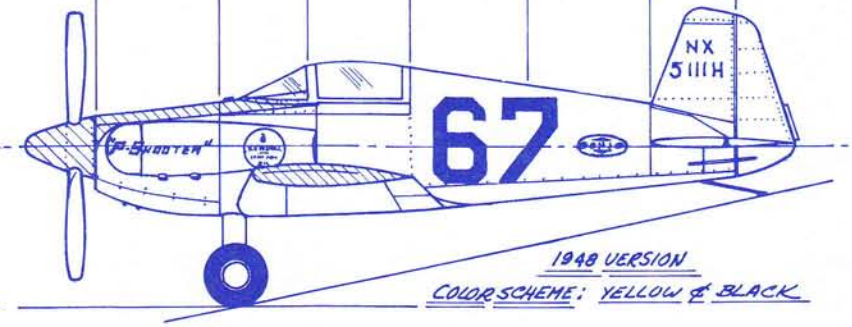


1949 VERSION

A B C D E F G

← N9N RACE NO. '9'

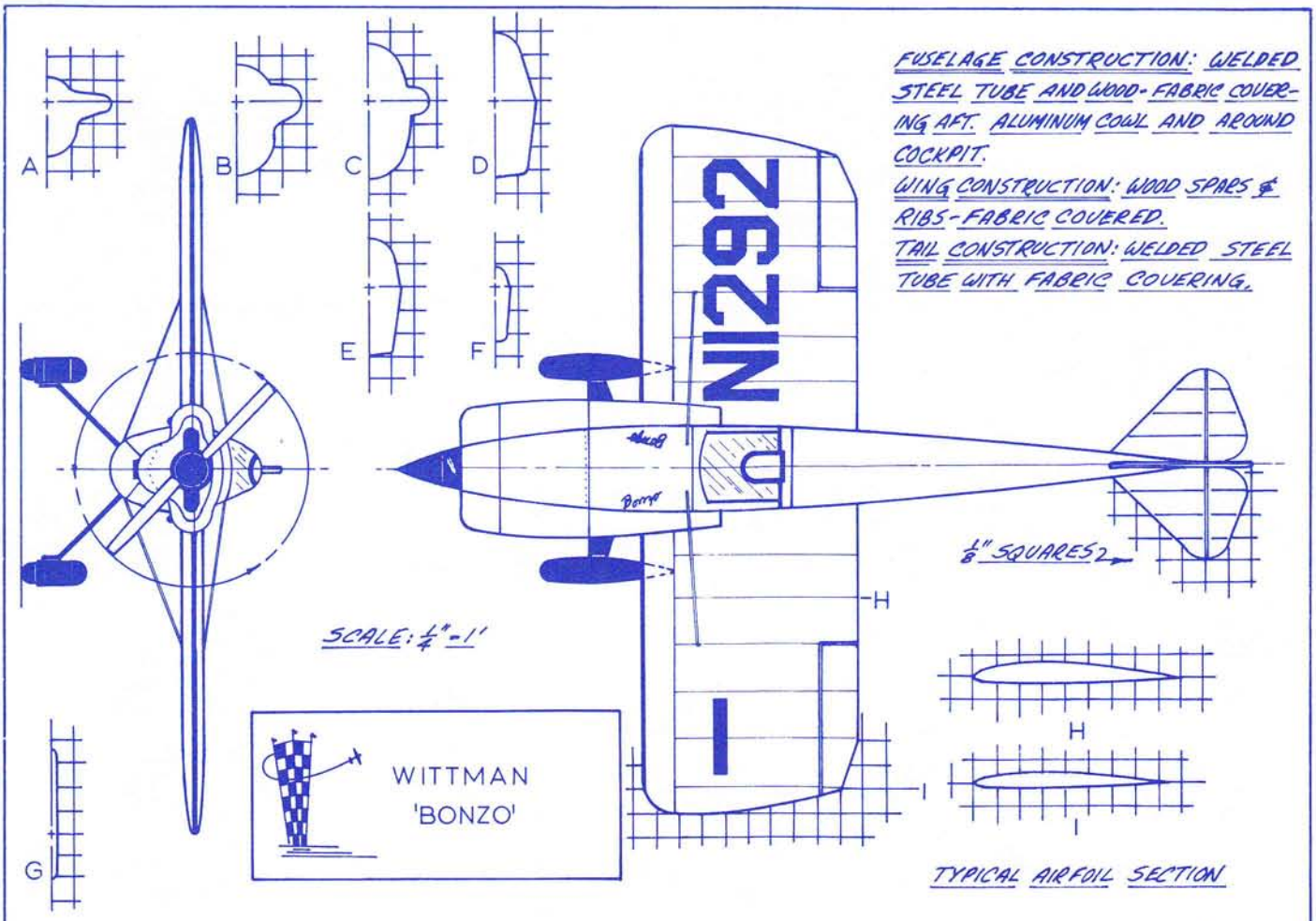




1948 VERSION
COLOR SCHEME: YELLOW & BLACK

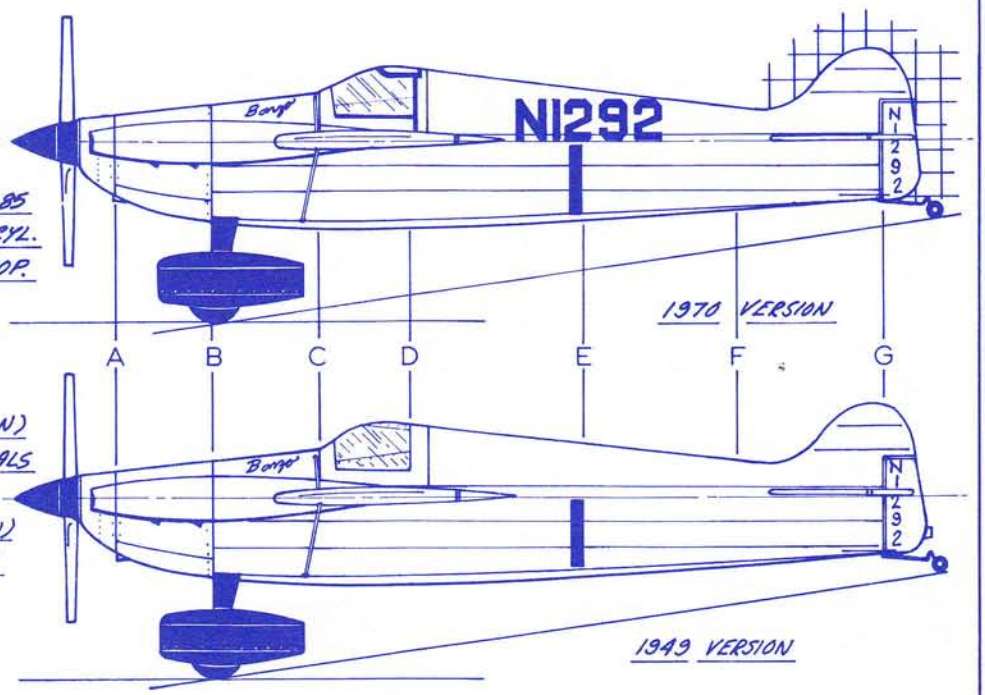
LONG-JOHNSON "MAMMY" A SISTER SHIP OF "P-SHOOTER" FLOWN BY LUTHER JOHNSON. NOTE DIFFERENCE IN WHEEL PANT SHAPE. JOHNSON ALSO OWNED "67" "P-SHOOTER"

AIRCRAFT HAS BEEN RACED FREQUENTLY SINCE BEING BUILT IN 1947. SHIP WON 4TH PLACE IN 1949 CONTINENTAL MOTORS RACE, FLOWN BY DAVE LONG AT AN AVERAGE SPEED OF 166.763 MILES PER HOUR. - ALSO 8TH PLACE IN 1949 GOODYEAR AT 167.308 MPH



FUSELAGE CONSTRUCTION: WELDED STEEL TUBE AND WOOD-FABRIC COVERING AFT. ALUMINUM COWL AND AROUND COCKPIT.
WING CONSTRUCTION: WOOD SPARS & RIBS-FABRIC COVERED.
TAIL CONSTRUCTION: WELDED STEEL TUBE WITH FABRIC COVERING.

LENGTH - 19'
SPAN - 15' 4"
EMPTY WEIGHT - 508 LBS.
TOP SPEED - 240 M.P.H.
POWERPLANT: CONTINENTAL C-85 125 HORSEPOWER - 190 C.I. - 4 CYL.
IN 1948 CRAFT HAD SCIMITAR PROP.

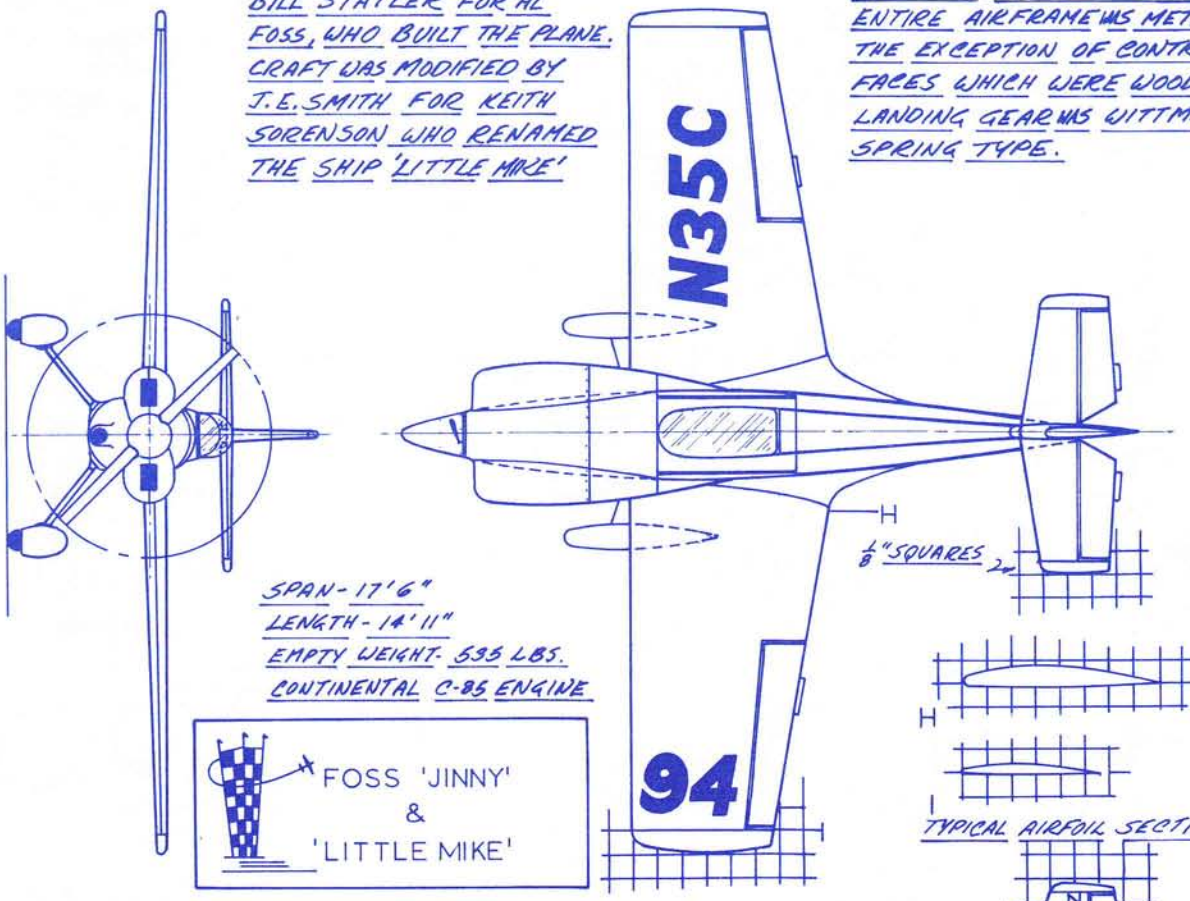


COLOR SCHEME: (1949 VERSION) ALL YELLOW WITH RED NUMERALS AND MARKINGS.
COLOR SCHEME: (1970 VERSION) ALL YELLOW WITH BLUE TRIM

'BONZO', A SISTER SHIP OF WITTMAN'S OLD 'BUSTER' WAS BUILT AND FLOWN BY STEVE WITTMAN FOR THE 1948 GOODYEAR TROPHY RACE, PLACING 2ND AT 168.69 M.P.H. AMONG OTHER RACES, CRAFT LATER WON 1949, '50 & '52 CONTINENTAL TROPHY RACE; 1950 & '51 READING RACES; 1956 & '57 OSHKOSH RACES; 2ND IN 1964 & '66 CHAMPIONSHIP FORMULA 1 RACES AT RENO.

'JINNY' WAS DESIGNED BY BILL STATLER FOR AL FOSS, WHO BUILT THE PLANE. CRAFT WAS MODIFIED BY J.E. SMITH FOR KEITH SORENSON WHO RENAMED THE SHIP 'LITTLE MIKE'

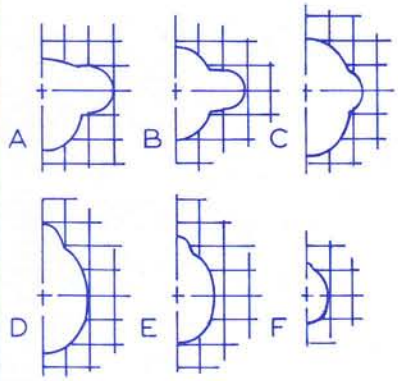
AIRCRAFT CONSTRUCTION: ENTIRE AIRFRAME WAS METAL WITH THE EXCEPTION OF CONTROL SURFACES WHICH WERE WOOD FRAMED. LANDING GEAR WAS WITTMAN SPRING TYPE.

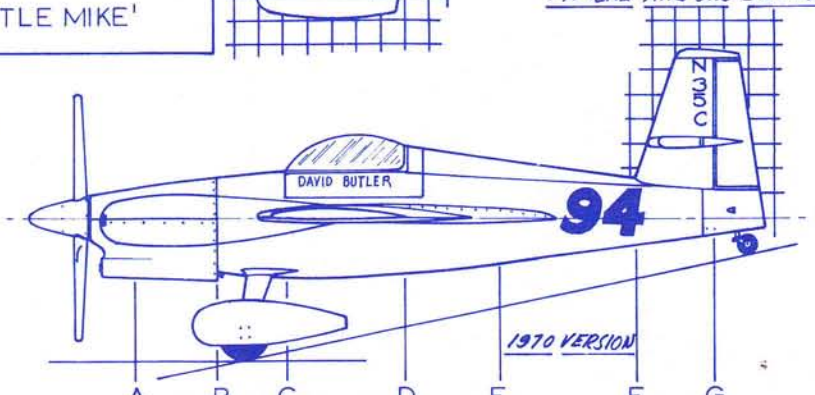


SPAN - 17'6"
LENGTH - 14'11"
EMPTY WEIGHT - 535 LBS.
CONTINENTAL C-85 ENGINE

TYPICAL AIRFOIL SECTIONS

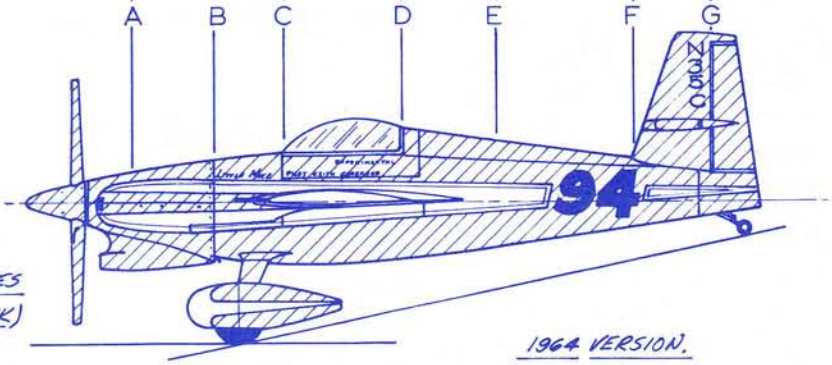
COLOR SCHEME: (1970) ALL WHITE WITH GOLD NUMERALS EDGED IN BLACK.







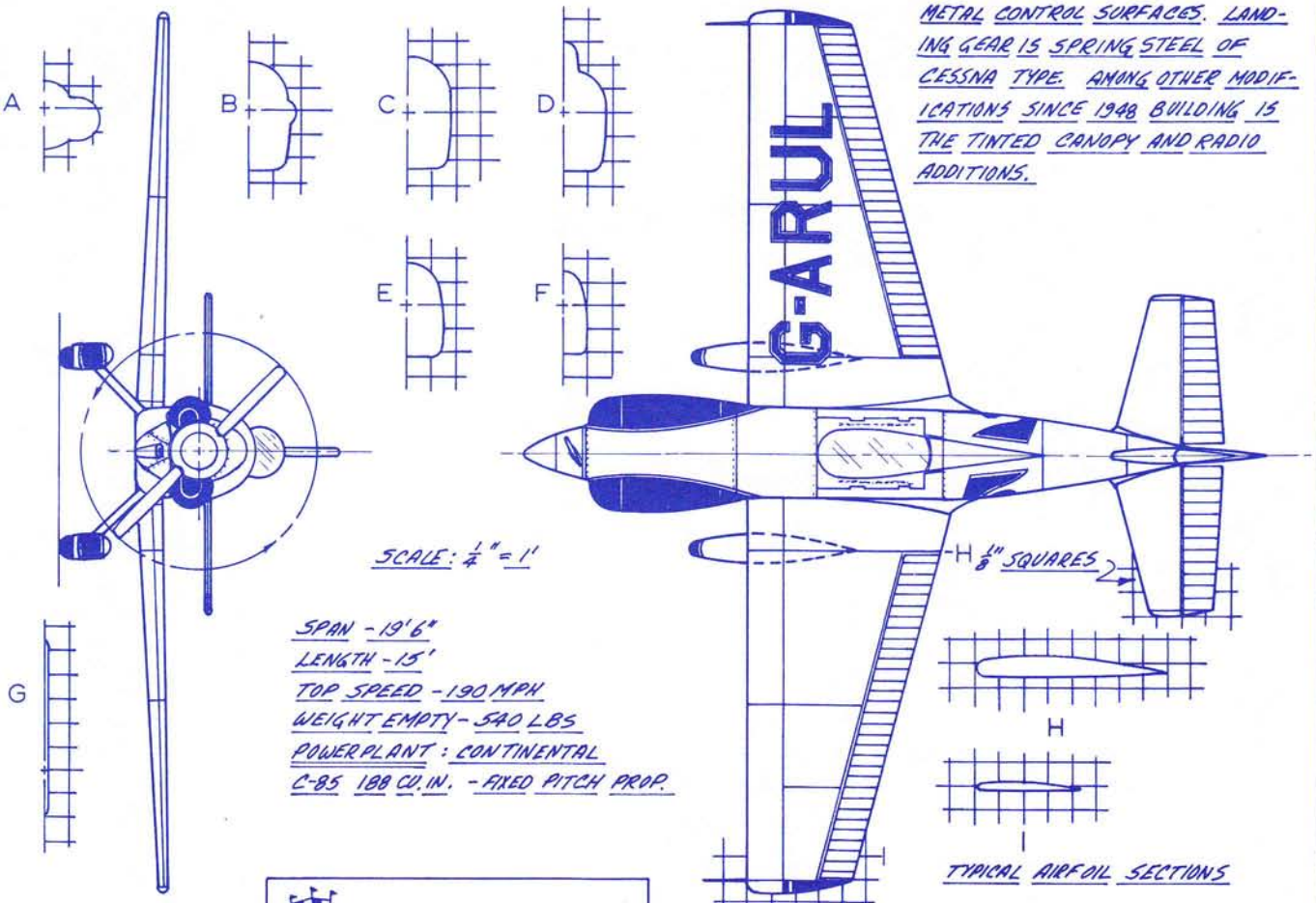
COLOR SCHEME: NAVY BLUE WITH WHITE STRIPES AND NUMERALS (SHOWN BLACK) EDGED IN GOLD.



1964 VERSION.

'JINNY' WAS BUILT IN 1949 FOR THE GOODYEAR TROPHY RACES AT THE CLEVELAND NATIONAL AIR RACES FOR THAT YEAR. SHE FAILED TO FINISH THIS RACE BUT KEITH SORENSON TOOK A 3RD WITH HER (NOW A HIM & RENAMED 'LITTLE MIKE') FOR 1951 DETROIT CONTINENTAL TROPHY. AT RENO IN 1964 SHE WAS QUALIFIED AT 172.38 M.P.H.; IN 1970 & 71 SHE WAS RACED AT RENO BY DAVID BUTLER.

ENTIRE AIRCRAFT IS ALL ALUMINUM CONSTRUCTION. NOTE CORRUGATED METAL CONTROL SURFACES. LANDING GEAR IS SPRING STEEL OF CESSNA TYPE. AMONG OTHER MODIFICATIONS SINCE 1948 BUILDING IS THE TINTED CANOPY AND RADIO ADDITIONS.



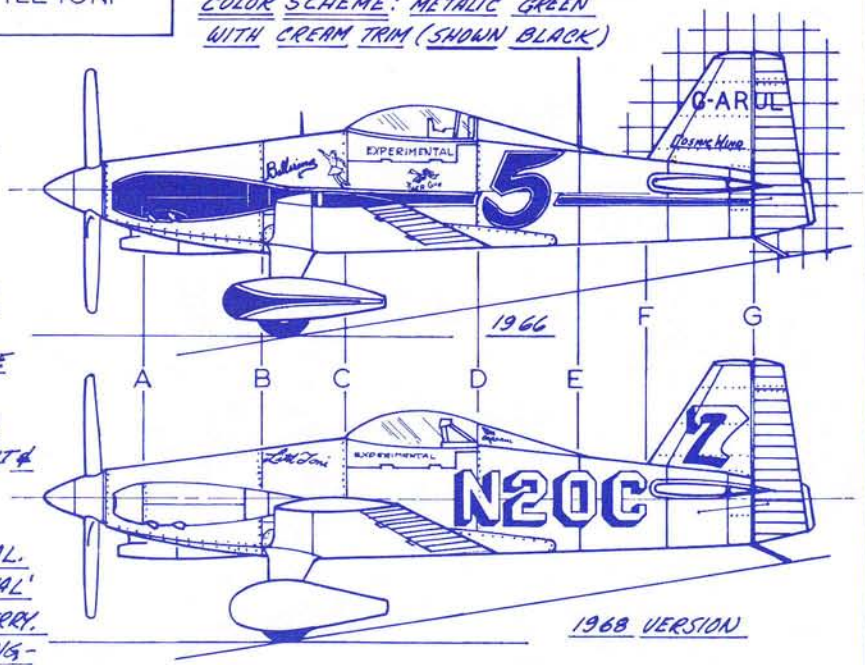
SCALE: 1/4" = 1'

SPAN - 19'6"
LENGTH - 15'
TOP SPEED - 190 MPH
WEIGHT EMPTY - 540 LBS
POWERPLANT: CONTINENTAL C-85 188 CU.IN. - FIXED PITCH PROP.



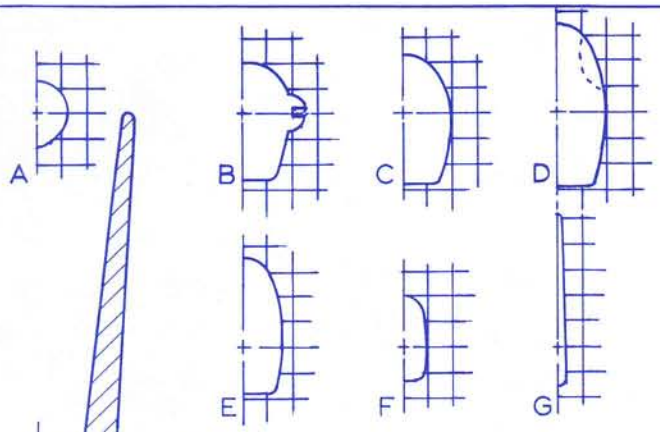
COSMIC WIND
'BALLERINA'
'LITTLE TONI'

COLOR SCHEME: METALIC GREEN WITH CREAM TRIM (SHOWN BLACK)



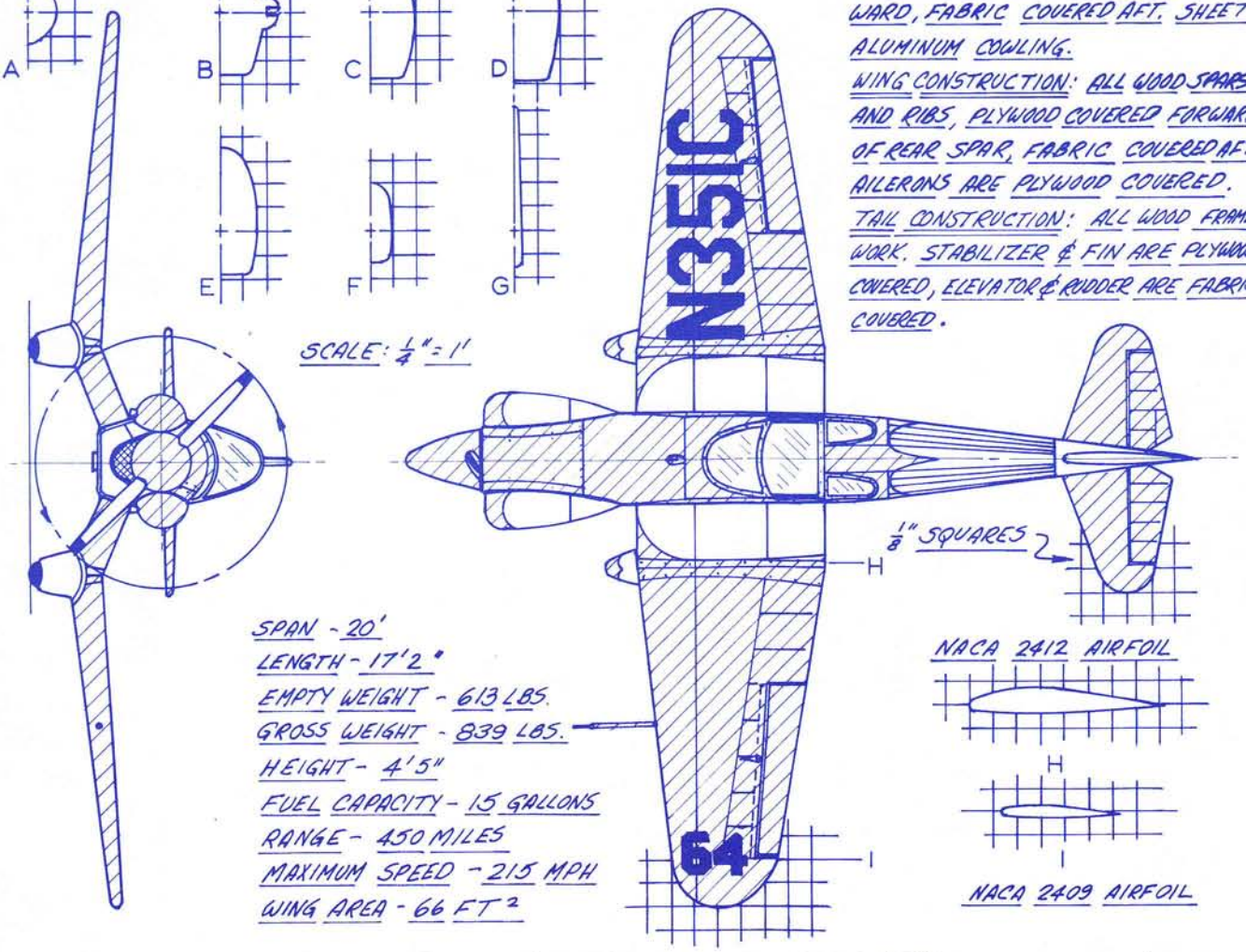
THE 'COSMIC WIND' SERIES OF RACERS WERE DEVELOPED AND BUILT BY TONY LEVIER AND ASSOCIATES FOR ENTRY IN THE GOODYEAR TROPHY RACES OF THE LATE 1940'S. DUE TO THEIR EXCELLENCE IN CONSTRUCTION & DESIGN THEY HAVE CONTINUED TO BE FLOWN IN RACES BOTH IN ENGLAND AND THE UNITED STATES SINCE THEN. 'BALLERINA' CRASHED IN ENGLAND IN 1966 HOWEVER HAS SINCE BEEN REBUILT & RACED IN 1973 BY WM. WALKER. THE CORRUGATED SURFACES (AS SHOWN) WERE REPLACED WITH SMOOTH METAL. 'LITTLE TONI' (THE 'FRENCH QUARTER SPECIAL' IN 1965) WAS RACED IN 1968 BY ROY BERRY. AIRCRAFT IS NOW LICENSED G-AYRJ IN ENGLAND.

COLOR SCHEME: METALIC BLUE WITH WHITE NUMERALS EDGED IN BLACK.



FUSELAGE CONSTRUCTION: ALL WOOD FRAMEWORK, PLYWOOD COVERED FORWARD, FABRIC COVERED AFT. SHEET ALUMINUM COWLING.
WING CONSTRUCTION: ALL WOOD SPARS AND RIBS, PLYWOOD COVERED FORWARD OF REAR SPAR, FABRIC COVERED AFT. AILERONS ARE PLYWOOD COVERED.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK. STABILIZER & FIN ARE PLYWOOD COVERED, ELEVATOR & RUDDER ARE FABRIC COVERED.

SCALE: $\frac{1}{4}$" = 1'



$\frac{1}{8}$" SQUARES

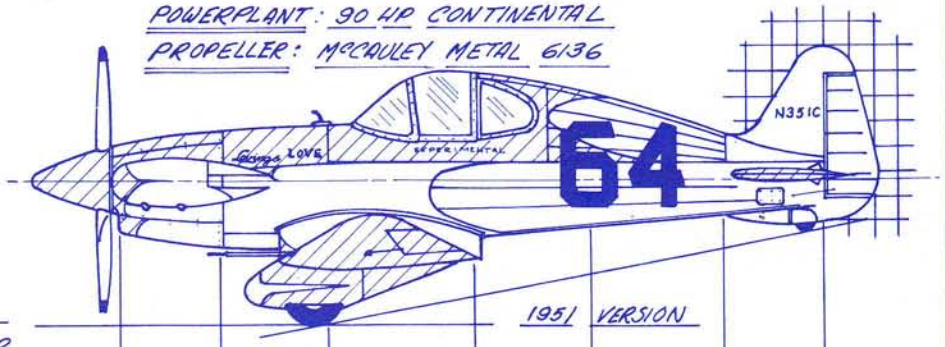
SPAN - 20'
LENGTH - 17'2"
EMPTY WEIGHT - 613 LBS.
GROSS WEIGHT - 839 LBS.
HEIGHT - 4'5"
FUEL CAPACITY - 15 GALLONS
RANGE - 450 MILES
MAXIMUM SPEED - 215 MPH
WING AREA - 66 FT²

NACA 2412 AIRFOIL

NACA 2409 AIRFOIL

POWERPLANT: 90 HP CONTINENTAL
PROPELLER: McCAULEY METAL 6136

LOVING-WAYNE
WR-1

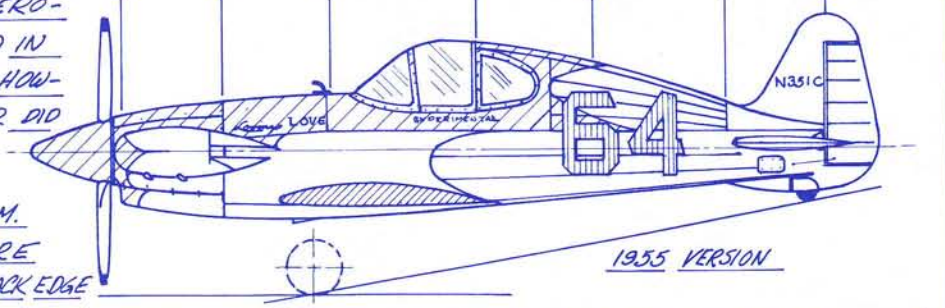


1951 VERSION

THE LOVING-WAYNE WR-1 WAS DESIGNED AND BUILT UNDER THE SUPERVISION OF NEIL LOVING BY THE WAYNE SCHOOL OF AERONAUTICS. CRAFT WAS ENTERED IN 1951 GOODYEAR TROPHY RACE-HOWEVER PROBLEMS WITH SPINNER DID NOT ALLOW IT TO RACE.

COLOR SCHEME: MAROON & CREAM.
RACE NUMBERS 1951 VERSION WERE BLACK, 1955 VERSION-SILVER-BLACK EDGE

A B C D E F G

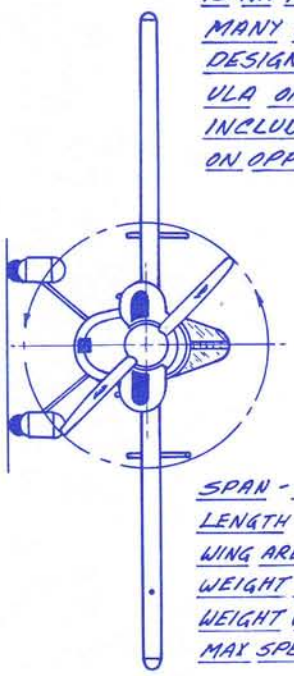


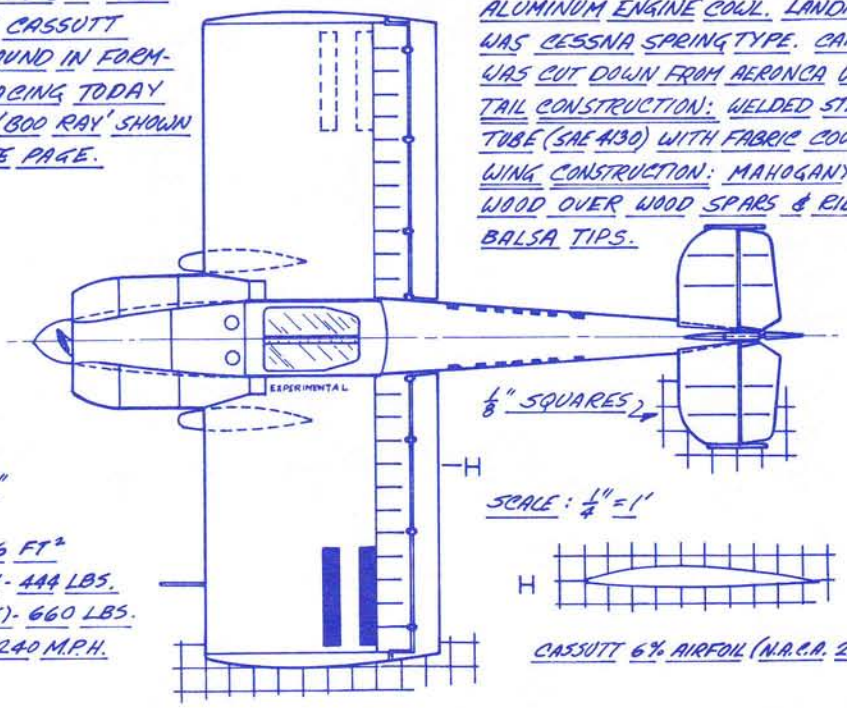
1955 VERSION

THIS AIRCRAFT IS NOW PRESERVED IN THE EXPERIMENTAL AIRCRAFT ASSOCIATION MUSEUM.

THIS FINE CASSUTT DESIGN IS AN ANCESTOR OF THE MANY FINE CASSUTT DESIGNS FOUND IN FORMULA ONE RACING TODAY INCLUDING 'BOO RAY' SHOWN ON OPPOSITE PAGE.

FUSELAGE CONSTRUCTION: SAE 4130 STEEL TUBING WELDED IN FRAMEWORK AND FABRIC COVERED AFT OF ALUMINUM ENGINE COWL. LANDING GEAR WAS CESSNA SPRING TYPE. CANOPY WAS CUT DOWN FROM AERONCA UNIT. TAIL CONSTRUCTION: WELDED STEEL TUBE (SAE 4130) WITH FABRIC COVERING. WING CONSTRUCTION: MAHOGANY PLYWOOD OVER WOOD SPARS & RIBS WITH BALSA TIPS.



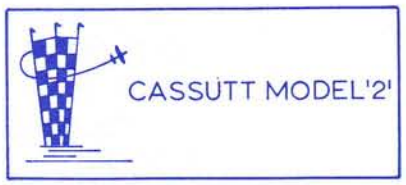


SPAN - 13'8"
LENGTH - 16'
WING AREA - 66 FT²
WEIGHT EMPTY - 444 LBS.
WEIGHT (GROSS) - 660 LBS.
MAX SPEED - 240 M.P.H.

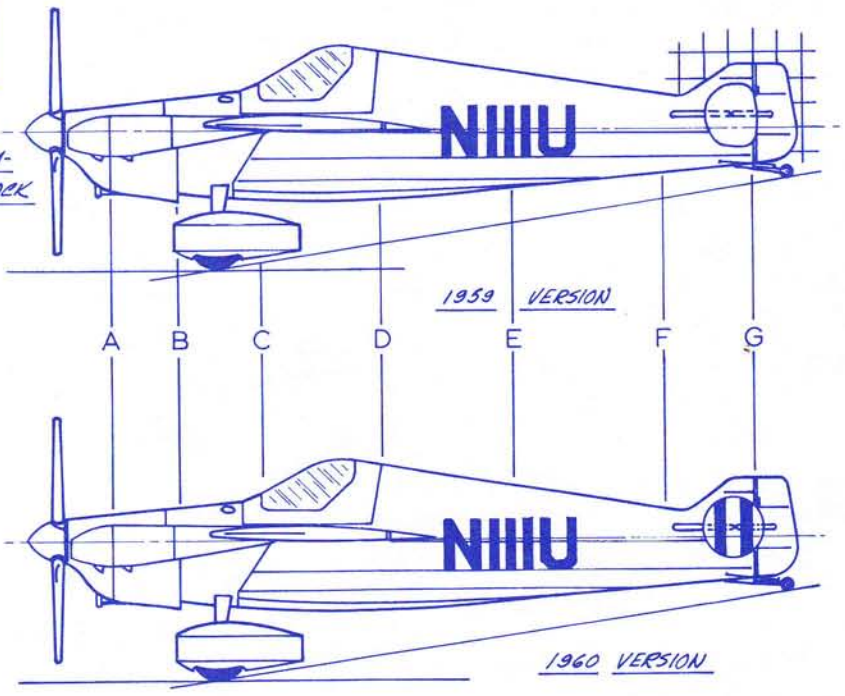
SCALE: 1/4" = 1'

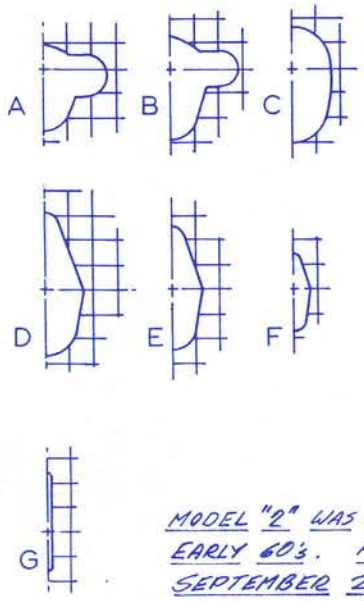
CASSUTT 6% AIRFOIL (N.A.C.A. 23006 MOD.)

CASSUTT "2" POWERPLANT: CONTINENTAL C-85-8F
PROPELLER: 58" DIA. x 5.6" SENSENICH



COLOR SCHEME: ALL ALUMINUM WITH RED LICENSE AND RACE NUMBER. "11" ON 1960 TIP PLATES IS BLACK.



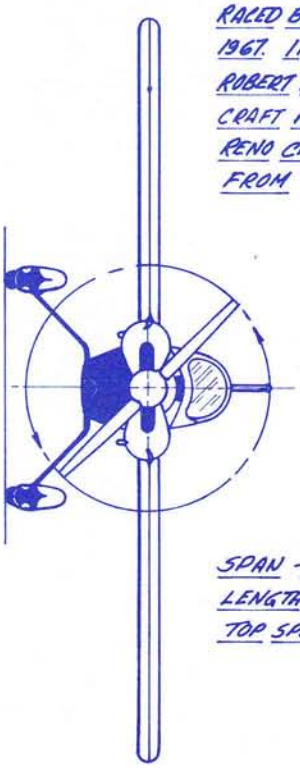


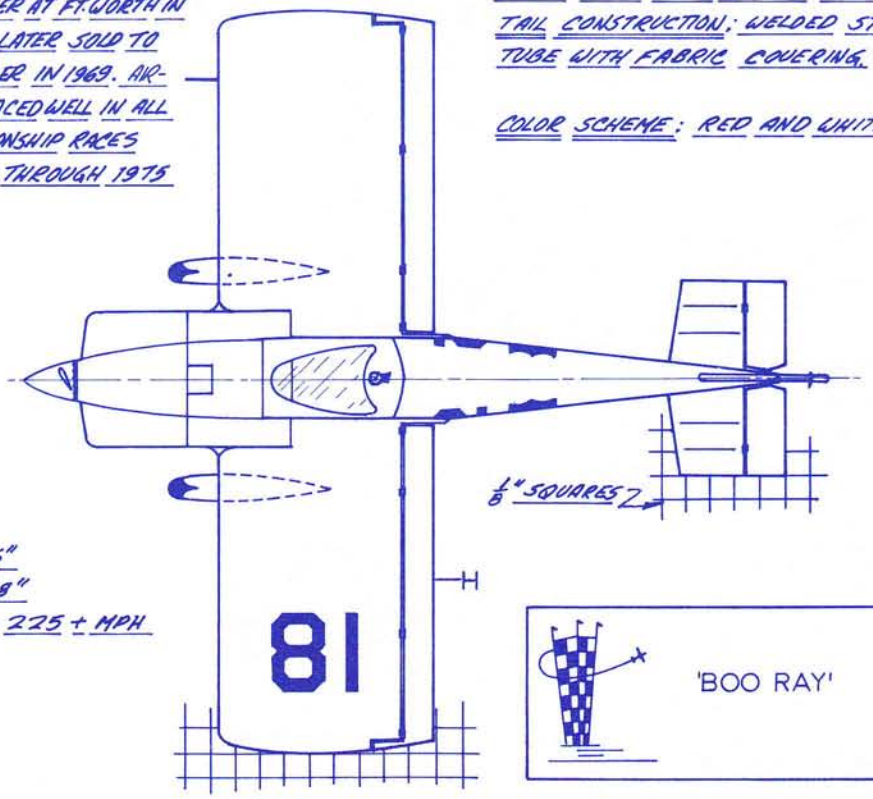
MODEL "2" WAS DESIGNED, BUILT AND FLOWN BY TOM CASSUTT DURING THE LATE 50's AND EARLY 60's. FIRST FLIGHT OF CRAFT WAS IN SEPTEMBER 1959. WITHIN TEN DAYS, ON SEPTEMBER 20TH, CRAFT WAS RACED AT FT. WAYNE, IND. TAKING 4TH PLACE IN THE FINAL RACE AT 182.12 M.P.H. CASSUTT RACED MODEL "2" AGAIN IN JULY 1960 AT FT. WAYNE TAKING 5TH PLACE AT 193.73 M.P.H.

'BOO RAY' IS A MODIFIED CASSUTT BUILT IN 1967 BY MARION BAKER AND ASSOCIATES. IT WAS FIRST RACED BY BAKER AT FT. WORTH IN 1967. IT WAS LATER SOLD TO ROBERT MOELLER IN 1969. AIRCRAFT HAS RACED WELL IN ALL RENO CHAMPIONSHIP RACES FROM 1967 THROUGH 1975

WING CONSTRUCTION: WOOD SPARS AND RIBS WITH PLYWOOD COVERING.
FUSELAGE CONSTRUCTION: WELDED STEEL TUBE WITH FABRIC COVERING.
TAIL CONSTRUCTION: WELDED STEEL TUBE WITH FABRIC COVERING.

COLOR SCHEME: RED AND WHITE



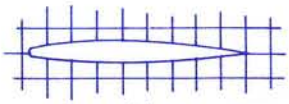


SPAN - 15'6"
LENGTH - 16'8"
TOP SPEED - 225+ MPH



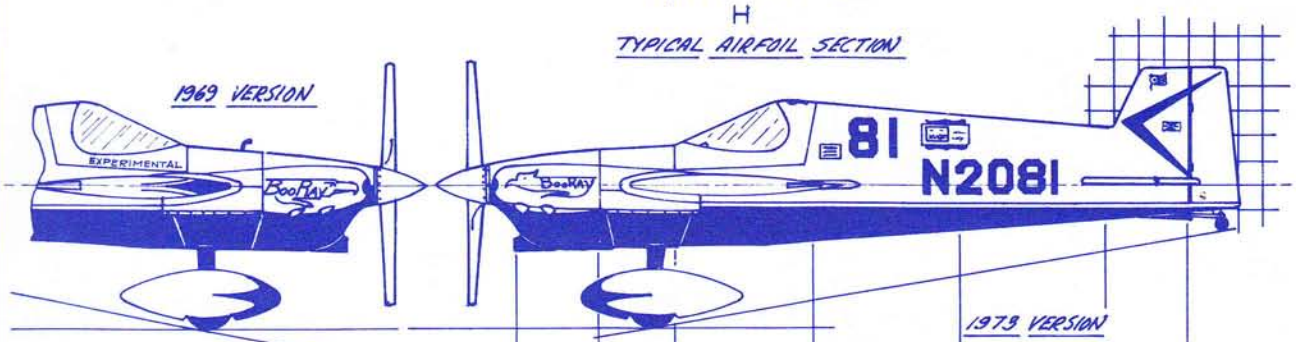
SCALE: 1/4"=1'

POWERPLANT: CONTINENTAL O-200 4 CYLINDER ENGINE

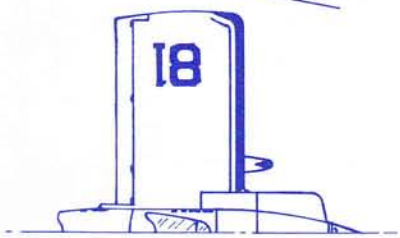


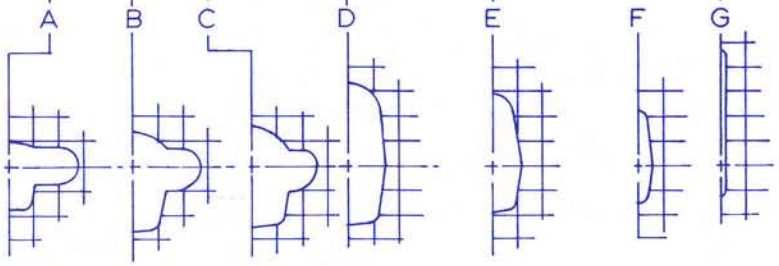
TYPICAL AIRFOIL SECTION

1969 VERSION



1978 VERSION



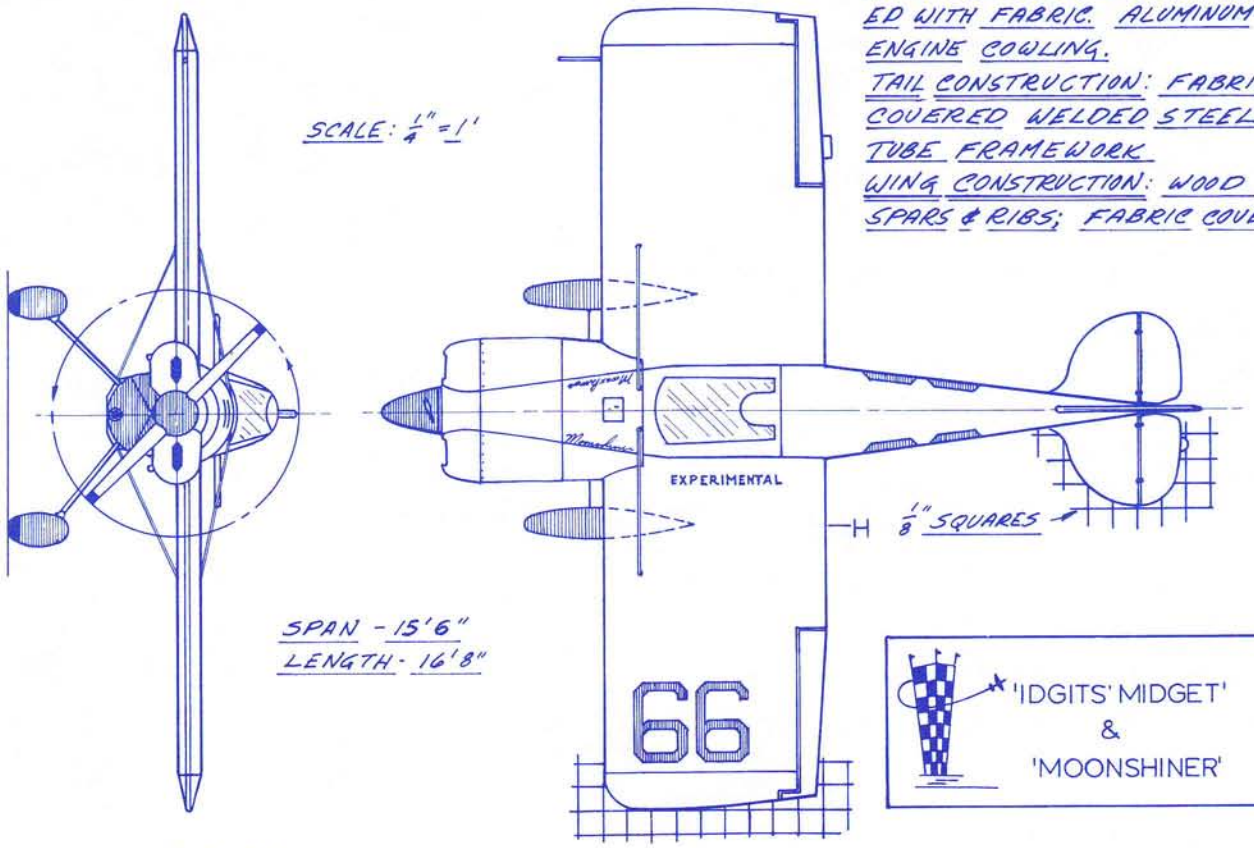


ABOVE PARTIAL VIEW (NOT TO SCALE) SHOWS RED STRIPING ON WING LEADING EDGE AND RED RACE NUMBER STYLE. (1969)

CH

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK COVERED WITH FABRIC. ALUMINUM ENGINE COWLING.
TAIL CONSTRUCTION: FABRIC COVERED WELDED STEEL TUBE FRAMEWORK
WING CONSTRUCTION: WOOD SPARS & RIBS; FABRIC COVERING.

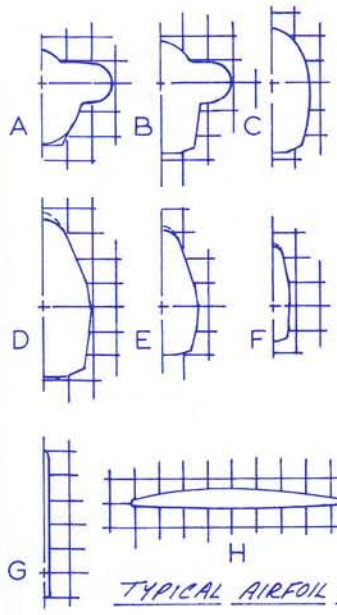
SCALE: 1/4" = 1'



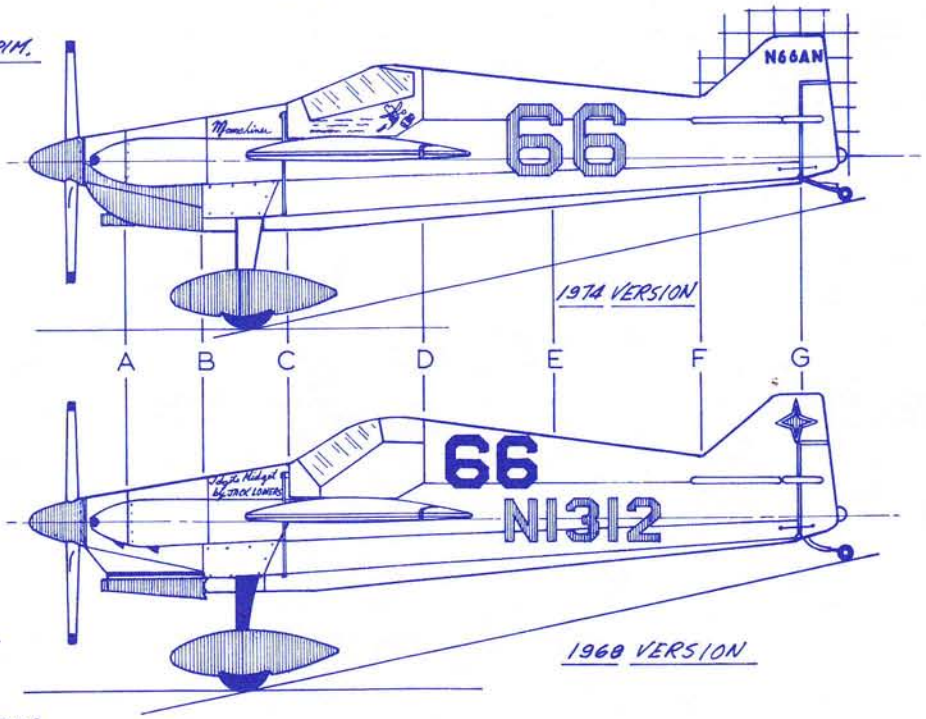
SPAN - 15'6"
LENGTH - 16'8"

'IDGITS' MIDGET'
&
'MOONSHINER'

COLOR SCHEME: (1974)
ALL YELLOW WITH RED TRIM.



