



## This CD-ROM contains the following Paul Matt 3-view drawings and photos:

*(CD-ROM also contains contents files in the following formats: TXT, DOC)*

CURTISS MF-6-K	CURTISS-WRIGHT CW-1	FAIRCHILD M-62, PT-19
CURTISS P-36	DOUGLAS O-2	FOKKER T.V
CURTISS P-6E	DOUGLAS O-2H	GALLAUDET D-1 & D-2
CURTISS PW-8	DOUGLAS O-38	GENERAL AVIATION CLARK GA-43
CURTISS R-6	DOUGLAS O-38E	GRUMMAN F11F-1
CURTISS SC-1/SC-2	DOUGLAS M-2	GRUMMAN FF-1
CURTISS SNC-1	DOUGLAS DB-7/A-20	GRUMMAN G-44
CURTISS SO3C-1	ETRICH 1913 "TAUBE"	GRUMMAN JF/J2F
CURTISS JN	FAIRCHILD FC-1	
CURTISS-COX	FAIRCHILD FC-2	
CURTISS T-32	FAIRCHILD FC-2W	



**GENERAL SPECIFICATIONS MF-6-K**

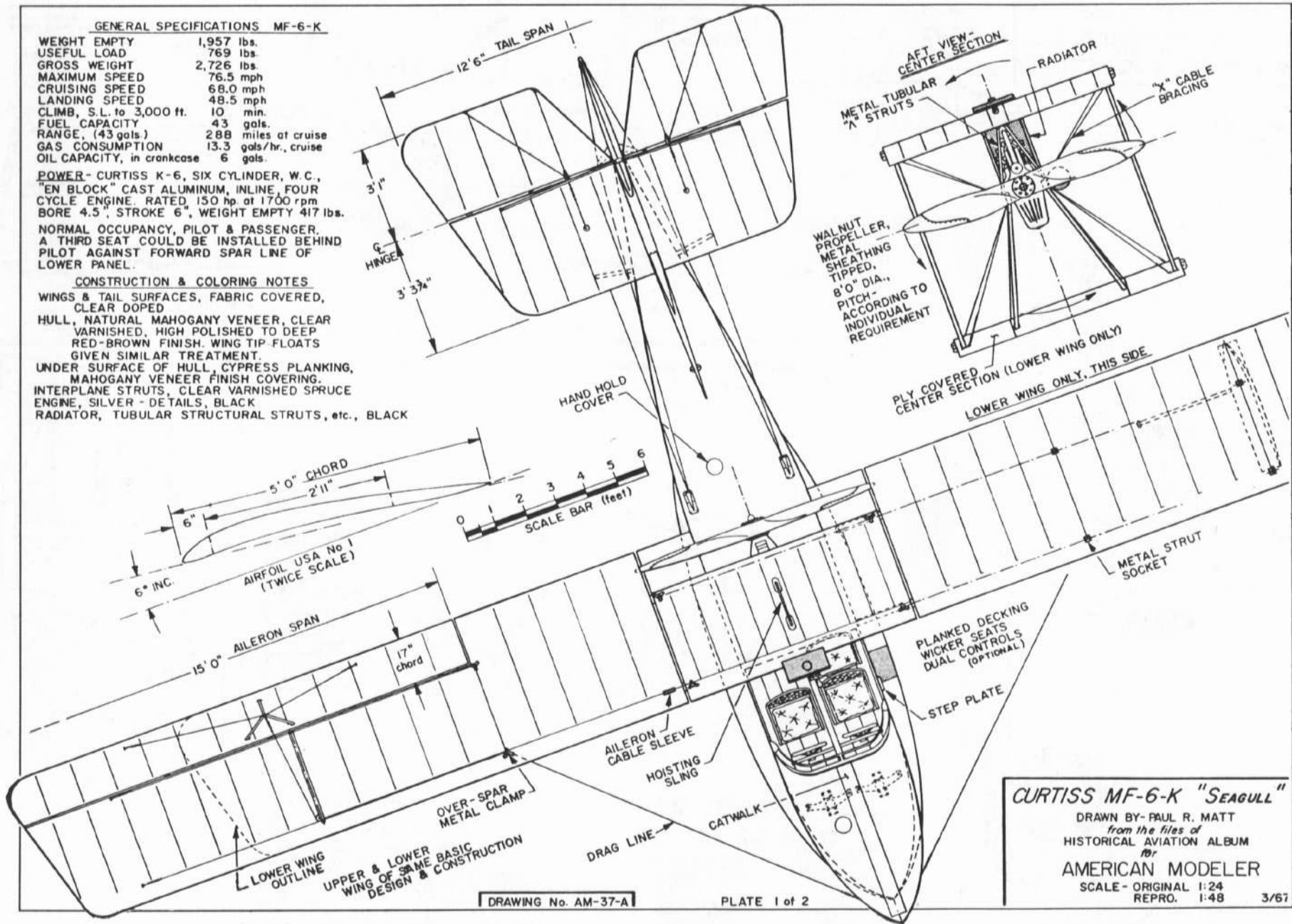
WEIGHT EMPTY	1,957 lbs.
USEFUL LOAD	769 lbs.
GROSS WEIGHT	2,726 lbs.
MAXIMUM SPEED	76.5 mph
CRUISING SPEED	68.0 mph
LANDING SPEED	48.5 mph
CLIMB, S.L. to 3,000 ft.	10 min.
FUEL CAPACITY	43 gals.
RANGE, (43 gals.)	288 miles at cruise
GAS CONSUMPTION	13.3 gals/hr., cruise
OIL CAPACITY, in crankcase	6 gals.