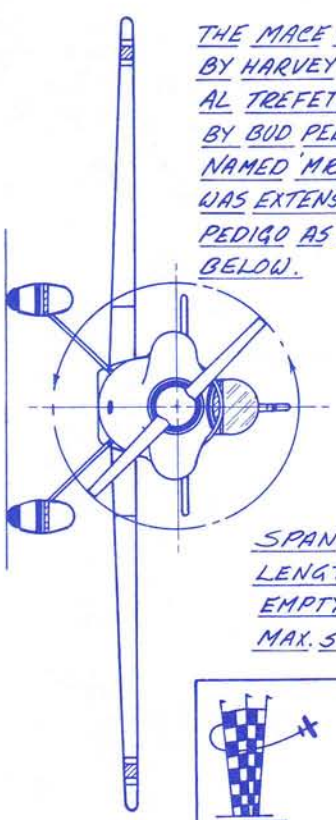
TYPICAL AIRFOIL SECTION

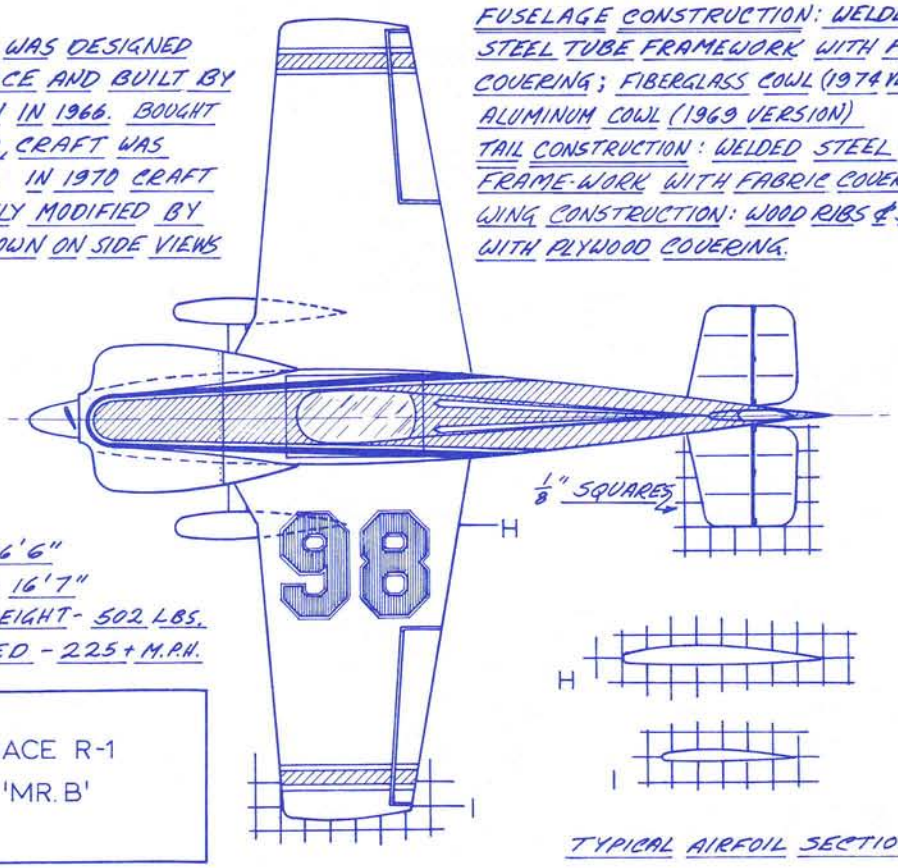


COLOR SCHEME: (1968) ALL YELLOW WITH RED SPINNER, WHEEL PANTS AND LICENSE NUMBER. RACE NUMBER & AND SPRING STEEL LANDING GEAR STRUT WERE BLACK. BUILT BY JACK LOWERS IN 1967, THIS MODIFIED CASSUTT WAS SOLD TO CHARLES ANDREWS IN 1969 AND NAME CHANGED FROM 'IDJITS MIDGET' TO 'MOONSHINER'. CRAFT HAS BEEN RACED BY BOTH MEN EXTENSIVELY.

THE MACE R-1 WAS DESIGNED BY HARVEY MACE AND BUILT BY AL TREFETHAN IN 1966. BOUGHT BY BUD PEDIGO, CRAFT WAS NAMED 'MR B'. IN 1970 CRAFT WAS EXTENSIVELY MODIFIED BY PEDIGO AS SHOWN ON SIDE VIEWS BELOW.

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK WITH FABRIC COVERING; FIBERGLASS COWL (1974 VERSION), ALUMINUM COWL (1969 VERSION)
TAIL CONSTRUCTION: WELDED STEEL TUBE FRAME-WORK WITH FABRIC COVERING
WING CONSTRUCTION: WOOD RIBS & SPARS WITH PLYWOOD COVERING.





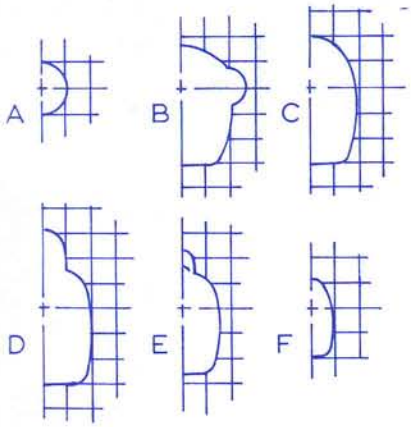
SPAN - 16'6"
LENGTH - 16'7"
EMPTY WEIGHT - 502 LBS.
MAX. SPEED - 225+ M.P.H.

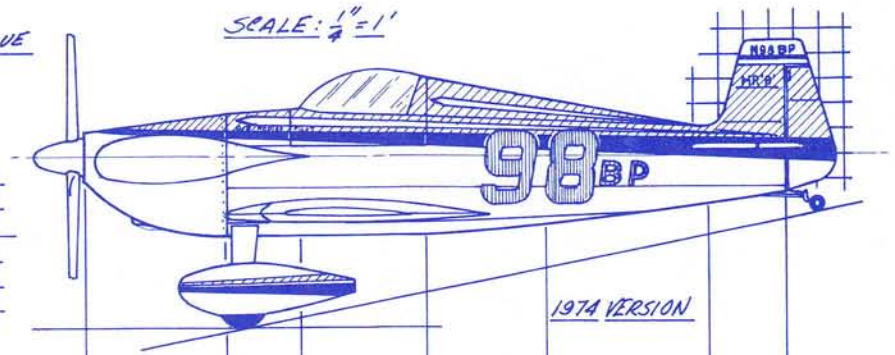


TYPICAL AIRFOIL SECTIONS

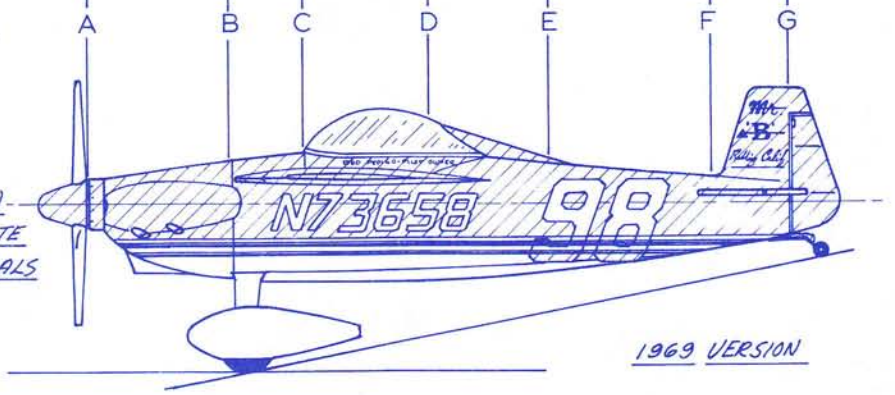
COLOR SCHEME: (1974)
ALL WHITE WITH RED & BLUE TRIM.

SCALE: 1/4" = 1'





1974 VERSION



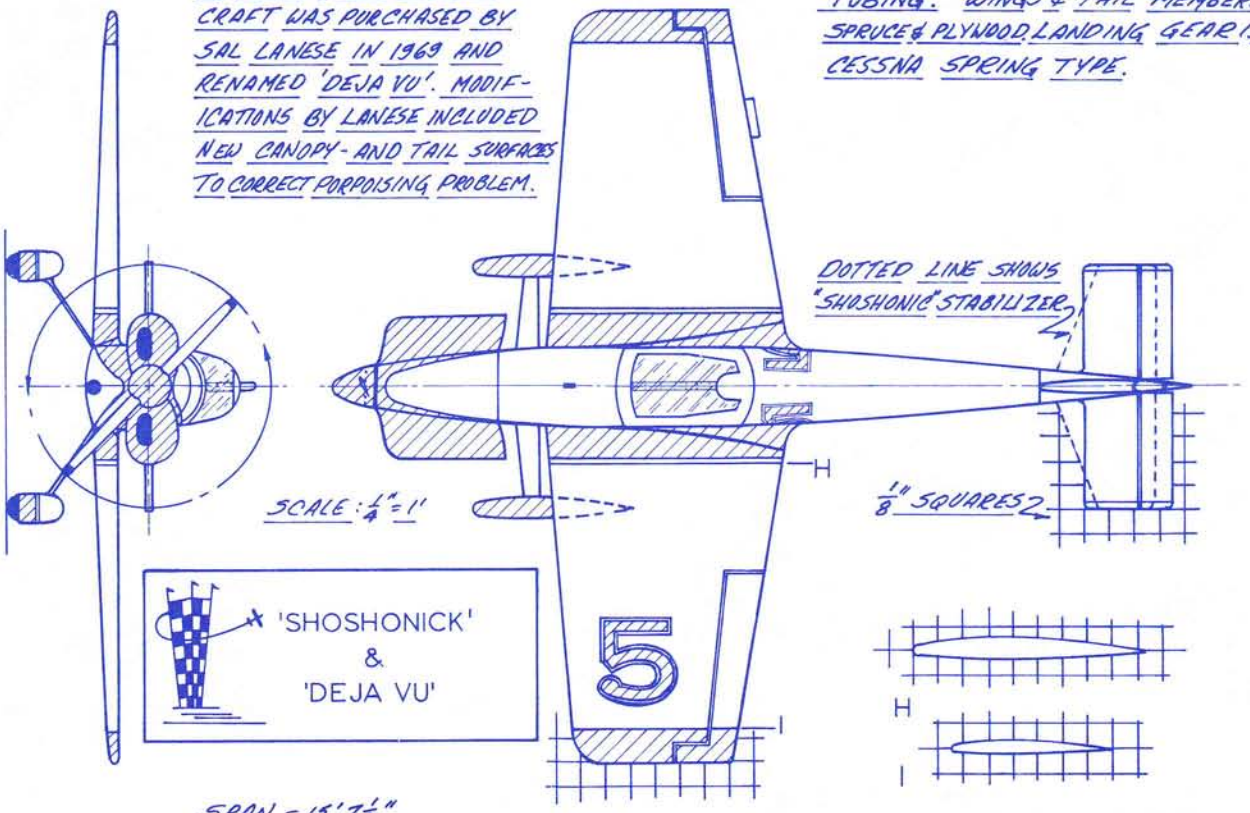
COLOR SCHEME: (1969)
ALL BLUE WITH WHITE TRIM LINES & NUMERALS

1969 VERSION

'MR B' HAS BEEN WIDELY RACED BY MR. PEDIGO THRU THE YEARS SINCE HE ACQUIRED IT AND APPEARED AT RACES IN CALIFORNIA, FLORIDA, WILSON, N.C., AND OF COURSE RENO. IN 1974 HE PLACED 4TH IN THE RENO FORMULA ONE CONSOLATION RACE AT 209.455 M.P.H.

"SHOSHONIC" WAS BUILT IN 1966 BY HOWARD & DALE TERRILL. CRAFT WAS PURCHASED BY SAL LANESE IN 1969 AND RENAMED 'DEJA VU'. MODIFICATIONS BY LANESE INCLUDED NEW CANOPY AND TAIL SURFACES TO CORRECT PORPOISING PROBLEM.

FUSELAGE STRUCTURE: WELDED STEEL TUBING. WINGS & TAIL MEMBERS: SPRUCE & PLYWOOD. LANDING GEAR IS CESSNA SPRING TYPE.

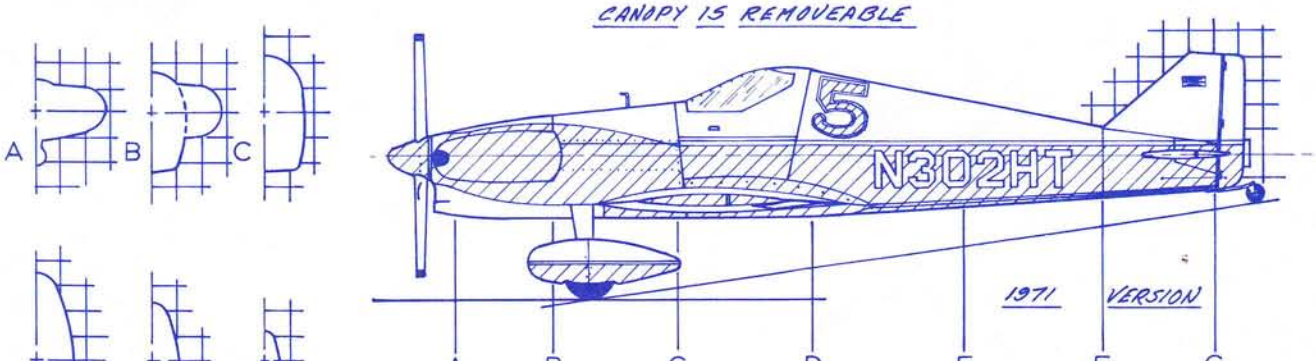


'SHOSHONICK' & 'DEJA VU'

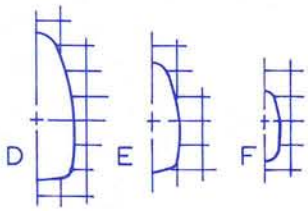
TYPICAL AIRFOIL SECTIONS

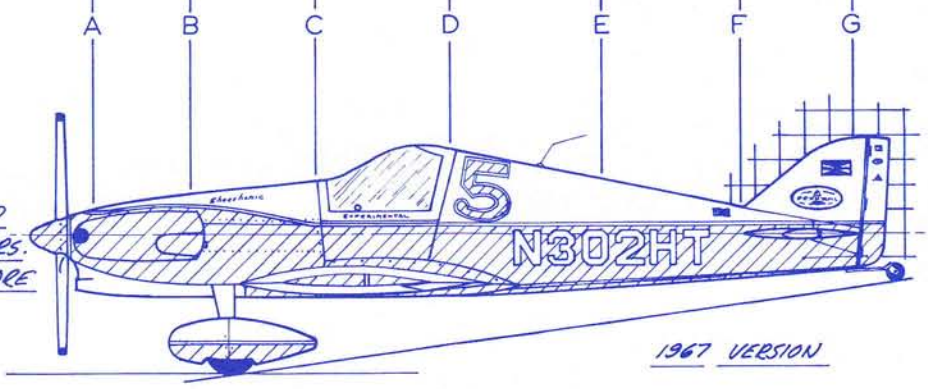
SPAN - 15' 7½"
LENGTH - 17' 7"
TOP SPEED - 200+M.P.H.

CANOPY IS REMOVEABLE



1971 VERSION

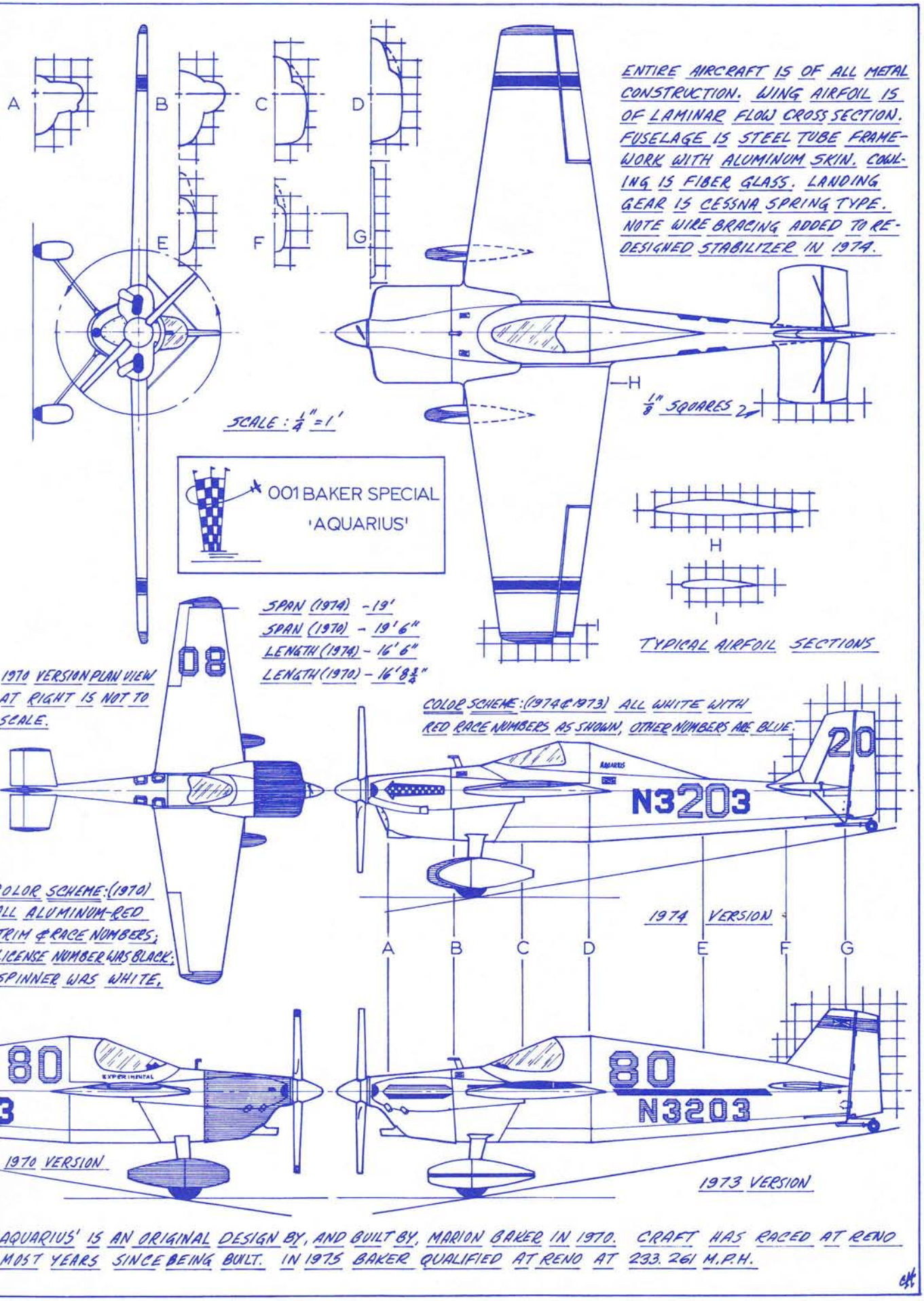




COLOR SCHEME: ALL WHITE WITH RED TRIM & RACING NUMBERS. LICENSE NUMERALS ARE WHITE.

1967 VERSION

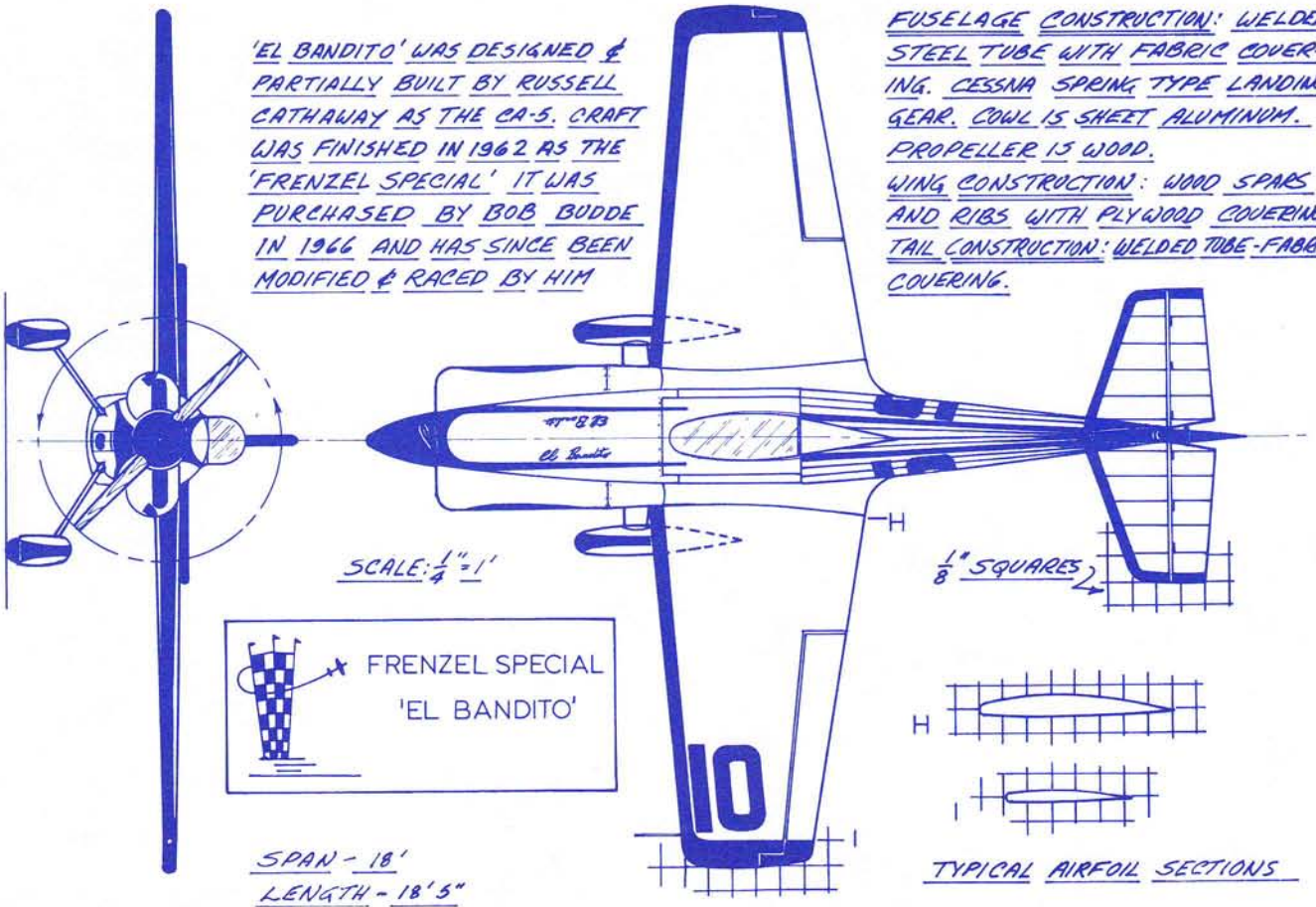
CRAFT WAS RACED BY SAL LANESE AT RENO IN 1969, FLORIDA AND WILSON IN 1970, FLORIDA IN '71 AND EVANSVILLE, IND. IN '74. THE TERRILLS RACED AT CLEVELAND IN LATE '60'S



'AQUARIUS' IS AN ORIGINAL DESIGN BY, AND BUILT BY, MARION BAKER IN 1970. CRAFT HAS RACED AT RENO MOST YEARS SINCE BEING BUILT. IN 1975 BAKER QUALIFIED AT RENO AT 233.261 M.P.H.

'EL BANDITO' WAS DESIGNED & PARTIALLY BUILT BY RUSSELL CATHAWAY AS THE CA-5. CRAFT WAS FINISHED IN 1962 AS THE 'FRENZEL SPECIAL' IT WAS PURCHASED BY BOB BUDDE IN 1966 AND HAS SINCE BEEN MODIFIED & RACED BY HIM

FUSELAGE CONSTRUCTION: WELDED STEEL TUBE WITH FABRIC COVERING. CESSNA SPRING TYPE LANDING GEAR. COWL IS SHEET ALUMINUM. PROPELLER IS WOOD.
WING CONSTRUCTION: WOOD SPARS AND RIBS WITH PLYWOOD COVERING.
TAIL CONSTRUCTION: WELDED TUBE-FABRIC COVERING.



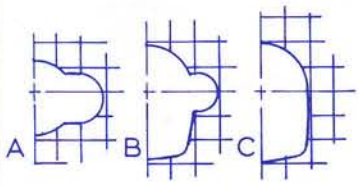
SCALE: $\frac{1}{4}$" = 1'

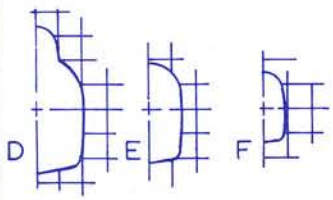
$\frac{1}{8}$" SQUARES

FRENZEL SPECIAL
'EL BANDITO'

SPAN - 18'
LENGTH - 18'5"

TYPICAL AIRFOIL SECTIONS

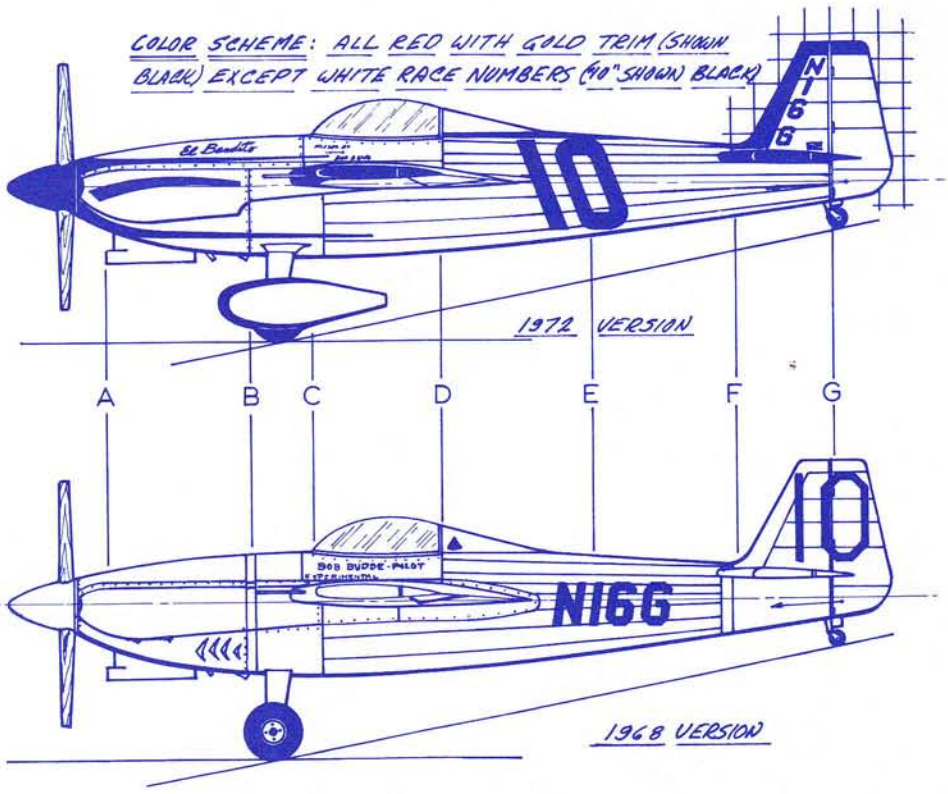






COLOR SCHEME: ALL WHITE WITH RED RACE AND LICENSE NUMERALS.

COLOR SCHEME: ALL RED WITH GOLD TRIM (SHOWN BLACK) EXCEPT WHITE RACE NUMBERS (40" SHOWN BLACK)

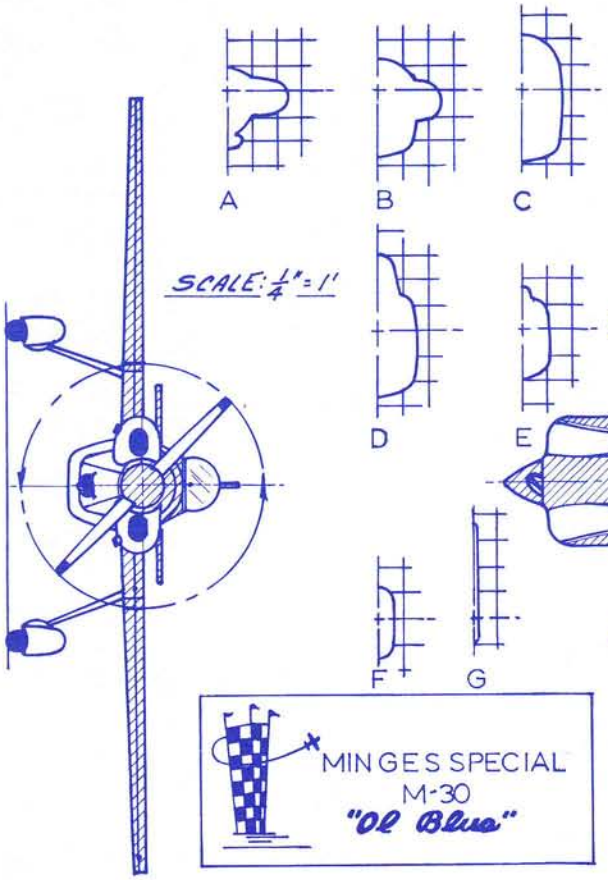


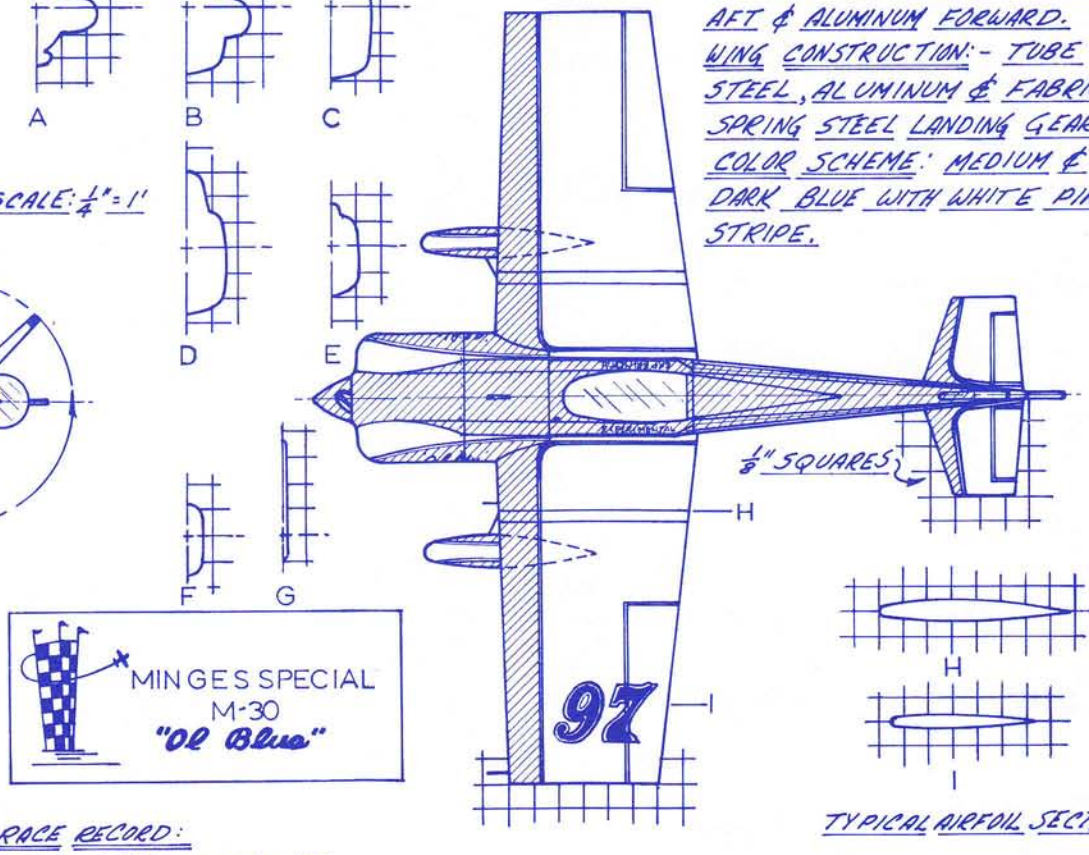
1972 VERSION

1968 VERSION

'EL BANDITO' HAS BEEN RACED BY BUDDE EVERY YEAR SINCE 1968. HIGH POINT WAS RENO 1971 WHEN CRAFT PLACED 7TH IN THE FORMULA 1 CHAMPIONSHIP RACE AT 193 M.P.H.. 'EL BANDITO' IS VERY SLEEK BUT SOMEWHAT ON THE HEAVY SIDE WHICH PREVENTS IT FROM BEING AMONST FRONT RUNNERS.

FUSELAGE CONSTRUCTION:- WELDED STEEL TUBE STRUCTURE WITH FABRIC COVERING AFT & ALUMINUM FORWARD.
WING CONSTRUCTION:- TUBE STEEL, ALUMINUM & FABRIC.
SPRING STEEL LANDING GEAR.
COLOR SCHEME: MEDIUM & DARK BLUE WITH WHITE PIN STRIPE.





TYPICAL AIRFOIL SECTIONS

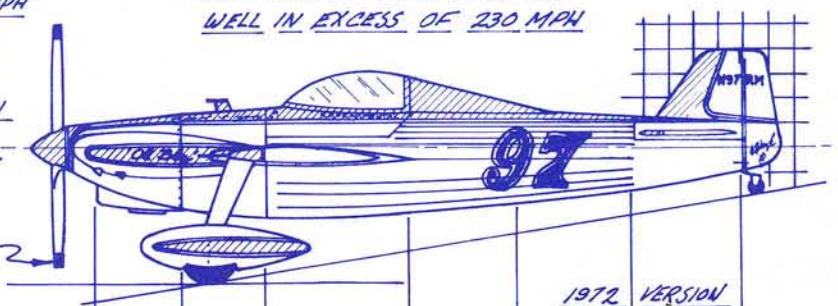
MINGES SPECIAL
M-30
"Ol Blue"

"OL BLUE" RACE RECORD:

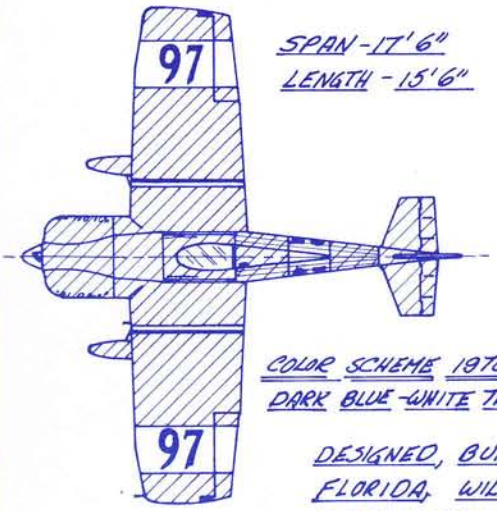
1970 FLA. NATIONALS - 9TH PLACE 201.37 MPH
1970 WILSON N.C. - 5TH PLACE 196.9 MPH
1970 RENO - 4TH PLACE 206.53 MPH
1971 WILSON N.C. - 2ND PLACE 214.6 MPH
1972 WILSON N.C. - 5TH PLACE 195.65 MPH

PLANE WAS MODIFIED IN 1972 TO THIS VERSION - DRAWINGS ARE PROVISIONAL.

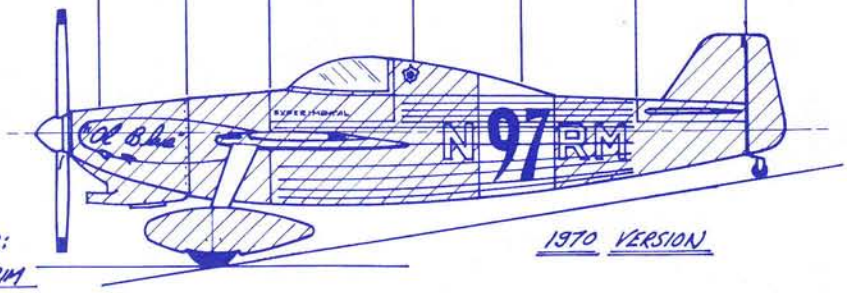
TOP SPEED OF 'OL BLUE' IS WELL IN EXCESS OF 230 MPH



1972 VERSION



SPAN - 17'6"
LENGTH - 15'6"

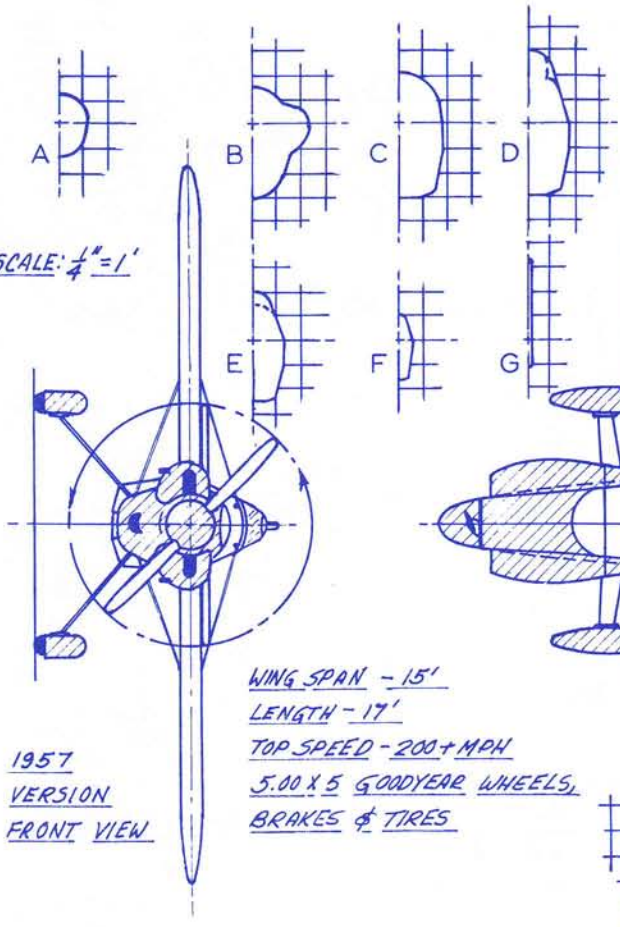


COLOR SCHEME 1970:
DARK BLUE - WHITE TRIM

1970 VERSION

DESIGNED, BUILT & FLOWN BY RICHARD MINGES. RACED DURING 1970 IN FLORIDA, WILSON AND RENO. AIRCRAFT LATER SOLD TO AND MODIFIED BY THURMOND ROCK '72. MINGES ALSO FLIES AT-6 CLASS RACERS.

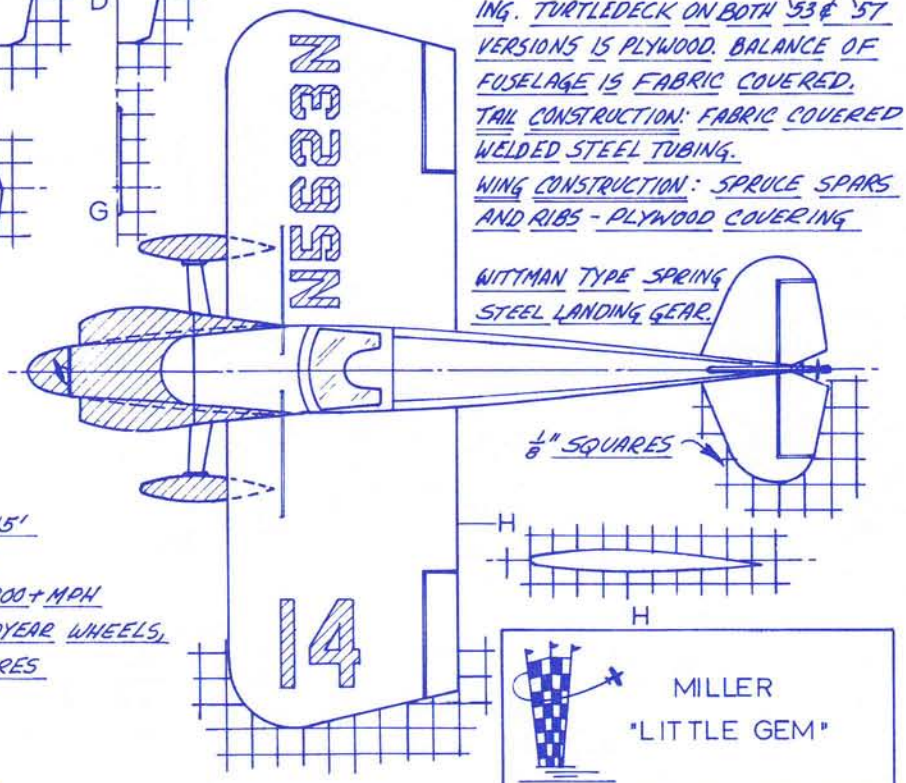
CH



WING SPAN - 15'
LENGTH - 17'
TOP SPEED - 200+ MPH
5.00 X 5 GOODYEAR WHEELS, BRAKES & TIRES

FUSELAGE CONSTRUCTION: FUSELAGE FRAMEWORK BUILT OF WELDED S.A.E. 4130 STEEL TUBING. AREA FORWARD OF COCKPIT IS ALUMINUM SHEET COVERING. TURTLEDECK ON BOTH '53 & '57 VERSIONS IS PLYWOOD. BALANCE OF FUSELAGE IS FABRIC COVERED.
TAIL CONSTRUCTION: FABRIC COVERED WELDED STEEL TUBING.
WING CONSTRUCTION: SPRUCE SPARS AND RIBS - PLYWOOD COVERING

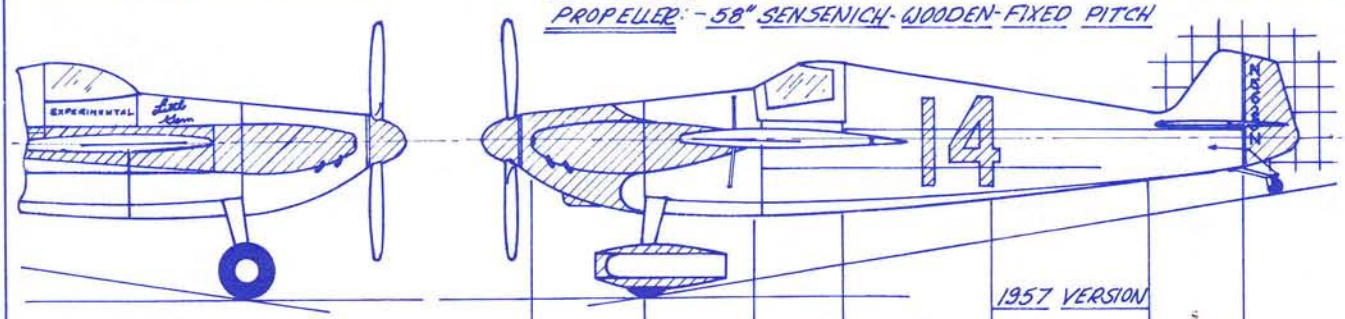
WITTMAN TYPE SPRING STEEL LANDING GEAR.



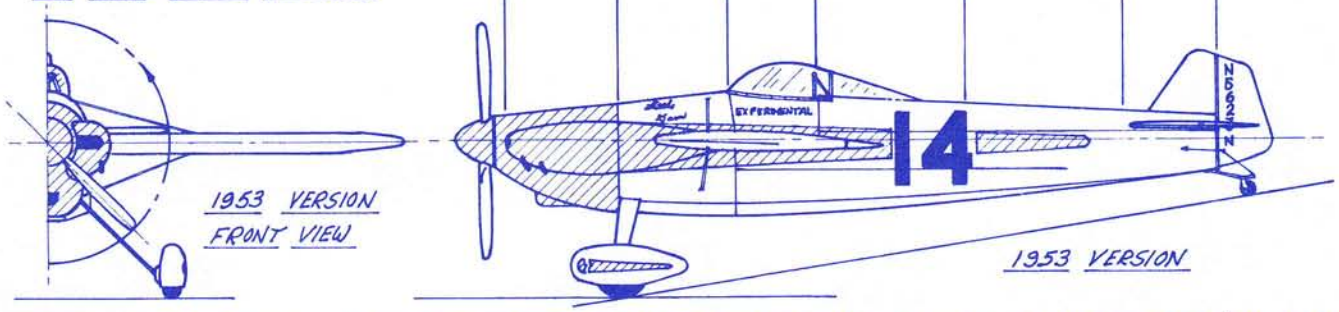
MILLER
"LITTLE GEM"

'49 VERSION SHOWN BELOW WAS BADLY DAMAGED IN 1951 CRASH.

POWERPLANT: - CONTINENTAL C-85-8J - 85HP - 4 CYLINDER ENGINE
PROPELLER: - 58" SENSENICH - WOODEN - FIXED PITCH



1949 VERSION - GRAY WITH RED TRIM - BLACK NUMERALS

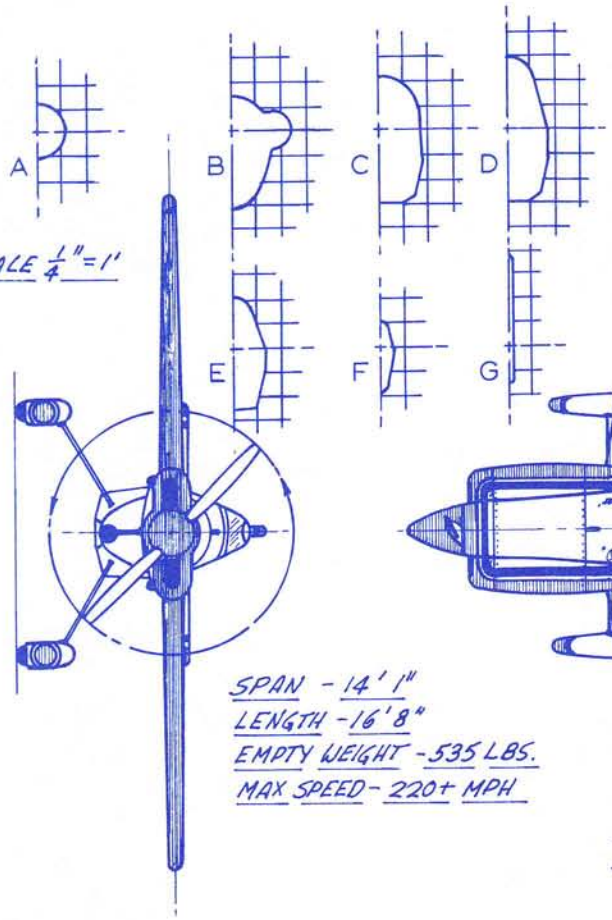


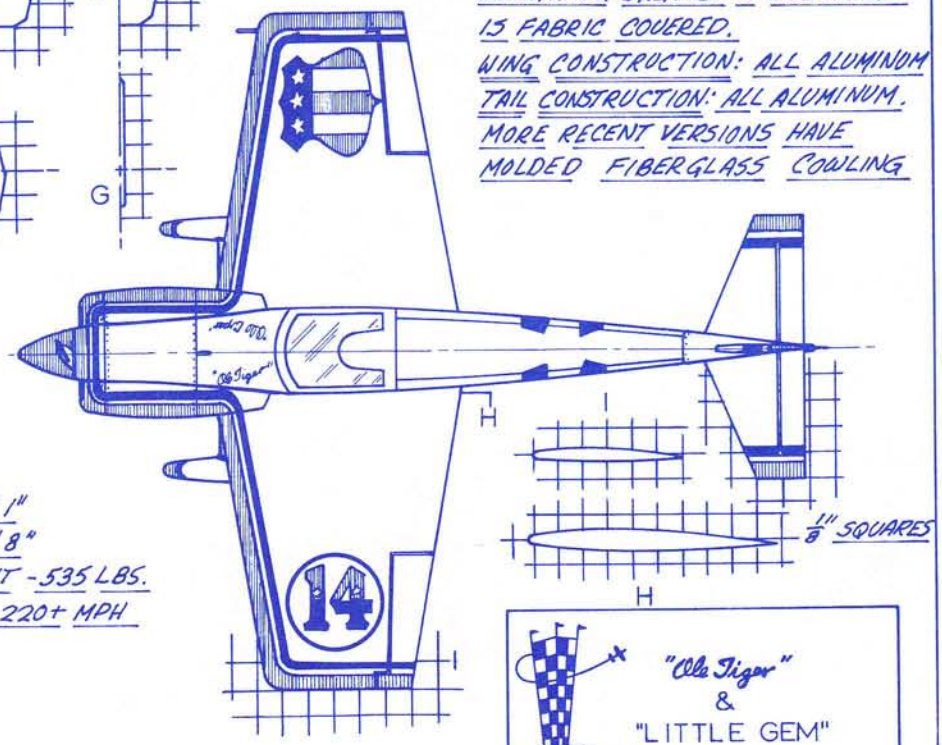
1953 VERSION
FRONT VIEW

1953 VERSION

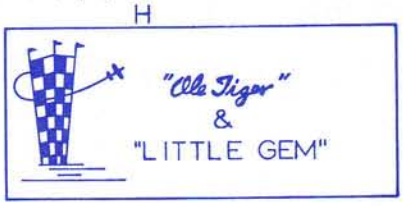
COLOR SCHEME 1953: - ALL GREY WITH RED TRIM - BLACK NUMERALS - 1957: - ALL GREY WITH RED TRIM & NUMERALS.
DESIGNED, BUILT & FLOWN BY JIM MILLER. 1951 VERSION WON 3RD IN 1950 CONTINENTAL MOTORS RACE (158.3 MPH) 4TH IN 1950 REBAT TROPHY RACE (169.55 MPH). 1957 VERSION WON 1ST AT DANSVILLE, N.Y. IN 1954 (181.06 MPH) AND 6TH PLACE IN 1957 FT. WAYNE, IND RACE. (175.88 MPH). SEE NEXT PAGE FOR MORE ON THIS AIRCRAFT. CW

FUSELAGE CONSTRUCTION: FRAMEWORK IS WELDED STEEL TUBING. TURTLE DECK IS PLYWOOD. AREA FORWARD OF COCKPIT IS SHEET ALUMINUM. BALANCE OF FUSELAGE IS FABRIC COVERED.
WING CONSTRUCTION: ALL ALUMINUM
TAIL CONSTRUCTION: ALL ALUMINUM.
MORE RECENT VERSIONS HAVE MOLDED FIBERGLASS COWLING



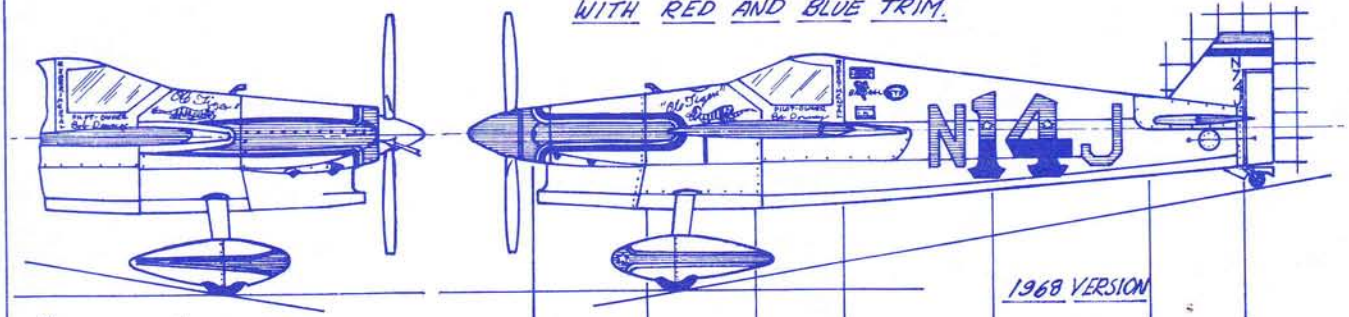


SPAN - 14' 1"
LENGTH - 16' 8"
EMPTY WEIGHT - 535 LBS.
MAX SPEED - 220+ MPH



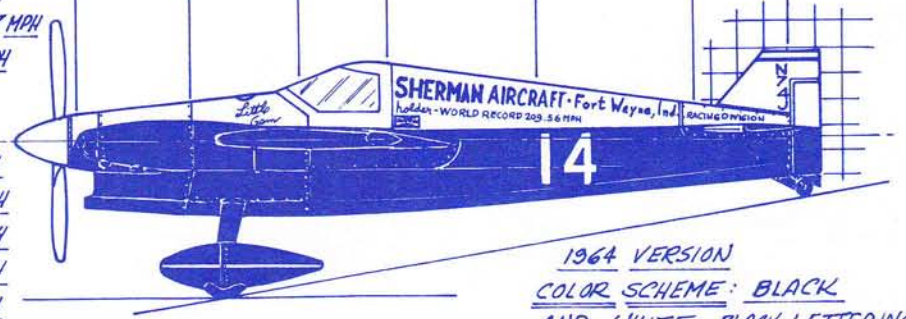
1972 VERSION SHOWN BELOW HAD ANNULAR AIR INTAKE BEHIND SPINNER

COLOR SCHEME: (1965 TO PRESENT) ALL WHITE WITH RED AND BLUE TRIM.



1968 VERSION

"OLE TIGER" RACE RECORD
LAS VEGAS '65 - 5TH PL. 195.2 MPH
ST PETERSBURG '66 4TH PL 190.27 MPH
LANCASTER, CA. '66 1ST PL. 189.48 MPH
FREDRICK, MD. '66 2ND PL 192.8 MPH
RENO '66 3RD PL 189.009 MPH
FT. WORTH '67 2ND PL 200.41 MPH
CLEVELAND '67 2ND PL 202.77 MPH
RENO '67 2ND PL 201.192 MPH
RENO '68 3RD PL 211.869 MPH
RENO '69 5TH PL 208.09 MPH
FOR CONTINUED RECORD SEE TABLE AT FRONT OF BOOK



1964 VERSION
COLOR SCHEME: BLACK AND WHITE, BLACK LETTERING

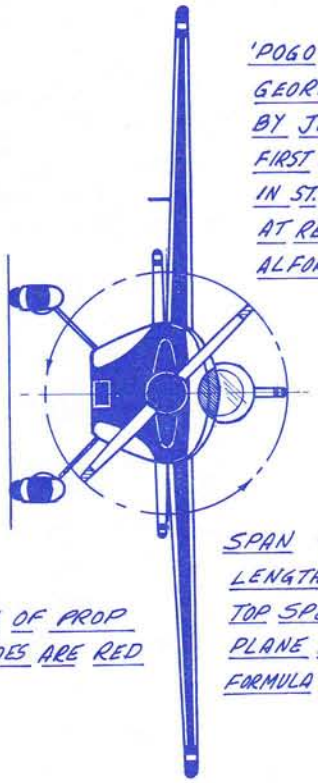
1964 VERSION WAS PILOTED BY BOB PORTER AT RENO '64 AND WON FIRST PLACE IN FORMULA 1. PLANE WAS BOUGHT BY PILOT-OWNER BOB DOWNEY AND RENAMED "OLE TIGER" IN 1965

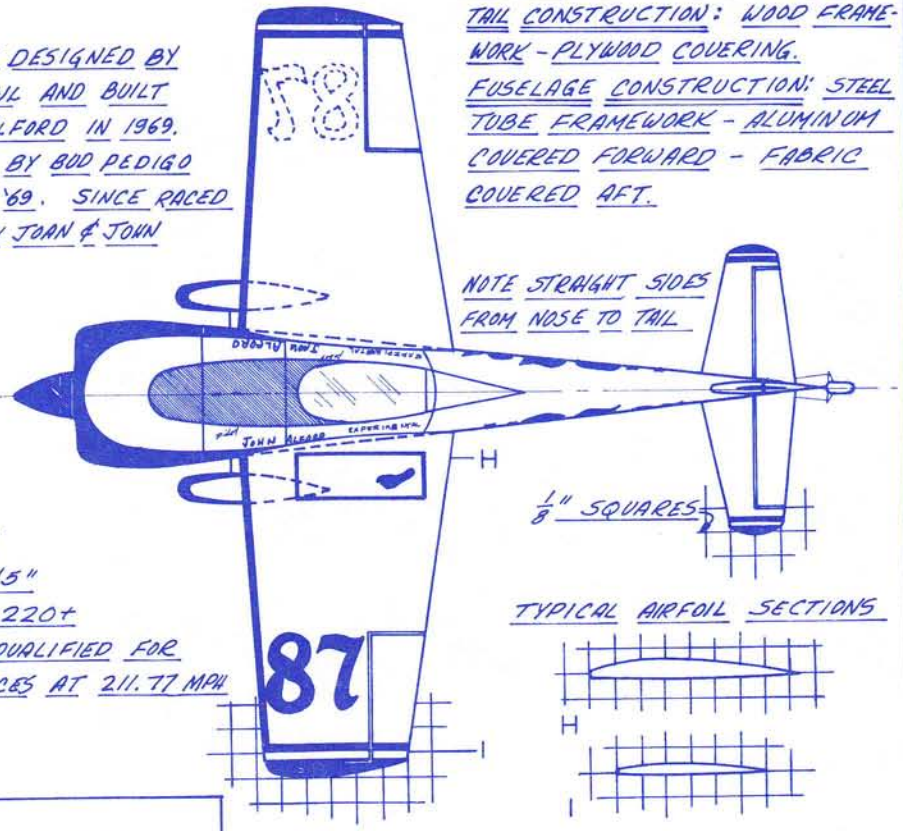
SCALE: $\frac{1}{4}$" = 1'

'POGO' WAS DESIGNED BY GEORGE OWL AND BUILT BY JOHN ALFORD IN 1969. FIRST RACED BY BOB PEDIGO IN ST. LOUIS '69. SINCE RACED AT RENO BY JOAN & JOHN ALFORD.

WING CONSTRUCTION: WOOD SPARS AND RIBS - PLYWOOD COVERING. TAIL CONSTRUCTION: WOOD FRAMEWORK - PLYWOOD COVERING. FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK - ALUMINUM COVERED FORWARD - FABRIC COVERED AFT.

NOTE STRAIGHT SIDES FROM NOSE TO TAIL



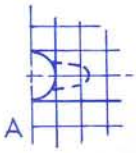


$\frac{1}{8}$" SQUARES

SPAN - 16'
LENGTH - 17'5"
TOP SPEED - 220+
PLANE HAS QUALIFIED FOR FORMULA I RACES AT 211.77 MPH

TIPS OF PROP BLADES ARE RED

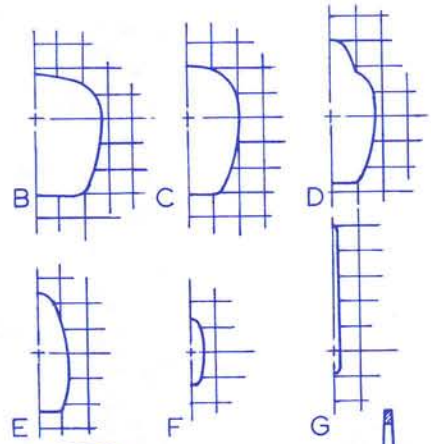
TYPICAL AIRFOIL SECTIONS

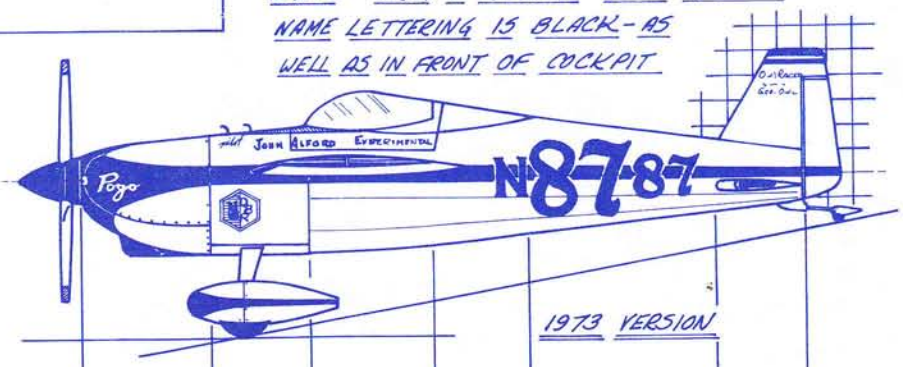




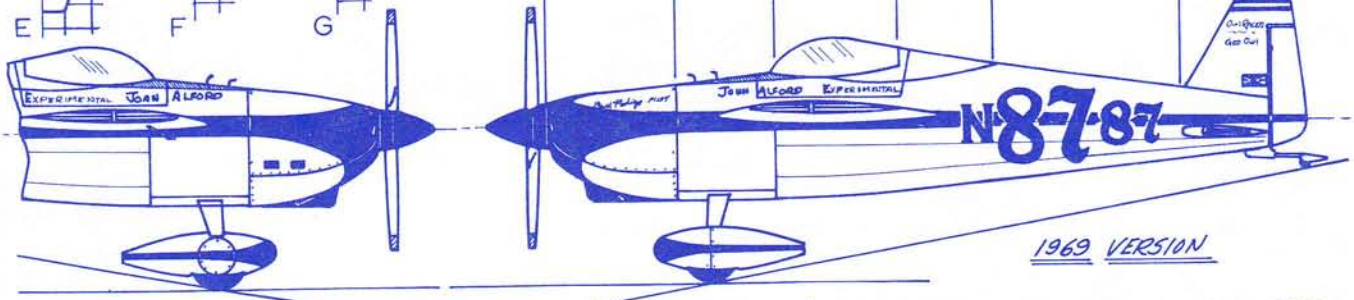
"POGO"
OWL OR-65-2

COLOR SCHEME: ENTIRE AIRCRAFT IS WHITE - TRIM IS METALIC OLIVE GREEN NAME LETTERING IS BLACK - AS WELL AS IN FRONT OF COCKPIT





1973 VERSION



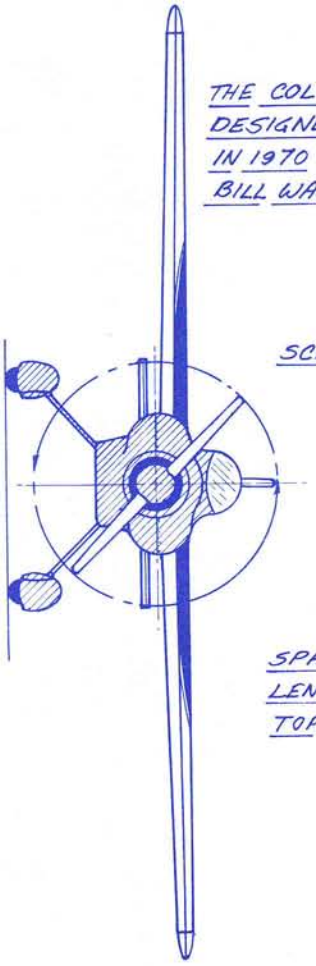
1969 VERSION

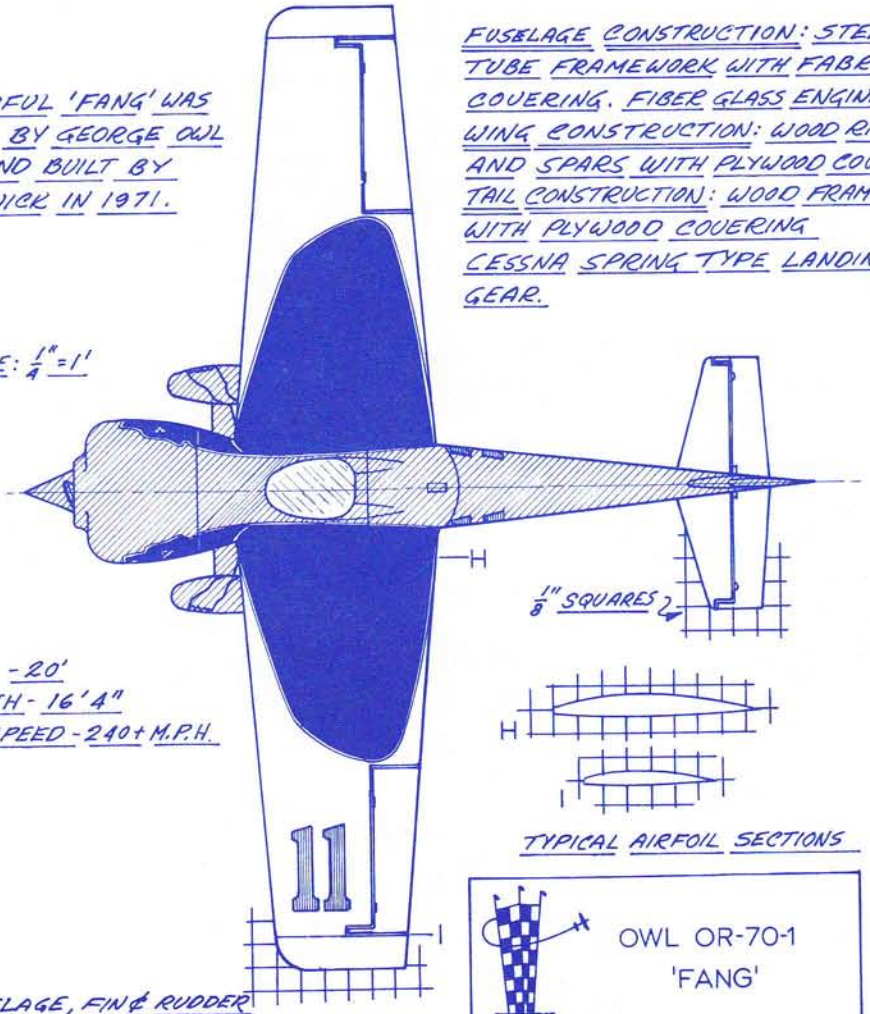
FLOWN BY JOAN ALFORD. PLANE HAS PLACED "IN THE MONEY" AT SEVERAL NATIONAL RACING EVENTS.

THE COLORFUL 'FANG' WAS DESIGNED BY GEORGE OWL IN 1970 AND BUILT BY BILL WARWICK IN 1971.

FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK WITH FABRIC COVERING. FIBER GLASS ENGINE COWL. WING CONSTRUCTION: WOOD RIBS AND SPARS WITH PLYWOOD COVERING TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING CESSNA SPRING TYPE LANDING GEAR.

SCALE: $\frac{1}{4}$" = 1'





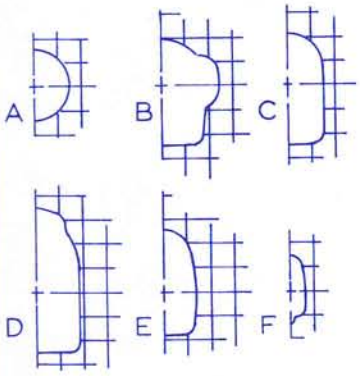
$\frac{1}{8}$" SQUARES

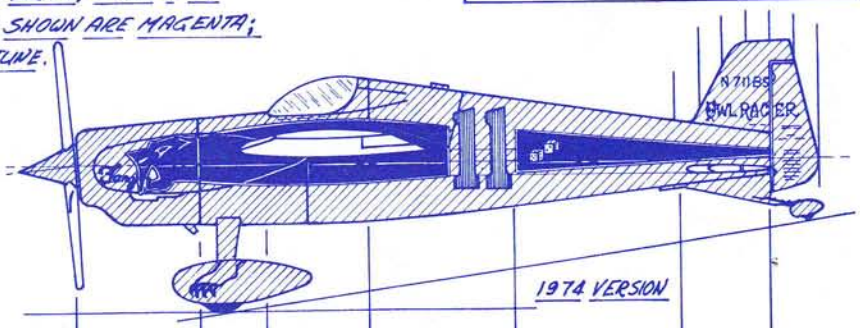
TYPICAL AIRFOIL SECTIONS

SPAN - 20'
LENGTH - 16'4"
TOP SPEED - 240+ M.P.H.

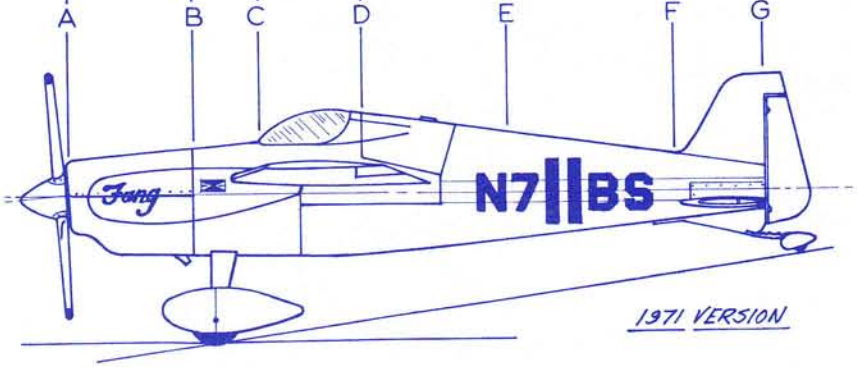
OWL OR-70-1
'FANG'

COLOR SCHEME: (1974) FUSELAGE, FIN & RUDDER ARE ROYAL PURPLE; WING OUTER AREA, STAB. & ELEVATOR ARE LILAC; BLACK AREAS SHOWN ARE MAGENTA; "11"S ARE YELLOW WITH WHITE OUTLINE.





1974 VERSION



1971 VERSION

COLOR SCHEME: (1971) ALL SILVER - BLACK LICENSE & MARKINGS

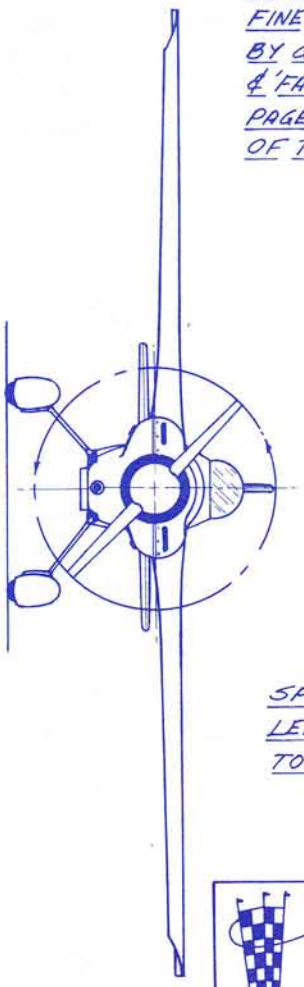
FLOWN BY PILOT OWNER JIM STEVENSON "FANG" PLACED 5TH AT 205.94 IN 1972; 7TH IN 1974 AT 219.18 MPH RENO CHAMPIONSHIP RACES. CRAFT WAS NOT ENTERED IN 1975 RENO EVENT.

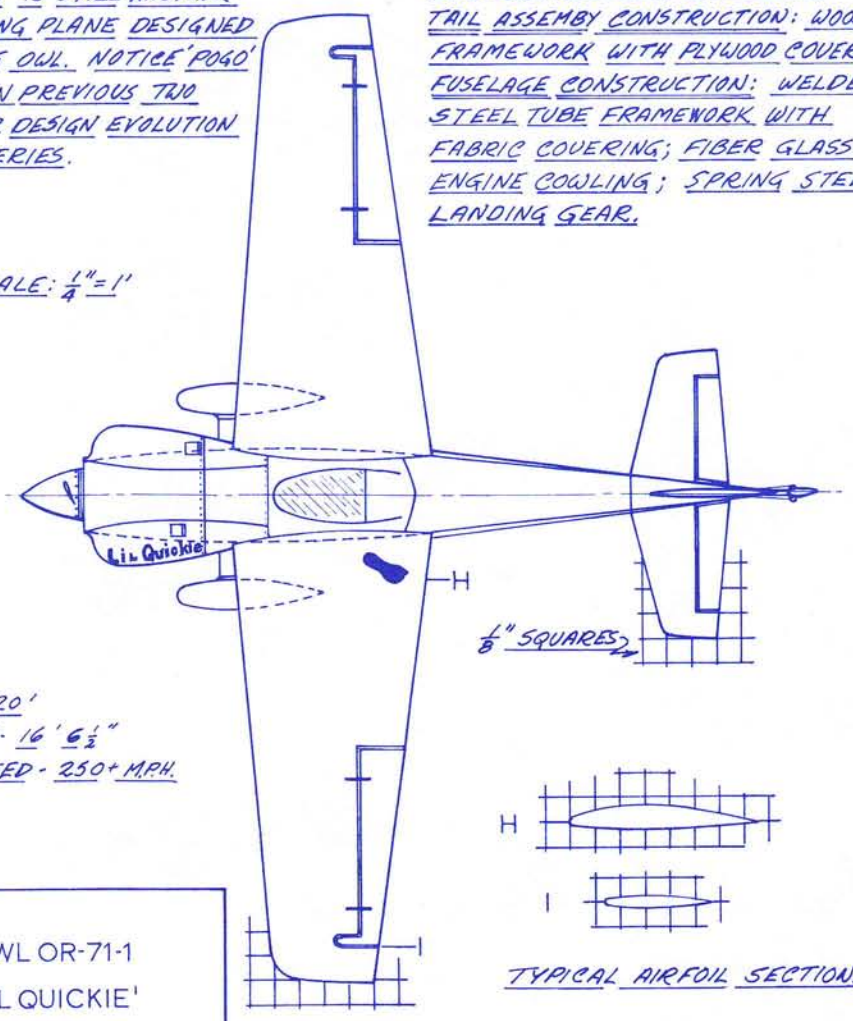
CH

'LIL QUICKIE' IS STILL ANOTHER FINE RACING PLANE DESIGNED BY GEORGE OWL. NOTICE 'POGO' & 'FANG' ON PREVIOUS TWO PAGES FOR DESIGN EVOLUTION OF THIS SERIES.

WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING. TAIL ASSEMBY CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING. FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK WITH FABRIC COVERING; FIBER GLASS ENGINE COWLING; SPRING STEEL LANDING GEAR.

SCALE: $\frac{1}{4}$"=1'





$\frac{1}{8}$" SQUARES

SPAN - 20'
LENGTH - 16' 6½"
TOP SPEED - 250+ M.P.H.

TYPICAL AIRFOIL SECTIONS

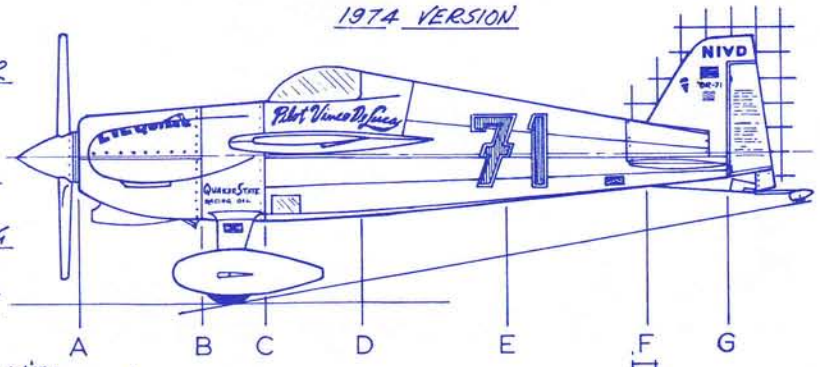


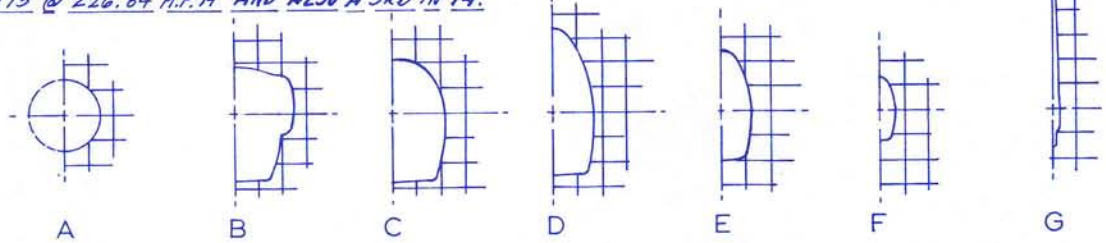
OWL OR-71-1
'LIL QUICKIE'

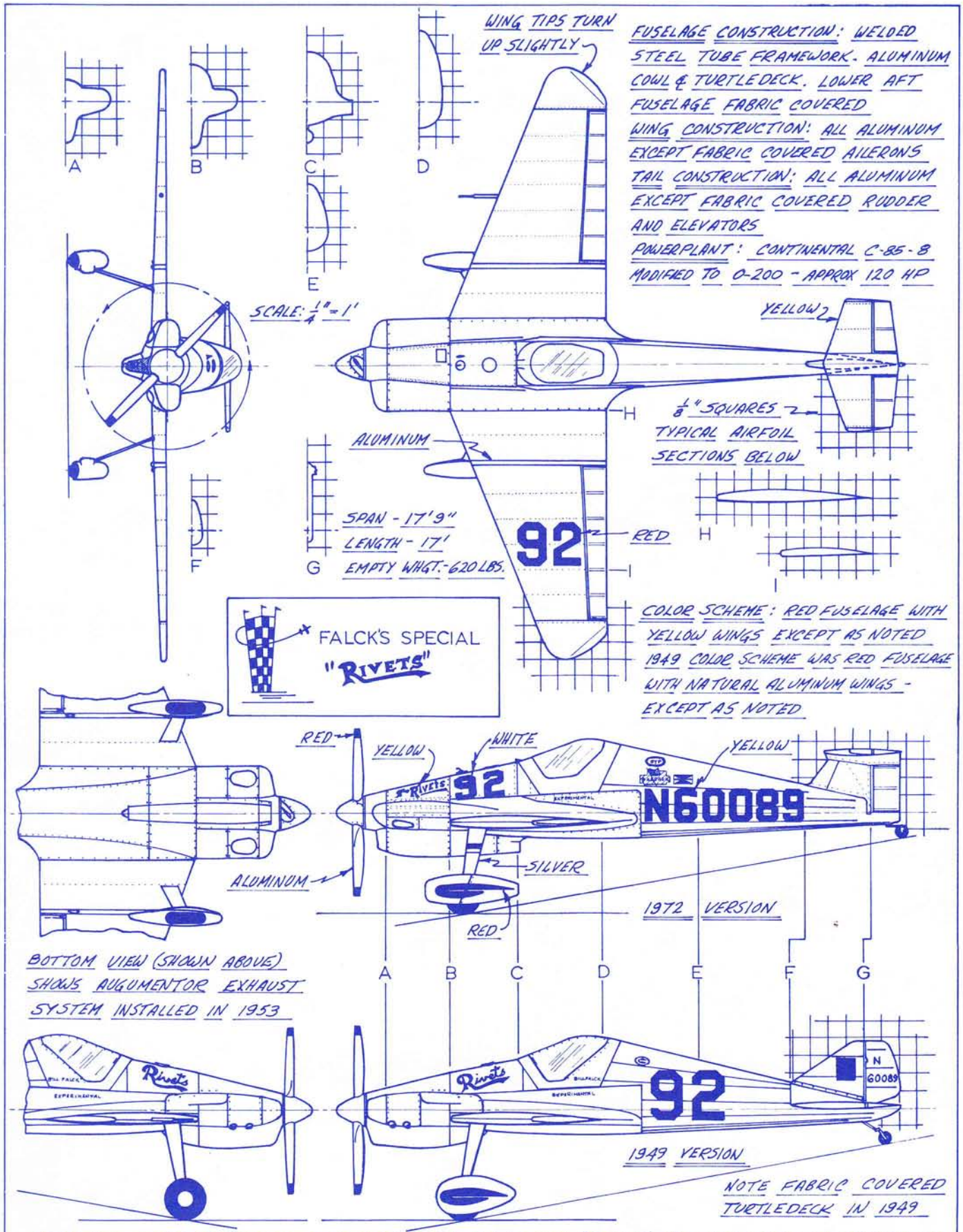
COLOR SCHEME: ALL YELLOW 'LIL QUICKIE', PILOTS NAME & LICENSE NUMBER ARE BLACK. RACE NUMBER IS BLUE EDGED IN RED.

BUILT AND RACED BY VINCE DELUCA, 'LIL QUICKIE' HAS AN EXCELLENT RACE RECORD AT RENO SINCE BEING BUILT IN 1972. IT HAS BEEN IN THE CHAMPIONSHIP FORMULA ONE RACE EVERY YEAR, TAKING 2ND PLACE IN 1975 @ 226.84 M.P.H AND ALSO A 3RD IN '74.

1974 VERSION







FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK. ALUMINUM COWL & TURTLEDECK. LOWER AFT FUSELAGE FABRIC COVERED
WING CONSTRUCTION: ALL ALUMINUM EXCEPT FABRIC COVERED AILERONS
TAIL CONSTRUCTION: ALL ALUMINUM EXCEPT FABRIC COVERED RUDDER AND ELEVATORS
POWERPLANT: CONTINENTAL C-85-8 MODIFIED TO O-200 - APPROX 120 HP

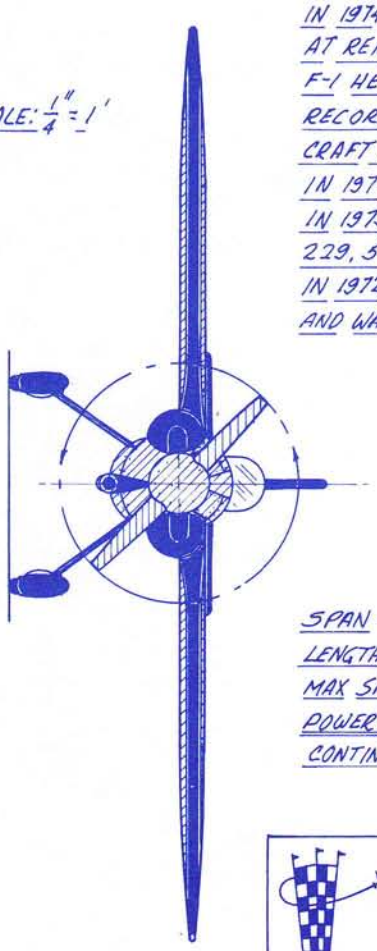
COLOR SCHEME: RED FUSELAGE WITH YELLOW WINGS EXCEPT AS NOTED
1949 COLOR SCHEME WAS RED FUSELAGE WITH NATURAL ALUMINUM WINGS - EXCEPT AS NOTED

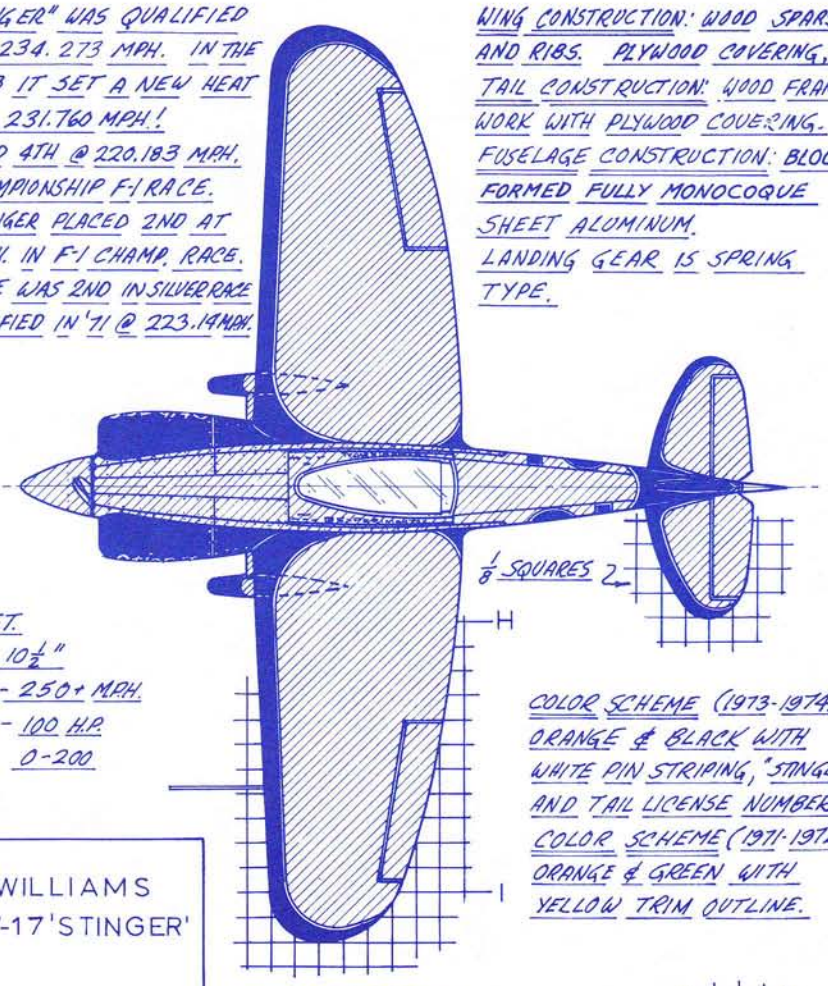
DESIGNED, BUILT, DEVELOPED AND RACED BY BILL FALCK "RIVETS" HAS WON OR PLACED IN OVER 20 FORMULA 1 RACES SINCE 1948. (SEE CHART IN FRONT OF BOOK FOR DETAILS.) WITH CURRENT MODIFICATIONS CAN NOW TOP 250 MPH STRAIGHT & LEVEL ALTHOUGH LANDING SPEED IS ONLY 80 MPH. CA

SCALE: $\frac{1}{4}$" = 1'

IN 1974 "STINGER" WAS QUALIFIED AT RENO AT 234.273 MPH. IN THE F-1 HEAT 1-B IT SET A NEW HEAT RECORD OF 231.760 MPH.! CRAFT PLACED 4TH @ 220.183 MPH. IN 1974 CHAMPIONSHIP F-1 RACE. IN 1973 'STINGER PLACED 2ND AT 229.543 MPH. IN F-1 CHAMP. RACE. IN 1972 PLANE WAS 2ND IN SILVER RACE AND WAS QUALIFIED IN '71 @ 223.14 MPH.

WING CONSTRUCTION: WOOD SPARS AND RIBS. PLYWOOD COVERING. TAIL CONSTRUCTION: WOOD FRAMEWORK WITH PLYWOOD COVERING. FUSELAGE CONSTRUCTION: BLOCK FORMED FULLY MONOCOQUE SHEET ALUMINUM. LANDING GEAR IS SPRING TYPE.



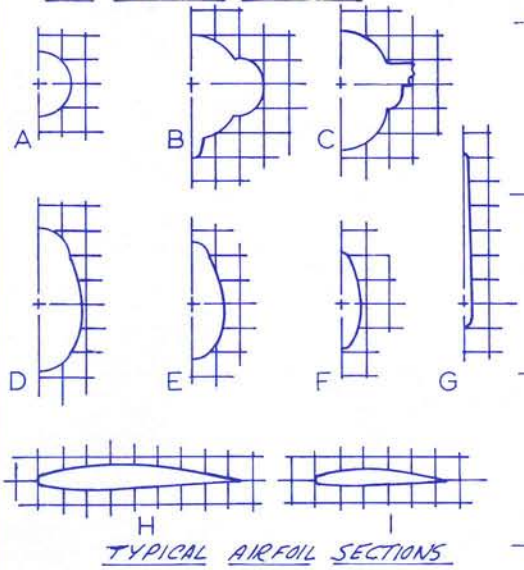


SPAN - 19 FT.
LENGTH - 15' 10$\frac{1}{2}$"
MAX SPEED - 250+ MPH.
POWERPLANT: - 100 H.P. CONTINENTAL O-200

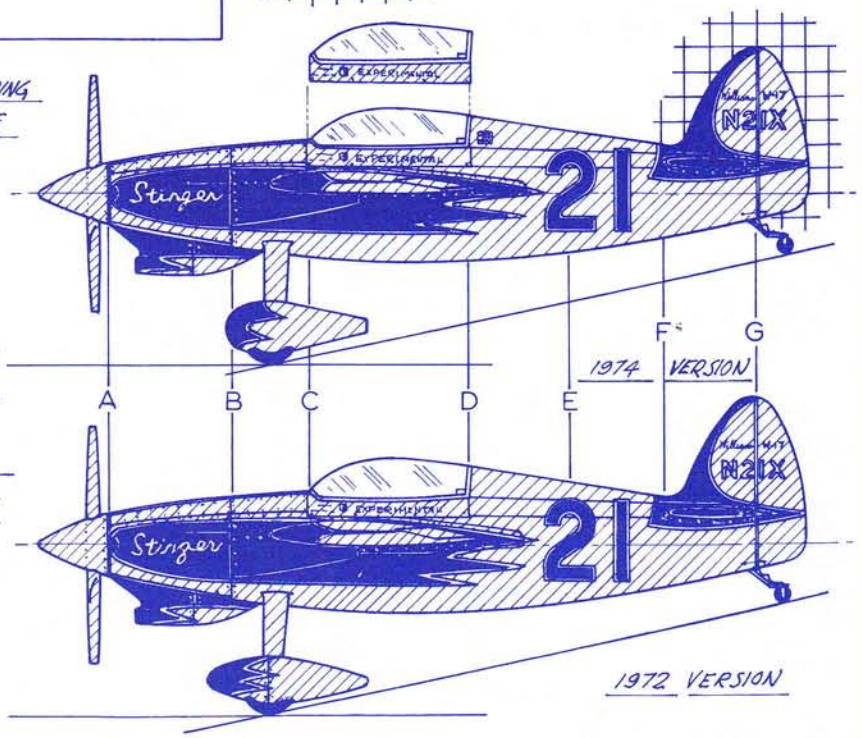
COLOR SCHEME (1973-1974): ORANGE & BLACK WITH WHITE PIN STRIPING, "STINGER" AND TAIL LICENSE NUMBER. COLOR SCHEME (1971-1972) ORANGE & GREEN WITH YELLOW TRIM OUTLINE.

WILLIAMS
W-17 'STINGER'

AIRCRAFT WAS BADLY DAMAGED DURING TAXI TESTS AT MOJAVE AFTER THE 1974 RACING SEASON.



TYPICAL AIRFOIL SECTIONS

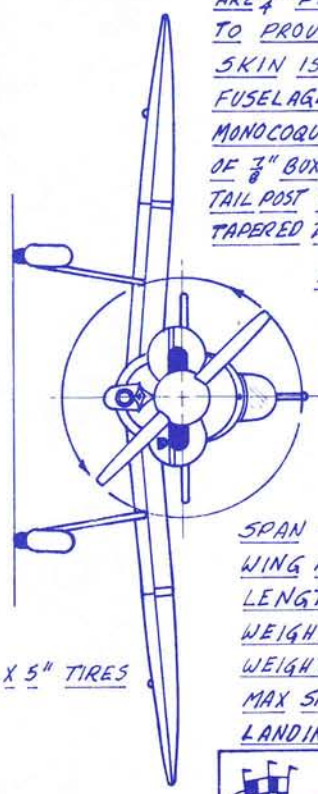


AIRCRAFT WAS DESIGNED BY ART WILLIAMS OF "SUNDANCER" FAME. IT WAS BUILT BY WILLIAMS, JOHN PAUL JONES, DAVID JONES, JOHN ALBRIEGT, CARL AST AND CARL GILMORE. A NEW ENGINE AND NEW WHEEL PANTS WERE ADDED IN 1973. STINGER'S RACING CAREER HAS BEEN ENTIRELY IN THE EXPERIENCED PILOTING HANDS OF JOHN PAUL JONES.

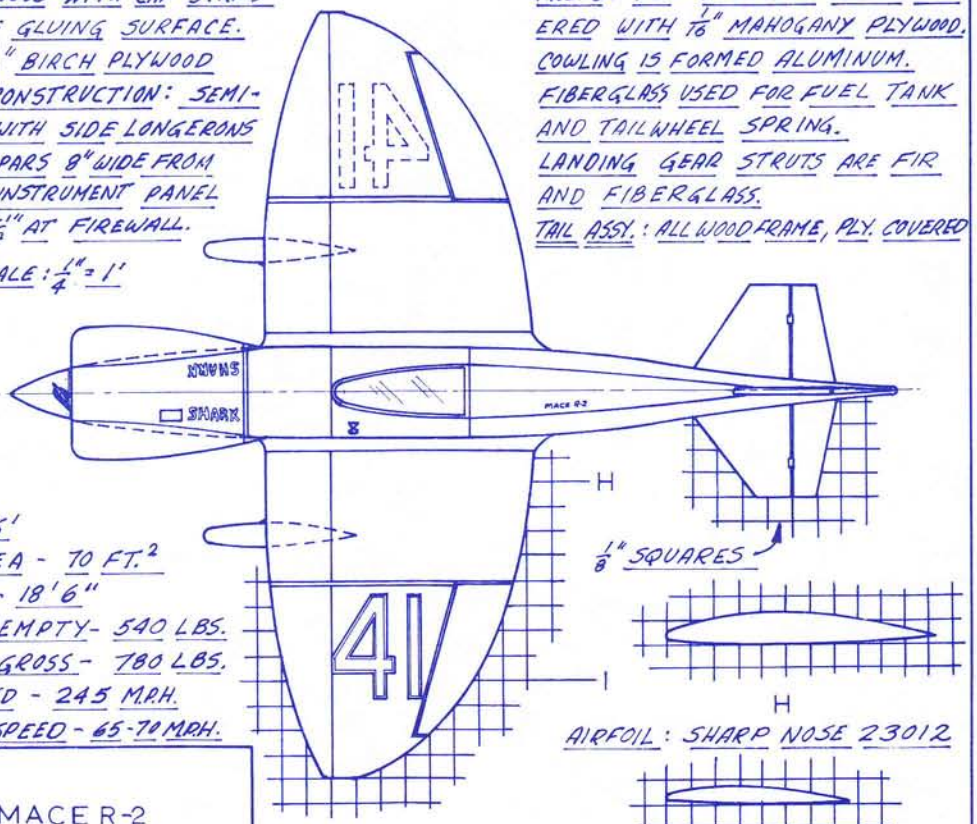
WING CONSTRUCTION: $5\frac{1}{4}$" BOX SPAR TAPERED AT TIP. RIBS ARE $\frac{1}{4}$" PLYWOOD WITH CAP STRIPS TO PROVIDE GLUING SURFACE. SKIN IS $\frac{1}{16}$" BIRCH PLYWOOD
FUSELAGE CONSTRUCTION: SEMI-MONOCOQUE WITH SIDE LONGERONS OF $\frac{7}{8}$" BOX SPARS 8" WIDE FROM TAIL POST TO INSTRUMENT PANEL TAPERED TO $5\frac{1}{2}$" AT FIREWALL.

SCALE: $\frac{1}{4}$" = 1'

FUSE. CONST. (CONT.) COVERED WITH $\frac{1}{16}$" BIRCH PLYWOOD IN STRESSED AREAS. NON-STRESSED AREAS COVERED WITH $\frac{1}{16}$" MAHOGANY PLYWOOD. COWLING IS FORMED ALUMINUM. FIBERGLASS USED FOR FUEL TANK AND TAILWHEEL SPRING. LANDING GEAR STRUTS ARE FIR AND FIBERGLASS.
TAIL ASSY.: ALL WOOD FRAME, PLY. COVERED



5.00 X 5" TIRES

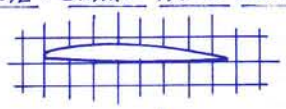


SPAN - 16'
WING AREA - 70 FT.²
LENGTH - 18'6"
WEIGHT EMPTY - 540 LBS.
WEIGHT - GROSS - 780 LBS.
MAX SPEED - 245 M.P.H.
LANDING SPEED - 65-70 M.P.H.

$\frac{1}{8}$" SQUARES

H

AIRFOIL: SHARP NOSE 23012



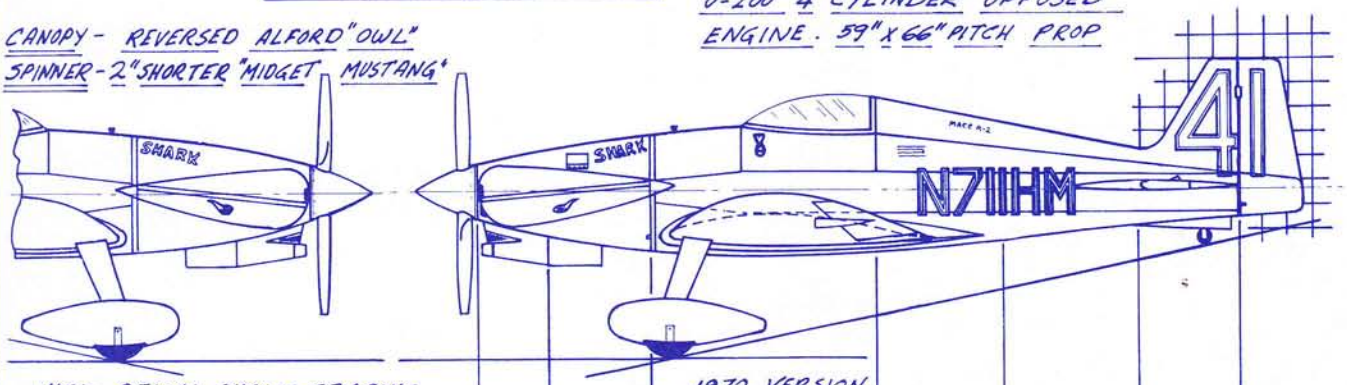
I



MACE R-2
'SHARK'

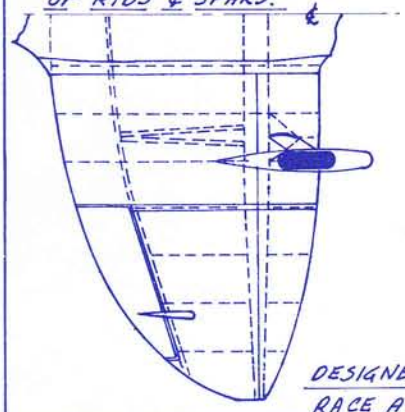
POWERPLANT: CONTINENTAL O-200 4 CYLINDER OPPOSED ENGINE. 59" X 66" PITCH PROP

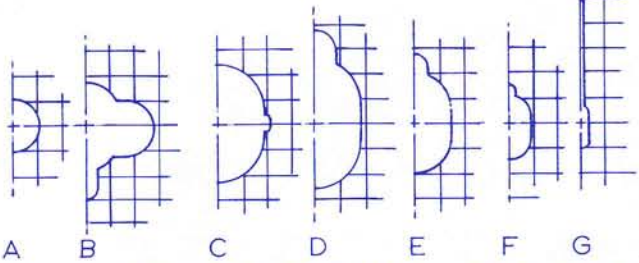
CANOPY - REVERSED ALFORD "OWL"
SPINNER - 2" SHORTER "MIDGET MUSTANG"



1970 VERSION

VIEW BELOW SHOWS SPACING OF RIBS & SPARS.





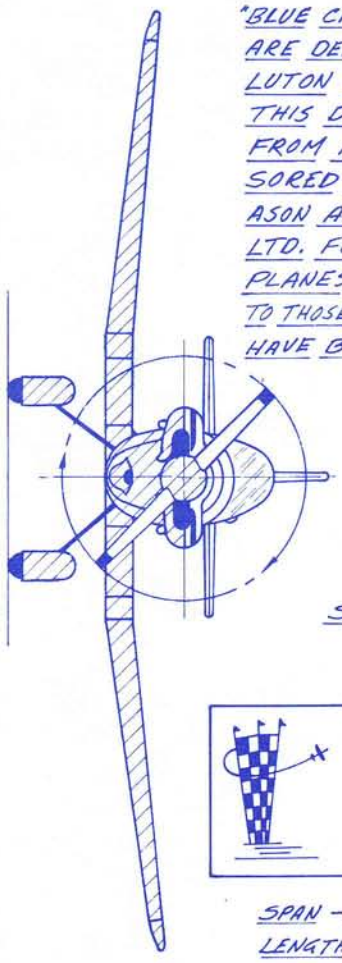
A B C D E F G

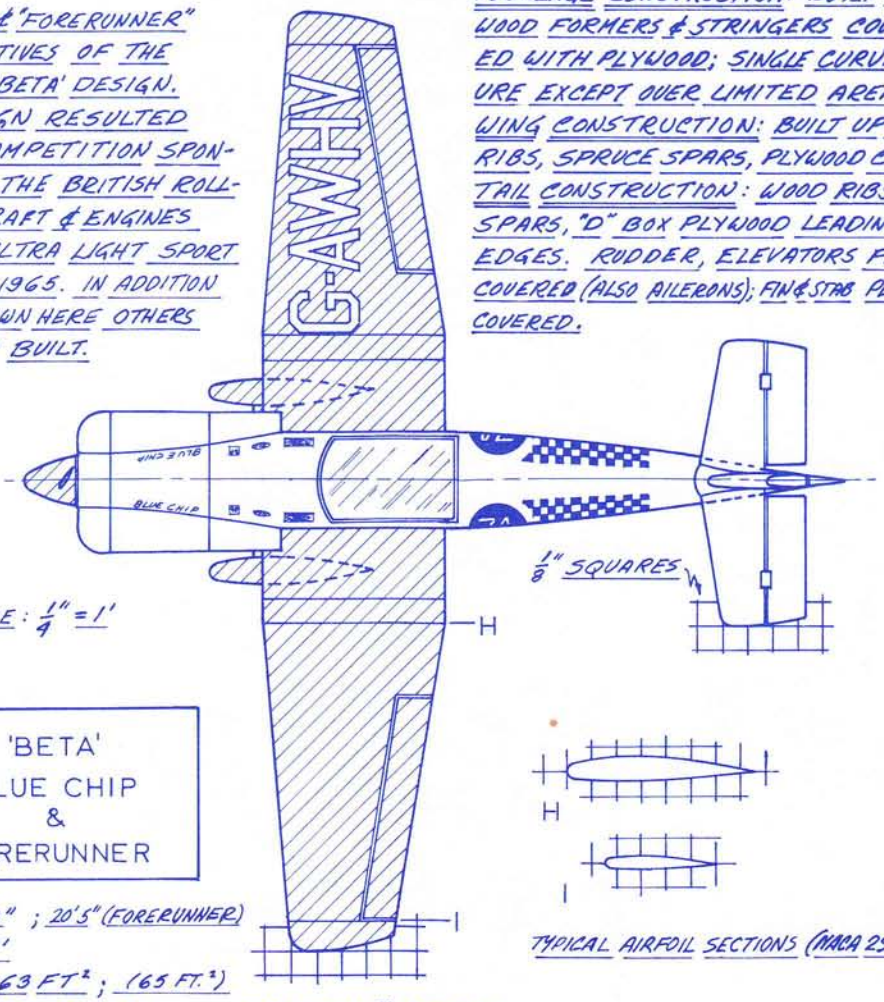
COLOR SCHEME: 1969 GM DARK METALIC GRAY. PALE YELLOW NUMBERS WITH $\frac{1}{2}$" WHITE EDGE. RED SHARK MOUTH AND EYE WITH BLACK TRIM. GRAY SEAM TAPE.

DESIGNED, BUILT AND FLOWN BY HARVEY MACE. PLACED SECOND IN CONSOLATION RACE AT 1970 RENO RACES AT 193.896 M.P.H.; 4TH IN '75 RENO SILVER RACE - 200.5 $\frac{3}{4}$ CH

"BLUE CHIP" & "FORERUNNER" ARE DERIVATIVES OF THE LUTON GP. 'BETA' DESIGN. THIS DESIGN RESULTED FROM A COMPETITION SPONSORED BY THE BRITISH ROLLASON AIRCRAFT & ENGINES LTD. FOR ULTRA LIGHT SPORT PLANES IN 1965. IN ADDITION TO THOSE SHOWN HERE OTHERS HAVE BEEN BUILT.

FUSELAGE CONSTRUCTION: BUILT UP WOOD FORMERS & STRINGERS COVERED WITH PLYWOOD; SINGLE CURVATURE EXCEPT OVER LIMITED AREAS. WING CONSTRUCTION: BUILT UP WOOD RIBS, SPRUCE SPARS, PLYWOOD COVER. TAIL CONSTRUCTION: WOOD RIBS & SPARS, "D" BOX PLYWOOD LEADING EDGES. RUDDER, ELEVATORS FABRIC COVERED (ALSO AILERONS); FIN & STAB PLYWOOD COVERED.





SCALE: $\frac{1}{4}$" = 1'

$\frac{1}{8}$" SQUARES

'BETA'
BLUE CHIP
&
FORERUNNER

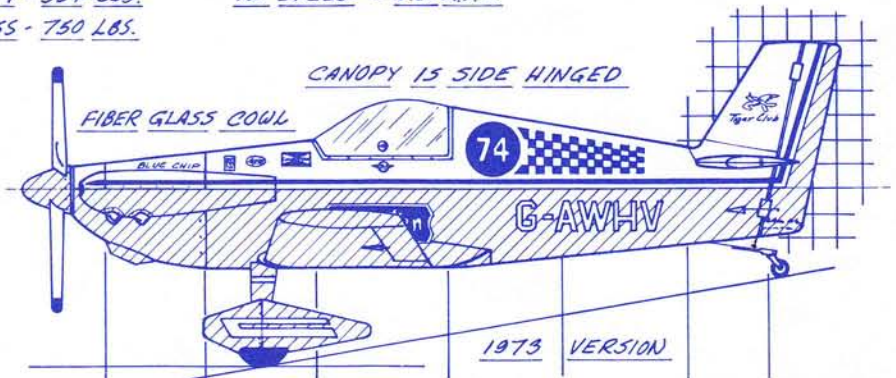
TYPICAL AIRFOIL SECTIONS (NACA 23012)

SPAN - 19'3" ; 20'5" (FORERUNNER)
LENGTH - 17'
WING AREA = 63 FT.² ; (65 FT.²)
WEIGHT EMPTY - 564 LBS.
WEIGHT-GROSS - 750 LBS.

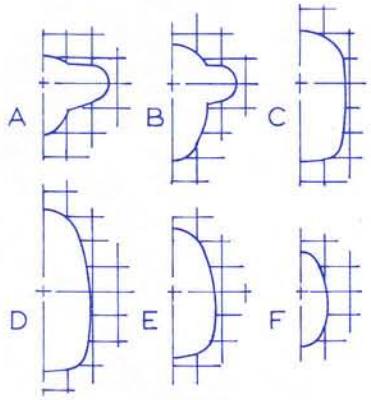
TOP SPEED ≅ 220 M.P.H.

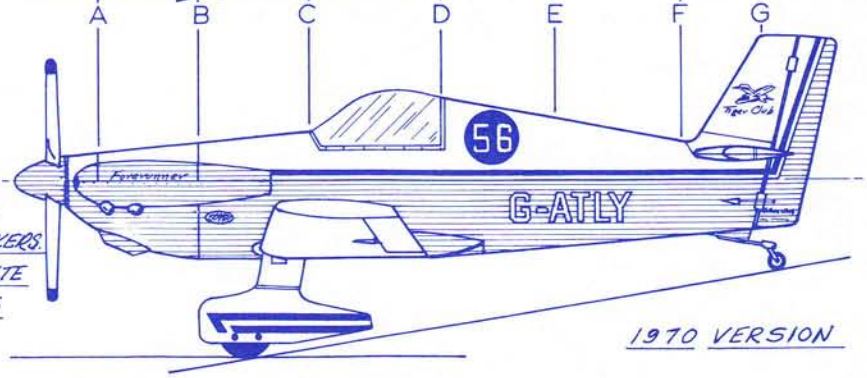
CANOPY IS SIDE HINGED

FIBER GLASS COWL



1973 VERSION





1970 VERSION

COLOR SCHEMES:
"BLUE CHIP" - DARK BLUE & AND WHITE. WHITE NUMERAL WITH BLACK STRIPE & CHECKERS.
"FORERUNNER" - RED & WHITE WITH BLACK TRIM LINES AND WHITE LETTERING.