**POWER**- CURTISS K-6, SIX CYLINDER, W.C., "EN BLOCK" CAST ALUMINUM, INLINE, FOUR CYCLE ENGINE. RATED 150 hp at 1700 rpm BORE 4.5", STROKE 6", WEIGHT EMPTY 417 lbs.

NORMAL OCCUPANCY, PILOT & PASSENGER. A THIRD SEAT COULD BE INSTALLED BEHIND PILOT AGAINST FORWARD SPAR LINE OF LOWER PANEL.

**CONSTRUCTION & COLORING NOTES**

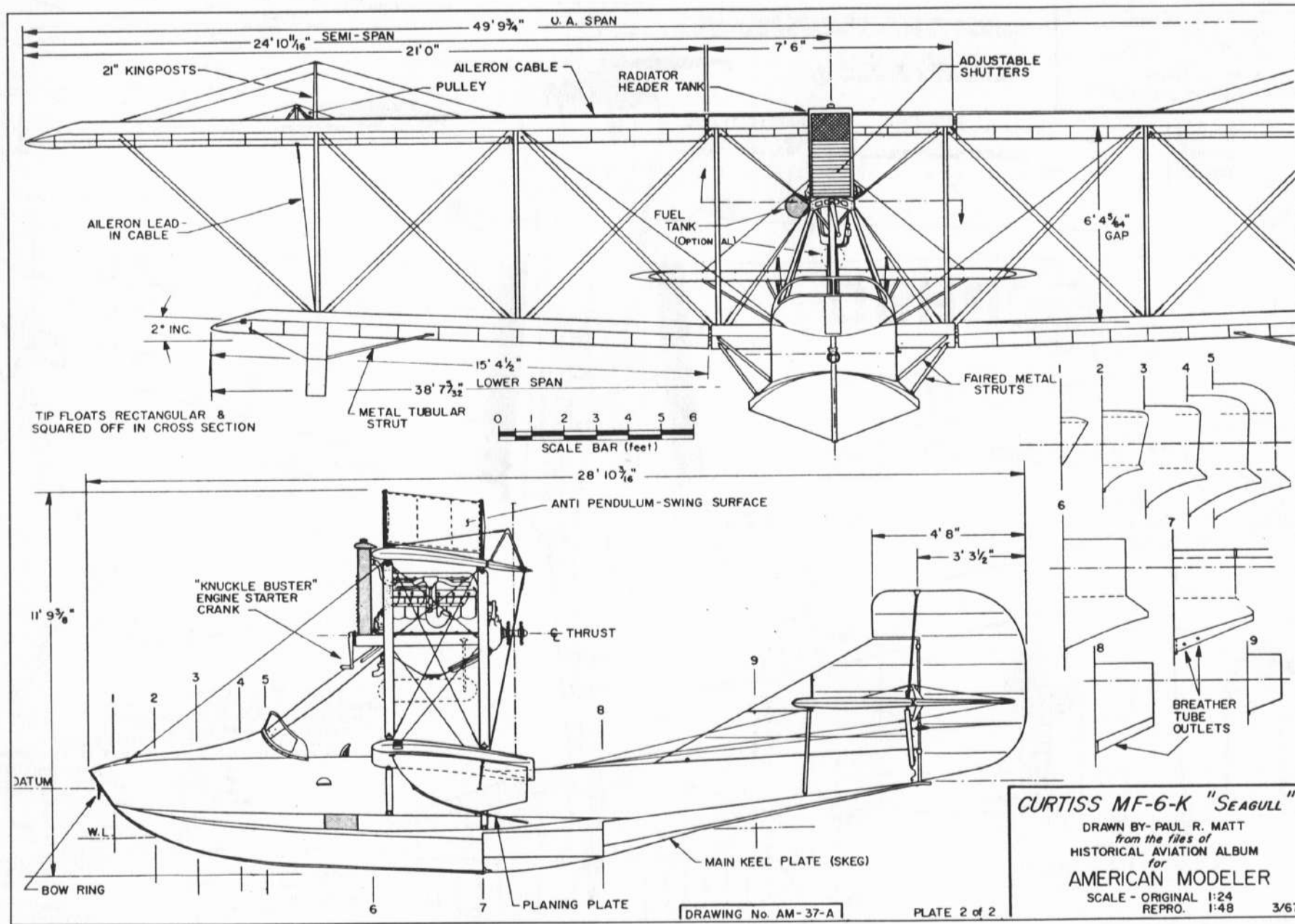
WINGS & TAIL SURFACES, FABRIC COVERED, CLEAR DOPED  
 HULL, NATURAL MAHOGANY VENEER, CLEAR VARNISHED, HIGH POLISHED TO DEEP RED-BROWN FINISH. WING TIP-FLOATS GIVEN SIMILAR TREATMENT.  
 UNDER SURFACE OF HULL, CYPRESS PLANKING, MAHOGANY VENEER FINISH COVERING.  
 INTERPLANE STRUTS, CLEAR VARNISHED SPRUCE  
 ENGINE, SILVER - DETAILS, BLACK  
 RADIATOR, TUBULAR STRUCTURAL STRUTS, etc., BLACK