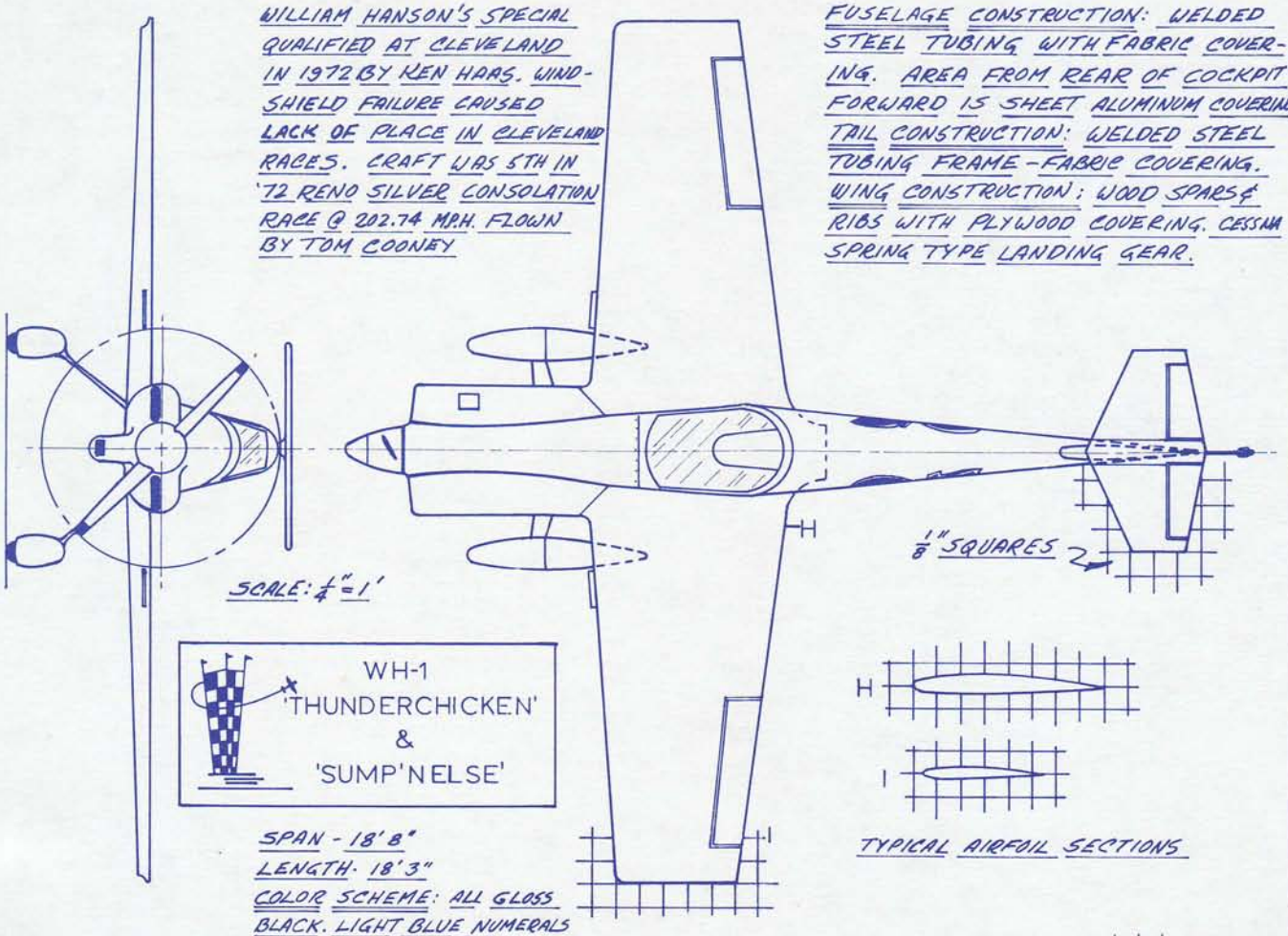
AIRCRAFT ARE FLOWN IN STRICTLY BRITISH RACES SUCH AS HEINEKEN TROPHY, MACKENZIE HILL TROPHY, ETC. dk

1497o

3/8=7"

WILLIAM HANSON'S SPECIAL QUALIFIED AT CLEVELAND IN 1972 BY KEN HAAS. WINDSHIELD FAILURE CAUSED LACK OF PLACE IN CLEVELAND RACES. CRAFT WAS 5TH IN '72 RENO SILVER CONSOLATION RACE @ 202.74 M.P.H. FLOWN BY TOM COONEY

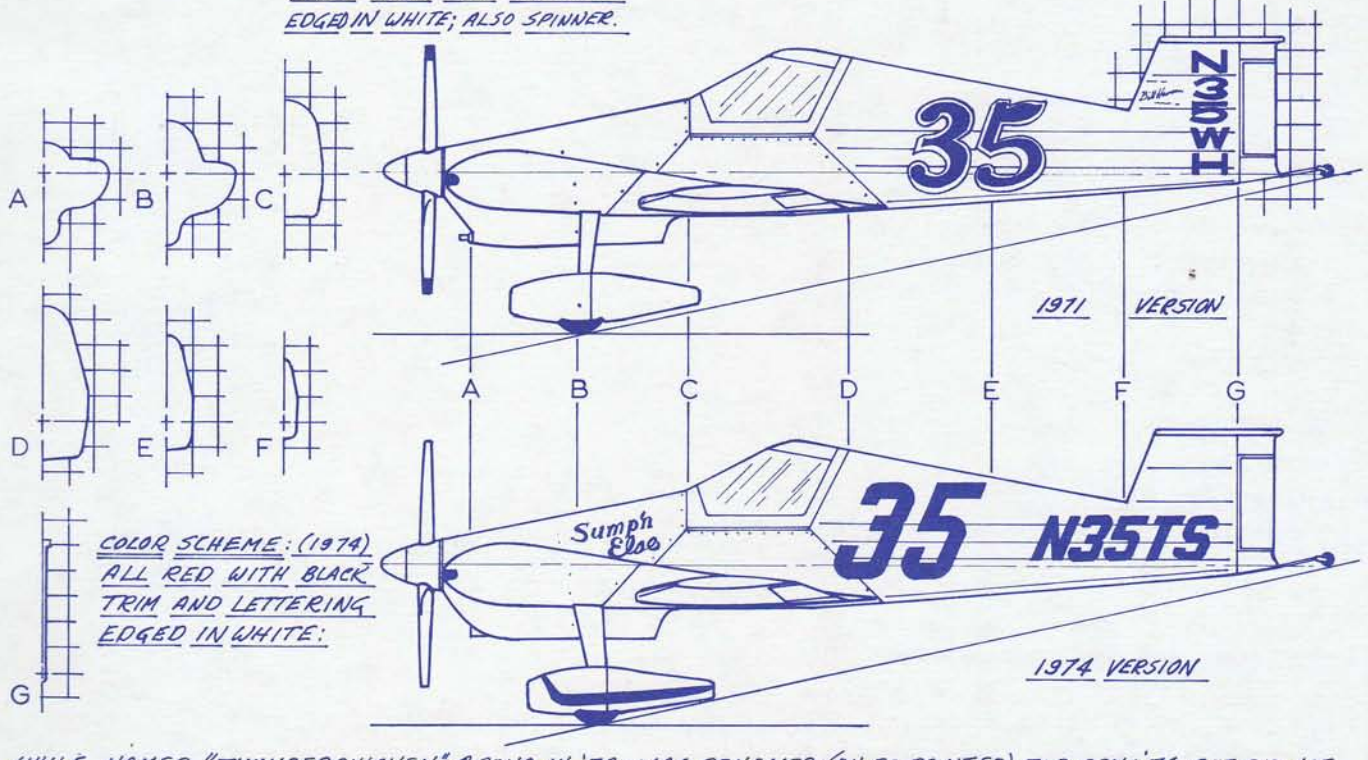
FUSELAGE CONSTRUCTION: WELDED STEEL TUBING WITH FABRIC COVERING. AREA FROM REAR OF COCKPIT FORWARD IS SHEET ALUMINUM COVERING. TAIL CONSTRUCTION: WELDED STEEL TUBING FRAME - FABRIC COVERING. WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING. CESSNA SPRING TYPE LANDING GEAR.



WH-1
'THUNDERCHICKEN'
&
'SUMP'N ELSE'

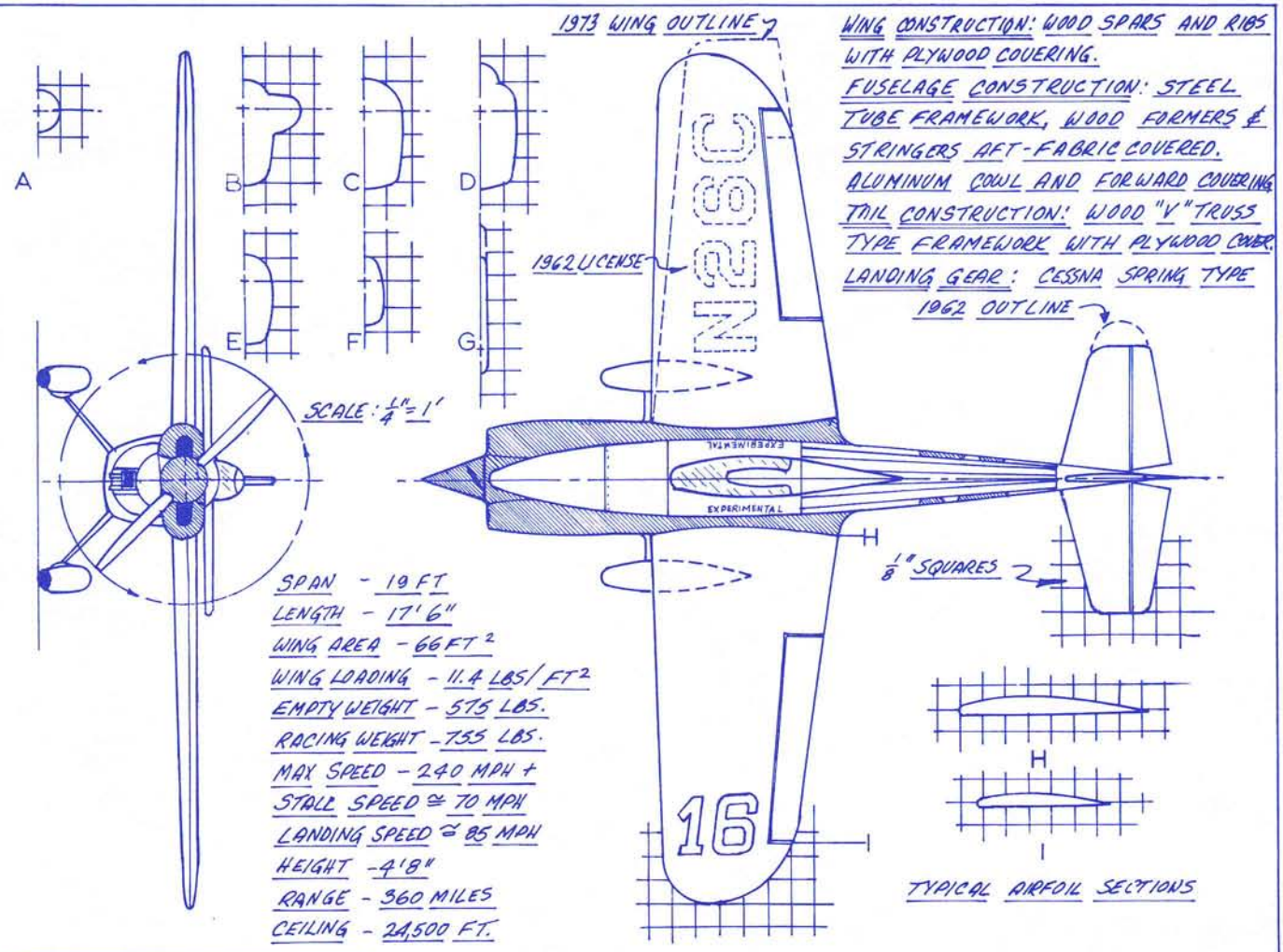
TYPICAL AIRFOIL SECTIONS

SPAN - 18' 8"
LENGTH - 18' 3"
COLOR SCHEME: ALL GLOSS BLACK. LIGHT BLUE NUMERALS EDGED IN WHITE; ALSO SPINNER.



COLOR SCHEME: (1974) ALL RED WITH BLACK TRIM AND LETTERING EDGED IN WHITE:

WHILE NAMED "THUNDERCHICKEN" @ RENO IN '72; WAS RENAMED (AN RE-PAINTED) FOR RENO '74 BUT DID NOT QUALIFY. FLOWN BY THOMAS SUMMERS IN '75 RENO SILVER CONSOLATION RACE TO 3RD PLACE AT 204.69 MPH CK



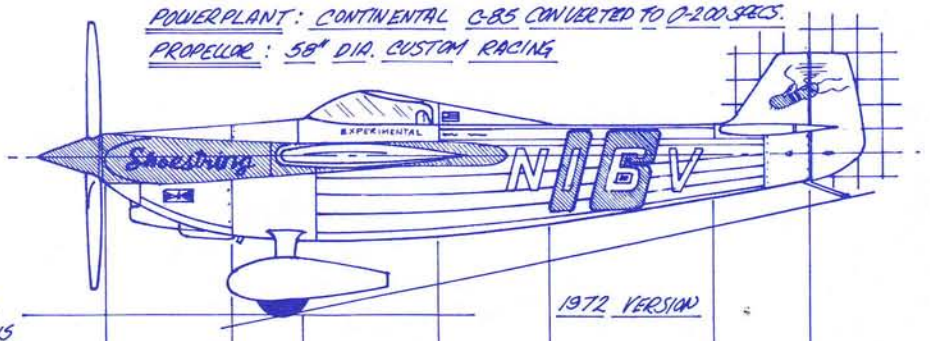
WING CONSTRUCTION: WOOD SPARS AND RIBS WITH PLYWOOD COVERING.
FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK, WOOD FORMERS & STRINGERS AFT - FABRIC COVERED. ALUMINUM COWL AND FORWARD COVERING.
TAIL CONSTRUCTION: WOOD "V" TRUSS TYPE FRAMEWORK WITH PLYWOOD COVER.
LANDING GEAR: CESSNA SPRING TYPE

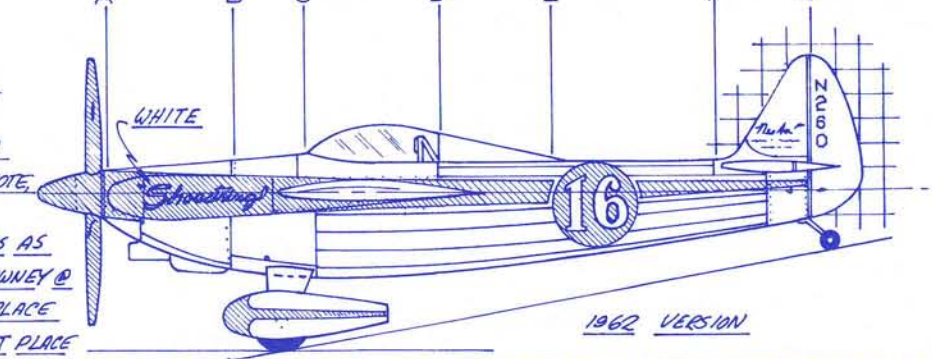
1962 OUTLINE

SPAN - 19 FT
LENGTH - 17'6"
WING AREA - 66 FT²
WING LOADING - 11.4 LBS/FT²
EMPTY WEIGHT - 575 LBS.
RACING WEIGHT - 755 LBS.
MAX SPEED - 240 MPH +
STALL SPEED ≅ 70 MPH
LANDING SPEED ≅ 85 MPH
HEIGHT - 4'8"
RANGE - 360 MILES
CEILING - 24,500 FT.



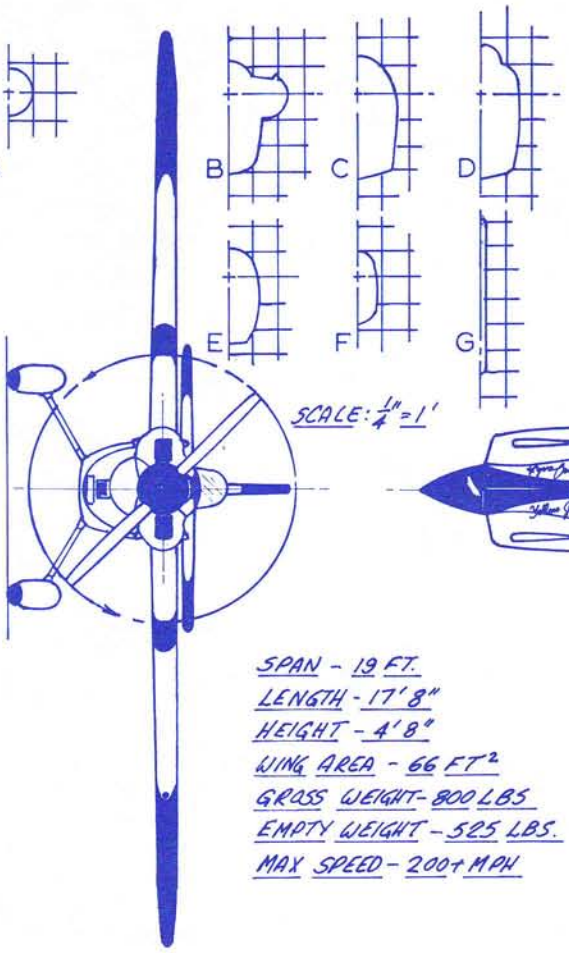
POWERPLANT: CONTINENTAL C-85 CONVERTED TO O-200 SPECS.
PROPELLOR: 58" DIA. CUSTOM RACING



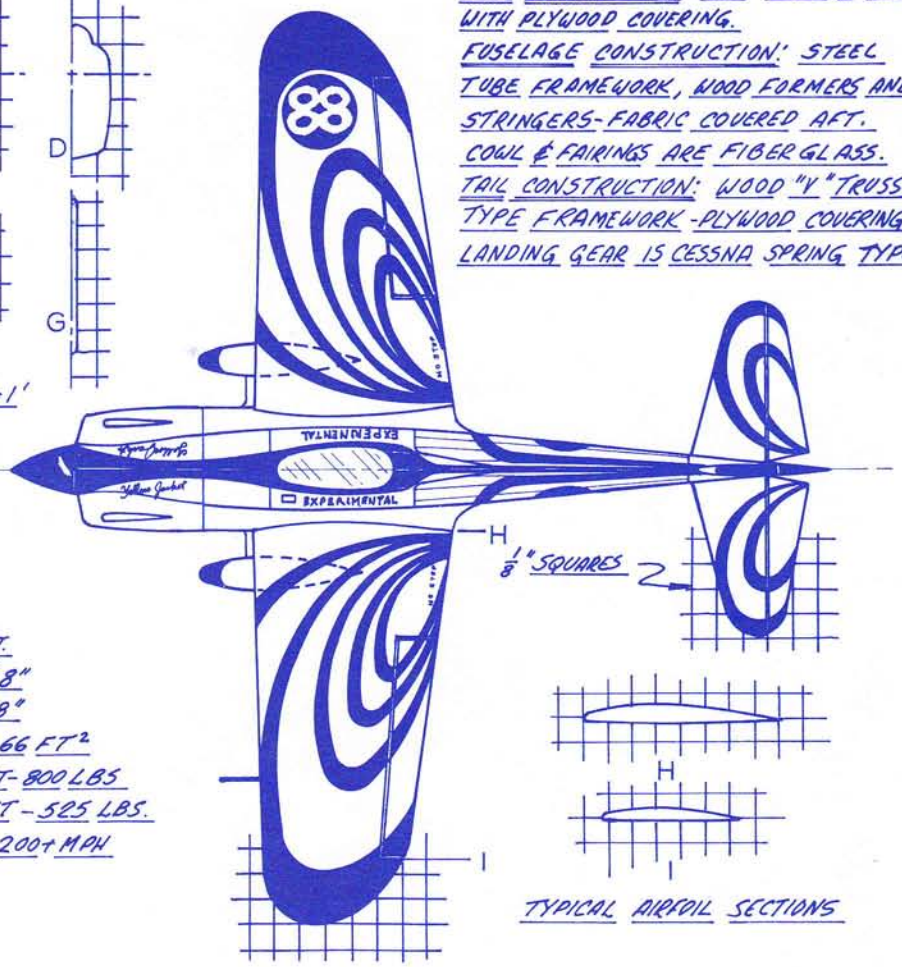


COLOR SCHEME: LIGHT BLUE/GRAY OVERALL WITH CORAL PINK TRIM. NUMERALS ARE WHITE - FUSELAGE NUMBERS ARE OUTLINED IN PINK WITH BLACK TRIM. "SHOESTRING" IS BLACK.
COLOR SCHEME (1967 VERSION): ALL CHARTREUSE WITH RED TRIM.
"SHOESTRING" WAS DESIGNED BY ROD KREIMENDAHL AND BUILT BY CARL & VINCENT AST, LATER MODIFIED TO PRESENT CONFIGURATION BY RAY COTE, KEN STOCKBARGER & CLARK HUSTON.
THE RACE RECORD OF SHOESTRING IS AS FOLLOWS: 1949 - 7TH PLACE WITH DOWNEY @ CLEVELAND - 171.4 MPH; 1950 - 3RD PLACE WITH DOWNEY, MIAMI - 181.3 MPH; 1951 - 1ST PLACE WITH JONES, DETROIT, 197.2 MPH; 1956 4TH PLACE WITH COLE, NIAGARA FALLS 191.4 MPH; 1957 5TH PLACE WITH OHM, FT. WAYNE, 187.1 MPH; 1958 4TH PLACE WITH TYGERT, FULTON, 189.3 MPH; 1967 3RD PLACE WITH COTE, RENO, 200.6 MPH; 1968 THRU 1975; RAY COTE WON FORMULA ONE AT RENO WITH SPEEDS UP TO 227.5 MPH. - "SHOESTRING" IS AN ALL-TIME GREAT!

WING CONSTRUCTION: WOOD SPARS & RIBS WITH PLYWOOD COVERING.
FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK, WOOD FORMERS AND STRINGERS - FABRIC COVERED AFT. COWL & FAIRINGS ARE FIBERGLASS.
TAIL CONSTRUCTION: WOOD "V" TRUSS TYPE FRAMEWORK - PLYWOOD COVERING
LANDING GEAR IS CESSNA SPRING TYPE

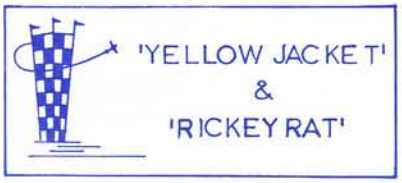


SCALE: 1/4" = 1'



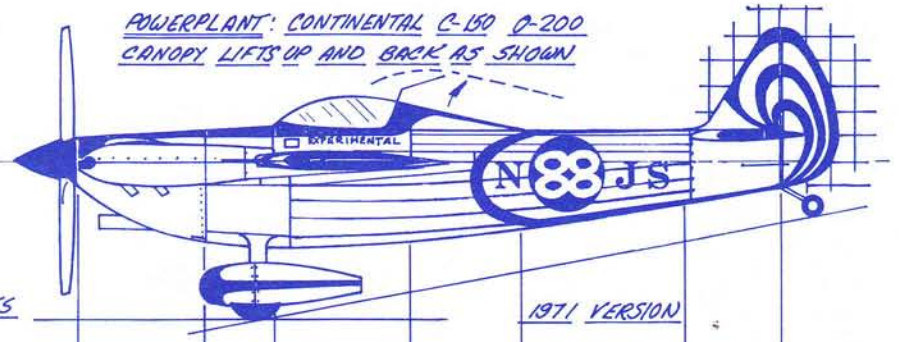
SPAN - 19 FT.
LENGTH - 17'8"
HEIGHT - 4'8"
WING AREA - 66 FT²
GROSS WEIGHT - 800 LBS
EMPTY WEIGHT - 525 LBS.
MAX SPEED - 200+ MPH

TYPICAL AIRFOIL SECTIONS



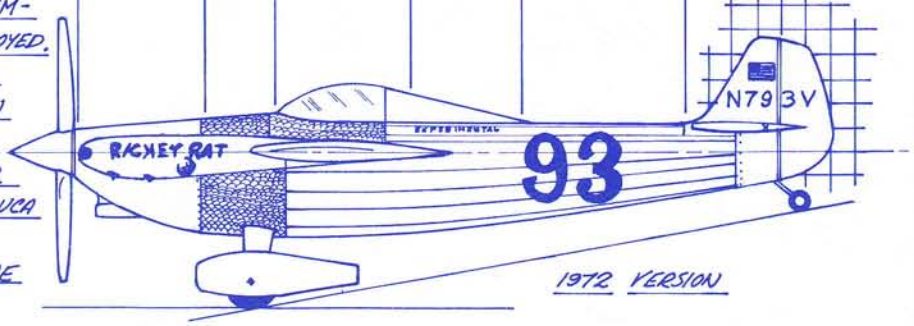
'YELLOW JACKET' & 'RICKEY RAT'

POWERPLANT: CONTINENTAL C-150 O-200
CANOPY LIFTS UP AND BACK AS SHOWN



1971 VERSION

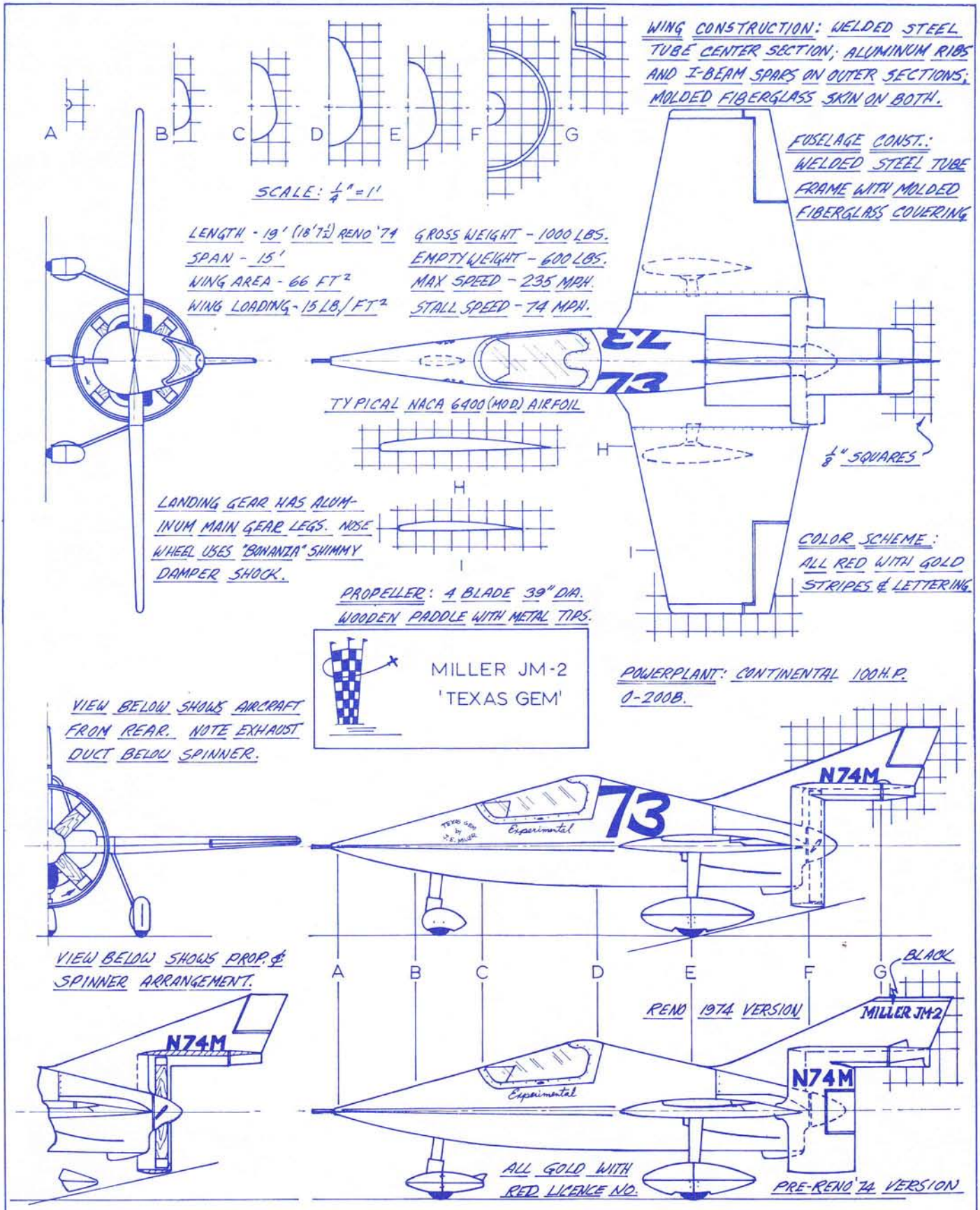
"YELLOW JACKET" WAS BUILT BY JIM STRODE FROM PLANS BY LANDIS KETNER. KETNER PREPARED THE PLANS FROM ACTUAL MEASUREMENTS TAKEN FROM "SHOESTRING" WHILE IT WAS OWNED BY JOHN ANDERSON. THIS WAS DONE AS THE ORIGIONAL DRAWINGS & DATA DONE BY ROD KRIEMENDAHL IN 1949 WERE LOST OR DESTROYED.
COLOR SCHEME: ALL GLOSS YELLOW WITH ALL BLACK MARKINGS. GREEN TINTED CANOPY. CRAFT RACED IN '72 AT WILSON BY HUGH ALEXANDER.
"RICKEY RAT" OWNED BY VINCENT DELUCA HAS RACED AT RENO
COLOR SCHEME: SILVER AND BLUE



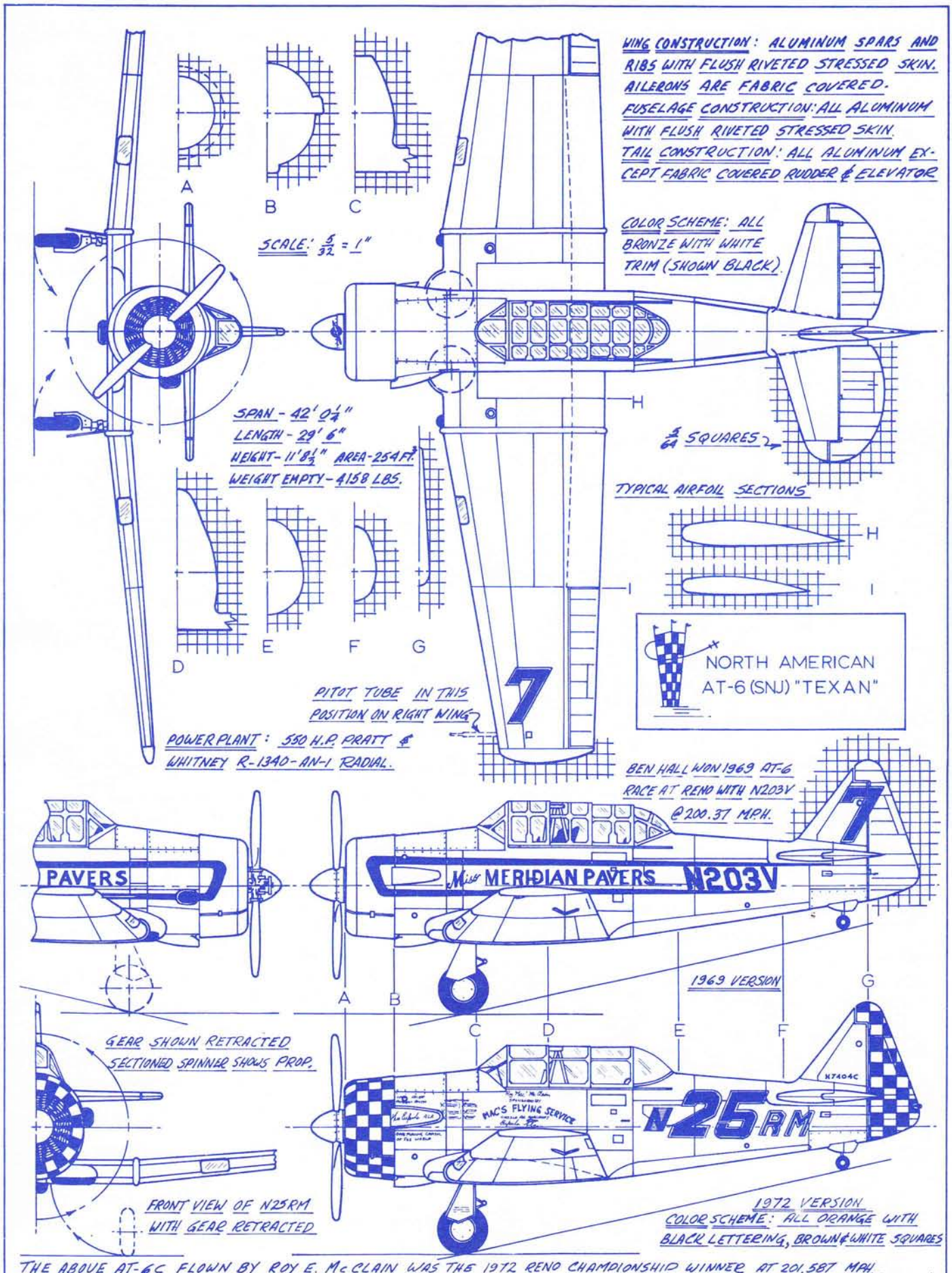
1972 VERSION

OTHER K-10 "SHOESTRINGS" BUILT FROM THE KETNER PLANS INCLUDE MUNROE LYETH JR'S "NO BIG THING" AND JUDY WAGNER'S SOLUTION.

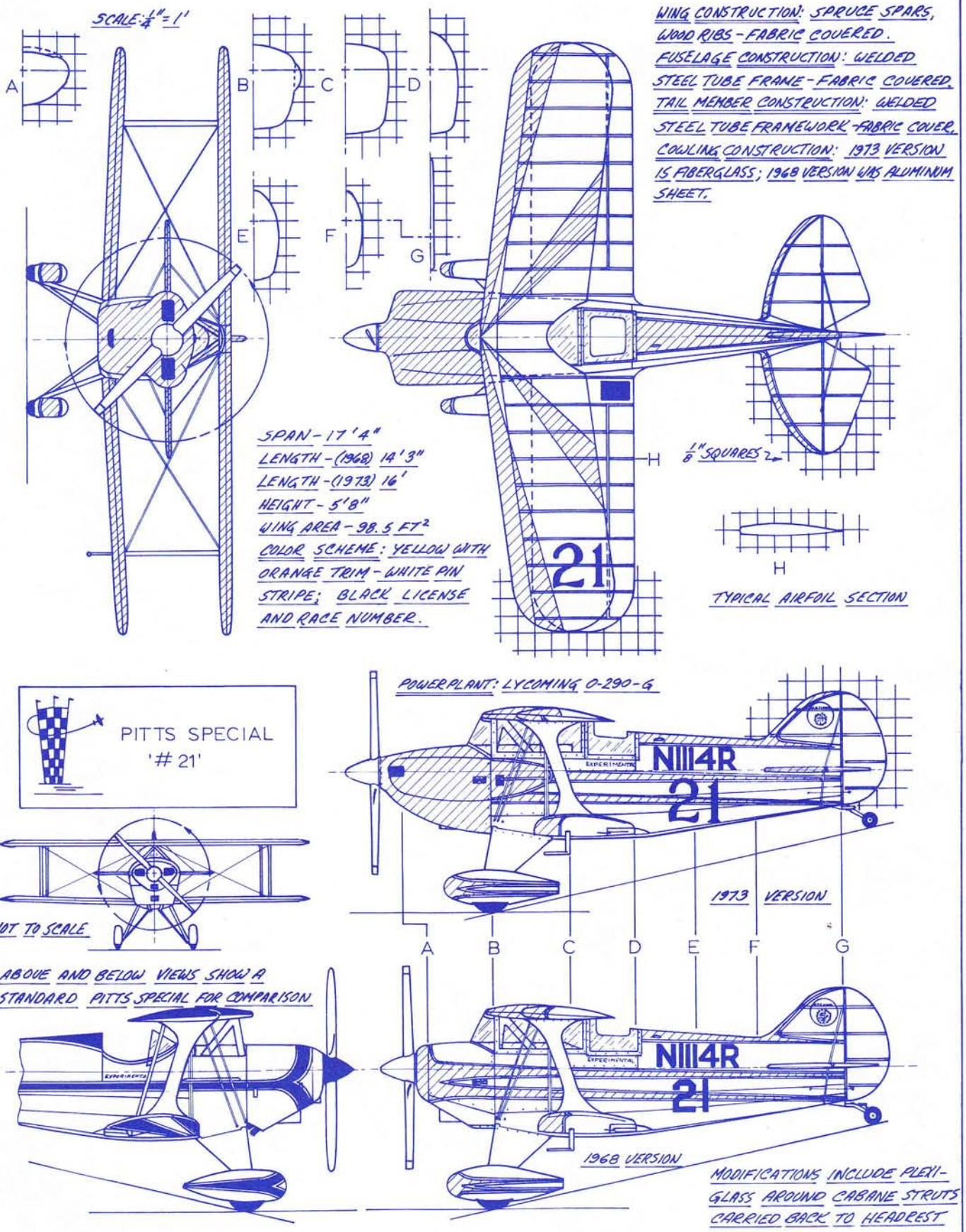
CAC



"TEXAS GEM", A VERY RADICAL DEPARTURE IN DESIGN FROM THE USUAL FORMULA ONE RACER, WAS DESIGNED BUILT, AND FLOWN IN THE 1974 RENO F-1 QUALIFYING TIME TRIALS BY JIM MILLER. (DESIGNER OF "LITTLE GEM", NOW "OLE TIGER".). DUE TO HIGH PROP RPM PROBLEMS CRAFT QUALIFIED AT ONLY 181.8 M.P.H.



THE ABOVE AT-6C FLOWN BY ROY E. McCLAIN WAS THE 1972 RENO CHAMPIONSHIP WINNER AT 201.587 MPH.



WING CONSTRUCTION: SPRUCE SPARS, WOOD RIBS - FABRIC COVERED.
FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAME - FABRIC COVERED.
TAIL MEMBER CONSTRUCTION: WELDED STEEL TUBE FRAMEWORK - FABRIC COVER.
COWLING CONSTRUCTION: 1973 VERSION IS FIBERGLASS; 1968 VERSION WAS ALUMINUM SHEET.

SPAN - 17'4"
LENGTH - (1968) 14'3"
LENGTH - (1973) 16'
HEIGHT - 5'8"
WING AREA - 98.5 FT²
COLOR SCHEME: YELLOW WITH ORANGE TRIM - WHITE PIN STRIPE; BLACK LICENSE AND RACE NUMBER.

TYPICAL AIRFOIL SECTION

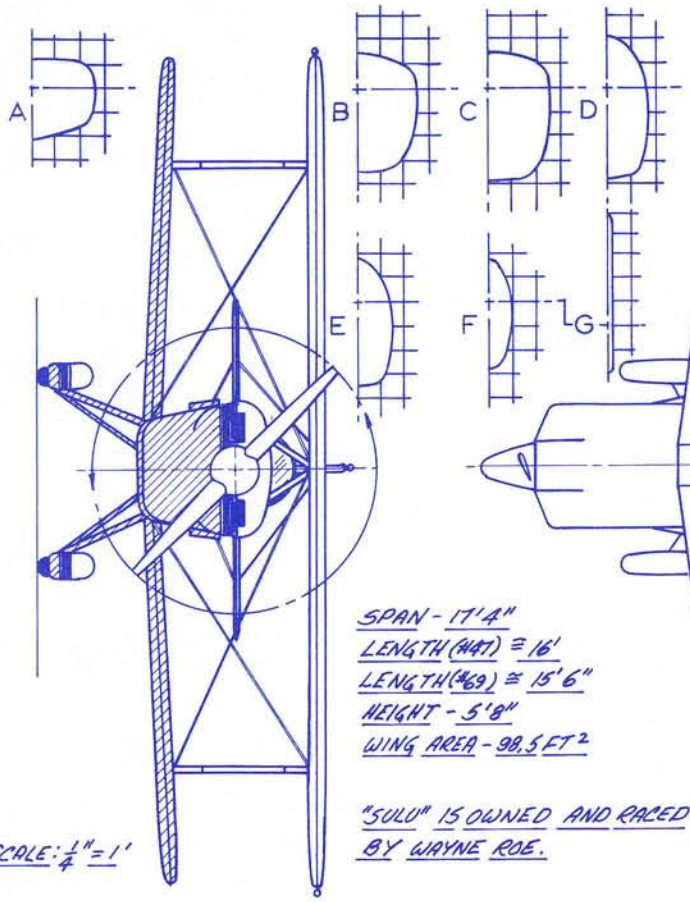
POWERPLANT: LYCOMING O-290-G

ABOVE AND BELOW VIEWS SHOW A STANDARD PITTS SPECIAL FOR COMPARISON

MODIFICATIONS INCLUDE PLEXI-GLASS AROUND CABANE STRUTS CARRIED BACK TO HEADREST

#21 IS OWNED AND RACED BY L.J. "SKEETER" ROYALL. CRAFT HAS BEEN RACED SINCE HE BUILT IT IN 1968 WITH FIRST RACE AT FREDERICK MD. ('68). HE WON FINAL EVENT AT FT. LAUDERDALE IN 1969. AIRCRAFT PILOTED BY DAVID GARBER WON 1973 MIAMI SPORT BIPLANE FINALS AT 173.08 M.P.H.

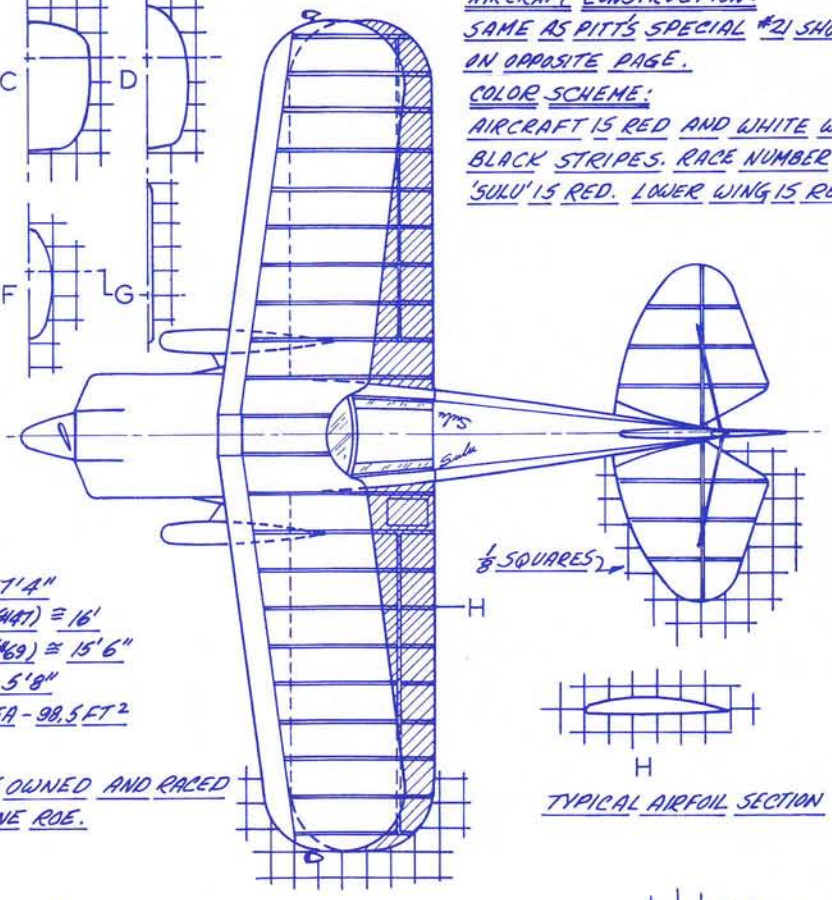
CH



SCALE: $\frac{1}{4}$" = 1'

AIRCRAFT CONSTRUCTION:
SAME AS PITT'S SPECIAL #21 SHOWN ON OPPOSITE PAGE.

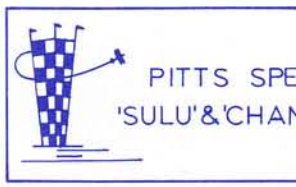
COLOR SCHEME:
AIRCRAFT IS RED AND WHITE WITH BLACK STRIPES. RACE NUMBER AND 'SULU' IS RED. LOWER WING IS RED.



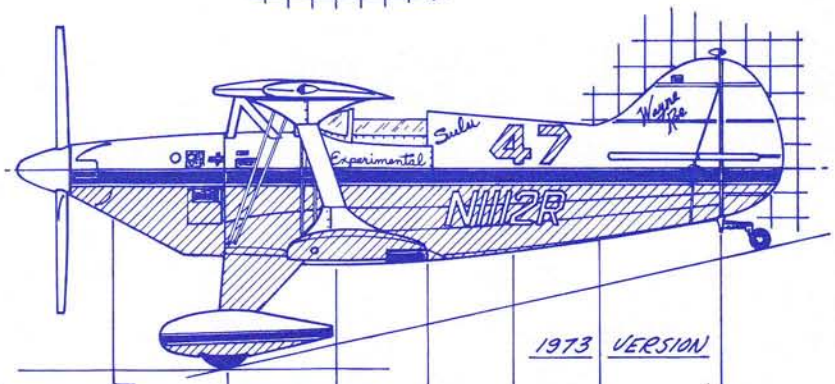
SPAN - 17'4"
LENGTH (#47) ≅ 16'
LENGTH (#69) ≅ 15'6"
HEIGHT - 5'8"
WING AREA - 98.5 FT²

"SULU" IS OWNED AND RACED BY WAYNE ROE.

TYPICAL AIRFOIL SECTION

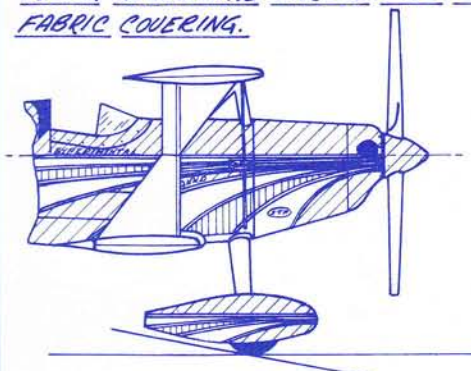


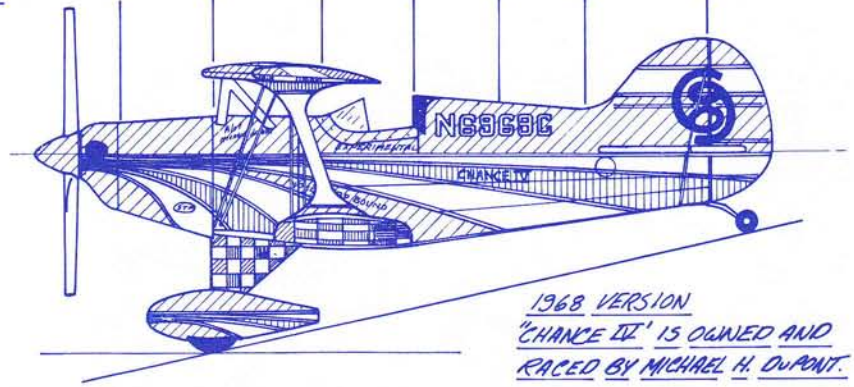
PITTS SPECIAL 'SULU' & 'CHANCE IV'



1973 VERSION

1971 VERSION OF #69 SHOWN BELOW FEATURES STRAIGHT LAMINAR FLOW WINGS BUILT UP OF PLASTIC FOAM & WOOD SPARS - COVERED WITH FIBERGLASS. TUBING INTERPLANE STRUTS SHOWN WITH FABRIC COVERING.





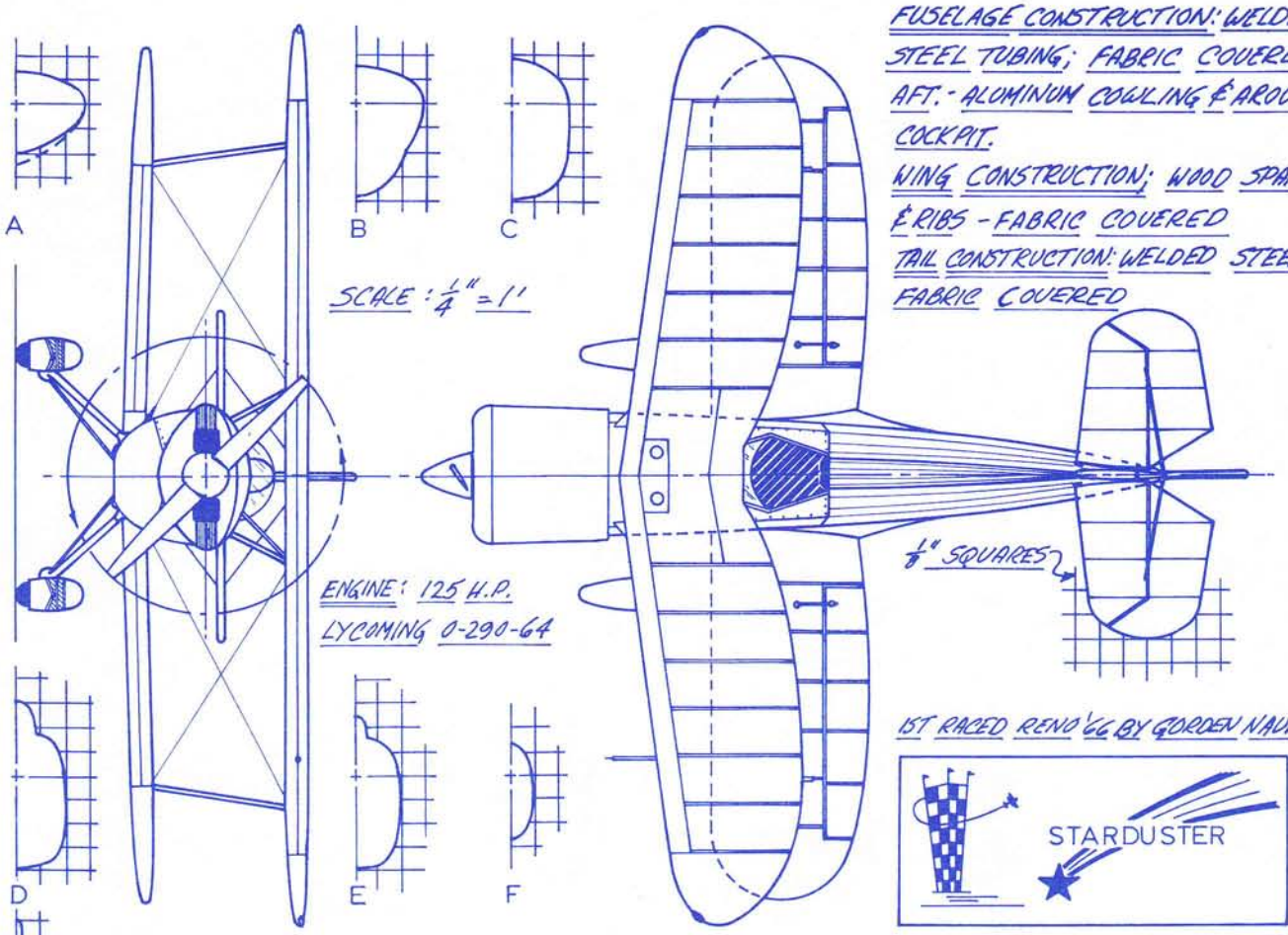
1968 VERSION
"CHANCE IV" IS OWNED AND RACED BY MICHAEL H. DUPONT.

COLOR SCHEME ON #69 IS RED, WHITE AND NAVY BLUE. CHECKERBOARD IS ON UNDERSIDE OF WINGS WITH SUNBURST STRIPING ON UPPER SURFACES - LIKEWISE FOR STABILIZER. - (1968 VERSION). THESE TWO PAGES ARE REPRESENTATIVE OF THE SEVERAL OTHER RACING PITTS SPECIALS.

CH

FUSELAGE CONSTRUCTION: WELDED STEEL TUBING; FABRIC COVERED AFT. - ALUMINUM COWLING & AROUND COCKPIT.
WING CONSTRUCTION; WOOD SPARS & RIBS - FABRIC COVERED
TAIL CONSTRUCTION: WELDED STEEL - FABRIC COVERED

SCALE: $\frac{1}{4}$" = 1'



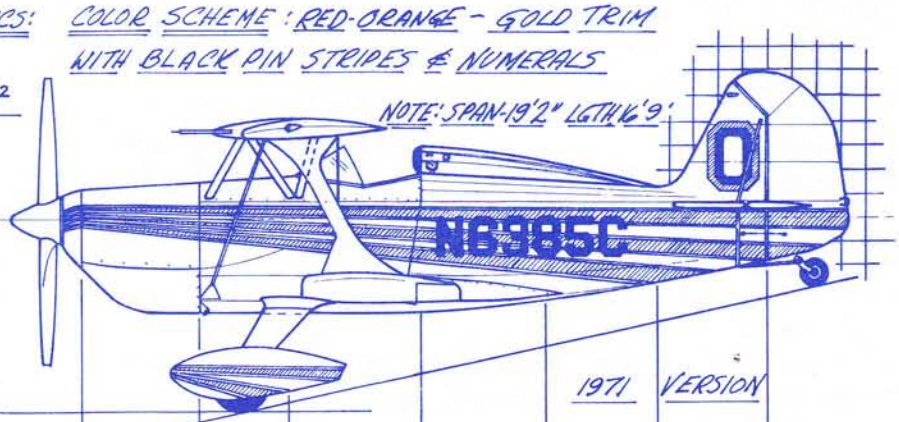
1ST RACED RENO '66 BY GORDEN NAUTA

STARDUSTER

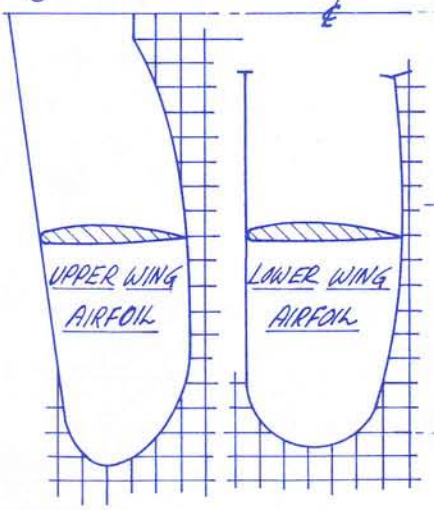
TYP. STARDUSTER SA-100A SPECS:
SPAN - 19' LENGTH - 16'-6"
HGT. - 6'6" WING AREA 110 FT²
GROSS WHGT. - 1080 LBS.
EMPTY WHGT. - 700 LBS.

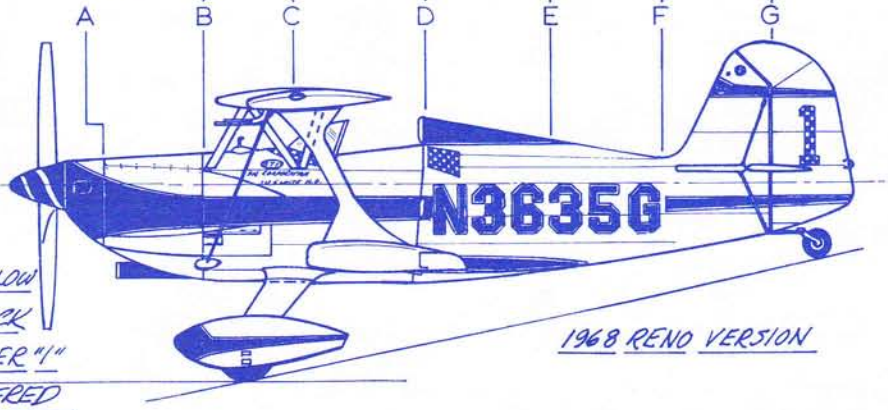
COLOR SCHEME: RED-ORANGE - GOLD TRIM WITH BLACK PIN STRIPES & NUMERALS

NOTE: SPAN-19'2" LGTH. 16'9"



1971 VERSION





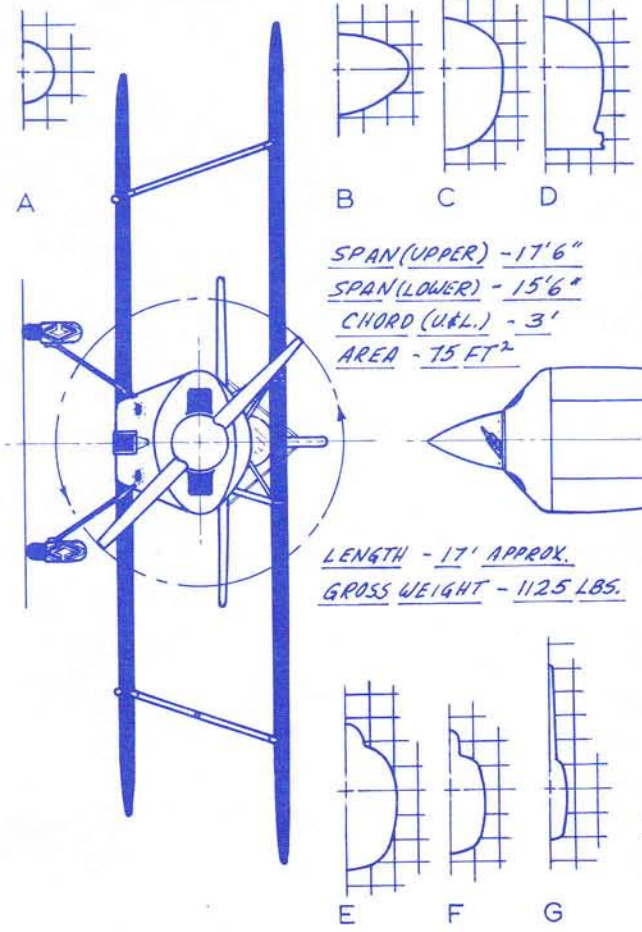
1968 RENO VERSION

COLOR SCHEME: BASE COLOR YELLOW STRIPING & NUMERALS ARE BLACK WITH SILVER TRIM. FLAG, NUMBER "1" & AROUND COCKPIT - BLK & WHT. CHECKERED

FLOWN BY DR. SIDNEY G. WHITE @ 160.29 MPH IN 1968 FOR QUALIFYING 2ND AT CLEVELAND

SCALE: $\frac{1}{4}$" = 1'

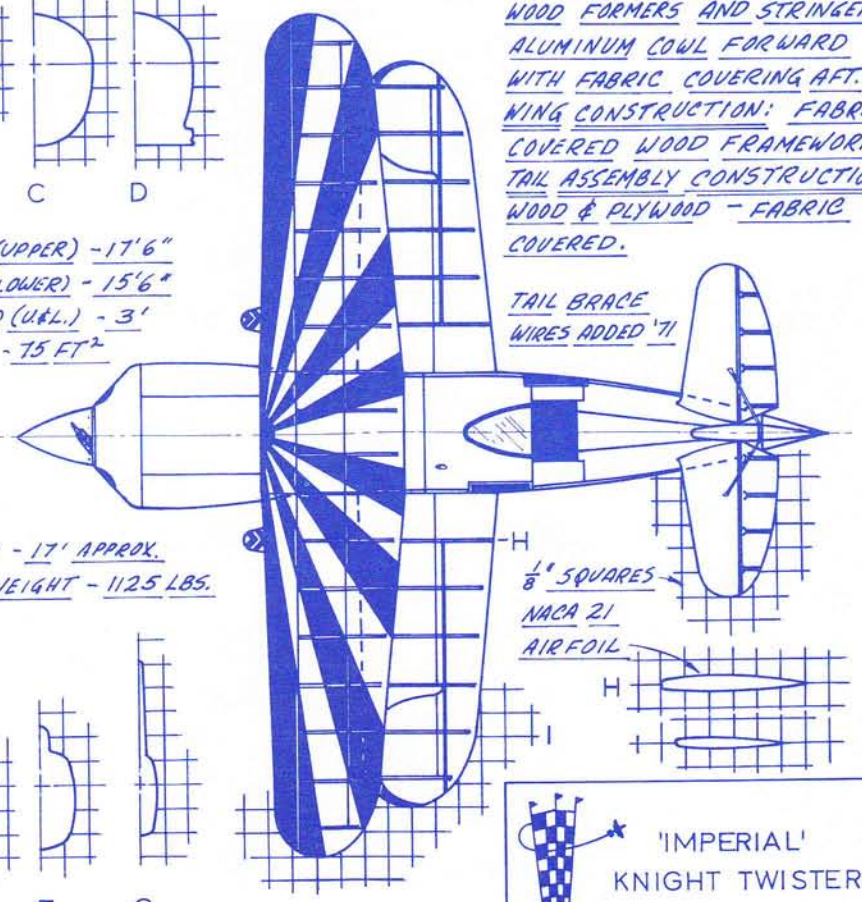
FUSELAGE CONSTRUCTION: STEEL TUBING FRAMEWORK WITH WOOD FORMERS AND STRINGERS. ALUMINUM COWL FORWARD WITH FABRIC COVERING AFT. WING CONSTRUCTION: FABRIC COVERED WOOD FRAMEWORK TAIL ASSEMBLY CONSTRUCTION: WOOD & PLYWOOD - FABRIC COVERED.



SPAN (UPPER) - 17'6"
SPAN (LOWER) - 15'6"
CHORD (U&L.) - 3'
AREA - 75 FT²

LENGTH - 17' APPROX.
GROSS WEIGHT - 1125 LBS.

TAIL BRACE WIRES ADDED '71



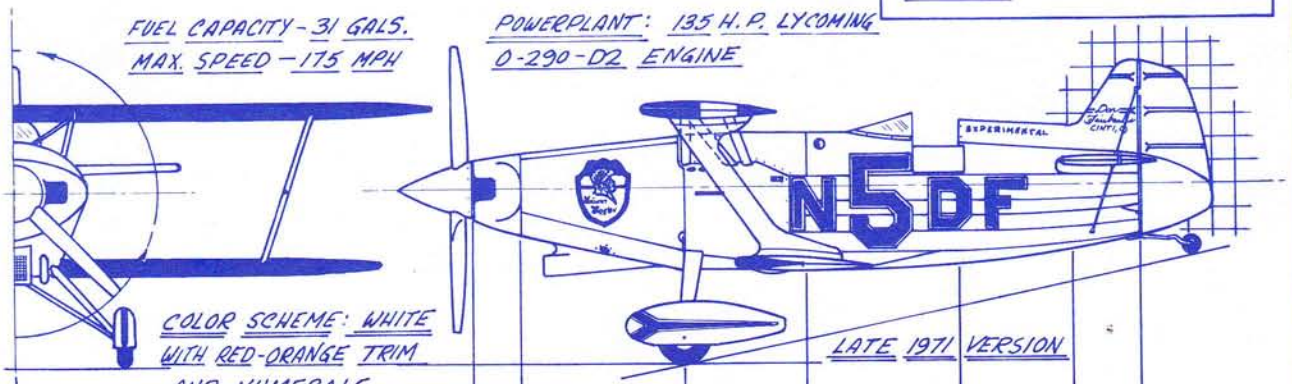
$\frac{1}{8}$" SQUARES
NACA 21
AIR FOIL



'IMPERIAL'
KNIGHT TWISTER

FUEL CAPACITY - 31 GALS.
MAX. SPEED - 175 MPH

POWERPLANT: 135 H.P. LYCOMING O-290-D2 ENGINE

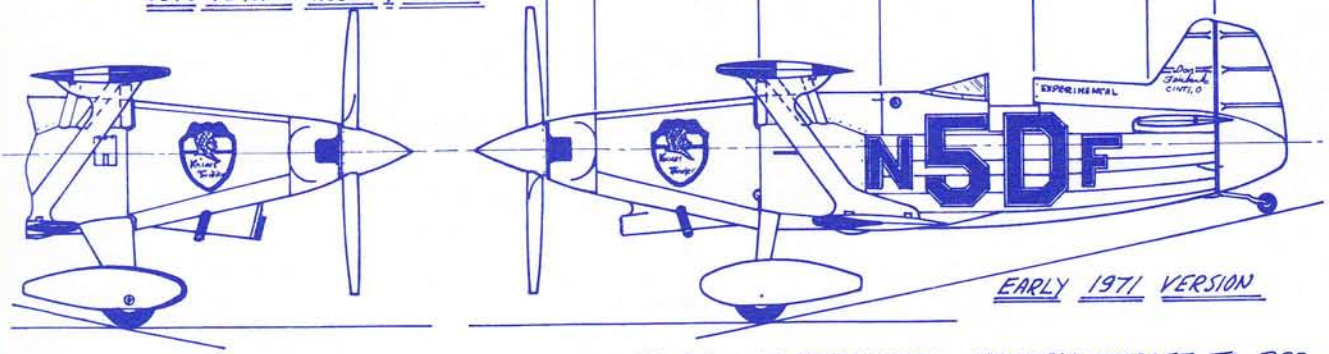


COLOR SCHEME: WHITE WITH RED-ORANGE TRIM AND NUMERALS.

LATE 1971 VERSION

1970 VERSION ABOVE & BELOW

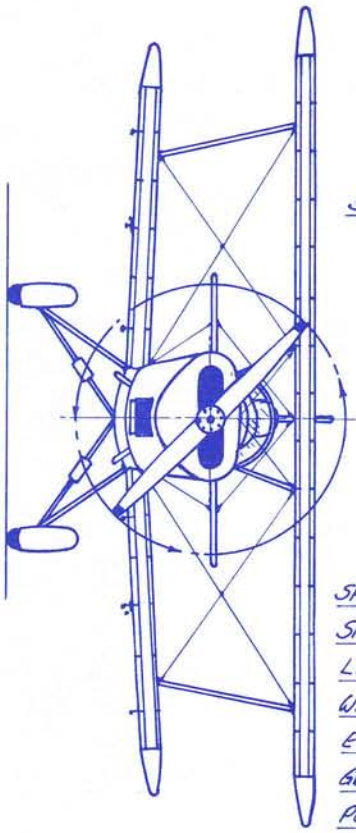
A B C D E F G



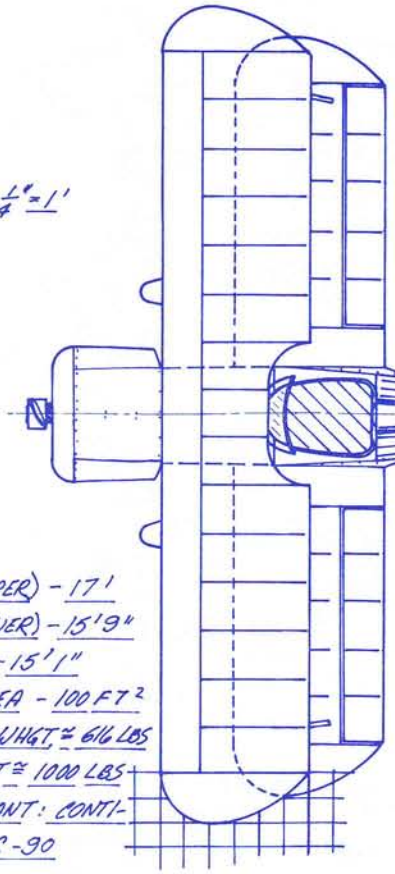
EARLY 1971 VERSION

'KNIGHT TWISTER' BUILT AND DESIGN MODIFIED BY DON FAIRBANKS. HE FLEW AIRCRAFT TO 3RD PLACE AT CAPE MAY, N.J. '71 RACE AND WON SILVER CONSOLATION RACE @ 160.48 MPH AT RENO '71

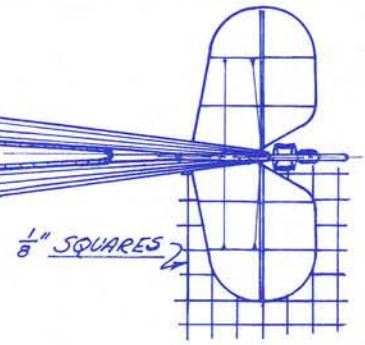
SMITH DSA-1 'MINIPLANE'



SCALE: $\frac{1}{4}$" = 1'



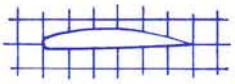
WING CONSTRUCTION: WOOD SPARS AND RIBS, STEEL TUBE TIP BOWS, ALUMINUM LEADING EDGE SKIN, PLYWOOD WING WALKS. ENTIRE ASSEMBLY FABRIC COVERED.
TAIL CONSTRUCTION: WELDED STEEL TUBE FABRIC COVERED
FUSELAGE CONSTRUCTION: WELDED STEEL TUBE FRAME - FABRIC COVERED AFT, ALUMINUM COVERING FORWARD AND COWLING.



$\frac{1}{8}$" SQUARES

SPAN (UPPER) - 17'
SPAN (LOWER) - 15'9"
LENGTH - 15'1"
WING AREA - 100 FT²
EMPTY WHGT. ≈ 616 LBS
GROSS WHGT ≈ 1000 LBS
POWERPLANT: CONTINENTAL C-90

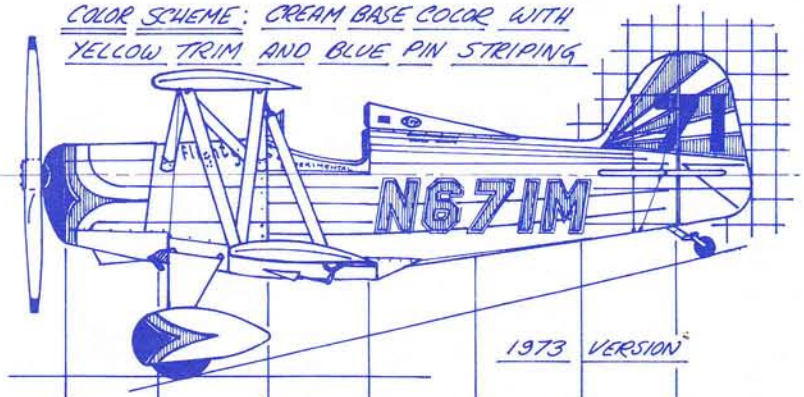
TYPICAL 'MINIPLANE' TOP & FRONT VIEWS



TYPICAL AIRFOIL SECTION

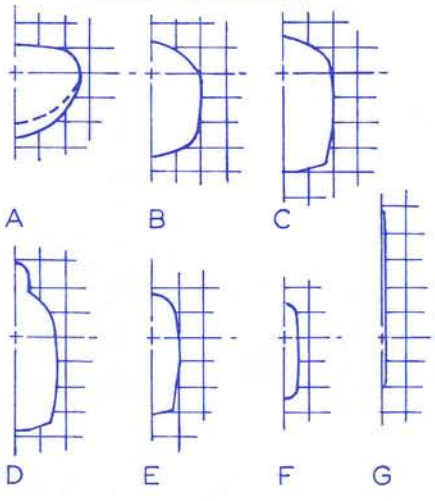
AIRCRAFT SHOWN BELOW RACED AT CAPE MAY IN 1971 BY CONSTANCE MARSH

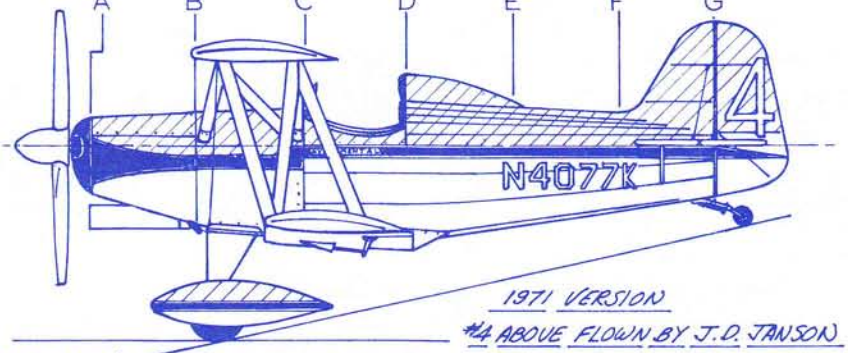
COLOR SCHEME: CREAM BASE COLOR WITH YELLOW TRIM AND BLUE PIN STRIPING



1973 VERSION

TYPICAL FUSELAGE CROSS-SECTIONS SHOWN BELOW

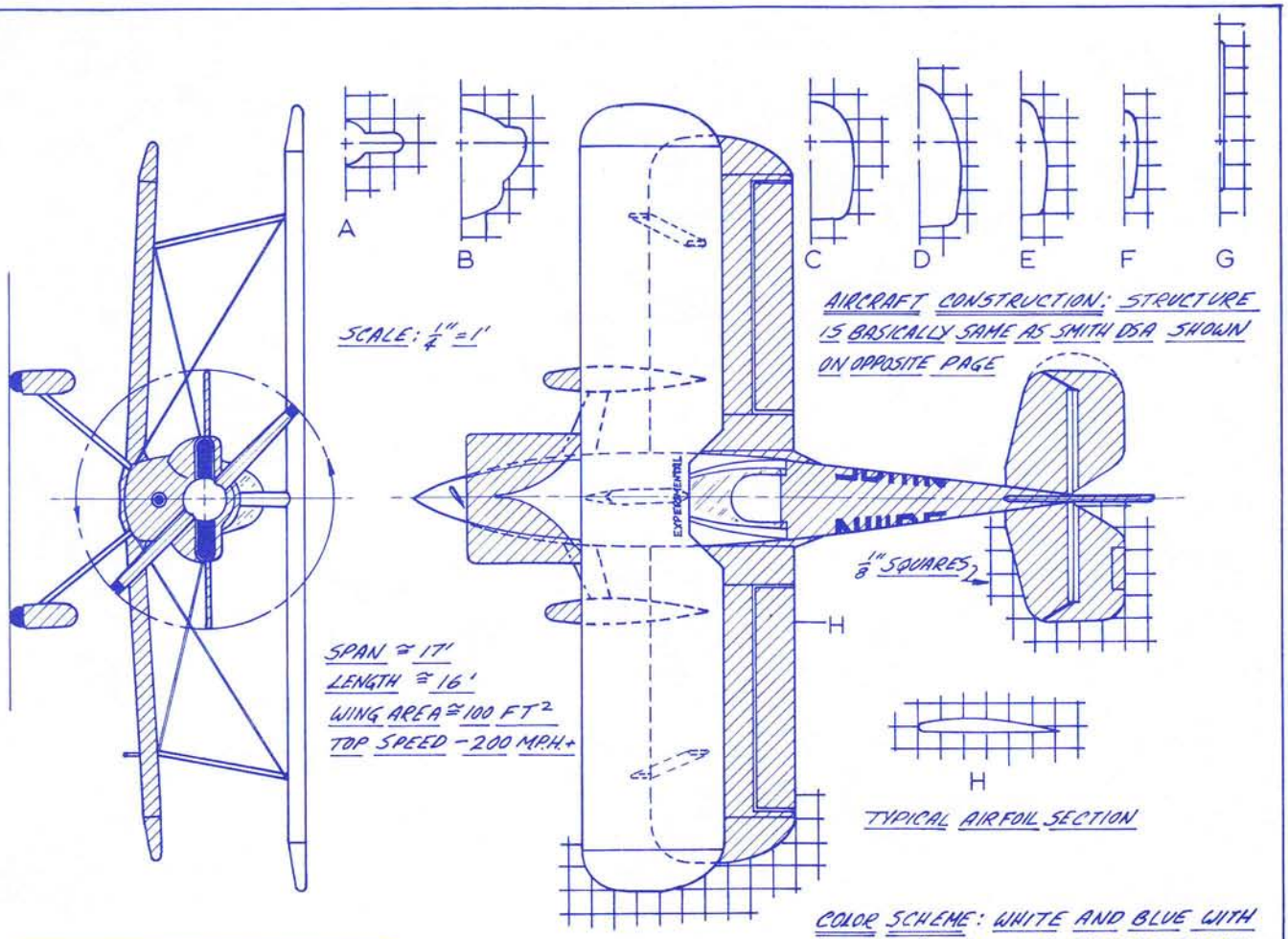




1971 VERSION
#4 ABOVE FLOWN BY J.D. JANSON
COLOR SCHEME: RED & MAROON WITH BLACK & GOLD STRIPES. LENGTH - 16'
FLOWN AT CAPE MAY AND RENO.

THE SMITH DSA-1 (OARNED SMALL AIRPLANE) WAS DESIGNED, BUILT AND FLOWN BY FRANK S. DURING 1957-58. IT IS AN OUTSTANDING EXAMPLE OF HOME BUILT AIRCRAFT AND PLANS ARE STILL AVAILABLE.

CN



SCALE: $\frac{1}{4}$" = 1'

AIRCRAFT CONSTRUCTION: STRUCTURE IS BASICALLY SAME AS SMITH DSA SHOWN ON OPPOSITE PAGE

SPAN ≅ 17'
LENGTH ≅ 16'
WING AREA ≅ 100 FT²
TOP SPEED - 200 M.P.H+

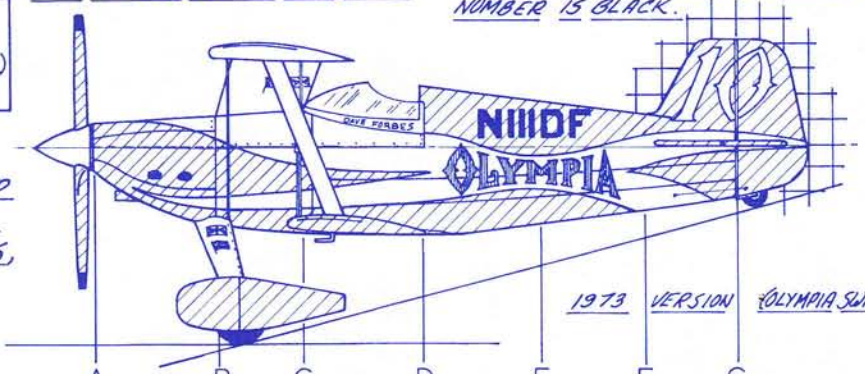
TYPICAL AIRFOIL SECTION

FORBES SPECIAL DSA-IM (WOLFRAM SPECIAL)

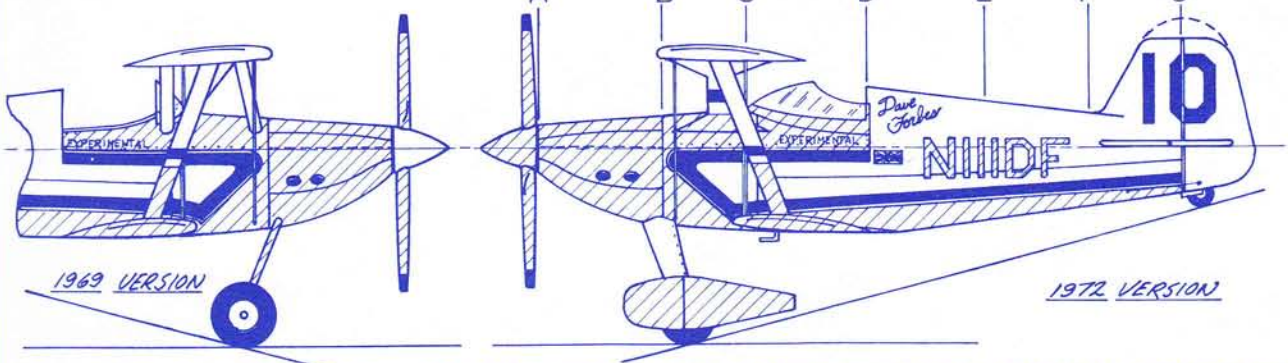
NOTE: IN 1974 "OLYMPIA" AND LICENSE NUMBER REMOVED FROM SIDES.

COLOR SCHEME: WHITE AND BLUE WITH "OLYMPIA" GOLD WITH BLACK OUTLINE. #10 IS WHITE WITH BLACK OUTLINE. LICENSE NUMBER IS BLACK.

AIRCRAFT WAS BUILT BY DAVE FORBES IN 1966 AND FIRST RACED IN 1967 AT RENO. MODIFICATIONS INCLUDE LANDING GEAR, COWLING, BUBBLE WINDSHIELD, NEW WINGS AND CLIPPED TAIL SURFACES.



1973 VERSION (OLYMPIA SWALLOW)



1969 VERSION

1972 VERSION

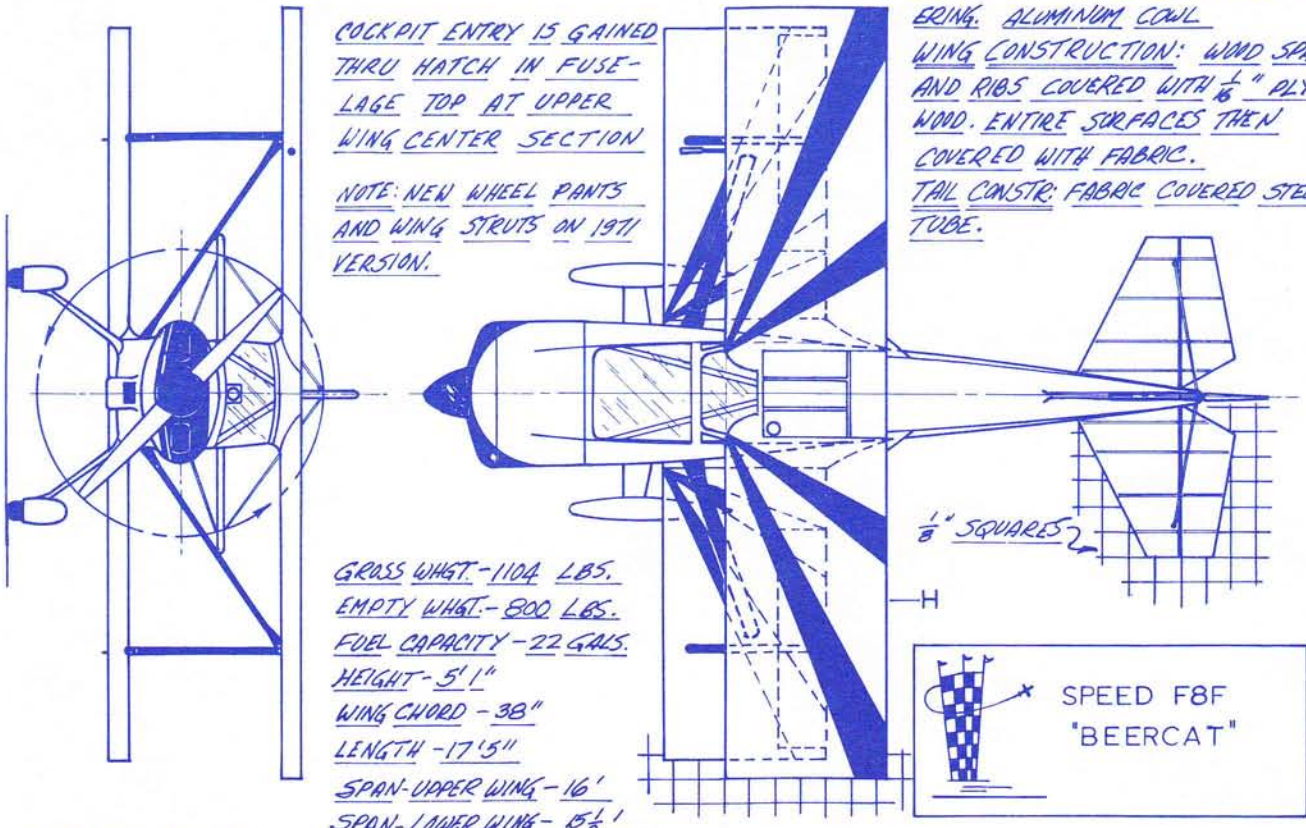
COLOR SCHEME (PRE-1973): RED AND WHITE WITH BLACK TRIM AND RACE NUMBER. LICENSE WAS RED. FORBES HAS PLACED 3RD IN EVERY RENO CHAMPIONSHIP BIPLANE RACE SINCE 1969 EXCEPT FOR 1971. TYPICAL SPEED HAS AVERAGED OVER 180 M.P.H. THE PAST FEW YEARS DURING THESE RACES.

SCALE $\frac{1}{4}$" = 1'

FUSELAGE CONSTRUCTION: WELDED STEEL TUBING WITH FABRIC COVERING. ALUMINUM COWL
WING CONSTRUCTION: WOOD SPARS AND RIBS COVERED WITH $\frac{1}{16}$" PLYWOOD. ENTIRE SURFACES THEN COVERED WITH FABRIC.
TAIL CONSTR: FABRIC COVERED STEEL TUBE.

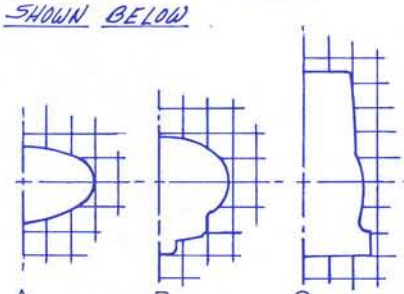
COCKPIT ENTRY IS GAINED THRU HATCH IN FUSELAGE TOP AT UPPER WING CENTER SECTION

NOTE: NEW WHEEL PANTS AND WING STRUTS ON 1971 VERSION.

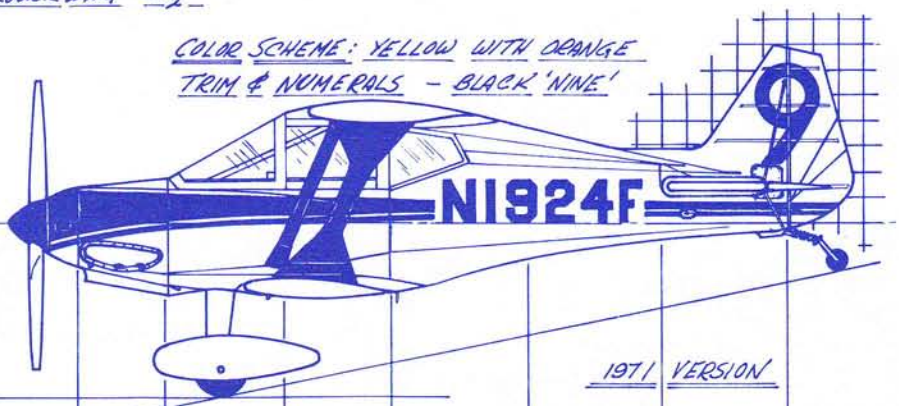


GROSS WHGT. - 1104 LBS.
EMPTY WHGT. - 800 LBS.
FUEL CAPACITY - 22 GALS.
HEIGHT - 5'1"
WING CHORD - 38"
LENGTH - 17'5"
SPAN-UPPER WING - 16'
SPAN-LOWER WING - 15½'

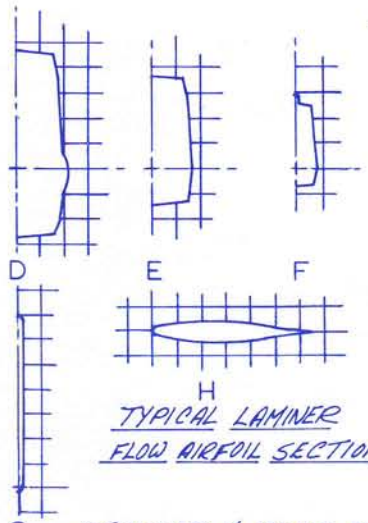
FUSELAGE CROSS-SECTIONS SHOWN BELOW



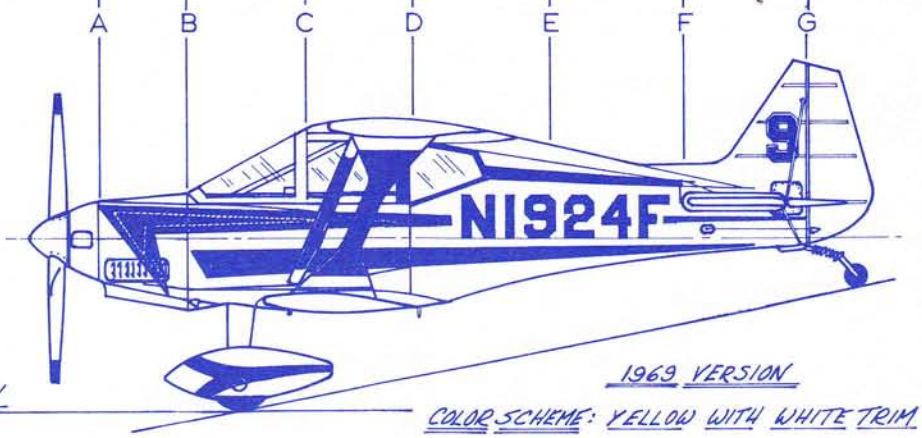
COLOR SCHEME: YELLOW WITH ORANGE TRIM & NUMERALS - BLACK 'NINE'



1971 VERSION



TYPICAL LAMINER FLOW AIRFOIL SECTION



1969 VERSION

COLOR SCHEME: YELLOW WITH WHITE TRIM

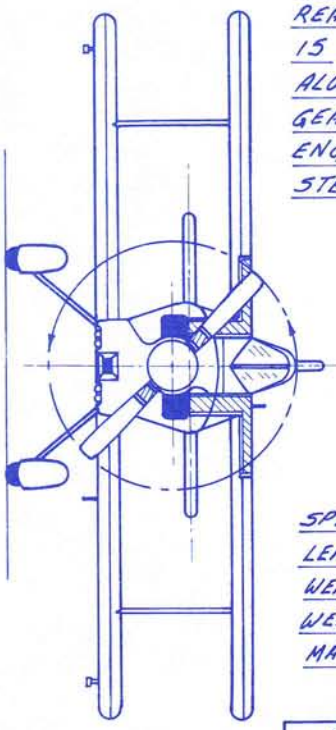
DESIGNED & BUILT BY RONALD JOHNSON AND ROBERT E. SPEED. "BEERCAT" WAS RACED BY SPEED AT RENO '69 - TOOK 3RD IN CONSOLATION BIPLANE RACE.

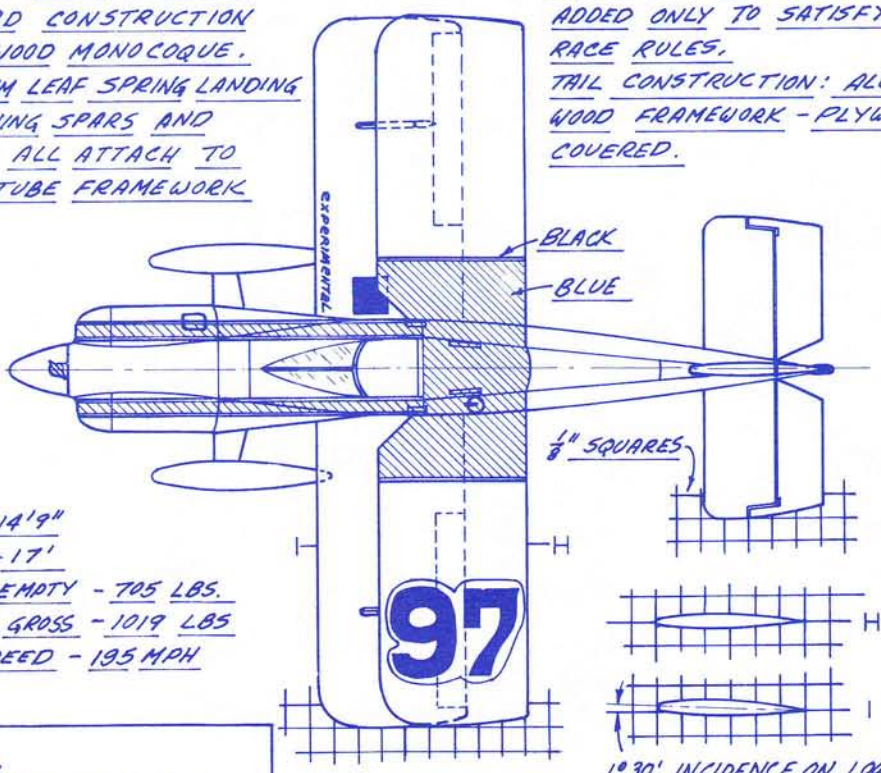
CA

SCALE: 1/4" = 1'

FUSELAGE CONSTRUCTION: STEEL TUBE FRAMEWORK FROM FIREWALL TO AFT OF COCKPIT. FROM COCKPIT REARWARD CONSTRUCTION IS ALL WOOD MONOCOQUE. ALUMINUM LEAF SPRING LANDING GEAR, WING SPARS AND ENGINE ALL ATTACH TO STEEL TUBE FRAMEWORK

WING CONSTRUCTION: FULLY CANTILEVERED, ALL WOOD SPARS AND WOOD RIBS. SKIN IS PLYWOOD. STRUTS ARE ADDED ONLY TO SATISFY RACE RULES.
TAIL CONSTRUCTION: ALL WOOD FRAMEWORK - PLYWOOD COVERED.





SPAN - 14'9"
LENGTH - 17'
WEIGHT EMPTY - 705 LBS.
WEIGHT, GROSS - 1019 LBS
MAX SPEED - 195 MPH

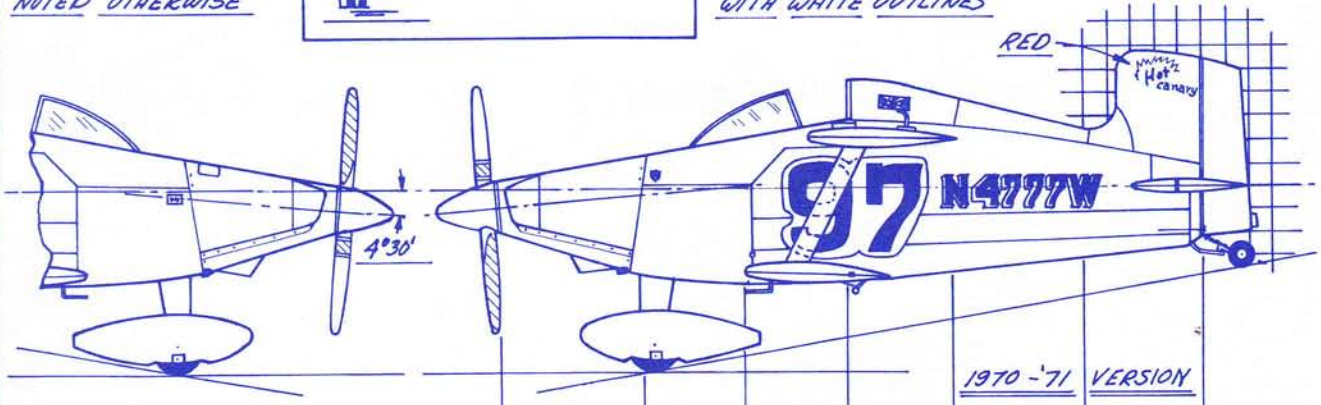
1°30' INCIDENCE ON LOWER WING. CONSTANT 3' CHORD SYMETRICAL AIRFOIL SECTION



WARWICK W-4
'HOT CANARY'

COLOR SCHEME: ALL YELLOW EXCEPT WHERE NOTED OTHERWISE

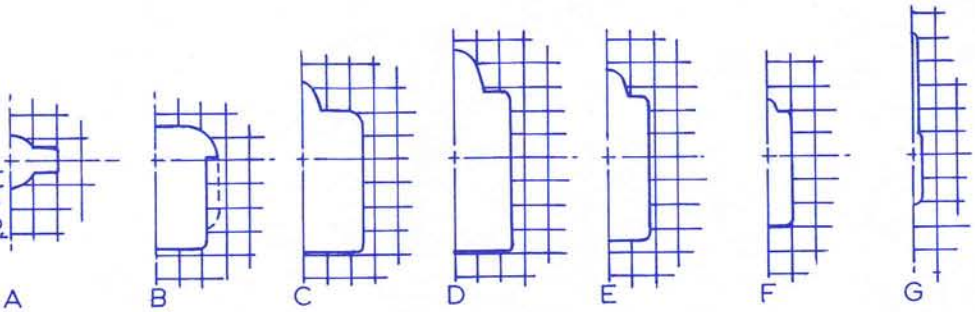
NUMERALS ARE BLACK WITH WHITE OUTLINES



1970 - '71 VERSION

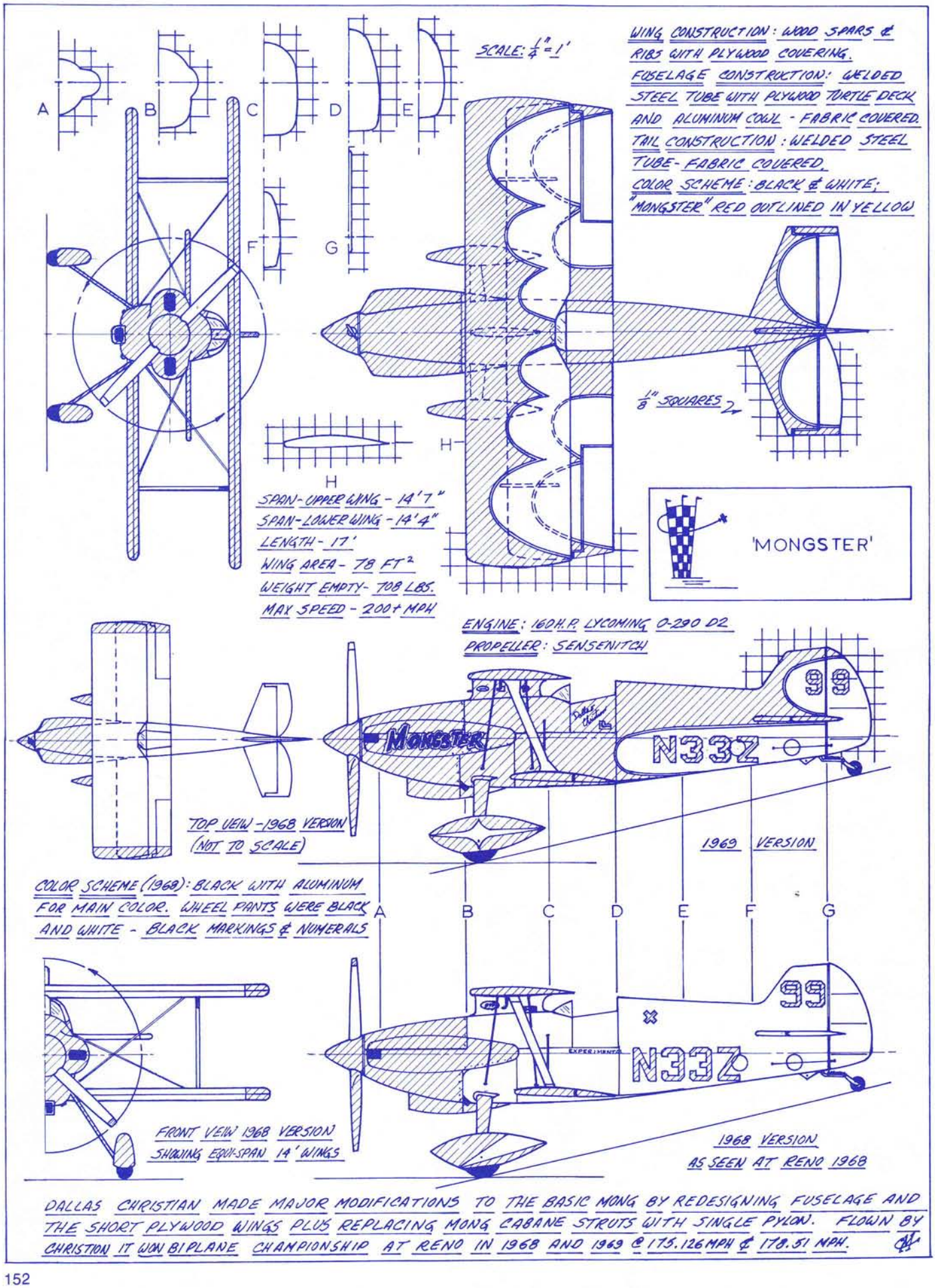
POWERPLANT: LYCOMING 4 CYLINDER OPPOSED O-290-G ENGINE

'CANARY' WON 1970 FLA. SPORT BIPLANE CONSOLATION RACE. IT FINISHED 4TH AT '70 RENO AT 163 MPH AVERAGE SPEED.

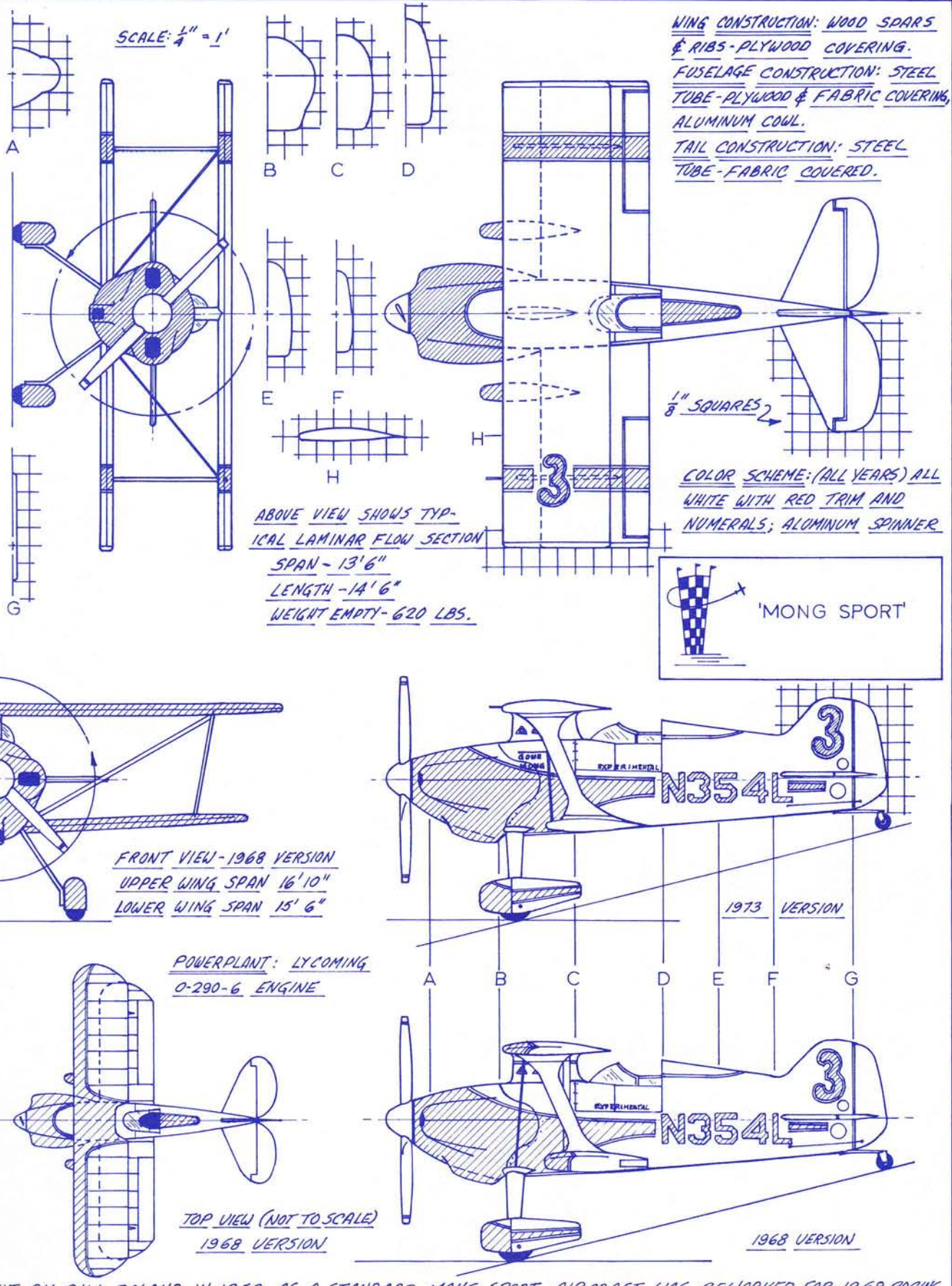


"HOT CANARY" WAS DESIGNED, BUILT, FLOWN AND RACED BY BILL WARWICK.

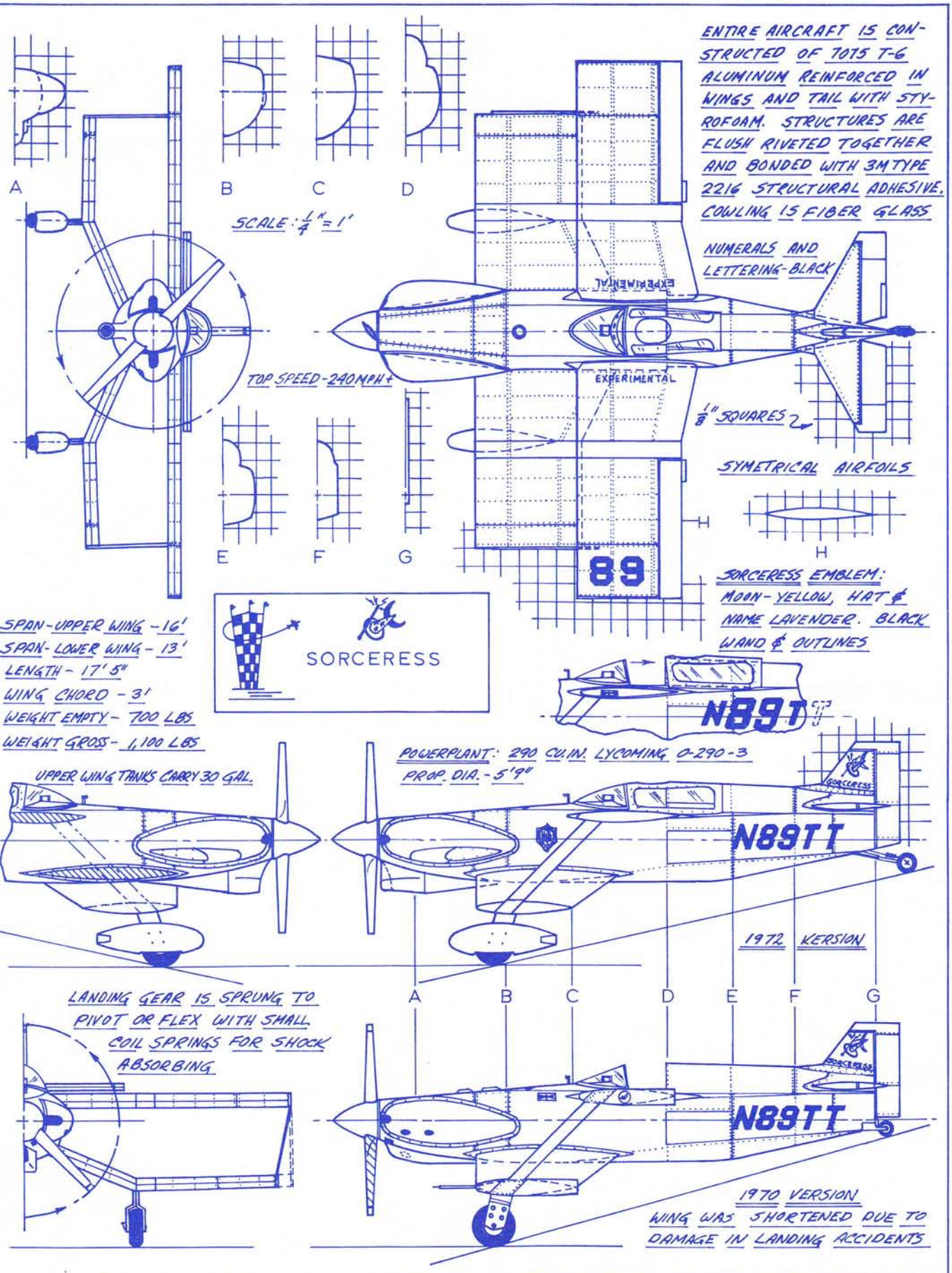
CA



DALLAS CHRISTIAN MADE MAJOR MODIFICATIONS TO THE BASIC MONG BY REDESIGNING FUSELAGE AND THE SHORT PLYWOOD WINGS PLUS REPLACING MONG CABANE STRUTS WITH SINGLE PYLON. FLOWN BY CHRISTION IT WON BIPLANE CHAMPIONSHIP AT RENO IN 1968 AND 1969 @ 175.126 MPH & 178.51 MPH.



BUILT BY BILL BOLAND IN 1959 AS A STANDARD MONG SPORT, AIRCRAFT WAS REWORKED FOR 1968 RACING BY SHORTENING STABILIZER & RUDDER, ADDING BUBBLE TYPE WINDSHIELD, WIDER LANDING GEAR AND SMALLER TAIL WHEEL. SHORT WINGS CAME IN 1969. FLOWN BY BOLAND AT REND CHAMPIONSHIPS: 1ST IN 1965-67, 2ND IN 1968, 69, 70 CAS

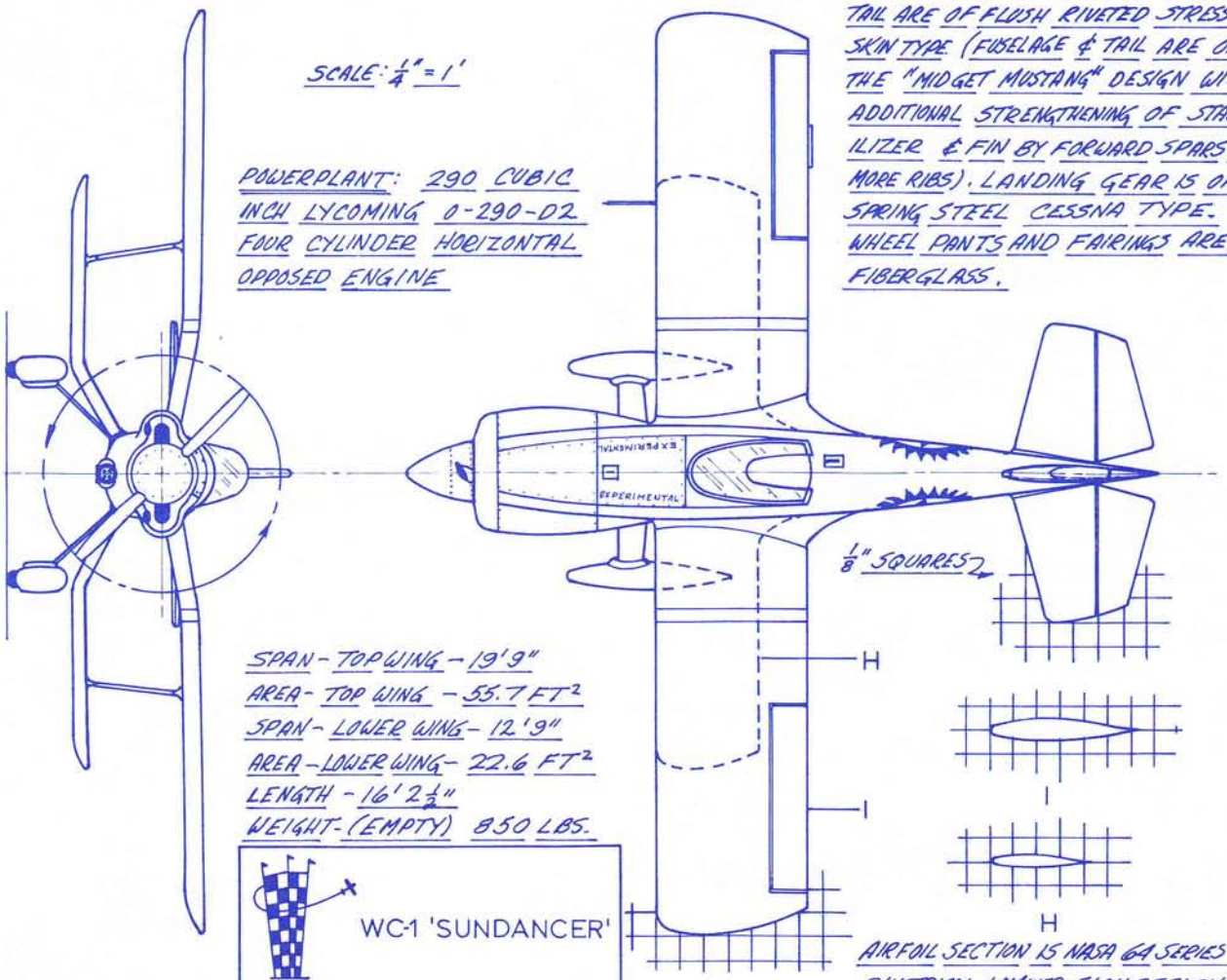


"SORCERESS", DESIGNED & BUILT BY LEE MAHONEY, WON THE 1972 SPORT BIPLANE CLASSIC CHAMPIONSHIP AT RENO. IT WAS FLOWN BY DON BECK. "SORCERESS" AVERAGED 189.723 M.P.H. IN 1975 CRAFT TOOK RENO CHAMPIONSHIP RACE @ 198.99 M.P.H. - FLOWN BY BECK. CH

ENTIRE AIRCRAFT IS ALL ALUMINUM CONSTRUCTION. FUSELAGE, WINGS AND TAIL ARE OF FLUSH RIVETED STRESSED SKIN TYPE. (FUSELAGE & TAIL ARE OF THE "MIDGET MUSTANG" DESIGN WITH ADDITIONAL STRENGTHENING OF STAB-ILIZER & FIN BY FORWARD SPARS & MORE RIBS). LANDING GEAR IS OF SPRING STEEL CESSNA TYPE. WHEEL PANTS AND FAIRINGS ARE FIBERGLASS.