DRAWING No. AM-37-A

PLATE 1 of 2

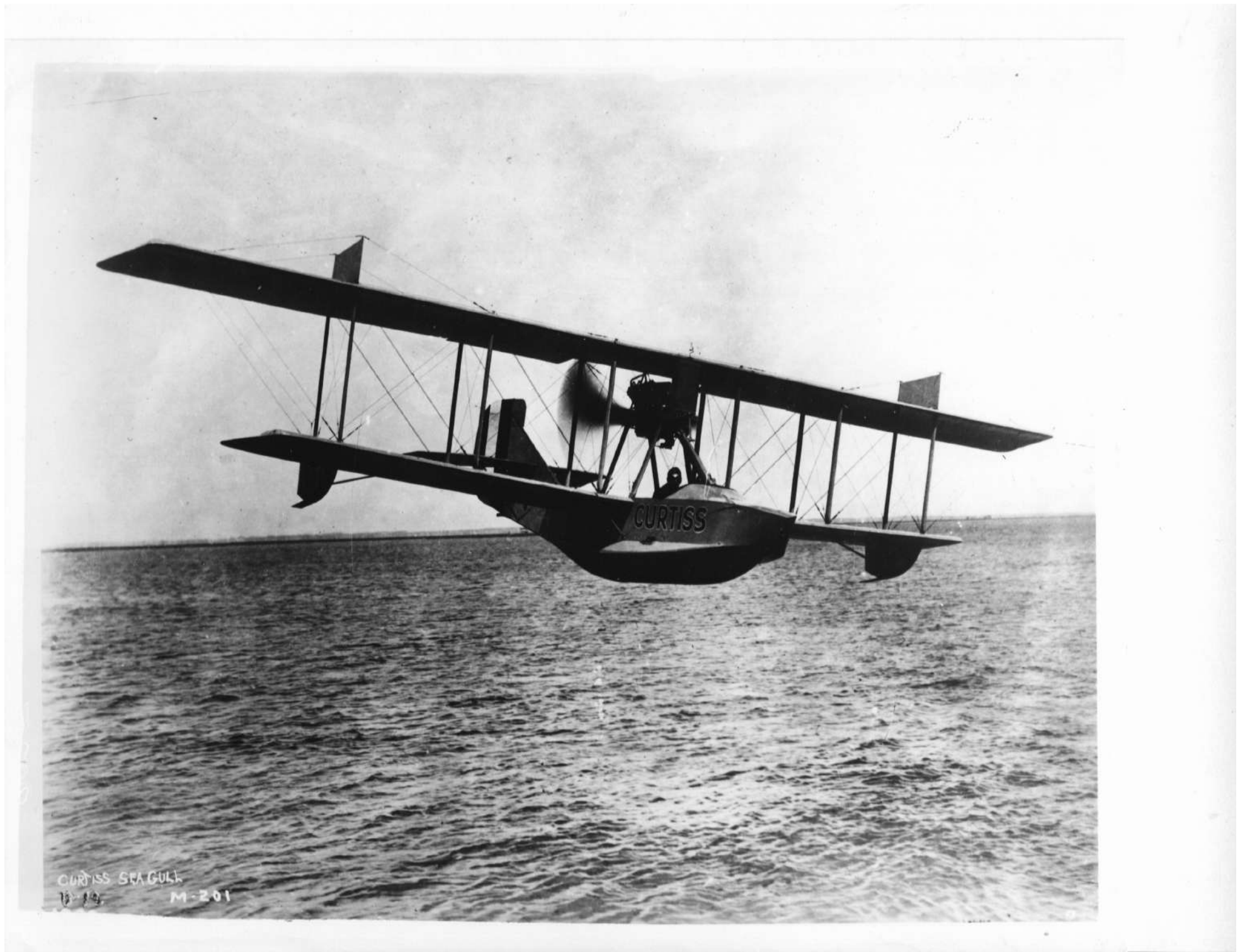
**CURTISS MF-6-K "SEAGULL"**  
 DRAWN BY- PAUL R. MATT  
 from the files of  
 HISTORICAL AVIATION ALBUM  
 or  
 AMERICAN MODELER  
 SCALE - ORIGINAL 1:24  
 REPRO. 1:48 3/67