SCALE: $\frac{1}{4}$" = 1'

POWERPLANT: 290 CUBIC INCH LYCOMING O-290-D2 FOUR CYLINDER HORIZONTAL OPPOSED ENGINE



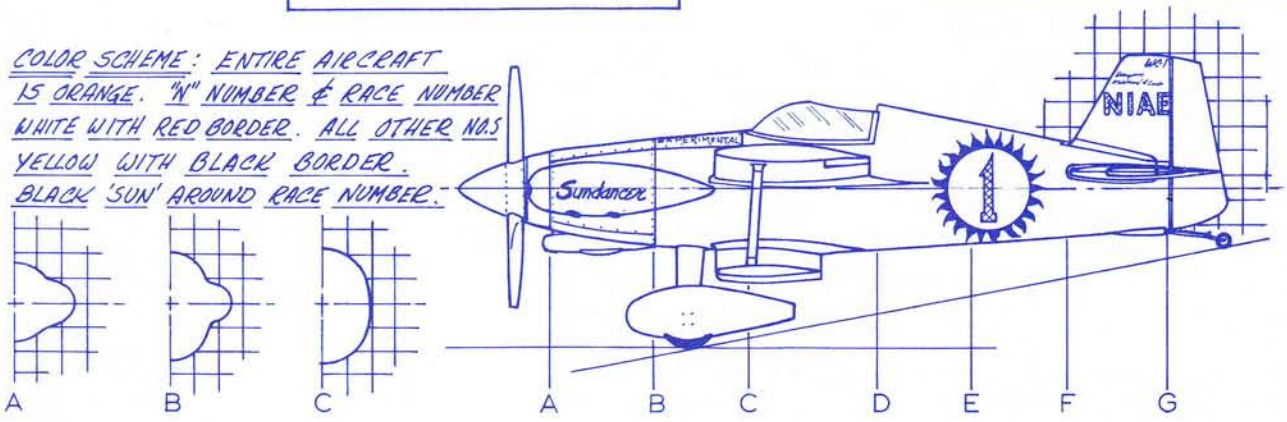
$\frac{1}{8}$" SQUARES

SPAN - TOP WING - 19'9"
AREA - TOP WING - 55.7 FT²
SPAN - LOWER WING - 12'9"
AREA - LOWER WING - 22.6 FT²
LENGTH - 16'2½"
WEIGHT - (EMPTY) 850 LBS.

WC-1 'SUNDANCER'

AIRFOIL SECTION IS NASA 64 SERIES SYMETRICAL LAMINER FLOW DESIGN

COLOR SCHEME: ENTIRE AIRCRAFT IS ORANGE. "N" NUMBER & RACE NUMBER WHITE WITH RED BORDER. ALL OTHER NOS YELLOW WITH BLACK BORDER. BLACK 'SUN' AROUND RACE NUMBER.

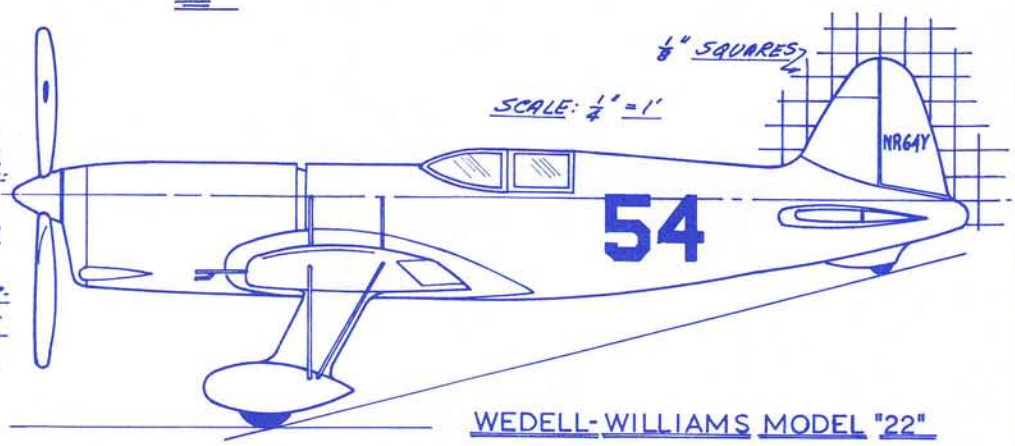


1973 VERSION

AIRCRAFT WAS DESIGNED BY ART WILLIAMS AND CARL CANSIE BOTH HIGHLY SKILLED AERONAUTICAL ENGINEERS. CONSTRUCTION WAS STARTED IN 1970 BY RALPH THENHAUS AND COMPLETED BY JACK SWAN IN 1973. TEST FLYING WAS DONE BY HERMAN 'FISH' SALMON OF 1948 COSMIC WIND "MINNOW" FAME. DR. SID WHITE, PILOT AND OWNER OF 'SUNDANCER', TOOK 1ST PLACE 1973 AND 1974 RENO SPORT BIPLANE CLASS - 1974 AT 198.1 MPH.

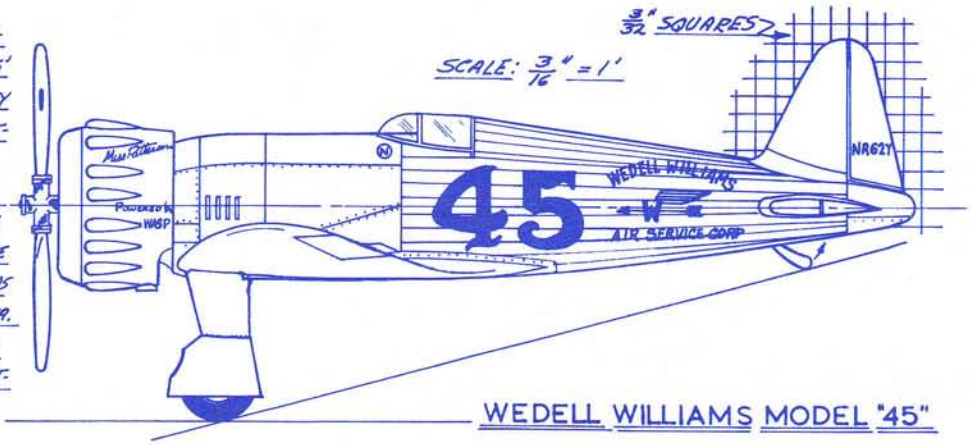
APPENDIX I

NR64Y WAS SECOND AIRCRAFT IN THE WEDELL-WILLIAMS MODEL "22" SERIES (½ SIZE MODEL '44"). THE AFT FUSELAGE WAS BUILT OF PLYWOOD BY THE DELGADO TRADE SCHOOL. THE CRAFT WAS RACED BY WEDELL AT 1933 CHICAGO INTERNATIONAL AIR RACE WITH LITTLE SUCCESS DUE TO ENGINE PROBLEMS. IT WAS POWERED BY A 4 CYLINDER MENASCO C4S PIRATE. ENTIRE AIRCRAFT WAS PLYWOOD COVERED. COLOR SCHEME: RED



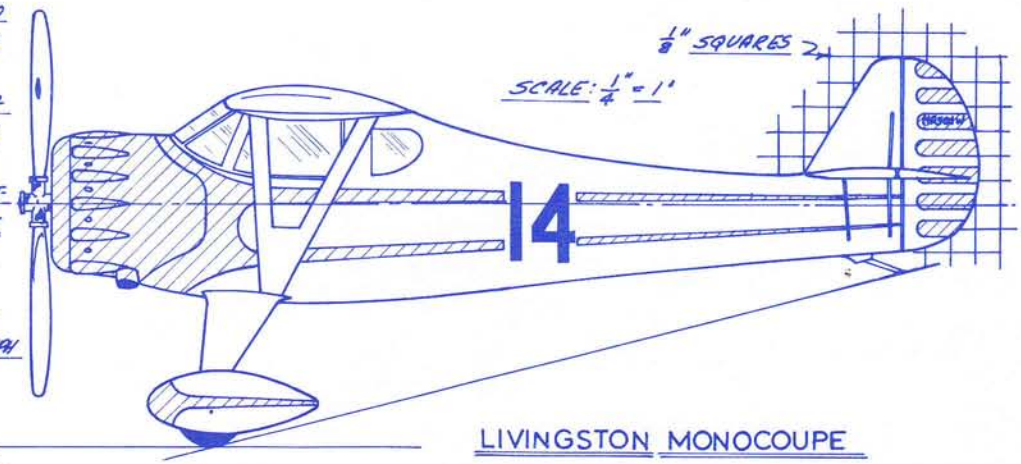
WEDELL-WILLIAMS MODEL "22"

THE LAST OF THE WEDELL-WILLIAMS RACERS WAS THE MODEL '45' POWERED BY A PRATT & WHITNEY WASP SENIOR. AIRCRAFT WAS FITTED WITH FOLL CANTILEVER WINGS & INWARD RETRACTING LANDING GEAR. THE DESIGN WAS GIVEN AXP-34 DESIGNATION BY THE ARMY AIR CORP. COLOR SCHEME WAS RED WITH BLACK COWL & GEAR AREA. MAX SPEED WAS 302 MPH FLOWN BY JOHN WORTHEN AT 1934 NATIONALS SHELL SPEED DASHES



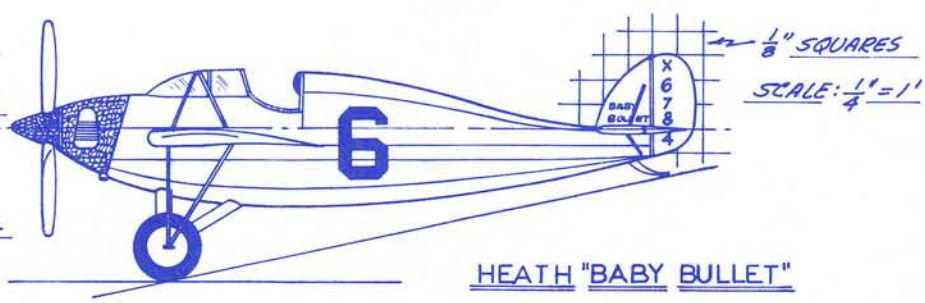
WEDELL WILLIAMS MODEL "45"

JOHN LIVINGSTON MODIFIED A 1930 STOCK MONOCOUPE AND BY EARLY 1932 HAD CLIPPED THE WINGS FROM 32 FT TO 22 FT. HE FURTHER MODIFIED THE CRAFT WITH WITH A GREATLY IMPROVED COWL, ROCKER ARM BULGES AND AN ASSORTMENT OF SMALLER WHEEL PANTS. MAX POWERPLANT WAS 145 HP WARNER 7 CYLINDER RADIAL COLOR SCHEME: BRIGHT YELLOW WITH RED TRIM. MAX SPEED 220 MPH



LIVINGSTON MONOCOUPE

DESIGNED & BUILT BY ED HEATH THE WORLDS FIRST MIDGET AIR RACER WAS POWERED BY A 2 CYLINDER OPPOSED 32 HP BRISTOL 'CHERUB'. THE YELLOW PAINTED AIRCRAFT COULD DO 150 MPH. LENGTH-14'2" SPAN-18'6" CONSTRUCTION WAS WELDED STEEL TUBING FUSELAGE COVERED WITH FABRIC. WINGS WERE WIRE BRACED ALL WOOD CONSTRUCTION WITH FABRIC COVERING



HEATH "BABY BULLET"

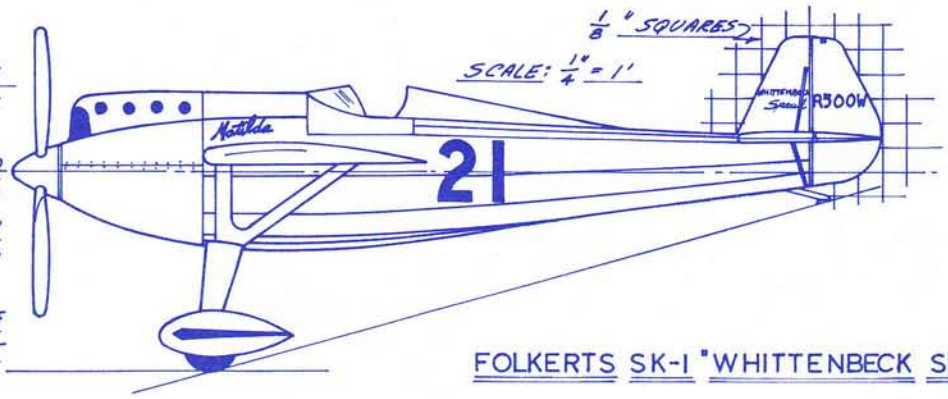
APPENDIX II

THE SPAN & LENGTH OF THIS AIRCRAFT WAS ABOUT 19 FT. COLOR SCHEME WAS LIGHT BLUE. ORIGIONALLY DESIGNED WITH A RETRACTABLE GEAR TROUBLESOME MECHANISM PREVENTED ITS USE. THIS DESIGN WAS BY ALDEN BROWN RATHER THAN LAWRENCE BROWN OF B-1 & B-2 FAME. DURING 1933 1000 CU. IN. EVENT THIS MENASCO POWERED RACER TOOK 4TH PLACE AT 139 MPH PILOTED BY LEE SCHOENHAIR.



ALDEN BROWN RACER

ORIGIONALLY BEGINNING LIFE AS THE FOLKERTS SK-1 MONO-SPECIAL & POWERED BY A 310 CU. IN. CIRRUS RATED AT 90HP, THE CRAFT WAS FLOWN AT THE 1930 NATIONAL AIR RACES. BY 1933 WHEEL PANTS AND HEAD REST WERE ADDED AND SPEED WAS UP TO 170 MPH. IN 1935 CLEM WHITTENBACK PORCHASED RACER AND WITH REFINEMENTS SPEED WAS UPPED TO 187 MPH. COLOR SCHEME WAS RED. 1937 WAS LAST YEAR IT APPEARED AT NATIONALS.



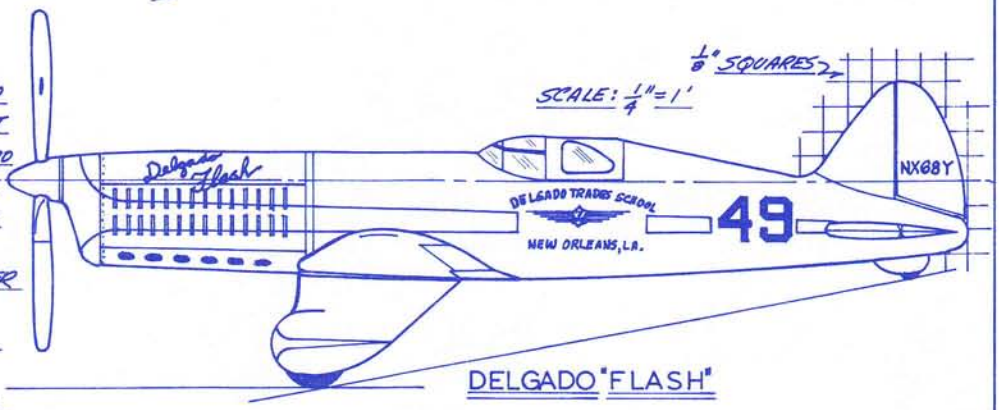
FOLKERTS SK-1 "WHITTENBECK SPL"

THE "MAID" WAS DESIGNED BY BYRON ARMSTRONG OF THE DELGADO TRADE SCHOOL AND BUILT BY STUDENTS OF THE SAME SCHOOL. THE RED AIRCRAFT HAD A SPAN OF 22'9" AND A LENGTH OF 22'. IT WAS OF ALL PLYWOOD CONSTRUCTION AND POWERED BY A V-12 CURTISS CONQUEROR ENGINE. AFTER 18 FLIGHTS THE 300 MPH + AIRCRAFT CRASHED NEVER HAVING ENTERED A RACE



DELGADO "MAID"

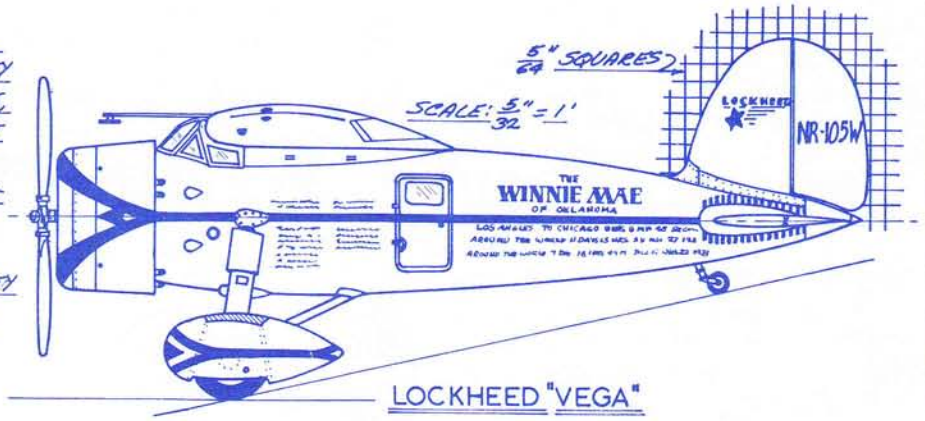
CONSTRUCTION WAS STARTED ON "FLASH" IN 1933 BUT NOT FINISHED UNTIL 1937. IT ALSO WAS BUILT BY THE STUDENTS OF THE DELGADO TRADE SCHOOL. DURING BUILDING IT WAS FITTED WITH A RETRACT GEAR & 4 CYL. MENASCO. THE GEAR WAS CHANGED & A 6 CYLINDER MENASCO FITTED. FLOWN BY C. MACARTHUR IN '37 & '38 THE BLACK & WHITE RACER WAS UNSUCCESSFUL DUE TO MECHANICAL DROBLEMS.



DELGADO "FLASH"

APPENDIX III

A FREQUENT VISITOR AT THE NATIONALS, WILEY POST'S LOCKHEED "VEGA" THAT WILEY HAD FLOWN AROUND THE WORLD IN 7 DAYS, 18 HOURS, 45 MINUTES FOR A SOLO FLIGHT RECORD. HE HAD USED THE SAME PLANE IN 1931 WITH HAROLD GATTY ON AN EARLIER AROUND THE WORLD RECORD. SPAN - 41' LENGTH 27'6" POWERPLANT - 500 H.P. PRATT & WHITNEY WASP. COLOR SCHEME - WHITE WITH BLUE TRIM.



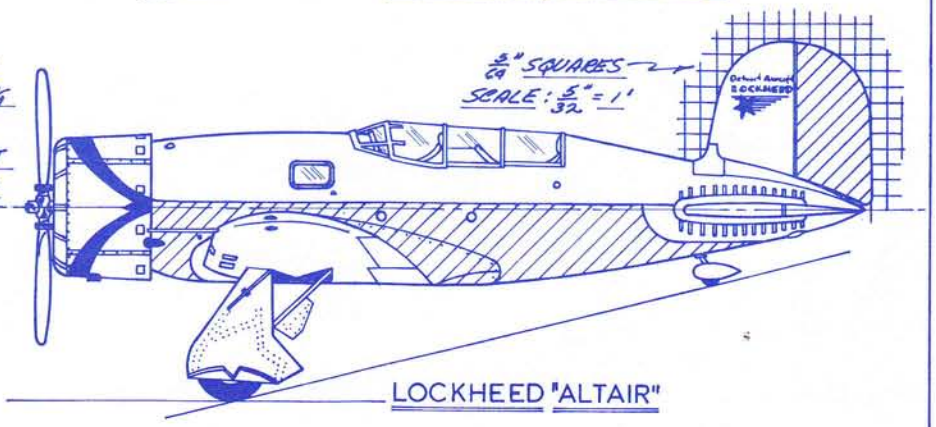
LOCKHEED "VEGA"

PAINTED CREAM WITH RED AND GOLD TRIM ROSCOE TURNER'S "AIR EXPRESS" WAS A STABLE MATE OF HIS FAMOUS "57" WEDELL-WILLIAMS RACER. HE SET MANY INTER-CITY RECORDS WITH THIS AIRCRAFT INCLUDING A COAST TO COAST RECORD OF 19 HOURS, 42 MINUTES, 30 SECONDS. SPAN - 43' LENGTH 27'6" POWERPLANT WAS A PRATT & WHITNEY 420 H.P. WASP



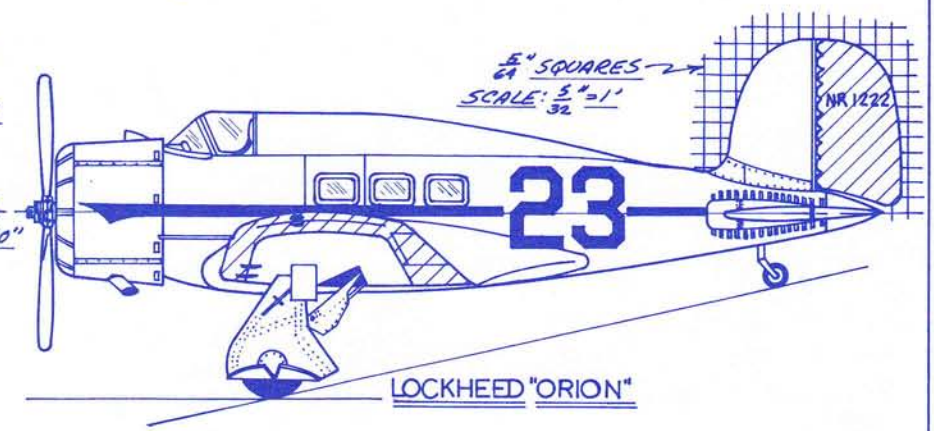
LOCKHEED "AIR EXPRESS"

FLOWN BY IRA EAKER IN 1931 THOMPSON TROPHY RACE TO 5TH PLACE AVERAGING 196.6 MPH AND 1931 BENDIX TROPHY RACE AVERAGING 186.1 MPH. AIRCRAFT WAS POWERED BY A PRATT & WHITNEY WASP SI DI 1340 CU. IN. ENGINE. SPAN - 42'9" LENGTH - 28'11" EMPTY WEIGHT - 3550 LBS GROSS WEIGHT - 4409 LBS



LOCKHEED "ALTAIR"

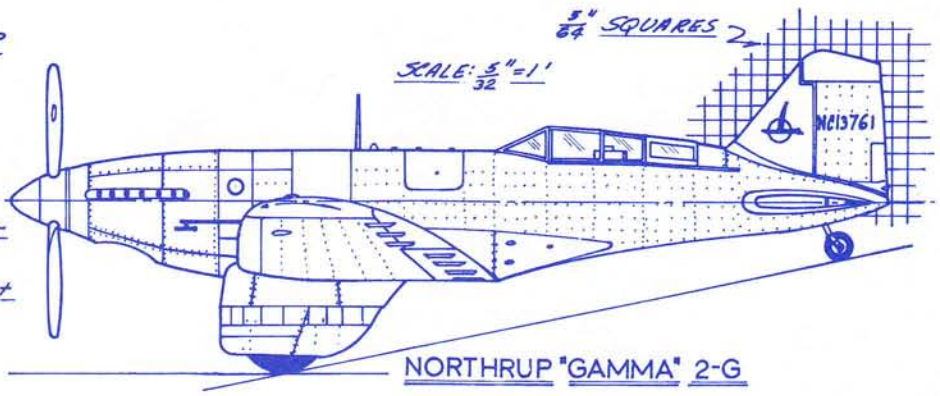
RED WITH WHITE TRIM "ORION" WAS FLOWN BY PAUL MANTZ TO THIRD PLACE IN 1938 BENDIX TROPHY RACE AVERAGING 206.6 MPH OTHER "ORIONS" WERE FLOWN IN THE BENDIX IN 1931, '35, '36 AND '39. SPAN - 42'9¼" LENGTH - 28'10" POWERPLANT - 750 H.P. WRIGHT CYCLONE



LOCKHEED "ORION"

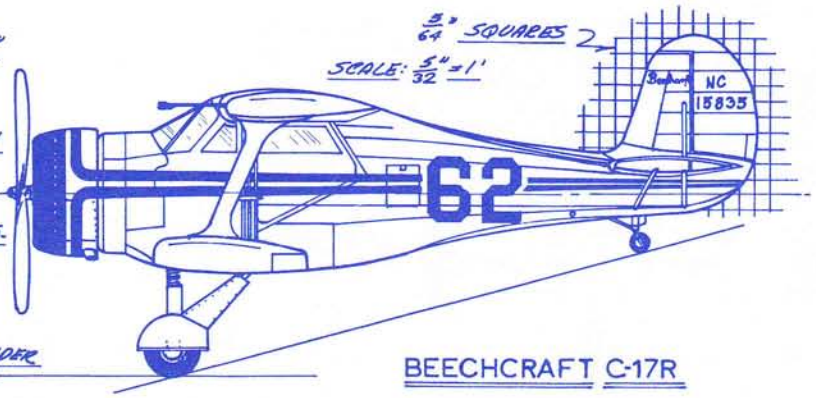
APPENDIX IV

THE "GAMMA" NORMALLY HAD A 750 HP WRIGHT CYCLONE RADIAL ENGINE. HOWEVER, THIS "ONE OF A KIND" WAS BUILT FOR JACKIE COCHRAN FOR AIR RACING. POWERPLANT WAS A 705 H.P. GEARED CURTISS CONQUEROR SVG-1570F-4 V-12 SUPERCHARGED ENGINE. SPAN-48' LENGTH-29' TOPSPEED-200MPH+ COLOR SCHEME WAS NATURAL ALUMINUM.



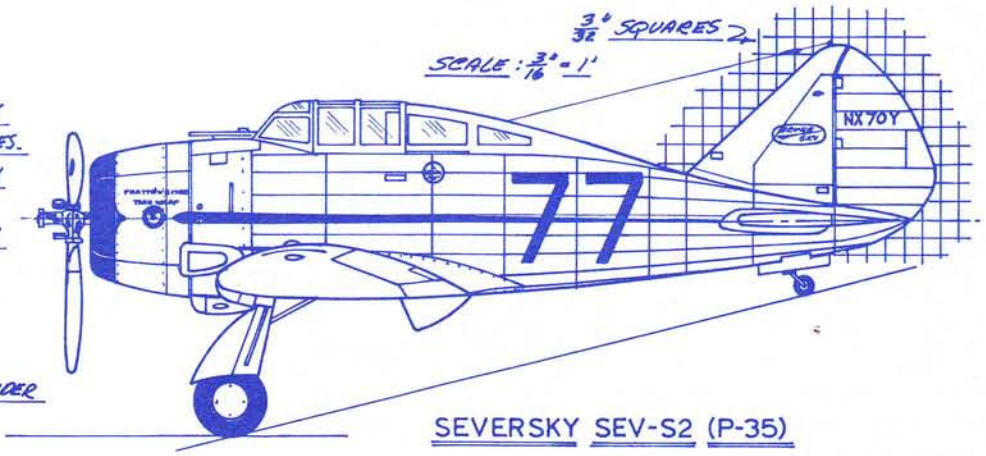
NORTHRUP "GAMMA" 2-G

THIS STOCK C-17R "STAGGERWING" WAS FLOWN BY LOUISE THADEN AND BLANCH NOYES TO FIRST PLACE IN THE 1936 BENDIX TROPHY RACE. AIRCRAFT HAD A NORMAL CRUISE SPEED OF 202 MPH AT ALTITUDE. EMPTY WEIGHT-2225 LBS. GROSS WEIGHT-3900 LBS. RANGE 700 MILES. SPAN-34'6" LENGTH-24'5" POWERPLANT-WRIGHT R-975E-3 420 HP 9 CYLINDER ENGINE.



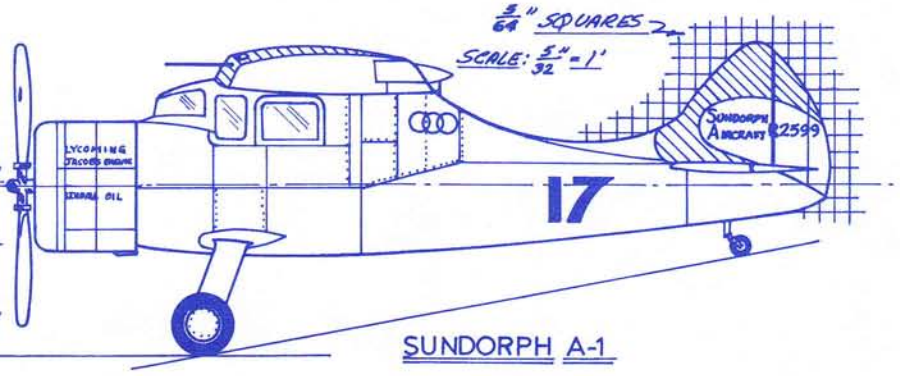
BEECHCRAFT C-17R

THE SEV-S2 SHOWN WAS THE FIRST PLACE WINNER IN 1937 AND 1939 BENDIX TROPHY RACES. PILOT WAS FRANK FULLER WITH AN AVERAGE SPEED IN '39 OF 282.1 MPH. PLANE WAS METALIC BLUE AND HIGHLY POLISHED SPAN-36' LENGTH-25'6" EMPTY WEIGHT-3852 LBS. GROSS WEIGHT-6390 LBS. POWERPLANT-1000 HP 9 CYLINDER PRATT & WHITNEY "WASP"



SEVERSKY SEV-S2 (P-35)

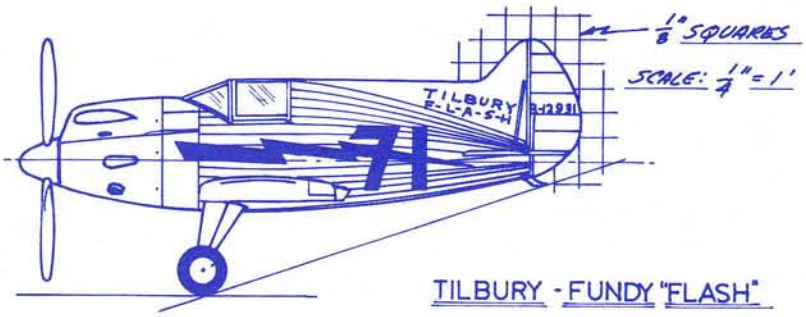
DESIGNED, BUILT & FLOWN BY EILER SUNDORPH AIRCRAFT FINISHED 6TH IN 1937 BENDIX TROPHY RACE AVERAGING 166.2 MPH. FUSELAGE WAS ALL METAL WITH FABRIC COVERED WOOD STRUCTURED WINGS. POWERPLANT WAS 285 HP JACOBS RADIAL, PLANE WAS DESIGNED AS AN EXECUTIVE TRANSPORT & RACED FOR ADVERTISING PURPOSES. LENGTH-27½' CESSNA WINGS WERE USED



SUNDORPH A-1

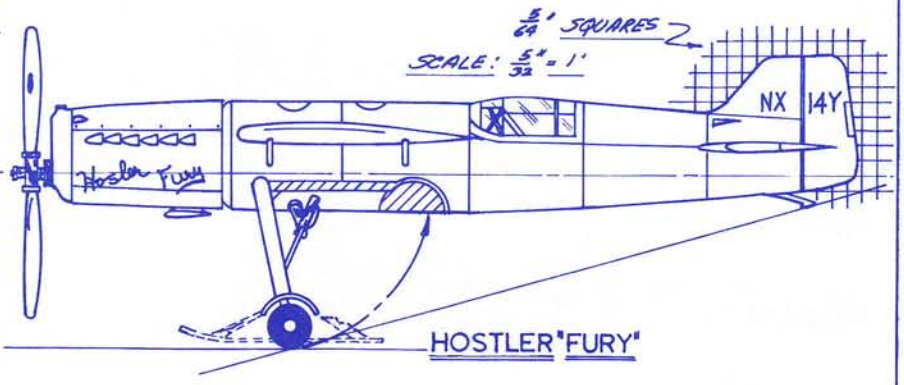
APPENDIX V

BUILT IN 1932 THE "FLASH" FIRST RACED AT THE 1933 AMERICAN AIR RACES AT CHICAGO WINNING THE 115 CU.IN. EVENT AT 114.92 MPH. POWERPLANT WAS A 45 H.P. CHURCH ENGINE. SPAN - 16' LENGTH - 11' 6" EMPTY WEIGHT 270 LBS. CRAFT WAS RACED THROUGH 1935 ATTAINING A TOP PYLON SPEED OF 115.8 MPH



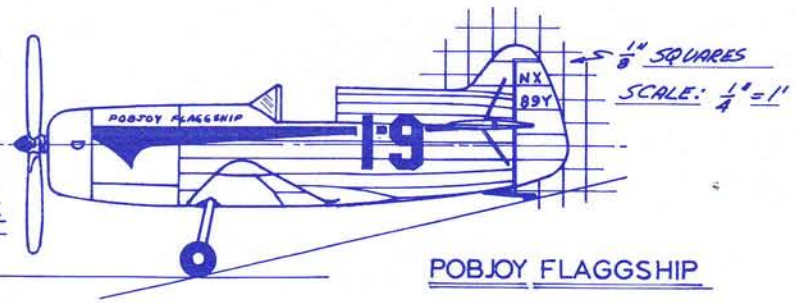
TILBURY - FUNDY "FLASH"

BUILT IN 1938 THE "FURY", DESIGNED, BUILT AND FLOWN BY RUSSELL A. HOSLER WAS TO BE A PROTOTYPE OF A LONG RANGE AIR CORPS ATTACK PLANE. IT WAS POWERED BY A 450 H.P. CURTISS D-12 ENGINE. COLOR SCHEME WAS RED. LENGTH - 28' SPAN - 16' AS LANDING SPEED WAS ESTIMATED AT OVER 100 MPH TRIAL STRAIGHT AHEAD FLIGHTS WITH SKIS WERE MADE FROM A FROZEN LAKE. LANDING GEAR HYDRAULICALLY RETRACTED REARWARD PROJECT ABANDONED DUE TO WW II



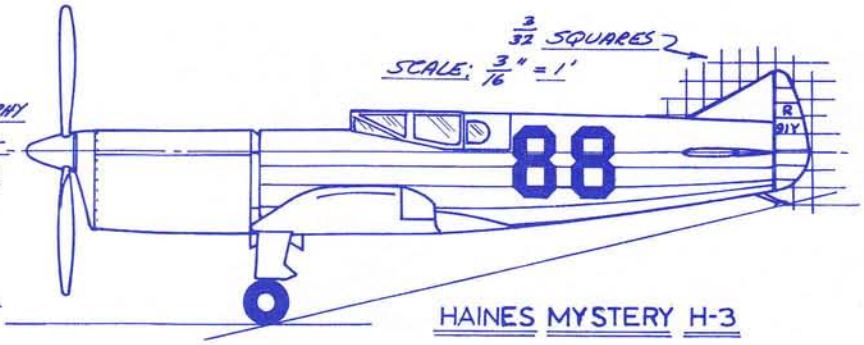
HOSTLER "FURY"

ORIGINALLY BUILT IN 1937 BY CLAUDE FLAGG. POWERPLANT WAS 90HP POBJOY NIAGRA I 7 CYLINDER ENGINE. SPAN - 12'7" LENGTH - 11'6" WING AREA - 26.4 FT². EMPTY WEIGHT - 430 LBS. GROSS WEIGHT - 700 LBS MAX SPEED - 235 MPH. FUSELAGE AND TAIL CONSTRUCTION WERE WELDED STEEL TUBE WITH FABRIC OVER WIRE SCREEN COVERING. WING CONSTRUCTION WAS SPRUCE SPARS WITH PLYWOOD COVERING. INWARD RETRACTING GEAR. UNSTABLE & NOT RACED AT '38 & '39 NATS.



POBJOY FLAGGSHIP

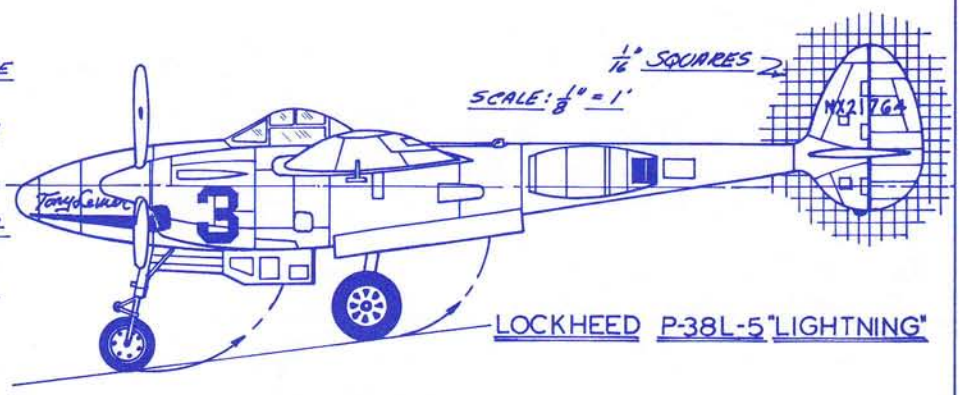
THE H-3 WAS BUILT & FLOWN BY FRANK HAINES OF DETROIT. IT WAS COMPLETED IN 1937 AND PLACED 6TH IN 1937 GREVE TROPHY RACE AT A SLOW 177.71 MPH AVERAGE SPEED. NOTE THE SWEPT BACK LEADING EDGE OF WING & UNUSUAL CANOPY. COLOR SCHEME OF RACER WAS BRONZE. HAINES AND RACER MET THEIR END IN 1938 MIAMI SILVA TROPHY RACE.



HAINES MYSTERY H-3

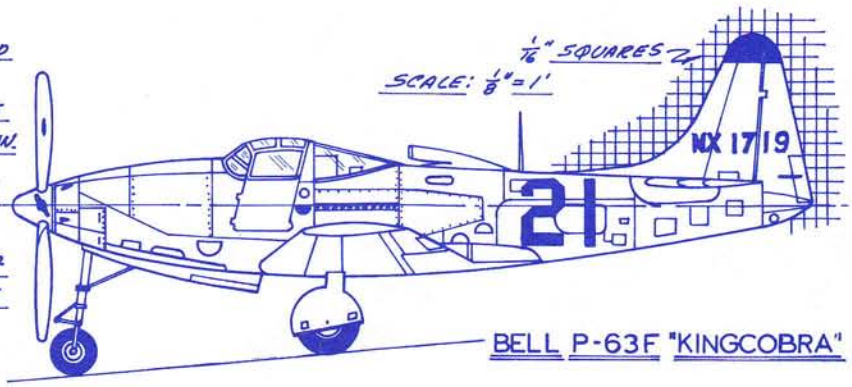
APPENDIX VI

THIS BRIGHT RED "LIGHTNING" WAS FLOWN BY TONY LEVIER TO 5TH PLACE IN 1947 THOMPSON TROPHY RACE. IT WAS ONE OF SEVERAL P-38S FLOWN AT NATIONALS ALTHOUGH THE REST WERE BENDIX CONTESTANTS. NUMBER '3' WAS MODIFIED WITH SUPERCHARGERS AND STABILIZER TIPS REMOVED PLUS ADDITIONAL GAS CAPACITY. SPAN-52' AREA-327.5 FT² LENGTH-37'10" POWERPLANTS: 2 1425 HP ALLISON V-1710-89/91 V-12 LIQUID COOLED ENGINES



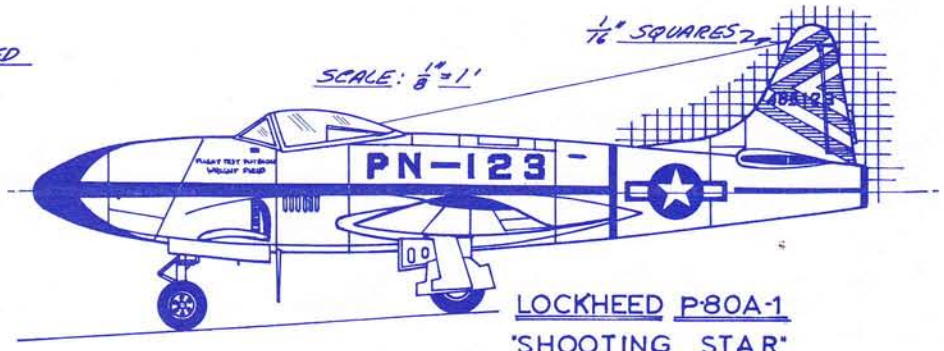
LOCKHEED P-38L-5 "LIGHTNING"

ONE OF SEVERAL "KINGCOBRAS" ENTERED IN VARIOUS NATIONAL AIR RACES. NUMBER '21' WAS FLOWN TO 10TH PLACE IN 1946 THOMPSON BY H.L. PEMBERTON. IT WAS SOLE "F" SERIES WITH MODIFIED LARGER FIN & RUDDER FOR BETTER CONTROL. SPAN-38'4" LENGTH-32'8" WING AREA-248FT² WEIGHT EMPTY-6375 LBS. GROSS WEIGHT-8800 LBS. POWERPLANT-1325 HP ALLISON V-1710-93 12 CYLINDER LIQUID COOLED ENGINE



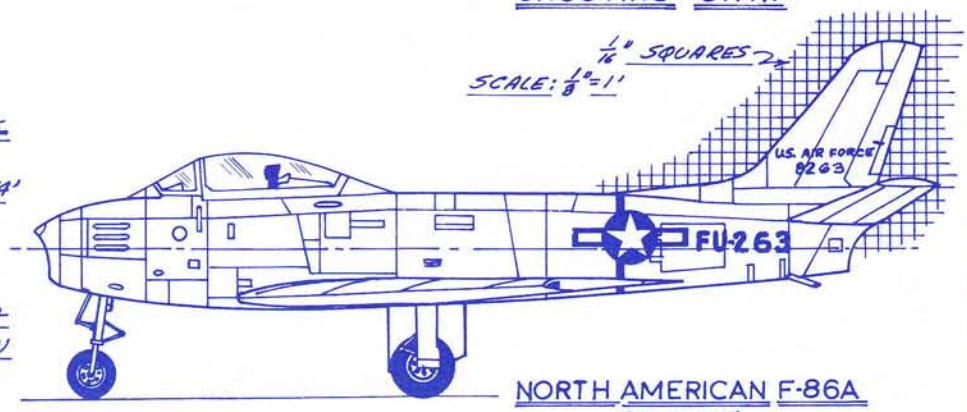
BELL P-63F "KINGCOBRA"

WINNER OF THE 1946 THOMPSON "J" TROPHY AT 515.853 MPH PILOTED BY MAJOR GUS LUNDQUIST. P-80 WAS USAF'S 1ST FULL SCALE PRODUCTION JET FIGHTER. SPAN-38'10½" LENGTH-34'6" WEIGHT EMPTY-7920 LBS. GROSS WEIGHT MAX.-14,000 LBS. WING AREA-238 FT² POWERPLANT-4600 LBS ST. THRUST ALLISON J-33-63-9



LOCKHEED P-80A-1
"SHOOTING STAR"

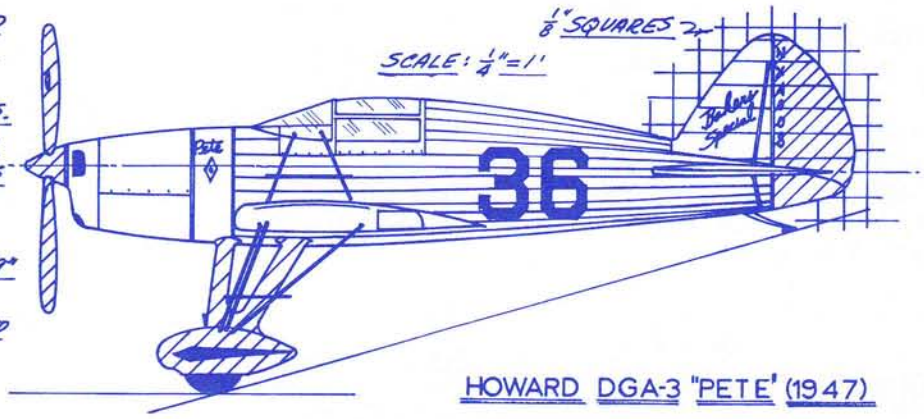
"SABRE" FLOWN BY CAPT. BRUCE CUNNINGHAM TO VICTORY IN 1949 THOMPSON TROPHY JET DIVISION RACE AT 586.173 MPH. SPAN-37.12' WING AREA-287.9 FT² LENGTH-37.54' POWERPLANT-GE J-47-63-13 5200 LBS STATIC THRUST. AIRCRAFT WAS CAPABLE OF OVER MACH 1 SPEEDS IN A DIVE AND WAS STANDARD USAF FIGHTER DURING KOREAN WAR



NORTH AMERICAN F-86A
"SABRE"

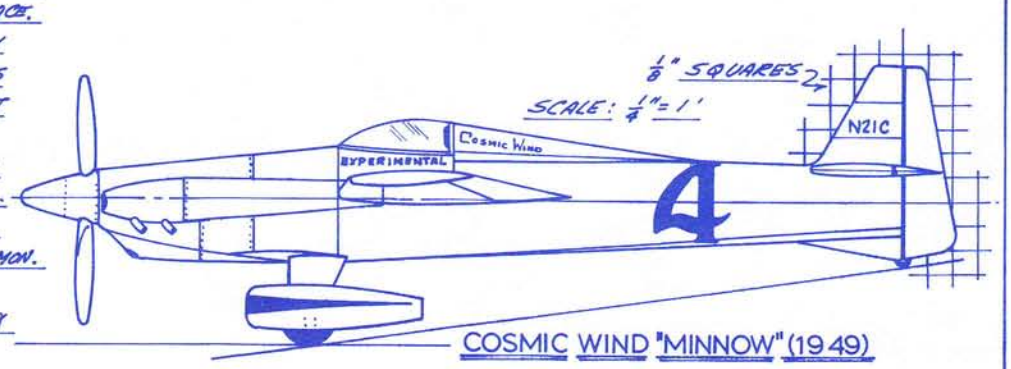
APPENDIX VII

BUILT IN 1930 BY BEN HOWARD AND KNOWN AS "PETE" AIRCRAFT WAS FAMOUS AT THE NATIONALS DURING THE 1930'S. REBUILT BY RAY BAKER IN 1947 TO USE THE CONTINENTAL C-85 ENGINE FOR THE GOODYEAR TROPHY RACE. SPAN-20'1" WING AREA-63FT² LENGTH-17'9" RACER WAS UNSUCCESSFUL IN POST WAR RACES DUE TO ADDED WEIGHT.



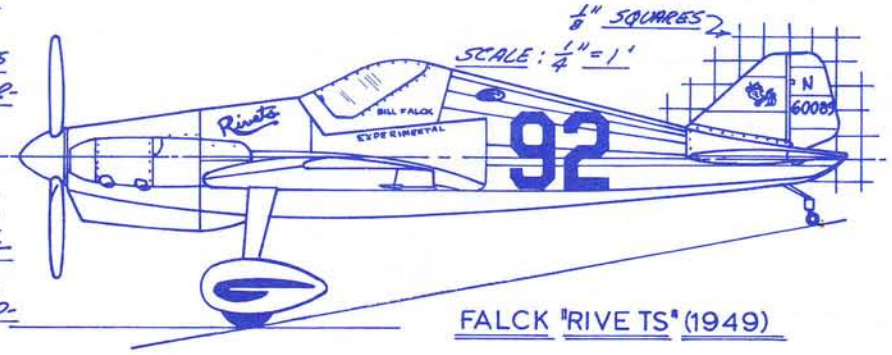
HOWARD DGA-3 "PETE" (1947)

MINNOW "4" WAS GREATLY CHANGED FOR 1949 GOODYEAR TROPHY RACE. LOW WING WAS MOVED HALF WAY UP FUSELAGE. FUSELAGE WAS STRETCHED OVER THREE FEET AND FABRIC COVERED STEEL FRAMEWORK REPLACED FORMER METAL AFT FUSELAGE AND TAIL. FLOWN TO 5TH PLACE IN '49 GOODYEAR BY HERMAN 'FISH' SALMON. SPAN-16' LENGTH-18'10" EMPTY WEIGHT-602 LBS. MAX SPEED WAS OVER 200 MPH.



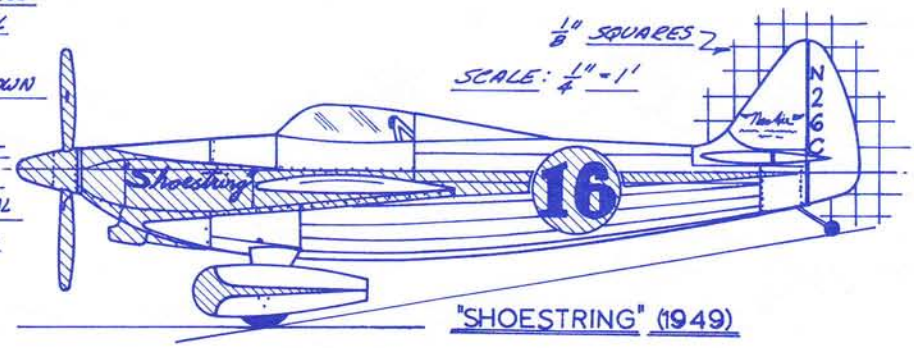
COSMIC WIND "MINNOW" (1949)

STARTING OUT IN 1948 AS A VERY HOMELY GOODYEAR MIDGET "RIVETS" DESIGNED, BUILT, AND RACED BY BILL FALCK HAD STARTED TO LOOK MUCH LIKE ITS FAMOUS 1950'S RACING CONFIGURATION BY 1949. SPAN-17.8' LENGTH-17' COLOR SCHEME RED WITH YELLOW TRIM. ALL METAL WING & FORWARD FUSELAGE. STEEL TUBE FABRIC COVERED AFT FUSELAGE & TAIL. CRAFT WON CONSOLATION GOODYEAR IN 1949 AT 162.6 MPH.



FALCK "RIVETS" (1949)

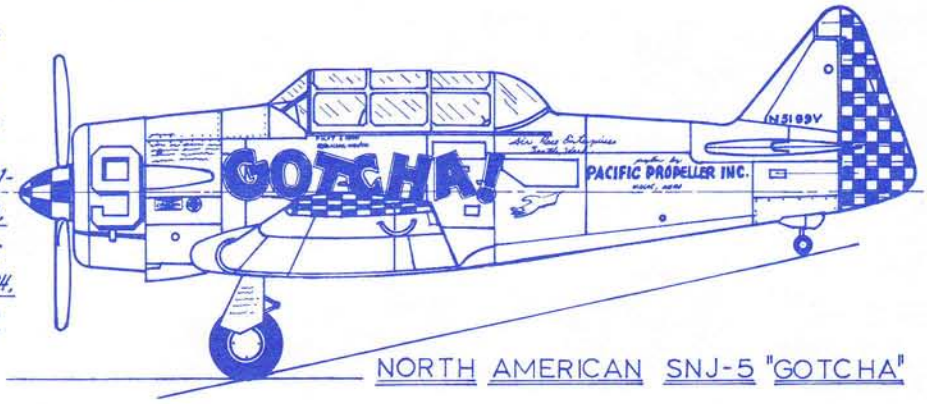
"SHOESTRING" WAS DESIGNED BY ROD KREIMENDAHL AND BUILT BY CARL & VINCENT AST. IN 1949 CRAFT WON GOODYEAR 7TH PLACE FLOWN BY BOB DOWNEY. SPAN-19' LENGTH-17'9" COLOR SCHEME-CHARTREUSE AND RED. CRAFT WENT ON TO WIN 1951 CONTINENTAL TROPHY RACE. POWERPLANT-CONTINENTAL C-85 125 H.P.



"SHOESTRING" (1949)

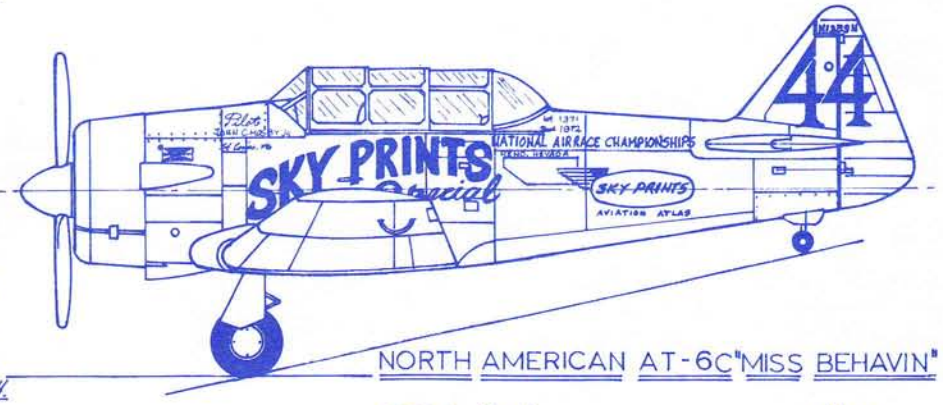
APPENDIX VIII

'GOTCHA' IS PAINTED ORANGE WITH BLACK AND WHITE TRIM. FLOWN BY PATRICK J. PALMER TO 3RD PLACE IN '73 RENO CHAMPIONSHIP RACE AT 203.822 M.P.H. - TOOK 1ST IN CALIFORNIA AIR CLASSIC AT 219.891 M.P.H. IN '73. CRAFT PLACED 2ND IN '72 RENO SILVER CONSOLATION RACE AT 197.20 M.P.H. AT RENO '71. PALMER PLACED 3RD IN AT-6 SILVER CONSOLATION RACE AT 196.19 M.P.H.; CRAFT TOOK RENO '75 RACE AT 207.19 M.P.H.



NORTH AMERICAN SNJ-5 "GOTCHA"

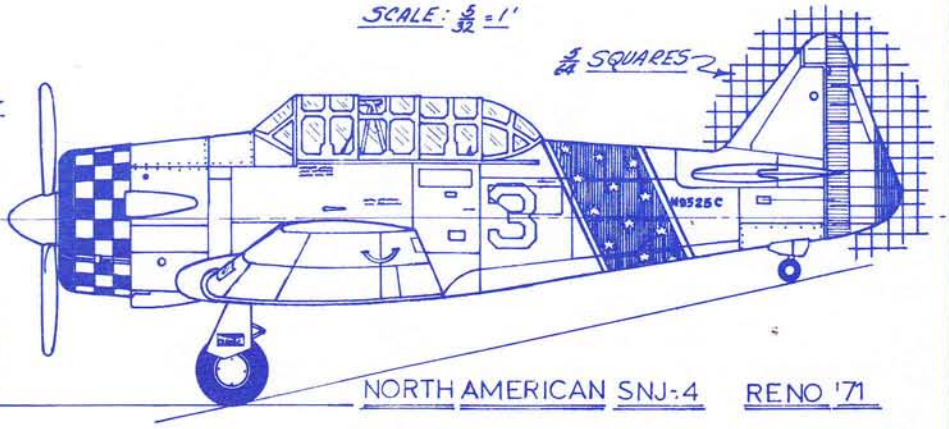
'SKY PRINTS SPECIAL' IS RED WITH WHITE LETTERING. SPINNER IS POLISHED ALUMINUM. JOHN MOSBY TOOK 1ST IN HAROLD NEUMAN CLASSIC @ 207.69 M.P.H. MIAMI '73 FLOWN BY JACK LOWERS AT RENO '73 TO 1ST IN CONSOLATION RACE AT 212.390 M.P.H. IN 1972 MOSBY TOOK 1ST IN QUALIFYING TRIALS AT 210.526 M.P.H. & 2ND IN AT-6 CHAMPIONSHIP RACE @ 201.305 M.P.H.



NORTH AMERICAN AT-6C "MISS BEHAVIN"

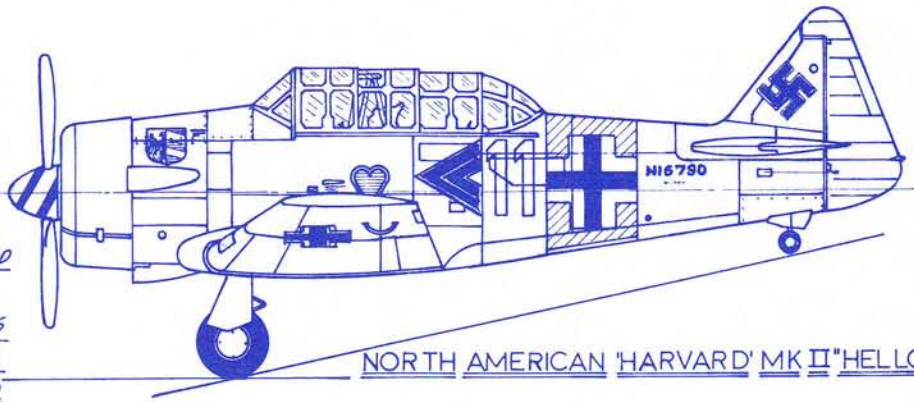
SCALE: $\frac{3}{32}$ = 1'

THE AIRCRAFT AT RIGHT HAS BEIGE-YELLOW WINGS AND STABILIZER. FUSELAGE IS GLOSSY OLIVE DRAB, BLACK AND WHITE CHECKERBOARD ON COWL, WHITE WHEELS & SPINNER, RED, WHITE & BLUE RUDDER, BLUE BAND AROUND FUSELAGE WITH WHITE STARS AND BORDER. QUALIFIED AT RENO '71 IN 3RD PLACE AT 204.16 MPH BY RICHARD SYKES.



NORTH AMERICAN SNJ-4 RENO '71

THIS MARK II IS PAINTED A HIGH GLOSS DARK GREEN. RACE NUMBERS AND AREA AROUND CROSS ARE WHITE. BAND AROUND FUSELAGE IS YELLOW. CROSS & CHEVERONS ARE BLACK. FLOWN BY CALVIN CONROY TO 5TH PLACE IN HAROLD NEUMAN SPEED CLASSIC AT 196.01 M.P.H. - MIAMI '73. OWNER E.J. MODES FLEW CRAFT TO 5TH AT RENO AT-6 CONSOLATION RACE RENO '73 @ 199.692 M.P.H.

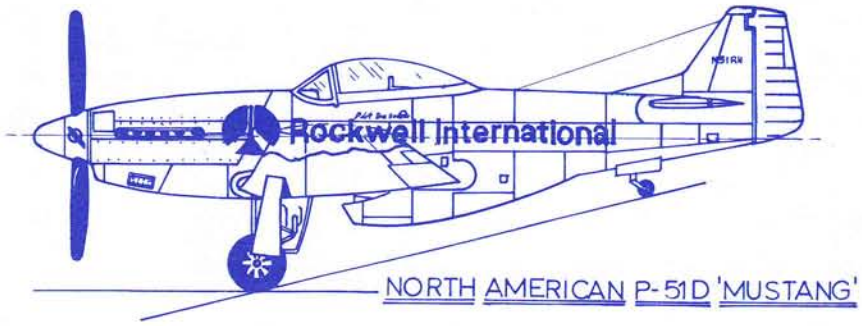


NORTH AMERICAN 'HARVARD' MK II "HELLO"

CH.

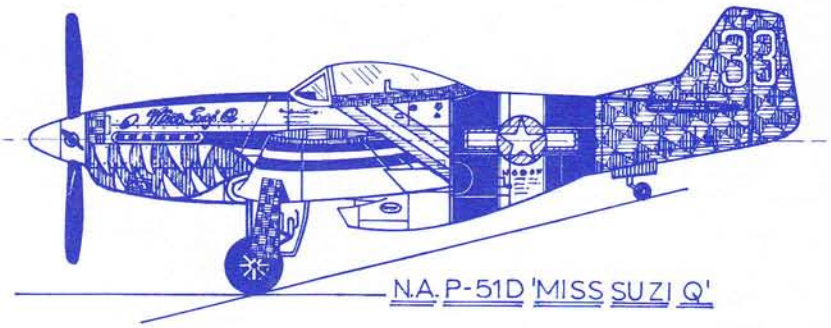
APPENDIX IX

THIS AIRCRAFT IS THE WELL KNOWN UNLIMITED PACE PLANE SEEN AT MAJOR AIR RACES SUCH AS RENO, MOJAVE & MIAMI. PILOTED BY THE WORLD RENOWNED AEROBATIC PILOT BOB HOOVER OF ROCKWELL INTERNATIONAL "SHRIKE COMMANDER" & F-86 STUNT FAME, WHILE NOT AN AIR RACER, THIS YELLOW AND BLACK P-51, BECAUSE OF ITS YEARS SERVING AIR RACING IS INCLUDED HERE.



NORTH AMERICAN P-51D 'MUSTANG'

THE COLOR SCHEME OF THIS AIRCRAFT ALMOST DEFIES DESCRIPTION. THE AREAS OF CHECKERBOARD ARE RED & YELLOW, BLACK BANDS SURROUND THE STAR & BAR INSIGNIA WHICH IS LIGHT BLUE. SHARK MOUTH IS RED & WHITE. BALANCE OF TRIM IS BLACK & YELLOW AS SHOWN. AIRCRAFT IS OWNED & FLOWN BY KEN BURNSTINE. DUE TO SEVERAL TECHNICALITIES IT WON THE '74 RENO RACE AT ONLY 381.482 M.P.H.

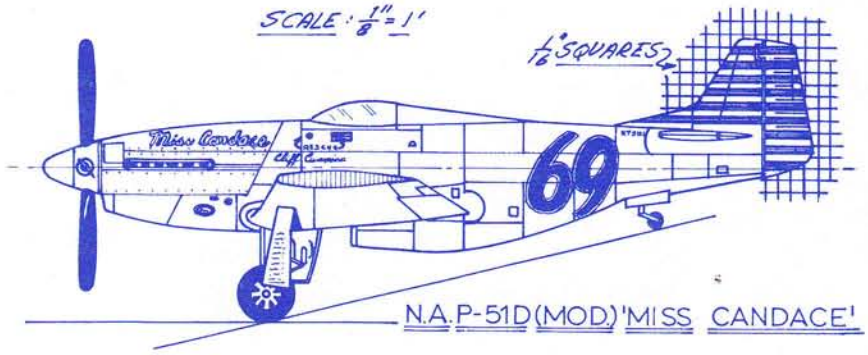


N.A. P-51D 'MISS SUZI Q'

CLIFF CUMMINS OWNS AND RACES "MISS CANDACE". THIS 'MUSTANG' HAS CLIPPED WINGS, MODIFIED OIL COOLER ON FUSELAGE BOTTOM AND GREATLY REDUCED CANOPY. STRIPES ON TAIL ARE RED. NAME OF AIRCRAFT IS WHITE TRIMMED IN YELLOW & BLACK. NUMBER "69" IS BLACK - YELLOW BORDER. CUMMINS FLEW AIRCRAFT TO 2ND PLACE AT RENO '73 @ 417.076 M.P.H.

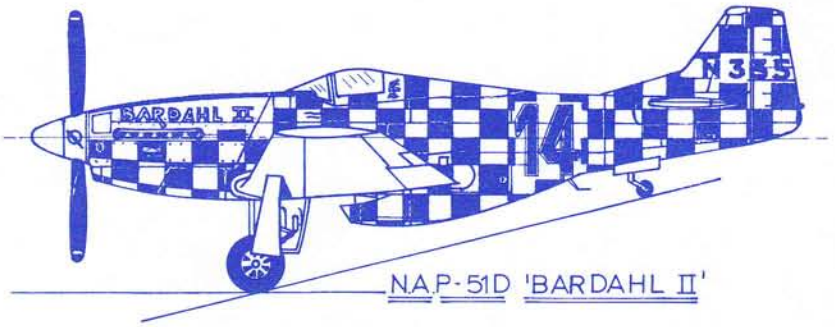
SCALE: 1" = 1'

1/8" SQUARES



N.A. P-51D (MOD.) 'MISS CANDACE'

EDWARD WEINER FLEW THIS YELLOW & BLACK CHECKERBOARD AIRCRAFT CROSS COUNTRY IN THE HAROLDS CLUB TRANSCONTINENTAL TROPHY DASH FROM MILWAUKEE TO RENO IN 1968. CRAFT WON RACE AT AN AVERAGE SPEED OF 361.141 M.P.H. #14 & "BARDAHL" WERE BLACK WITH WHITE TRIM. LANDING GEAR, WHEEL WELLS WERE WHITE. ROLLSROYCE MERLIN V-1650-7 DELIVERED 1700 H.P. - MAX SPEED WAS 450 M.P.H.

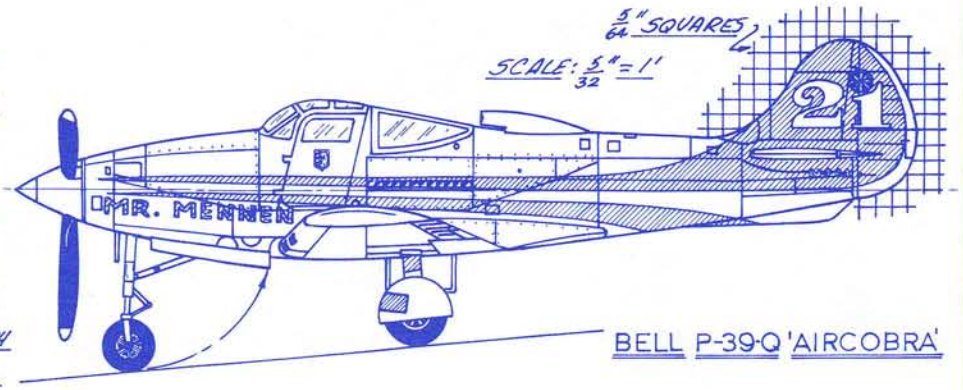


N.A.P-51D 'BARDAHL II'

CA

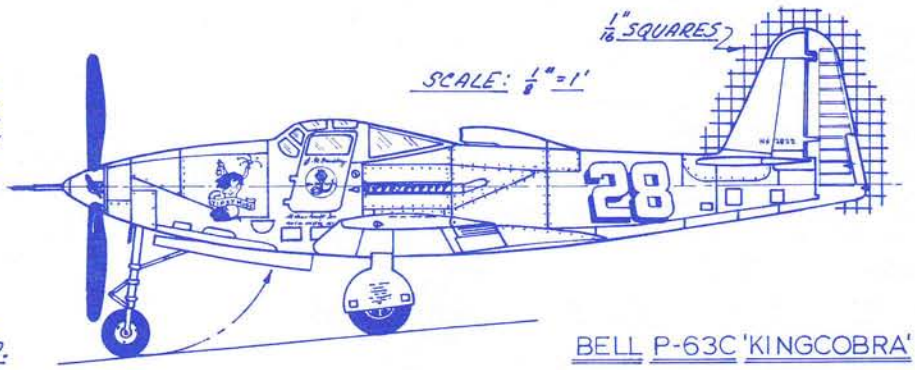
APPENDIX X

MIRA J. SLOVAK'S "MR. MENNEN" ARRIVED AT RENO IN 1972 TOO LATE TO QUALIFY FOR THE UNLIMITED EVENT. HOWEVER THE FLASHY 'COBRA' WAS A REAL CROWD PLEASER FROM AN APPEARANCE STANDPOINT. CRAFT WAS ALL WHITE WITH GREEN STRIPES & MARKINGS EDGED IN GOLD. 12 CYLINDER ALLISON ENGINE CAN PUT OUT 2200 H.P., SPAN IS 34 FT., LENGTH IS 30'2". LICENSE NUMBER IS N40A.



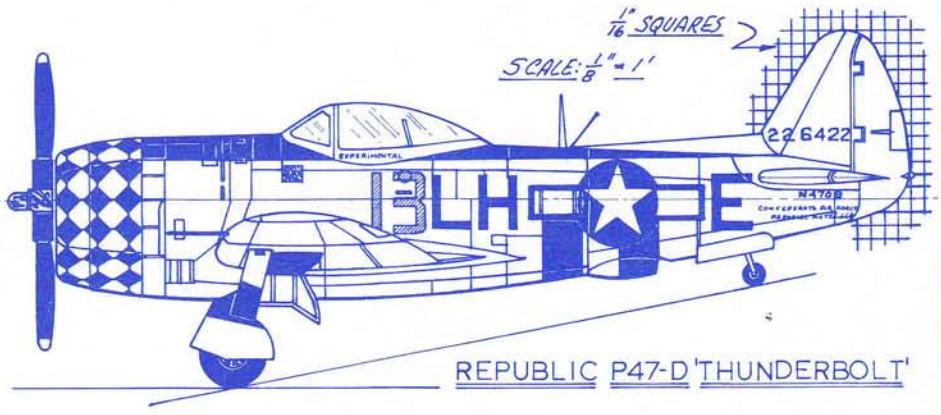
BELL P-39-Q 'AIRCOBRA'

JOHN R. SANDBERG'S FLAMING RED 'COBRA' HAS A POLISHED CHROME PLATED SPINNER, WHITE LETTERING WITH BLACK TRIM AND BLACK 'TIPSY MISS'. AIRCRAFT HAS HAD POOR LUCK AT RENO & MOJAVE DUE TO MECHANICAL PROBLEMS. WINGS HAVE BEEN CLIPPED, AIR-SCOOP ENLARGED, EXHAUST MODIFIED AND WING FILLETS ENLARGED. ALLISON ENGINE PUTS OUT 2300+ H.P.



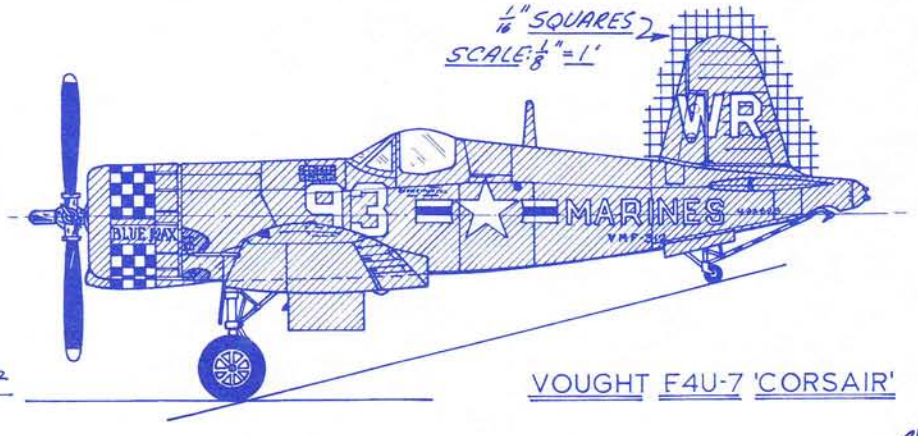
BELL P-63C 'KINGCOBRA'

A MOST UNUSUAL ENTRY IN THE RENO UNLIMITED CATAGORY, THIS 'JUG' PLACED 4TH IN THE '74 UNLIMITED MEDALLION RACE PILOTED BY MARVIN "LEFTY" GARDNER. AIRCRAFT IS LIGHT GRAY WITH YELLOW & BLACK CHECKERED COWLING. DIMENSIONS ARE: SPAN-40'9 3/8"; LENGTH-36'1 3/4"; HEIGHT-14'7"; WING AREA-300 FT.²; POWERPLANT IS 2535 H.P. P&W R-2800-59.



REPUBLIC P47-D 'THUNDERBOLT'

THIS 'CORSAIR DONE IN THE MARKINGS OF VMF-312 U.S.M.C., CVE-115 BAIROKO, KOREA, FEB. 1952 IS PILOTED BY ROBERT E. GUILFORD. CRAFT TOOK 6TH PLACE IN '74 RENO UNLIMITED MEDALLION RACE. COLOR IS NAVY BLUE WITH RED & WHITE CHECKERED COWL. ALL LETTERING IS WHITE. SPAN-41'; LENGTH-34 1/2'; HEIGHT-13'; WING AREA-314 FT.² POWERPLANT IS 2100 H.P. P&W 2800-18W.

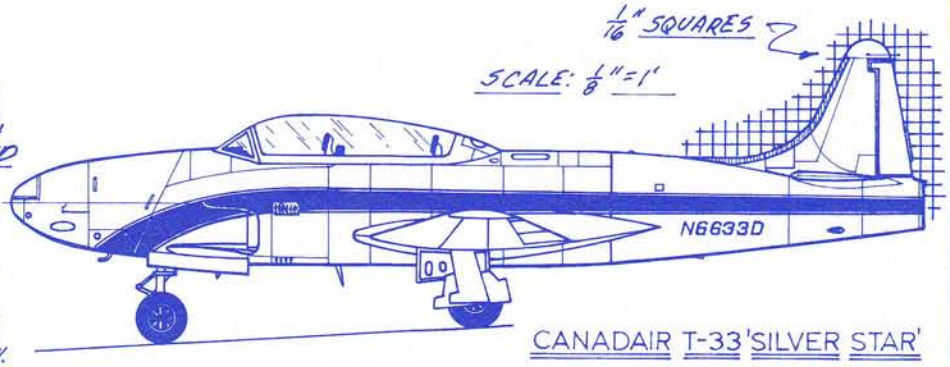


VOUGHT F4U-7 'CORSAIR'

CH

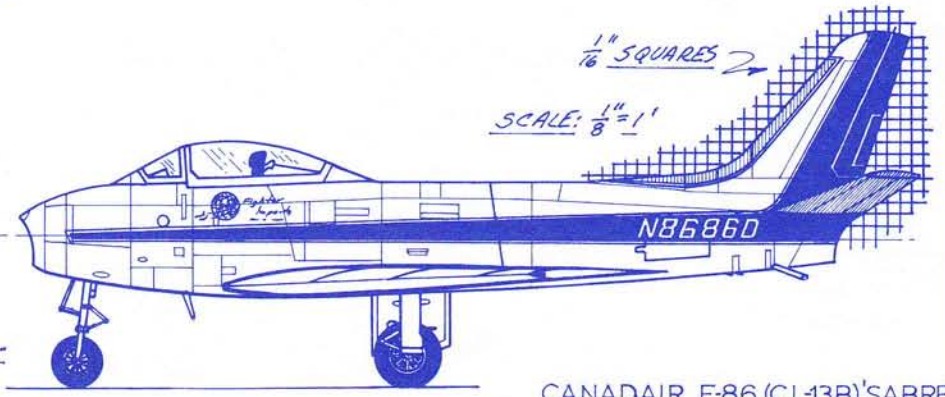
APPENDIX XI

THE T-33 IS A STRETCHED ADAPTATION OF THE LOCKHEED F-80C 'SHOOTING STAR' TO ALLOW FOR A SECOND SEAT. THE LATE LEROY PENHALL, OWNER OF 'FIGHTER IMPORTS,' OBTAINED T-33 & F-86 JETS FROM CANADA FOR MODIFICATION & RESALE IN U.S. RED AND YELLOW CRAFT AT RIGHT WAS FLOWN IN JET RACE AT MOJAVE '74 & '75. SPAN - 38'10½"; LENGTH - 37'9"; HEIGHT - 11'8"; WING AREA - 237 FT²; MAX SPEED - 580 MPH.



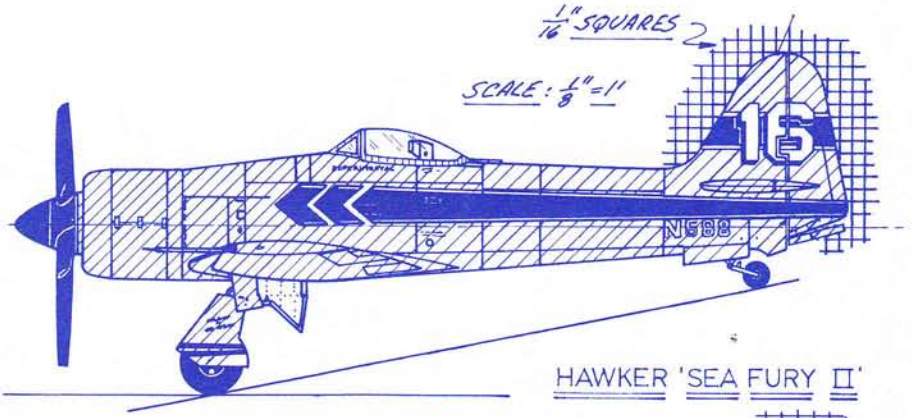
CANADAIR T-33 'SILVER STAR'

'SABRE' SHOWN IS ALL WHITE WITH RED STRIPE. LEADING EDGE OF VERTICAL FIN IS POLISHED ALUMINUM. 'FIGHTER IMPORTS' TRADE MARK IS BLUE AND LICENSE NUMBER IS GOLD. F-86 & T-33 ABOVE WERE BUILT BY CANADAIR LTD. SPAN - 37'1"; LENGTH - 37'6"; HEIGHT - 14'7"; WING AREA - 287.9 FT². MAX SPEED - 680 M.P.H. CRAFT COMPETED IN MOJAVE JET RACES.



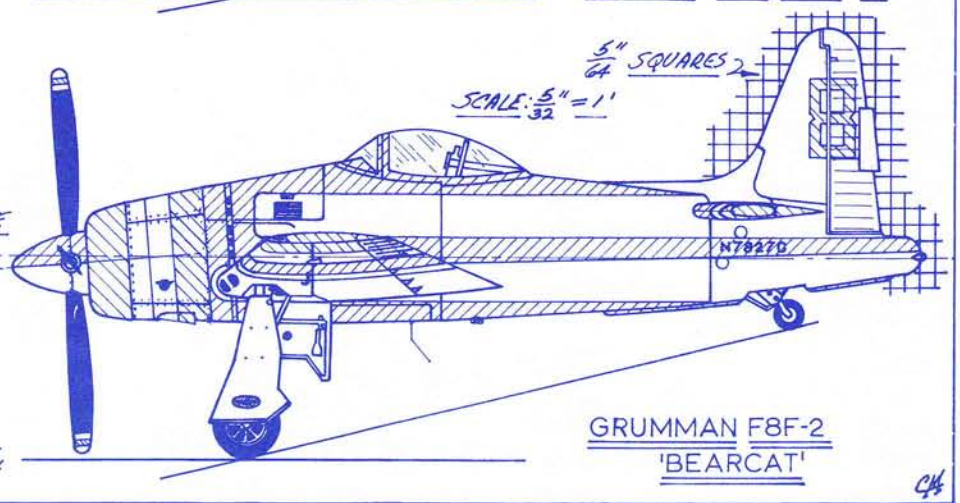
CANADAIR F-86 (CL-13B) 'SABRE'

LLOYD A. HAMILTON OWNS THIS HAWKER SEA FURY II. 1972 COLOR SCHEME SHOWN IS DARK GREEN WITH YELLOW FUSELAGE & TAIL STRIPE. LICENCE AND RACING NUMERALS WERE WHITE. CRAFT WAS LATER CHANGED TO SEA-FOAM GREEN WITH ROYAL AUSTRALIAN NAVY MARKINGS. HAMILTON PLACED THIRD IN HEAT 2-A IN 1972 UNLIMITED CONTEST AT RENO.



HAWKER 'SEA FURY II'

CRAFT APPEARED AT RENO IN 1969 FLOWN BY WALTER OHLRICH. IT BORE A RED #10 RACING NUMBER ON THE FIN. THE SPINNER WAS ALTERNATE RED, WHITE & BLUE QUARTERS. COWL WAS RED WITH WHITE STRIPE IN CENTER. STRIPING ON WHITE FUSELAGE WAS BLUE. PLANE WAS NAMED 'MISS PRISS'. JOHN A. HERLIHY NOW OWNS PLANE (RENAMED 'SWEET P') AND HAD STRIPPED PAINT FOR 1974 RENO RACE.

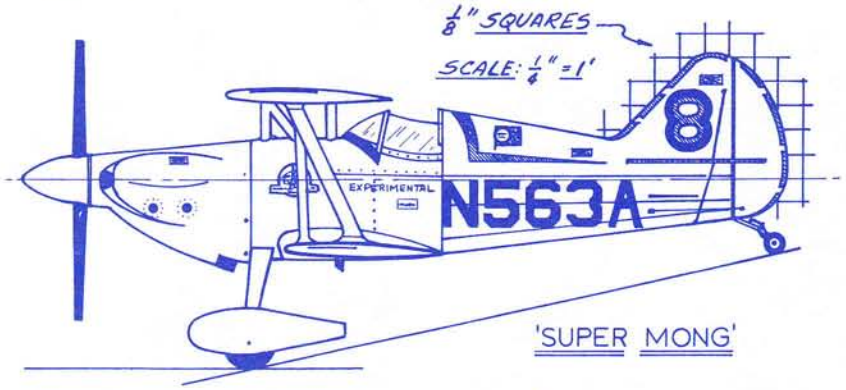


GRUMMAN F8F-2 'BEARCAT'

CH

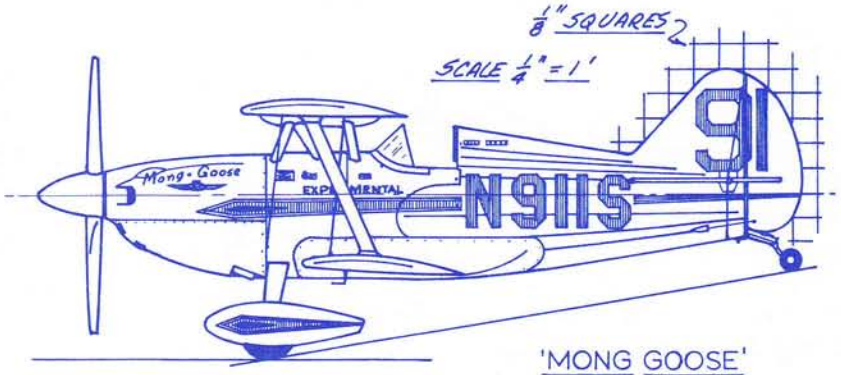
APPENDIX XII

CLEMENS F. FISCHER HAS MADE HIS 'MONG SPORT' INTO 'SUPER MONG' BY CHANGING WINGS TO LAMINAR FLOW FIBERGLASS COVERED ALUMINUM FRAMED ONES THAT ARE ONLY 2 7/32" THICK. ALSO HE HAS ADDED A CLOSE FITTING COWL. AIRCRAFT IS ALL WHITE WITH BLACK LICENSE, BLACK & GREEN "8" AND GREEN TRIM. FISCHER HAS FLOWN IN EVERY CHAMPIONSHIP RENO BIPLANE RACE SINCE 1965. HE CAME IN THIRD IN 1968, HIS BEST RACE.



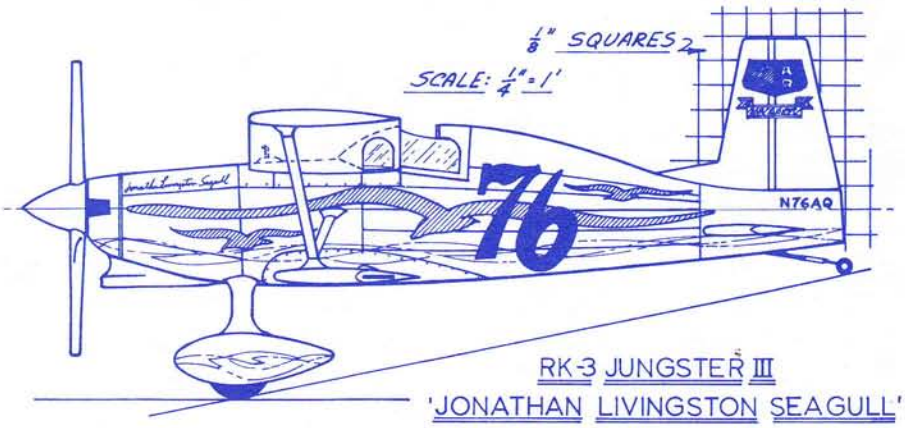
'SUPER MONG'

WILLIAM NAGEL BUILT "MONG GOOSE" AND HAS POWERED IT WITH A KIT BUILT FRANKLIN 4 CYLINDER ENGINE. COLOR SCHEME IS ALL WHITE BASE COLOR. RACE NUMBERS AND LICENSE NUMBERS ARE RED-ORANGE. INNER STRIPES ON FUSELAGE SIDES, WHEEL PANTS, WING & STAB. ARE RED ORANGE-WITH DARK BLUE OUTLINE. 'MONG GOOSE' IS DARK BLUE. LENGTH 15'8½"; SPAN = 12'1". PLANE SO FAR HAS BEEN SLOW DUE TO ENGINE.



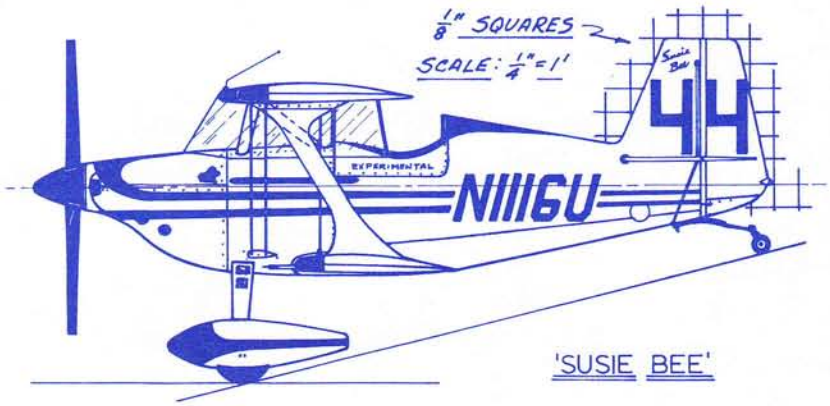
'MONG GOOSE'

'J.L. SEAGULL' WAS DESIGNED AND BUILT BY RIM KAMSKAS. FLOWN BY CURRENT OWNER J.O. HALL AIRCRAFT WON 2ND PLACE IN RENO BIPLANE CHAMPIONSHIP RACE IN 1972 AT 180.04 M.P.H.. FANCY PAINT SCHEME WAS DESIGNED BY ARTIST KEN THOMS. CRAFT IS ALL WHITE WITH GOLD GULLS; VARIOUS SHADES OF BLUE ON LOWER FUSELAGE & PANTS CREATE WAVE EFFECT.



RK-3 JUNGSTER III
'JONATHAN LIVINGSTON SEAGULL'

EARL HOFFMAN HAS FLOWN "SUSIE BEE", AN ORIGINAL DESIGN BUILT BY GENE SALINA IN 1967, IN THE RENO CHAMP. BIPLANE RACE EVERY YEAR SINCE 1969 EXCEPT 1972. COLOR SCHEME IS WHITE WITH BLACK TRIM & GOLD PIN STRIPE. WING IS FABRIC COVERED WOOD; SPAN 15'5". FUSELAGE IS FABRIC COVERED STEEL TUBE FRAMEWORK. LENGTH IS 15'2". LYCOMING O-290-G ENG.

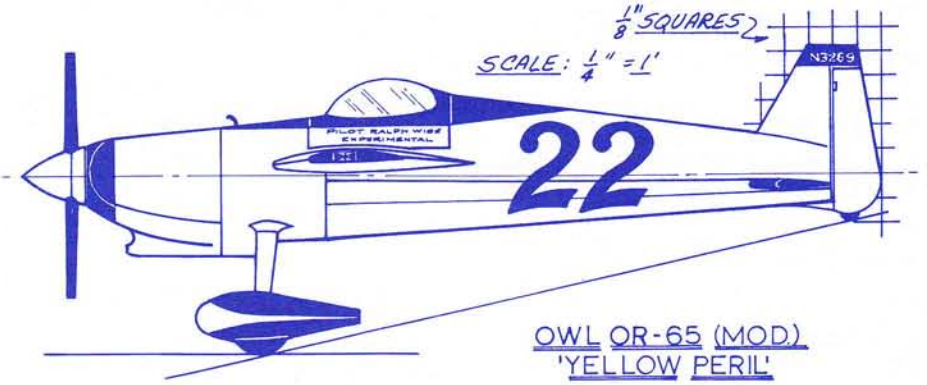


'SUSIE BEE'

CH

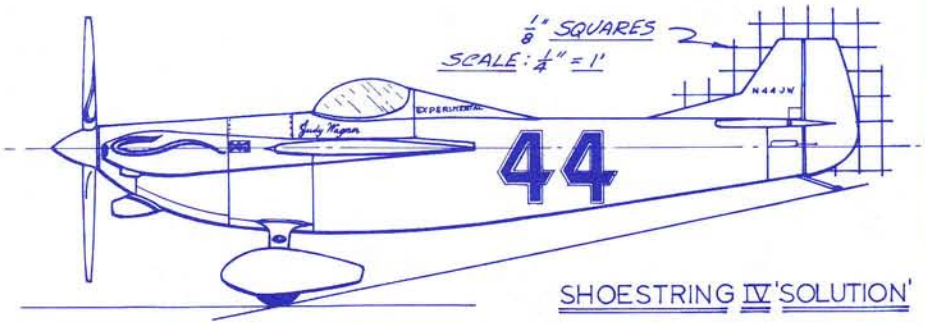
APPENDIX XIII

THE OWL RACER OR-65-2 "YELLOW PERIL" HAS A SPECIAL WING DESIGNED BY OWNER, BUILDER, PILOT, RALPH WISE. SPAN IS 20'5"; CHORD AT ROOT IS 50" AND 25" AT TIPS. COLOR SCHEME IS YELLOW WITH MAROON TRIM & POLISHED ALUMINUM SPINNER. CRAFT TOOK 1ST IN '72 F-1 MEDALLION RACE (RENO) AT 195.181 M.P.H. PLANE WAS SOLD TO JERRY HIBBARD AND HAS SINCE CRASHED & BURNED.



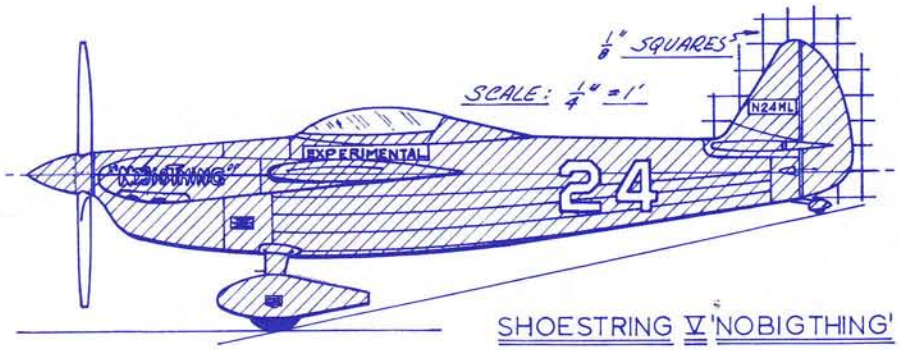
OWL OR-65 (MOD.)
'YELLOW PERIL'

JUDITH WAGNER BUILT THIS SHOESTRING IV FROM KETNER PLANS IN 1971. NAMED "WAGNER SOLUTION" AIRCRAFT IS PAINTED A HIGH GLOSS BRIGHT ORANGE. MODIFICATIONS INCLUDE CLIPPED RUDDER & FIN, ADDED DORSAL FIN AND CLEANED UP CARB. INTAKE. POWERPLANT IS O-200 CONTINENTAL. SHE PLACED 5TH IN FORMULA ONE HEAT 1-A IN 1973 AT 210.117 M.P.H.



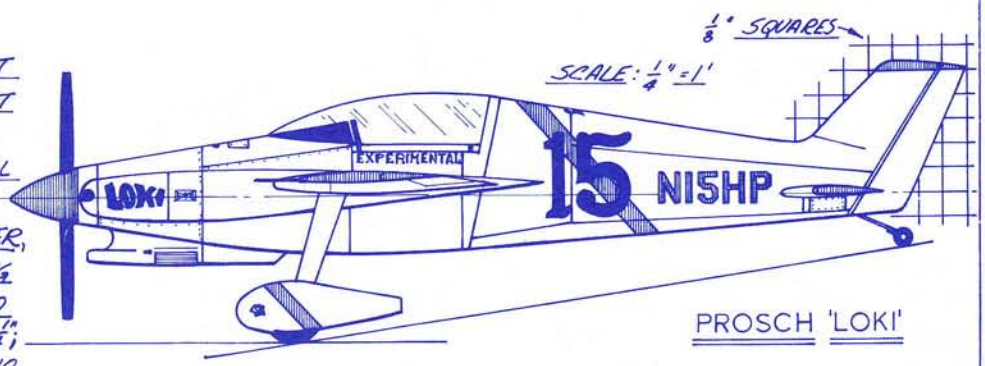
SHOESTRING IV 'SOLUTION'

BUILT BY MUNROE LYETH, JR. "NOBIGTHING" IS A SHOESTRING K-10 FROM KETNER PLANS. COLOR SCHEME IS RED WITH WHITE NAME & RACE NUMBER. #24 HAS BLACK OUTLINE. OTHER LETTERING IS BLACK ON WHITE BACKGROUNDS. PLANE WAS BUILT IN '72 AND PLACED 6TH IN HEAT 1-A AT RENO '72. AIRCRAFT WAS RACED AT MIAMI IN 1973.



SHOESTRING V 'NOBIGTHING'

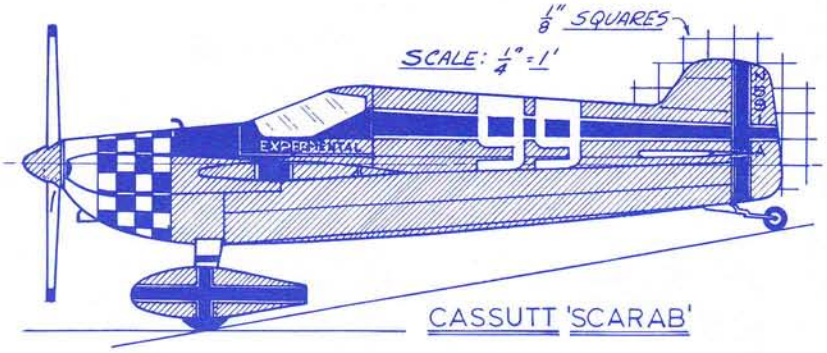
ERNEST PROSCH DESIGNED & BUILT "LOKI" FOR 1973 SEASON. EXCEPT FOR FIBERGLASS WHEEL PANTS AND WING FILLETS CRAFT IS ALL METAL. COLOR SCHEME IS ALL WHITE WITH RED-ORANGE SPINNER, STRIPES, LICENSE NO. AND FLYING SURFACE TIPS. RACING NO. AND "LOKI" ARE BLACK. SPAN - 17'10 1/4"; LENGTH - 19'10 1/2". RACED AT RENO IN '73 & '74 BY ROBERT REINSETH.



PROSCH 'LOKI'

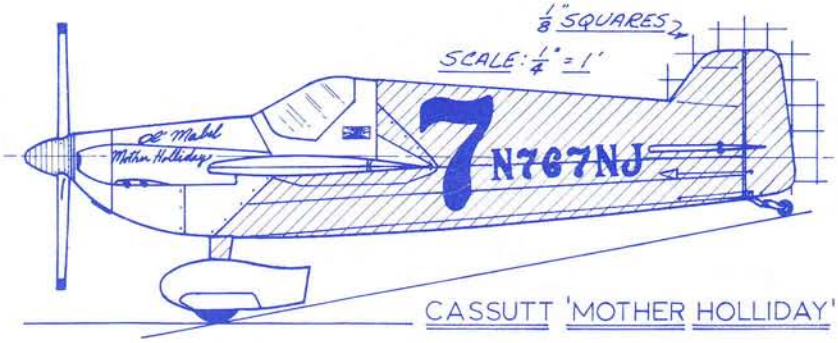
APPENDIX XIV

'SCARAB', A CASSUTT III, WAS BUILT IN 1967 BY BOB GREIGER AND RACED AT FREDERICK MD. & RENO IN 1968. OWNED BY THE ERIE-SCARAB RACING ASSOCIATION OF CLEVELAND, CRAFT WAS FLOWN BY SAL LANESE. COLOR SCHEME WAS RED WITH BLACK AND WHITE TRIM. LICENSE NUMBER AND 'EXPERIMENTAL' WERE GOLD. SPAN = 15' LENGTH = 16'3" WOOD WING; STEEL TUBE & FABRIC FUSELAGE & TAIL.



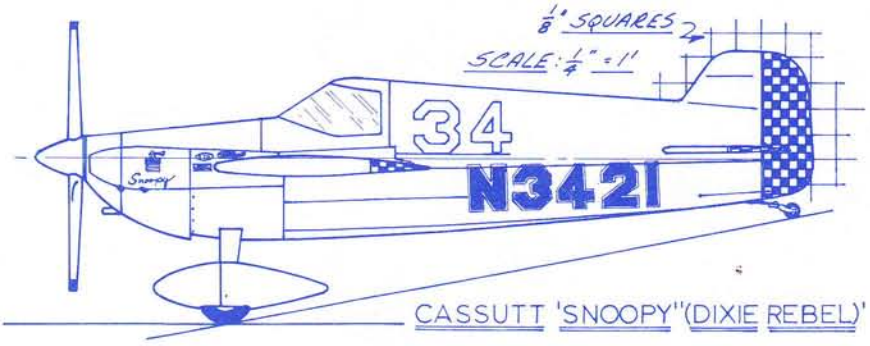
CASSUTT 'SCARAB'

FUSELAGE OF 'MOTHER HOLLIDAY' IS CASSUTT FITTED WITH 'RIVETS' STYLE CANOPY. WING WAS DESIGNED BY OWNER, BUILDER, PILOT NICK JONES. COLOR SCHEME IS BLUE & WHITE FUSELAGE AND TAIL; RACE AND LICENSE NUMBER ARE GOLD - OTHER MARKING BLACK. WINGS ARE NATURAL MAHOGANY FINISH. LENGTH = 16'; SPAN = 15' WHEEL PANTS HAVE CLAM-SHELL DOORS.



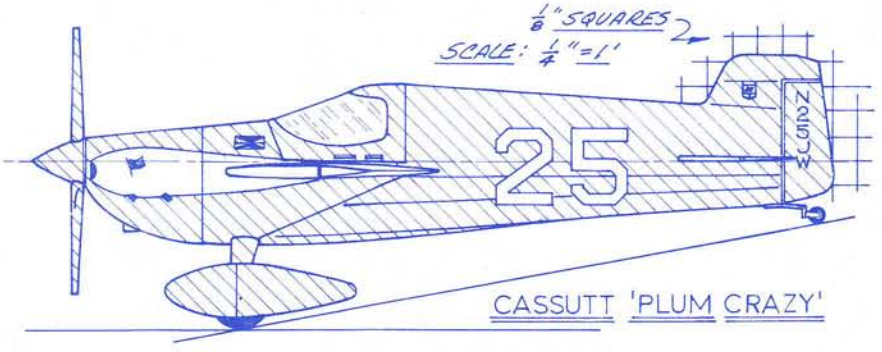
CASSUTT 'MOTHER HOLLIDAY'

"SNOOPY", A CASSUTT II, WAS BUILT IN 1967 BY JIM WILSON AND RACED BY HIM AT CLEVELAND & MIAMI. PLANE IS PAINTED LAVENDER MIST WITH WHITE SPINNER & RACE NUMBER; BLACK & WHITE CHECKERBOARD ON CONTROL SURFACES; BLACK LICENSE NUMBER. SPAN = 14'10½" LENGTH = 16'8". CRAFT SOLD TO JOHN THOMSON IN '70; RENAMED 'DIXIE REBEL'.



CASSUTT 'SNOOPY" (DIXIE REBEL)'

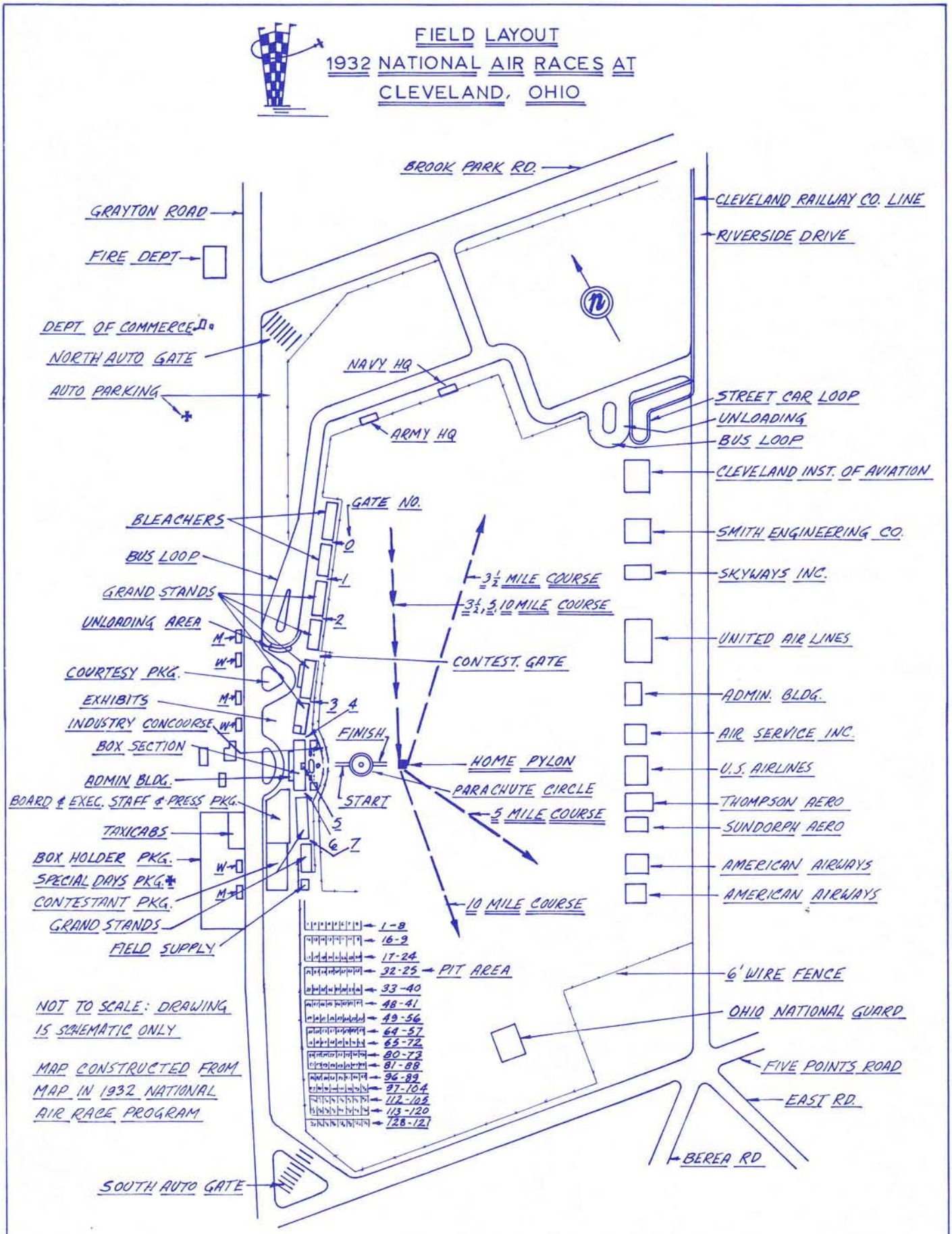
JIM WILSON BUILT "PLUM CRAZY" WITH A SPECIAL SELF DESIGNED THIN TAPERED WING FOR WHICH HE SELLS PLANS. SPAN = 18' LENGTH = 17'4". COLOR SCHEME IS PLUM FUSELAGE & PANTS; WHITE 'APPLE CHEEKS' AND RACE NUMBER. WINGS AND STABILIZER ARE WHITE. WILSON PLACED 4TH IN 1972 & 1973 IN RENO CHAMPIONSHIP FORMULA ONE RACES.



CASSUTT 'PLUM CRAZY'

CH

FIELD LAYOUT
1932 NATIONAL AIR RACES AT CLEVELAND, OHIO



NOT TO SCALE: DRAWING IS SCHEMATIC ONLY

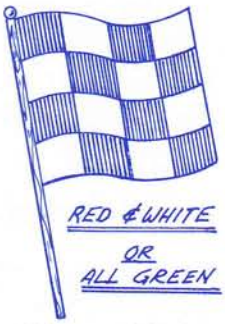
MAP CONSTRUCTED FROM MAP IN 1932 NATIONAL AIR RACE PROGRAM

HELD AUGUST 27 THRU SEPTEMBER 5, 1932 WAS THE YEAR OF JIMMY DOOLITTLE & GEE BEE R-1 TRIUMPH. OVER 55,000 RACE FANS CHEERED THIS AMAZING COMBINATION OF MAN & MACHINE. A VINTAGE RACING YEAR!

CK

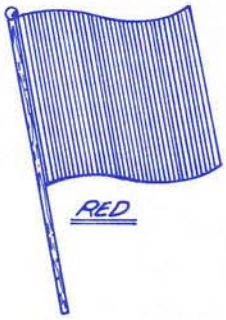


RACING FLAGS AND THEIR MEANING



RED & WHITE
OR
ALL GREEN

START OF RACE



RED

RACE CANCELLED

1975 RENO RACE COURSE



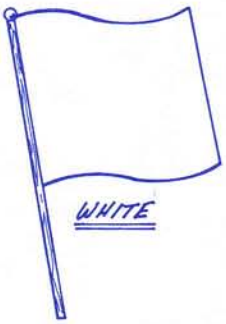
UNLIMITED COURSE - 9.8 MILES
ORANGE & WHITE PYLONS

FORMULA 1, SPORT BIPLANE & AT-6
COURSE - 3.0 MILES - RED & WHITE
PYLONS



BLACK

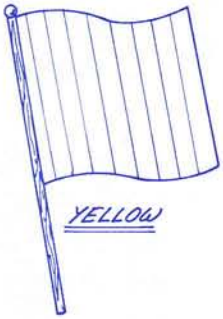
CONTESTANT DISQUALIFIED
AIRCRAFT TO VACATE COURSE



WHITE

START OF LAST LAP

START/FINISH
PYLON



YELLOW

EMERGENCY IN PROGRESS

7600' EAST-WEST RUNWAY

SCATTER PYLON

RAMP

AIRCRAFT PARKING AREA

SPECTATOR GRANDSTANDS

CONTROL TOWER



BLACK & WHITE

RACE IS FINISHED

THE VIEW AT RIGHT SHOWS "CONQUEST 1", THE WORLDS PROP DRIVEN SPEED RECORD HOLDER (483.041 MPH; 9-21-'69; SEE PAGE 14) AT MOJAVE & RENO 1975. DUE TO MECHANICAL PROBLEMS CRAFT DID NOT RACE AT RENO. COLOR SCHEME IS YELLOW WITH RED PROP, LICENCE AND RACE NUMBERS. "AMERICAN JET" IS BLACK. EAGLE IS BLACK; ORANGE FEET & BEAK.



1975 VERSION SCALE: $\frac{3}{32}$" = 1'

CH

TABLE OF ENTRIES IN MAJOR AIR RACES

JAMES GORDON BENNETT CUP

Year	Pilot	Aircraft	Speed
1909	Curtiss	Golden Flyer	47.6
	Bleriot	Bleriot XI	46.8
	Latham	Antoinette	42.5
	Lefebvre	Wright	37.7
	Cockburn	Earman	—
1910	Grahame-White	Bleriot XI bis	61.0
	Moisant	Bleriot XI	31.5
	Ogilvie	Wright C	29.4
	Latham	Antoinette	17.8
	Leblanc	Bleriot	—
	Drexel	Bleriot XI	—
	Radley	Bleriot XI bis	—
	Brookins	Baby Wright	—
1911	Weyman	Nieuport	78.0
	Leblanc	Bleriot	75.8
	Nieuport	Nieuport	75.1
	Ogilvie	Baby Wright	53.3
	Chevalier	Nieuport	—
	Hamel	Bleriot	—
1912	Vedrines	Deperdussin	105.5
	Provost	Deperdussin	103.8
	Frey	Hanriot	—
			—
1913	Provost	Deperdussin	124.5
	Vedrines	Bleriot XI	123.0
	Gilbert	Deperdussin	119.5
	Crombez	Deperdussin	106.9
1920	Sadi-Lecointe	Nieuport	168.5
	deRomanet	Spad	113.5
	Kirch	Nieuport	—
	Raynham	Martinsyde	—
	Schroeder	Verville Packard	—
	Rinehart	Dayton Wright	—
	Rohles	Curtiss Texas Wildcat	—

SCHNEIDER TROPHY RACE

Year	Pilot	Aircraft	Speed
1913	Provost	Deperdussin	45.7
	Weyman	Nieuport	—
1914	Pixton	Sopwith Tabloid	86.5
	Burri	F.B.A.	62.0
1920	Bologna	Savoia S-12	107.2
1921	Briganti	Macchi M-7	117.9
	Zanetti	Macchi M-19	—
1922	Baird	Sea Lion III	145.7
	Passaleva	Savoia S-51	143.5
	Zanetti	Macchi M-17	133.0
	Corniglio	Macchi M-7	90.6
1923	Rittenhouse	Curtiss R-3	177.4
	Irvine	Curtiss R-3	173.5
	Baird	Sea Lion III	157.2
	Hurel	Cams 38	—
	Wead	Wright NW-2	—
1921	Briganti	Macchi M-7	117.9
	Zanetti	Macchi M-19	—
1922	Baird	Sea Lion III	145.7
	Passaleva	Savoia S-51	143.5
	Zanetti	Macchi M-17	133.0
	Corniglio	Macchi M-7	90.6
1923	Webster	Nieuport	168.5
	Worsley	Spad	113.5
	Guazzetti	Nieuport	—
	Raynham	Martinsyde	—
	Kinkead	Verville Packard	—
	deBernardi	Dayton Wright	—
1925	Doolittle	Curtiss R3C-2	232.6
	Broad	Gloster III	199.2
	deBriganti	Macchi M-33	168.4
	Cuddihy	Curtiss R3C-2	—
	Ofstie	Curtiss R3C-2	—
	Baird	Supermarine S-4	—
1926	deBernardi	Macchi M-39	246.5
	Schilt	Curtiss R3C-2	231.3
	Bacula	Macchi M-39	218.0
	Tomlinson	Curtiss F6C-1	136.9
	Cuddihy	Curtiss R3C-4	—
1927	Webster	Supermarine S-5	281.6
	Worsley	Supermarine S-5	273.1
	Guazzetti	Macchi M-52	—
	Kinkead	Gloster IV B	—
	deBernardi	Macchi M-52	—

SCHNEIDER TROPHY RACE (CONTINUED)

Year	Pilot	Aircraft	Speed
1929	Waghorn	Supermarine S-6	328.6
	DalMolin	Macchi M-52R	284.2
	Grieg	Supermarine S-5	282.1
	Atcherly	Supermarine S-6	—
	Cadringer	Macchi M-67	—
	Monti	Macchi M-67	—
1931	Boothman	Supermarine S-6B	340.1

PULITZER TROPHY RACE

Year	Pilot	Aircraft	Speed
1920	Mosely	Verville Packard	156.5
	Hartney	Thomas Morse MB-3	148.0
	Acosta	SVA A-1	134.5
	Streett	Orewco "D"	133.0
	Laurents	Vought VE-7	125.0
	Roullot	DeHaviland DH-4	124.0
	Taylor	SVA-9	117.0
	Kirby	SE-5A	116.7
	Colt	Morane-Saulnier	95.0
	Bradley	Leoning Special	150.0
1921	Acosta	Curtiss R-1	176.7
	Coombs	Curtiss Cox	170.3
	Macready	Thomas Morse MB-6	160.7
	Bertaud	Ansaldo Balilla	149.8
	Hartney	Thomas Morse MB-7	—
	Curran	SVA-9	—
1922	Maughan	Curtiss R-6	205.8
	Maitland	Curtiss R-6	198.8
	Brow	Curtiss R-2	193.2
	Williams	Curtiss R-1	188.0
	Barksdale	Verville Sperry R-3	181.0
	Mosely	Verville Packard R-1	179.0
	Johnson	Verville Sperry R-3	178.0
	Whitehead	Leoning R-4	170.2
	Schulz	Leoning R-4	160.9
1923	Williams	Curtiss R2C-1	243.7
	Brow	Curtiss R2C-1	241.8
	Sanderson	Wright F2W	230.1
	Callaway	Wright F2W	230.0
	Miller	Curtiss R-6	218.9
	Corkill	Curtiss R-6	216.5
	Pearson	Verville Sperry R-3	—
1924	Mills	Verville Sperry R-3	215.7
	Brookley	Curtiss R-6	214.7
	Stoner	Curtiss PW-8A	167.9
	Skeel	Curtiss R-6	—
1925	Bettis	Curtiss R3C-1	248.9
	Williams	Curtiss R3C-1	241.7
	Dawson	Curtiss P-1	169.9
	Norton	Curtiss PW-8	168.8
	Cook	Curtiss PW-8	167.4
	Cuddihy	Curtiss PW-8	—

NATIONAL AIR RACES 1926-1928

Year	Pilot	Aircraft	Speed
1926	Cuddihy	Boeing FB-3	180.5
	Elliott	Curtiss P-2	178.6
	Hoyt	Curtiss P-2	170.9
	Nutt	Curtiss P-2	170.8
	McCormick	Curtiss P-2	169.6
	Barner	Boeing FB-3	163.6
	Sanderson	Boeing FB-3	163.4
	Ballard	Curtiss P-1	159.3
	McKierman	Curtiss P-1	—
1927	Batten	Curtiss XP-6A	201.2
	Lyon	Curtiss XP-6A	189.6
	Jeter	Boeing FB-5	176.9
	Regan	Boeing FB-5	175.9
	Bogan	Boeing FB-5	172.9
	Beverly	Boeing PW-9C	169.7
	Rogers	Curtiss F6C-4	161.5
	Cornelius	Curtiss P-1B	161.5
	Woodring	Curtiss P-1B	159.2
	Malloy	Curtiss P-1B	—
1928	Jeter	Boeing XF4B-1	172.3
	Cruise	Boeing F2B-1	159.9
	Harrigan	Boeing F2B-1	151.6
	Burroughs	Boeing F2B-1	150.3
	Crommelin	Boeing F2B-1	149.8
	Williamson	Boeing F2B-1	146.0

THOMPSON TROPHY RACE

Year	Pilot	Aircraft	Speed
1929	Davis	Travel Air Model R	194.9
	Breene	Curtiss Hawk P-3A	186.8
	Turner	Lockheed "Vega"	163.8
1930	Holman	Laird "Solution"	201.9
	Haizlip	Travel Air Model R	199.8
	Howard	Howard "Pete"	162.8
	Adams	Travel Air Biplane	142.6
1931	Bayles	Gee Bee Model Z	236.2
	Wedell	Wedell-Williams "44"	228.0
	Jackson	Laird "Solution"	211.2
	Hall	Gee Bee Model Y	201.3
	Eaker	Lockheed Altair	196.8
	Howard	Howard "Pete"	163.6
	Ong	Laird Speedwing	153.0
	Doolittle	Laird "Super Solution"	—
1932	Doolittle	Gee Bee R-1	252.7
	Wedell	Wedell-Williams "44"	242.5
	Turner	Wedell-Williams "57"	233.0
	Haizlip	Wedell-Williams "92"	231.3
	Gehlbach	Gee Bee R-2	222.1
	Hall	Hall "Bulldog"	215.6
	Ong	Howard "Ike"	191.1
1933	Wedell	Wedell-Williams "44"	237.9
	Gehlbach	Wedell-Williams "92"	224.9
	Minor	Howard "Mike"	199.9
	Hague	Keith-Rider R-2	183.2
	Granville	Gee Bee Model Y	173.1
1934	Turner	Wedell-Williams "57"	248.1
	Minor	Brown B-2	214.9
	Worthen	Wedell-Williams "45"	208.4
	Neumann	Howard "Ike"	207.1
	Rae	Keith-Rider R-1	205.4
	Chester	Chester "Jeep"	191.6
1935	Neumann	Howard "Mr. Mulligan"	220.2
	Wittman	Wittman "Bonzo"	218.7
	Rae	Keith-Rider R-1	213.9
	Jacobson	Howard "Mike"	209.1
	Miles	Seversky SEV-3	193.6
	McKeen	Brown B-2	188.9
	Turner	Wedell-Williams "57"	—
1936	Detroyat	Caudron C-460	264.3
	Ortman	Keith Rider R-3	248.0
	Rae	Keith Rider R-4	236.6
	Neumann	Folkerts "Toots"	233.1
	McKeen	Brown B-2	230.5
	Crosby	Crosby Special CR-3	226.1
1937	Kling	Folkerts "Jupiter"	256.9
	Ortman	Marcoux Bromberg R-3	256.8
	Turner	Laird-Turner LTR-14	253.8
	Sinclair	Seversky SEV-S2	252.4
	Wittman	Wittman "Bonzo"	250.1
	Moore	Seversky SEV-S2	238.4
	Gotch	Schoenfeldt "Firecracker"	217.8
1938	Turner	Laird-Turner LTR-14	283.4
	Ortman	Marcoux Bromberg R-3	269.7
	Wittman	Wittman "Bonzo"	259.1
	Wade	HM-1 (Time Flies)	249.8
	Mackey	Wedell-Williams "57"	249.6
	Jacobson	Keith-Rider "8 Ball"	214.5
1939	Turner	Laird-Turner LTR-14	282.5
	LeVier	Schoenfeldt "Firecracker"	272.5
	Ortman	Marcoux Bromberg R-3	254.4
	Crosby	Crosby Special CR-4	244.5
	Wittman	Wittman "Bonzo"	241.3
	Mackey	Wedell-Williams "57"	232.9
1946	Johnston	P-39Q "Aircobra"	373.9
	LeVier	P-38L-5 "Lightning"	370.1
	Ortman	P-51D-30 "Mustang"	367.6
	Raymond	P-51D "Mustang"	364.6
	Swanson	P-51D "Mustang"	362.1
	Cleland	F-2G-1 "Corsair"	357.5
	Edmundson	P-51D "Mustang"	354.4
	Wittman	P-63C-5 "Kingcobra"	341.2
	Lilly	P-63A "Kingcobra"	328.2
	Pemberton	P-63F "Kingcobra"	304.4
1947	Cleland	F-2G-1 "Corsair"	396.1
	Becker	F-2G-1 "Corsair"	390.1
	Demming	P-39Q "Aircobra"	389.8
	Beville	P-51D "Mustang"	360.8
	LeVier	P-38L-5 "Lightning"	357.5
	Bour	P-63A "Kingcobra"	327.3
1948	Johnson	P-51D "Mustang"	383.8
	Raymond	P-51D "Mustang"	365.2
	Newhall	P-63C-5 "Kingcobra"	313.6
	Brown	P-39Q "Aircobra"	392.4
1949	Cleland	F-2G-1 "Corsair"	397.1
	Puckett	F-2G-1 "Corsair"	393.5
	McKillen	F-2G-1 "Corsair"	387.6
	Beville	P-51D "Mustang"	381.2
	Tucker	P-63C-5 "Kingcobra"	378.3
	Hagerstrom	P-51D "Mustang"	372.7
	Newhall	P-51K "Mustang"	372.3
	Hannon	P-51A "Mustang"	300.4
	Johnson	P-51D "Mustang"	—
	Odom	P-51C "Mustang"	—

BENDIX TROPHY RACE

Year	Pilot	Aircraft	Speed
1931	Doolittle	Laird "Super Solution"	223.0
	Johnson	Lockheed "Orion"	198.8
	Blevins	Lockheed "Orion"	189.0
	Eacker	Lockheed Altair	186.1
1932	Haizlip	Wedell-Williams "92"	245.0
	Wedell	Wedell-Williams "44"	232.0
	Turner	Wedell-Williams "57"	226.0
	Gehlback	Gee Bee R-2	210.0
	Vance	Vance Flying Wing	—
1933	Turner	Wedell-Williams "57"	214.8
	Wedell	Wedell-Williams "44"	209.2
	Boardman	Gee Bee R-1	—
	Thaw	Gee Bee R-2	—
	Gehlbach	Wedell-Williams "92"	—
	Earhart	Lockheed "Vega"	—
1934	Davis	Wedell-Williams "44"	216.2
	Worthen	Wedell-Williams "92"	203.2
	Gehlbach	Gee Bee "QED"	—
1935	Neumann-Howard	Howard "Mr. Mulligan"	238.7
	Turner	Wedell-Williams "57"	238.5
	Thaw	Northrup "Gamma"	201.9
	Hunt	Lockheed "Orion"	174.8
1936	Thaden-Noyes	Beech C-17	165.3
	Ingalls	Lockheed "Orion"	157.5
	Bulick	Vultee VIA-1	156.5
	Pomeroy	Douglas DC-2	151.5
	Earhart	Lockheed "Electra"	148.7
	Howard-Wife	Howard "Mr. Mulligan"	—
	Jacobson	Northrup "Gamma"	—
	Miles	Gee Bee "QED"	—
1937	Fuller	Seversky SEV-S2 (P-35)	258.2
	Ortman	Marcoux Bromberg R-3	224.8
	Cochran	Beech "Staggerwing"	194.7
	Sinclair	Seversky SEV-S2	184.9
	Burcham	Lockheed 12	184.5
	Sundorph	Sundorph A-1	166.2
	Perlick	Beech "Staggerwing" A17F	—
	Mackey	Wedell-Williams "44"	—
1938	Cochran	Seversky SEV-S2	249.7
	Fuller	Seversky SEV-S2	238.6
	Mantz	Lockheed "Orion"	206.6
	Constant	Beech "Staggerwing"	199.3
	Hadley	Beech "Staggerwing"	181.8
	LaJatte	Spartan 7W	177.4
	Armistead	Gee Bee "QED"	—
	Perlick	Beech A-17F	—
	Cordova	Bellanca Trimotor	—
1939	Fuller	Seversky SEV-S2	282.1
	Bussy	Bellanca Trimotor	244.5
	Mantz	Lockheed "Orion"	234.9
	Constant	Beech "Staggerwing"	231.4
	Davis	Spartan 7W	196.8
	Maycock	Beech "Staggerwing"	187.2
1946	Mantz	P-51C "Mustang"	435.5
	Cochran	P-51B "Mustang"	420.9
	Mayson	P-51C "Mustang"	408.2
	Eddy	P-51D "Mustang"	373.3
	Harp	P-38 "Lightning"	370.4
	Husted	A-26C "Invader"	367.9
	Tucker	P-63C-5 "Kingcobra"	367.1
1947	Mantz	P-51C "Mustang"	460.4
	DeBona	P-51D "Mustang"	458.2
	Lunken	P-51D "Mustang"	408.7
	Gimbel	P-51B "Mustang"	404.1
	Eddy	P-51D "Mustang"	376.5
	Mayson	P-51C "Mustang"	376.1
	Whitton	FG-1 "Corsair"	320.0
1948	Mantz	P-51C "Mustang"	448.0
	Carney	P-51C "Mustang"	446.1
	Cochran	P-51B "Mustang"	445.8
	Lunken	P-51D "Mustang"	441.6
	Stallings	DH "Mosquito"	341.1
	DeBona	P-51C "Mustang"	—
1949	DeBona	P-51C "Mustang"	470.1
	Reaver	P-51C "Mustang"	450.2
	Salmon	P-51C "Mustang"	449.2
	Bussart	DH "Mosquito"	343.8
	Cameron	B-26C "Invader"	—
	Perron	AT-12	—

GREVE TROPHY RACE

Year	Pilot	Aircraft	Speed
1934	Minor	Brown B-2	213.3
	Neumann	Howard "Ike"	211.6
	Rae	Keith-Rider R-1	211.0
	Miles	Miles & Atwood Spl.	206.2
	Chester	Chester "Jeep"	203.4
1935	Neumann	Howard "Mike"	212.7
	Rae	Keith-Rider R-1	210.1
	McKeen	Brown B-2	206.4
	Chester	Chester "Jeep"	199.1
	Miles	Miles & Atwood Spl.	189.6
	Wittman	"Chief Oshkosh"	189.4
	Elmendorf	Wedell-Williams "22"	175.1
1936	Detroyat	Caudron C-460	247.3
	Neumann	Folkerts "Toots"	225.9
	Chester	Chester "Jeep"	224.7
	Kling	Keith-Rider "Suzy"	218.3
	Jacobson	Howard "Mike"	214.4
	Rae	Keith-Rider R-1	212.3
	McKeen	Brown B-2	204.5
	Miles	Miles & Atwood Spl.	—

GREVE TROPHY RACE (CONTINUED)

Year	Pilot	Aircraft	Speed
1937	Kling	Folkerts SK-3	232.27
	Wittman	"Chief Oshkosh"	231.99
	Gotch	Schoenfeld-Rider R-4	231.59
	Rae	Folkerts SK4	224.19
	McKeen	Brown B-2	223.64
	Haines	Haines H-3	177.71
	McArthur	Delgado "Flash"	—
1938	LeVier	Schoenfeld-Rider R-4	250.9
	Chester	Chester "Goon"	250.4
	Jacobson	Rider R-6 "8 Ball"	218.2
	Ortman	Marcoux-Bromberg-Jackrabbit	192.5
	Crosby	Crosby CR-4	—
	Dory	Bushey-McGrew	—
1939	Chester	Chester "Goon"	263.4
	LeVier	Schoenfeld-Rider R-4	—
	Crosby	Crosby CR-4	—
	Williams	Brown B-2	—

GOODYEAR TROPHY RACE

Year	Pilot	Aircraft	Speed
1947	Brennand	Wittman "Buster"	165.9
	Penrose	"Chester Swee Pea"	165.4
	Salmon	Cosmic Wind "Special"	158.8
	LeVier	Cosmic Wind "Little Toni"	157.9
	Siem	"Loose Siem"	151.3
	Robinson	Modified Brown B-1	143.9
1948	Salmon	Cosmic Wind "Minnow"	169.7
	Wittman	Wittman Special	168.9
	Chester	Chester "Swee Pea II"	168.2
	Brennand	Wittman "Buster"	167.1
	Robinson	Cosmic Wind "Little Toni"	165.1
	Quigley	Pitts Special	164.9
	Downey	Cosmic Wind "Ballerina"	161.5
	LeFevers	Falcon Special	156.6
1949	Brennand	Wittman "Buster"	177.3
	Sorenson	"Deerfly"	176.7
	Wittman	Wittman "Bonzo"	176.2
	Ast	Cosmic Wind "Ballerina"	176.0
	Salmon	Cosmic Wind "Minnow"	175.7
	Mone	Williams "Estrellita"	175.0
	Downey	Mercury Air	171.4
	Johnson	Long LA-1	167.3
	Kistler	Kistler Special	153.4
	Foss	"Jinny"	—

CHAMPIONSHIP RACE RESULTS: RENO

UNLIMITED

Year	Pilot	Aircraft		#	Speed
1964	Love	North American	P-51D	8	381.96
	Slovak	Grumman	F8F-2	80	355.52
	Lacy	North American	P-51D	64	354.74
	Hall	North American	P-51D	2	344.45
	Ohlrich	Grumman	F8F-2	10	343.43
	Weiner	North American	P-51D	14	282.72
	Greenamyer	Grumman	F8F-2	1	351.88
1965	Greenamyer	Grumman	F8F-2	1	375.10
	Lyford	North American	P-51D	8	368.57
	Lacy	North American	P-51D	64	356.97
	Slovak	Grumman	F8F-2	80	356.00
	Ohlrich	Grumman	F8F-2	10	333.22
	Shelton	North American	P-51D	12	331.99
1966	Greenamyer	Grumman	F8F-2	1	396.22
	Hall	North American	P-51D	2	372.70
	Lacy	North American	P-51D	64	360.63
	Adams	North American	P-51D	9	—
	Weaver	North American	P-51D	15	—
	Lyford	North American	P-51D	8	—
1967	Greenamyer	Grumman	F8F-2	1	392.62
	Weiner	North American	P-51D	45	373.71
	Lacy	North American	P-51D	64	363.21
	Hall	North American	P-51D	5	363.07
	Loening	North American	P-51D	2	359.87
	Lyford	North American	P-51D	8	—
1968	Greenamyer	Grumman	F8F-2	1	388.65
	Hall	North American	P-51D	5	386.85
	Lacy	North American	P-51D	64	388.12
	Ohlrich	Grumman	F8F-2	10	344.30
	Weiner	North American	P-51D	49	—
	Loening	North American	P-51D	2	—
1969	Greenamyer	Grumman	F8F-2	1	412.63
	Hall	North American	P-51D	5	377.23
	Lacy	North American	P-51D	64	371.70
	Cummins	North American	P-51D	69	358.84
	Shelton	Grumman	F8F-2	70	356.37
	Balz	Grumman	F8F-1	7	318.29

UNLIMITED (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1970	Lacy	North American P-51D	64	387.34
	Loening	North American P-51D	2	376.69
	Penhall	North American P-51D	81	373.82
	Keefe	North American P-51D	11	371.55
	Balz	Grumman F8F-1	7	334.43
	Greenamyer	Grumman F8F-2	1	297.06
	Shelton	Grumman F8F-2	77	—
1973	Shelton	Grumman F8F-2	77	428.16
	Cummins	North American P-51D	69	417.08
	Wright	North American P-51D	5	407.50
	Sliker	Grumman F8F-2	4	381.60
	Keefe	North American P-51D	11	359.27
	Love	North American P-51D	97	—
	Fountain	Grumman F8F-2	24	—
1976	Gardner	North American P-51D	25	379.62
	Greenamyer	North American P-51D	1	366.36
	Keefe	North American P-51D	11	326.77
	Leeward	North American P-51D	9	302.99
	Whittington	North American P-51D	09	—
	Klabo	North American P-51D	85	—
	McClain	North American RB-51	5	—
	Crocker	North American P-51D	6	—
1979	Crocker	"Sumthin' Else"	6	422.30
	Hinton	"Red Baron"	5	415.97
	Putman	"Ciuchetton"	86	399.91
	Klabo	"Fat Cat"	85	387.00
	Hamilton	"Baby Gorilla"	16	343.72
1982	Hevle	"Dago Red"	4	405.09
	Klabo	"Fat Cat"	85	386.48
	Williams	"No Name Lady"	86	386.09
	Hinton	"Bud Light Special"	1	362.50
	Destefani	"Mangia-Pane"	72	354.86
	Dilley	"Lou IV"	19	349.91
1985	Hinton	Super Corsair	1	438.19
	Anderson	"Dreadnought"	8	429.43
	Brickert	"Dago Red"	4	426.85
	Hamilton	"Furias"	15	411.95

Year	Pilot	Aircraft	#	Speed
1971	Greenamyer	Grumman F8F-2	1	413.99
	Shelton	Grumman F8F-2	77	413.07
	Cooper	Hawker "Sea Fury"	87	412.58
	Balz	North American P-51D	5	412.10
	Penhall	North American P-51D	81	385.57
	Keefe	North American P-51D	11	—
	Loening	North American P-51D	2	—
1974	Burnstine	North American P-51D	33	381.48
	Henderson	North American P-51D	25	372.03
	Wright	North American P-51D	66	340.24
	Herlihy	Grumman F8F-2	20	320.25
	Shelton	Grumman F8F-2	77	—
	Love	North American P-51D	97	—
	McClain	North American P-51D	5	—
1977	Greenamyer	North American RB-51	5	430.70
	Whittington	North American P-51D	09	425.70
	Cummins	North American P-51D	69	424.36
	Klabo	North American P-51D	85	407.92
	Putman	North American P-51D	86	389.08
	McClain	North American P-51D	17	383.49
	Gardner	North American P-51D	25	374.67
1980	McClain	"Jeannie"	69	433.01
	Crocker	"Sumthin' Else"	6	429.78
	Whittington	"Precious Metal"	9	404.70
	Putman	"Ciuchetton"	86	397.81
	Whittington	"GeGe II"	4	358.45
1983	Anderson	"Dreadnought"	8	425.24
	Whittington	"Precious Metal"	9	414.65
	Crocker	"Sumthin' Else"	6	394.60
	Destefani	"Mangia-Pane"	72	384.36
1986	Brickert	"Dreadnought"	8	434.49
	Hamilton	"Furias"	15	429.37
	Destefani	"Strega"	7	416.88
	Preston	"Dago Red"	4	413.85
	Penny	"Rare Bear"	77	407.57
	Kelley	"Lou IV"	19	367.56

Year	Pilot	Aircraft	#	Speed
1972	Balz	North American P-51D	5	416.16
	Shelton	Grumman F8F-2	77	404.70
	Keefe	North American P-51D	11	398.53
	Lacy	North American P-51D	64	341.89
	Mitchem	Goodyear FG-10	94	341.99
	Baillie	Fury II	0	340.83
	Laidley	Grumman F8F-2	1	—
1975	Shelton	Grumman F8F-2	77	429.92
	McClain	North American P-51D	5	427.31
	Sliker	Grumman F8F-2	4	381.97
	Burnstine	North American P-51D	34	—
	Klabo	North American P-51D	85	—
	Cummins	North American P-51D	69	—
	Levitz	North American P-51D	81	—
1978	Hinton	North American RB-51	5	415.46
	Whittington	North American P-51D	09	414.77
	Putman	North American P-51D	86	396.21
	Keefe	North American P-51D	11	374.69
	Smith	North American P-51D	4	370.39
	Hamilton	Hawker "Sea Fury"	16	342.14
	Wright	North American P-51D	20	—
1981	Holm	"Jeannie"	69	431.29
	Crocker	"Sumthin' Else"	6	419.37
	Hevle	"Mangia-Pane"	72	388.14
	Klabo	"Fat Cat"	85	379.29
	Martin	"Ridge Runner"	7	364.42
	Hamilton	"Baby Gorilla"	16	357.50
1984	Holm	"Stiletto"	84	437.62
	Crocker	"Sumthin' Else"	6	431.15
	Hinton	Super Corsair	1	413.69
	Leeward	Leeward Air Ranch Spec.	44	407.41
	Levitz	"Tipsy Too"	28	385.59
	Granley	"Miss America"	11	384.39
1987	Destefani	"Strega"	7	452.56
	Brickert	"Dreadnought"	8	449.75
	Preston	"Dago Red"	4	439.46
	Maloney	Super Corsair	1	416.91
	Williams	"Pegasus"	55	386.89
	Levitz	"Miss Ashley"	38	375.82

UNLIMITED (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1988	Shelton	"Rare Bear"	77	456.82
	Brickert	"Dreadnought"	8	451.20
	Hinton	"Tsunami"	18	429.95
	Putman	"Georgia Mae"	69	408.29
	Hamilton	"Furias"	15	403.63
	Maloney	Super Corsair	1	368.13
1989	Shelton	"Rare Bear"	77	450.91
	Brickert	"Dreadnought"	8	427.87
	Ma loney	All Coast Super Corsair	1	406.27
	Yancey	"Yak II"	101	406.05
	Hinton	"Tsunami"	18	385.75
	Price	"Dago Red"	4	384.32
	Crocker	"Sumthin' Else"	6	358.89
1990	Rheinschild	"Risky Business"	45	415.53
	Levitz	"Miss Ashley"	38	407.21
	Cutshall	"E2S"	91	380.30
	Gardner	"Thunderbird"	25	376.88
	Baker	"Sky Fury"	711	372.12
	Janes	"Cottonmouth"	20	371.84
	Stephens	"Baby Gorilla"	16	369.33
1991	Shelton	"Rare Bear"	77	481.62
	Destefani	"Strega"	7	478.68
	Holm	"Tsunami"	18	478.14
	Yancey	"Perestroika"	101	428.29
	Sanders	"Dreadnought"	8	426.51
	Rheinschild	"Risky Business"	45	423.50
	Maloney	"All Coast"	1	406.42
	Pardue	"Fury"	66	357.67
1992	Destefani	"Strega"	7	450.84
	Sanders	"Dreadnought"	8	442.50
	Yancey	"Peristroika"	101	433.56
	Jackson	"Stiletto"	84	426.22
	Rupp	"Old Crow"	5	424.24
	Eldridge	Coast Super Corsair	1	420.80
	Levitz	"Miss Ashley"	38	378.34
1993	Destefani	"Strega"	7	455.38
	Sanders	"Dreadnought"	8	450.62
	Yancey	"Yak II"	101	439.54
	Rheinschild	"Risky Business"	45	436.94
	Eldridge	Coast Super Corsair	1	418.66
	Pardue	"Seafury"	66	406.71
	Speer	"Deja Vu"	56	399.87

FORMULA I

Year	Pilot	Aircraft	#	Speed
1964	Porter	Miller "Little Gem"	14	193.44
	Wittman	Wittman "Bonzo"	1	187.42
	Scholl	"Miss San Bernardino"	31	171.76
	Downey	"Miss Cosmic Wind"	6	166.57
	Quarton	Cagsutt-Quarton	19	162.86
1965	Porter	"Deerfly"	39	202.14
	Falck	"Rivets"	92	196.19
	Downey	Miller "Ole Tiger"	14	194.44
	Scholl	"Miss San Bernardino"	31	190.06
	Townsend	"French Quarter Special"	7	184.40
	Stead	"Miss Cosmic Wind"	6	—
1966	Falck	"Rivets"	92	193.10
	Wittman	"Bonzo"	1	191.90
	Downey	Miller "Ole Tiger"	14	189.01
	Scholl	"Miss San Bernardino"	31	185.25
	Berry	"Miss Dallas"	97	174.45
	Cote	"Shoestring"	16	—
1967	Falck	"Rivets"	92	202.70
	Downey	Miller "Ole Tiger"	14	201.19
	Cote	"Shoestring"	16	200.56
	Stover	"Miss San Bernardino"	31	191.08
	Baker	Baker "Boo Ray"	81	183.89
	Wilson	Wilson "Snoopy"	34	—
1968	Cote	"Shoestring"	16	214.61
	Falck	"Rivets"	92	212.36
	Downey	"Ole Tiger"	14	211.87
	Baker	"Boo Ray"	81	198.44
	Berry	"Little Toni"	7	197.59
	Jella	"Little Bit"	2	187.09
1969	Cote	"Shoestring"	16	214.61
	Falck	"Rivets"	92	212.36
	Downey	"Ole Tiger"	14	211.87
	Baker	"Boo Ray"	81	198.44
	Pedigo	"Pogo"	87	198.44
	Jones	"Mother Holliday"	7	198.44
	Berry	"Little Toni"	3	197.59
	Jella	"Little Bit"	2	187.0
1970	Cote	"Shoestring"	16	220.07
	Falck	"Rivets"	92	215.96
	Moeller	"Boo Ray"	81	210.84
	Minges	"Ol' Blue"	97	206.53
	Downey	"Ole Tiger"	14	206.14
	Jones	"Mother Holliday"	7	205.42
	Berry	"Little Toni"	3	199.91
1971	Cote	"Shoestring"	16	224.14
	Falck	"Rivets"	92	220.30
	Downey	"Ole Tiger"	14	219.25
	Wilson	"Plum Crazy"	25	212.46
	Jones	"Mother Holliday"	7	210.73
	Thomson	"Dixie Rebel"	34	207.03
	Budde	"El Bandito"	10	193.00
	Moeller	"Boo Ray"	81	—
1972	Cote	"Shoestring"	16	223.95
	Moeller	"Boo Ray"	81	220.97
	Downey	"Ole Tiger"	14	212.91
	Wilson	"Plum Crazy"	25	210.47
	Stevenson	"Fan"	11	205.91
	DeLuca	"Lil' Quickie"	71	205.76
	Beck	"Pogo"	87	203.92
	Falck	"Rivets"	92	—

FORMULA I (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1973	Cote	"Shoestring"	16	231.26
	Jones (J.P.)	"Stinger"	21	229.54
	Moeller	"Boo Ray"	81	225.38
	Falck	"Rivets"	92	224.16
	DeLuca	"Lil' Quickie"	71	219.60
	Beck	"Knat"	18	214.63
	Jones	"Mother Holliday"	7	211.27
	Wilson	"Plum Crazy"	25	207.21
1974	Cote	"Shoestring"	16	235.42
	Moeller	"Boo Ray"	81	226.24
	DeLuca	"Lil' Quickie"	71	222.68
	Jones (J.P.)	"Stinger"	21	220.18
	Jones	"Mother Holliday"	7	220.13
	Falck	"Rivets"	92	219.68
	Stevenson	"Fang"	11	219.18
	Downey	"Ole Tiger"	14	209.71
1975	Cote	"Shoestring"	16	227.46
	DeLuca	"Lil' Quickie"	71	226.84
	Falck	"Rivets"	92	222.41
	Moeller	"Boo Ray"	81	221.09
	Wofford	"Proud Bird"	9	218.98
	Jones	"Mother Holliday"	7	218.09
	Wagner	"Wagner Solution"	44	217.96
	Baker	"Aquarius"	20	214.71
1976	DeLuca	"Lil' Quickie"	71	228.75
	Downey	"Falcon"	28	222.39
	Falck	"Rivets"	92	221.65
	Wagner	"Wagner Solution"	44	220.46
	Moeller	"Boo Ray"	81	219.74
	Tuttle	"Pegasus"	95	215.41
	Budde	"Okie Streaker"	19	204.40
	Stevenson	"Fang"	11	196.59
1977	Parker	"Top Turkey"	93	226.12
	Wagner	"Wagner Solution"	44	217.52
	Wilson	"Aloha"	71	217.41
	Wofford	"Schultz-Lemire"	9	216.92
	Reinseth	"Pole Cat"	6	216.65
	Summers	"Hansen Special"	35	202.96
	Eskildsen	"Kistler Special"	31	170.72
1978				
		Championship Race cancelled due to high winds.		
1979	Parker	"Wild Turkey"	3	240.09
	Cote	"Shoestring/Circus, Circus"	16	236.01
	Wagner	"Wagner Solution"	44	232.51
	Wentworth	"Fang"	11	225.47
	Wise	"Wise Owl"	7	225.38
	Wilson	"Aloha"	71	221.63
1980	Parker	"American Special"	3	249.07
	Cote	"Shoestring/Circus, Circus"	16	242.96
	Wagner	"Wagner Solution"	44	238.79
	Moeller	"Boo Ray"	81	232.54
	Drew	"Fang"	11	229.84
	Downey	"Falcon"	28	225.78
	Anspach	"Polecat"	93	225.72
1981	Cote	"Shoestring"	16	232.13
	Wagner	"Wagner Solution"	44	221.87
	Fogg	"Aloha"	1	221.51
	Jensen	"Penguin"	25	217.30
	Miller	"Texas Gem"	73	216.02
	Dowd	"Illusion"	5	211.56
	Summers	"Sump'n Else"	35	208.62
1982	Sharp	"Aero Magic"	43	224.52
	Fogg	"Aloha"	1	223.90
	Dowd	"Illusion"	5	222.87
	Miller	"Texas Gem"	73	—
	Jensen	"Penguin"	25	—
	Wentworth	"Flexi-Flyer"	69	—
	Wise	"Wise Owl"	7	—
1983	Wentworth	"Flexi-Flyer"	69	239.02
	Thompson	"Empire Strikes Back"	71	224.85
	Dowd	"Illusion"	5	224.18
	Cote	"Judy's Turn"	44	223.88
	Sharp	"Aero Magic"	43	222.11
	Fogg	"Aloha"	1	220.21
	Miller	"Texas Gem"	73	192.19
1984	Cote	"Judy"	44	236.07
	Aslett	"Flexi-Flyer"	69	235.34
	Sharp	"Aero Magic"	43	233.81
	Dowd	"Illusion"	5	229.90
	Miller	"Texas Gem"	73	224.68
	Fogg	"Aloha"	4	216.69
	Beck	"Miss U.S.A."	18	—
1985	Cote	"Judy"	44	229.09
	Aslett	"Lil Thumper"	69	226.35
	Miller	"Texas Gem"	73	220.70
	Sawyer	"Lucy P"	74	215.50
	Drew	"Alouetta"	2	212.21
	Summers	"Sump'n Else"	35	196.26
	Harris	"Gold Fever"	25	—
1986	Sharp	"Aero Magic"	43	229.61
	Drew	"Friberg Special"	2	222.41
	Miller	"Texas Gem"	73	221.39
	Sawyer	"Lucy P"	74	219.65
	Fogg	"Aloha"	4	217.99
	Harris	"Gold Fever"	25	205.45
	Slayton	"Stinger"	21	199.92
1987	Preston	"Sitting Duck"	44	232.99
	Sharp	"Aero Magic"	43	227.11
	Miller	"Pushy Cat"	14	224.13
	Hubler	"Aloha"	4	220.67
	Harris	"Gold Fever"	25	216.82
	Drew	"Friberg Special"	2	214.51
	Roberson	"Puffin"	73	206.54

FORMULA I (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1988	Preston	"Sitting Duck"	44	240.75
	Sharp	"Aero Magic"	43	234.67
	Morris	"Sahara"	33	230.31
	Drew	"Friberg Special"	2	227.62
	Roberson	"Puffin"	73	222.07
	Dowd	"Super Spook"	77	220.23
	Miller	"Pushy Cat"	14	—
1989	Cote	"Alley Cat"	4	231.25
	Miller	"Pushy Cat"	14	229.95
	Morris	"Sahara"	33	219.25
	Porter	"Aero Magic"	43	212.00
	Kirol	"Super Shock"	77	211.15
	Slayton	"Stinger"	21	207.84
	Sharp	"Blue Streak"	96	—
1990	Miller	"Pushy Cat"	14	237.41
	Porter	"Sitting Duck"	44	237.08
	Bumford	"Bummer's Bullet"	55	233.85
	Cote	"Alley Cat"	4	230.04
	Beck	"Miss Reno"	69	225.02
	Gray	"F/X"	96	224.23
	Gray	"Areo Magic"	43	217.78
1991	Sharp	"Nemesis"	3	245.26
	Miller	"Pushy Cat"	14	242.21
	Bumford	"Bummer's Bullet"	55	241.59
	Porter	"Sitting Duck"	44	240.99
	Beck	"Miss Reno"	69	230.83
	Gray	"F/X"	96	224.57
	Drew	"Alouette"	2	216.56
1992	Sharp	"Nemesis"	3	238.18
	Porter	"Sitting Duck"	44	232.31
	Miller	"Pushy Cat"	14	231.01
	Bumford	"Bummer's Bullet"	55	227.79
	Bohannon	"Pushy Galore"	89	225.29
	Channing	"Miss Reno"	69	216.02
	Hubler	"Mariah"	95	215.44
1993	Sharp	"Nemesis"	3	246.85
	Rossi	"Chico Puro"	63	233.86
	Miller	"Pushy Cat"	14	233.55
	Ippolito	"Alley Cat"	4	227.68
	Hauptman	"Judy"	44	227.11
	Hubler	"Mariah"	95	225.11
	Channing	"Miss Reno"	69	220.69

SPORT BIPLANE

Year	Pilot	Aircraft	#	Speed
1964	Parsons	Knight Twister	—	144.57
	Shannon	Knight Twister	—	143.41
	Nagel	Knight Twister	—	131.50
	Boland	Starduster	—	130.63
	Rechenmacher	EAA Special	—	120.44
1965	Boland	Mong Sport	3	148.68
	Parsons	Knight Twister	11	146.06
	Rechenmacher	EAA Biplane	22	118.81
	Ormsbee	DSA Miniplane	5	117.42
	Fischer	Starduster	7	115.43
	White	Starduster	1	91.49
1966	Wickliffe	"Dollar Special"	11	147.72
	White	Starduster	1	144.72
	McIntire	Pitts Special	17	144.67
	Boland	Mong Sport	3	148.42
	Harendeen	Pitts Special	37	133.06
	Fischer	Mong Sport	8	127.10
1967	Boland	Mong Sport	3	151.64
	White	Starduster	1	151.31
	McIntire	Pitts Special	17	151.29
	Christian	Mong Sport	99	147.69
	Fischer	Mong Sport	8	146.72
	Smith	Mong Special	26	133.46
1968	Christian	"Mongster"	99	175.13
	Boland	Mong Sport	3	171.18
	Fischer	Mong Sport	8	155.15
	White	Starduster	1	153.13
	Swinn	Pitts Special	37	148.37
	Smith	Mong Sport	26	143.90
1969	Christian	"Mongster"	99	184.02
	Boland	Mong Sport	3	183.49
	Forbes	DSA Miniplane	10	159.29
	Hoffman	"Suzie Bee"	44	157.89
	Fischer	Mong Sport	8	157.66
	Coons	Starduster	13	156.48
	Schulte	Starduster	45	153.32
	DuPont	Pitts Special	69	153.28
1970	Boland	Mong Sport	3	177.45
	Christian	"Mongster"	99	168.49
	Forbes	DSA Miniplane	10	163.67
	Warwick	"Hot Canary"	97	163.27
	Hoffman	"Susie Bee"	44	151.61
	Garber	Pitts Special	18	141.45
	Fischer	Mong Sport	8	156.01
1971	Boland	Mong Sport	3	181.67
	Deschamps	"Sorceress"	89	175.29
	Christian	"Mongster"	99	173.84
	Forbes	DSA Forbes-Wolfram	10	169.08
	Warwick	"Hot Canary"	97	167.96
	Hoffman	"Susie Bee"	44	164.60
	Fischer	Mong Sport	8	160.68
	Hall	Jungster III	76	—
1972	Beck	"Sorceress"	89	189.72
	Hall	"Jonathan L. Seagull"	76	180.04
	Forbes	"Forbes Special"	10	178.03
	Fischer	"Super Mong"	8	167.75
	Boland	"Gone Mong"	3	184.89
	Christian	"Mongster"	99	—
	Warwick	"Hot Canary"	97	—
	Thomas	"Miss Q"	7	—

SPORT BIPLANE (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1973	White	"Sundancer"	1	194.95
	Beck	"Sorceress"	89	184.62
	Forbes	"Olympia Swallow"	10	184.50
	Boland	"Gone Mong"	3	178.81
	Fairbanks	"White Knight"	5	168.88
	Hoffman	"Suzie Bee"	44	166.03
	Fischer	"Super Mong"	8	161.01
	Janson	DSA Miniplane	4	147.82
1974	White	"Sundancer"	1	198.17
	Beck	"Sorceress"	89	191.53
	Forbes	Forbes Special	10	182.97
	Fairbanks	"White Knight"	5	170.18
	Hoffman	"Suzie Bee"	44	168.98
	Raven	"Spirit of '76"	76	159.20
	Fischer	"Super Mong"	8	157.78
	Janson	DSA Miniplane	4	149.15
1975	Beck	"Sorceress"	89	198.99
	White	"Sundancer"	1	196.41
	Forbes	"Cobra"	2	177.67
	Fairbanks	"White Knight"	5	171.02
	Hoffman	"Suzie Bee"	44	171.02
	Wrolstad	"Super Chick"	14	168.16
	Fischer	"Super Mong"	8	163.64
	Clark	Mong Sport	46	143.28
1976	Beck	"Sorceress"	89	202.15
	Hines	"Sundancer"	1	198.44
	Forbes	"Cobra"	2	178.22
	Fairbanks	"White Knight"	5	177.38
	Aberle	Mong Sport	32	168.82
	Fischer	"Super Mong"	8	163.17
	Allen	Pitts Special	42	139.35
	Brown	"Washoe Zephyr"	90	139.22
1977, 1978, 1979.	**No Biplane Class races at Reno during**			
1980	Hines	"Sundancer"	1	206.62
	Kramer	"Cobra"	22	177.05
	Fairbanks	"White Knight"	5	176.38
	Brown	"Tonapah Low"	00	172.93
	Smith	"Taste of Honey"	6	172.17
	Grieshaber	"Mongster"	99	164.63
	Wentworth	"Super Chic"	14	155.40
	Beck	"Sorceress"	89	210.73
1981	Hines	"Sundancer"	1	209.44
	Kramer	"Cobra"	22	187.13
	Mortensen	"Amsoil/Rutan Special"	3	181.13
	Aberle	"Two Bits"	25	174.41
	Allen	"Tonapah Low"	00	170.98
	Morss	"Mongster"	99	170.28
	Kempf	"Check 6"	26	143.70
	Brown	"Scarlet"	29	143.61
1982	Hines	"Sundancer"	1	209.40
	Mortensen	"Amsoil/Rutan Racer"	3	209.21
	Beck	"Sorceress"	89	206.29
	Aberle	"Two Bits"	25	196.46
1983	Hines	"Sundancer"	1	217.60
	Beck	"Sorceress"	89	202.35
	Kramer	"Cobra"	22	186.40
1984	Beck	"Miss Tahoe"	00	189.97
	Fairbanks	"White Knight"	5	185.35
	Hugo	"Taste of Honey"	6	165.49
	Marrocola	"Snaggle Tooth Sal"	35	148.55
	Allen	"Red Baron"	1	139.98
1985	Beck	"Miss Lake Tahoe"	00	195.62
	Fairbanks	"White Knight"	5	177.67
	Mortensen	"Pacific Flyer"	91	175.48
	Hugo	"Taste of Honey"	6	162.49
	Schulte	"Pits 'N Pieces"	42	144.70
	Penketh	"Passion Pitts"	4	143.84
1986	Preston	"Miss Lake Tahoe"	00	192 .67
	Fairbanks	"White Knight"	5	166.17
	Hugo	"A Taste of Honey"	6	165.97
	Selvidge	"Slick"	2	164.78
	Meyer	"Chuck"	111	161.42
	Brown	"Scarlet"	29	156.40
	Stubbs	"Casey"	30	154.91
	Penketh	"Passion Pitts"	4	150.93
1987	Aberle	"Long Gone Mong"	31	196.47
	Fairbanks	"White Knight"	5	179.28
	Allen	"Southern Air Transport"	21	178.24
	Morss	"Amsoil Pacific Flyer"	91	176.36
	Meyer	"Chuck"	111	169.73
	Selvidge	"Slick"	2	169.11
	Kempf	"Bully Bee"	11	164.64
	Penketh	"Passion Pitts"	4	158.41
1988	Preston	"Top Cat"	00	205.92
	Aberle	"Long Gone Mong"	31	203.98
	Penketh	"My Pitts"	1	179.89
	Paquin	"Buzz Job"	90	179.70
	Fairbanks	"White Knight"	5	176.47
	Allen	"Southern Air Transport"	21	175.52
	Selvidge	"Slick"	2	167.64
	Lister	"Little Red Baron"	77	162.49
1989	Aberle	"Wanna Play II"	40	196.14
	Maxwell	"Legal Eagle"	69	185.65
	Mortenson	"Amsoil Pacific Flyer"	91	184.70
	Paquin	"Buzz Job"	90	179.77
	Penketh	"My Pitts"	1	176.70
	Harris	"Sonoma Red"	62	168.83
	Ferguson	"Let The Good Times Roll"	20	164.59
	Penketh	"Passion Pitts"	4	159.51
1990	Mortensen	"Amsoil Pacific Flyer"	91	192.28
	Maxwell	"Legal Eagle"	69	184.76
	Paquin	"Buzz Job"	90	180.46
	Penketh	"My Pitts"	1	175.78
	Morse	—	111	173.09
	Detsch	"Uno"	55	172.50
	Ferguson	"Let The Good Times Roll"	20	165.85

SPORT BIPLANE (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1991	Ueno	"Sumari"	18	195.27
	Way	"Magic"	27	183.84
	Allen	"Legal Eagle"	69	180.23
	Smith	"Glass Slipper"	88	177.73
	Stubbs	"Caseu"	30	171.69
	Penketh	"My Pitts"	1	169.21
	Enefer	"Thunder Chicken"	10	167.45
	Harris	"Sonoma Red"	62	164.04
1992	Smith	"Glass Slipper"	88	193.89
	Allen	"Legal Eagle"	69	192.10
	Johnson	"Twerpster"	40	191.90
	Way	"Magic"	27	181.35
	Stubbs	"Patty Anne"	30	177.78
	Penketh	"My Pitts"	1	176.64
	Blackwood	"Blacked Out"	111	168.27
	Pacquin	"Buzz Job"	90	164.11
1993	Nelson	"Full Tilt Boogie"	40	208.47
	Cox	"Wild Thing"	33	202.49
	Allen	"Legal Eagle"	69	193.68
	Smith	"Glass Slipper"	88	190.64
	Way	"Magic"	27	182.32
	Stubbs	"Patty Anne"	30	178.57
	Pacquin	"Buzz Job"	90	180.42
	Brown	"Tonopah Low II"	00	168.39

AT-6 (SNJ)

Year	Pilot	Aircraft	#	Speed
1968	Otzen	SNJ-5	1	181.32
	Sykes	SNJ-4	3	181.25
	Livingston	SNJ-5	9	180.98
	Williams	SNJ-4	5	174.43
	Baker	SNJ-5	6	174.09
	Keefe	SNJ-5	11	169.71
1969	Hall	Mk. II	7	190.90
	Minges	AT-6D	96	182.13
	Philippi	SNJ-5	4	179.89
	Snyder	SNJ-5	99	179.22
	McKinney	AT-6D	22	176.76
	Malaspina	AT-6G	14	176.26
1970				
1971	Mitchem	AT-6C	94	205.85
	Palmer	SNJ-5	9	195.71
	Turnbull	SNJ-5	72	189.14
	Barrett	LSNJ-5	10	188.21
	Kostelnik	AT-6G	47	158.20
	Phillippi	SNJ-5	4	—
1972	McClain	AT-6C	25	201.59
	Mosby	AT-6C	44	201.31
	Turnbull	SNJ-5	72	197.04
	Metcalf	Mk. IV	88	188.85
	Suacci	AT-6D	69	—
	Phillippi	SNJ-5	4	—
1973	Turnbull	SNJ-5	72	206.60
	Mott	SNJ-5	42	204.35
	Palmer	SNJ-5	9	203.82
	Suacci	AT-6D	69	202.25
	Wilson	SNJ-5	10	200.09
	Early	SNJ-5	70	197.71
1974	Palmer	AT-6F	9	211.35
	McClain	SNJ-4	5	207.84
	Mott	SNJ-5	42	206.01
	Buehn	SNJ-4	43	202.91
	Wilson	SNJ-5	10	202.53
	Metcalf			
1975	Palmer	AT-6F	9	207.17
	Buehn	SNJ-4	43	202.34
	Wells	SNJ-5	9	202.25
	Rina	SNJ-6	73	200.09
	McClain	SNJ-4	5	197.85
	Turnbull	SNJ-5	72	196.95
1976	Palmer	AT-6F	99	210.68
	Rina	SNJ-6	73	208.95
	Mosby	Mk. II	44	206.85
	Landry	SNJ-6	98	206.75
	Sykes	AT-6C	3	202.63
	DeWalt	AT-6	74	199.08
1977	Twombly	T-6	41	209.66
	Palmer	T-6F	99	209.51
	Rina	SNJ-6	73	206.16
	Mott	SNJ-5	42	204.40
	Beck	SNJ-4	2	202.82
	DeWalt	AT-6	74	200.88
1978	Rina	"Miss Everything"	73	205.71
	Twombly	"Spooled Up"	41	203.39
	Sykes	"Two Five Charles"	3	201.79
	Mott	"Mis-Chief"	42	198.75
	Palmer	"Gotcha"	99	190.54
1979 & 1980	**No AT-6 (SNJ) Races at Reno in 1979 & 1980.**			
1981	Mosby	"Miss Behavin"	44	222.78
	Rina	"Miss Everything"	73	222.49
	Beck	"Cal. Med-Fly"	2	220.27
	Sykes	"Two Five Charles"	3	219.35
	McDonald	"Big Red"	5	217.94
	Goss	"Warlock"	75	214.65
1982	Twombly	"Miss Behavin"	44	214.90
	Rina	"Miss Everything"	73	213.85
	Goss	"Warlock"	75	213.55
	Beck	"Cal. Med-Fly"	2	208.65
	Buehn	"Ruthie"	39	206.92
	Gist	"Texas Red"	68	206.45
1983	Sykes	"The Mystery Ship"	14	225.94
	Rina	"Miss Everything"	73	223.16
	Buehn	"Angel's Desire"	3	222.87
	Mott	"Mis-Chief"	42	220.38
	Gist	"Texas Red"	68	217.24
	Catalano	"Nuthin' Fancy"	94	216.23

AT-6 (SNJ) (CONTINUED)

Year	Pilot	Aircraft	#	Speed
1984	Rina	"Miss Everything"	73	217.26
	Buehn	"Thunderbolt"	18	217.12
	Mott	"Mis-Chief"	42	216.94
	Catalano	"Nuthin' Fancy"	94	214.17
	Goss	"Warlock"	75	213.22
	Gist	"Texas Red"	68	209.47
1985	Difani	"Thunderbolt"	18	213.89
	Goss	"Warlock"	75	213.68
	Rina	"Miss Everything"	73	210.84
	Gist	"Texas Red"	68	209.07
	Van Fossen	"Miss TNT"	27	208.83
	Mott	"Mis-Chief"	42	191.03
1986	Van Fossen	"Miss TNT"	27	223.45
	Heale	"Lickety Split"	9	221.39
	De Fani	"Thunderbolt"	18	220.25
	Redding	"After You"	88	216.27
	Rina	"Miss Everything"	73	215.69
	Goss	"Warlock"	75	213.50
1987	Van Fossen	"Miss TNT"	27	226.36
	Mott	"Mischief"	42	224.78
	Goss	"Warlock"	75	223.50
	Difani	"Thunderbolt"	18	219.22
	Hutchins	"Silver Baby"	1	217.73
	Bruce	"Dash One"	4	225.66
1988	Van Fossen	"Miss TNT"	27	229.76
	Dwelle	"Tinkertoy"	7	227.94
	Difani	"Thunderbolt"	18	220.82
	Bruce	"Dash One"	4	220.48
	Twombly	"Miss Behavin"	44	218.50
	Goss	"Warlock"	75	213.71
1989	Dwelle	"Tinkertoy"	7	222.33
	Van Fossen	"Miss TNT"	27	221.12
	Goss	"Warlock"	75	218.43
	Difani	"Thunderbolt"	18	213.43
	Macy	"Six Cat"	6	212.49
	Foley	"Miss Behavin'"	44	208.94
1990	Dwelle	"Tinkertoy"	7	229.26
	Goss	"Warlock"	75	226.78
	Van Fossen	"Miss TNT"	27	223.35
	Macy	"Six Cat"	6	222.26
	McNeely	—	90	220.75
	Difani	"Thunderbolt"	18	217.49
1991	Van Fossen	"Miss TNT"	27	227.03
	Goss	"Warlock"	75	221.69
	Day	"Catch 22"	22	220.70
	Macy	"Six Cat"	6	217.51
	Hutchins	"Mystical Power"	21	215.71
	Difani	"Thunderbolt"	18	209.48
1992	Van Fossen	"Miss TNT"	27	234.77
	Goss	"Warlock"	75	228.35
	Hartung	"Boomer"	89	227.29
	Macy	"Six Cat"	6	225.69
	Bruce	"Slo Thunder"	4	225.22
	Hutchins	"Mystical Power"	21	215.28
1993	Van Fossen	"Miss TNT"	27	226.89
	Hartung	"Boomer"	89	223.01
	Hutchins	"Mystical Power"	21	222.59
	Goss	"Warlock"	75	221.81
	Twombly	-	41	218.96
	Difani	"Thunderbolt"	18	212.19

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