**CURTISS MF-6-K "SEAGULL"**  
 DRAWN BY- PAUL R. MATT  
 from the files of  
 HISTORICAL AVIATION ALBUM  
 for  
**AMERICAN MODELER**  
 SCALE - ORIGINAL 1:24      3/67  
 REPRO. 1:48

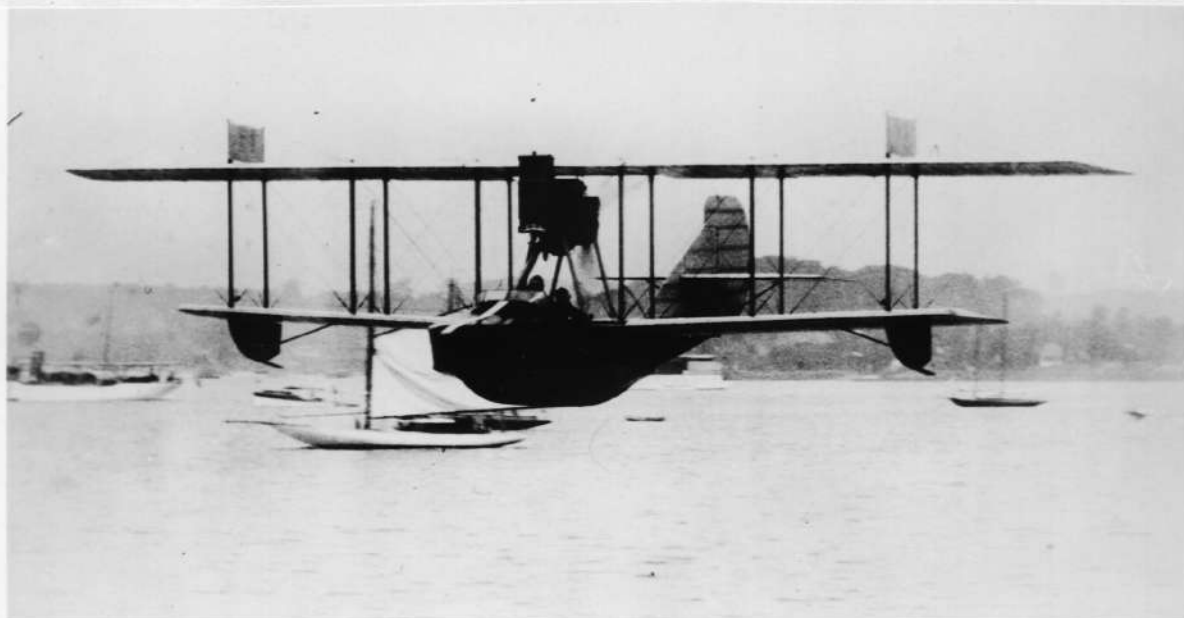
DRAWING No. AM-37-A

PLATE 2 of 2



CURTISS SEAGULL  
10-19 M-201

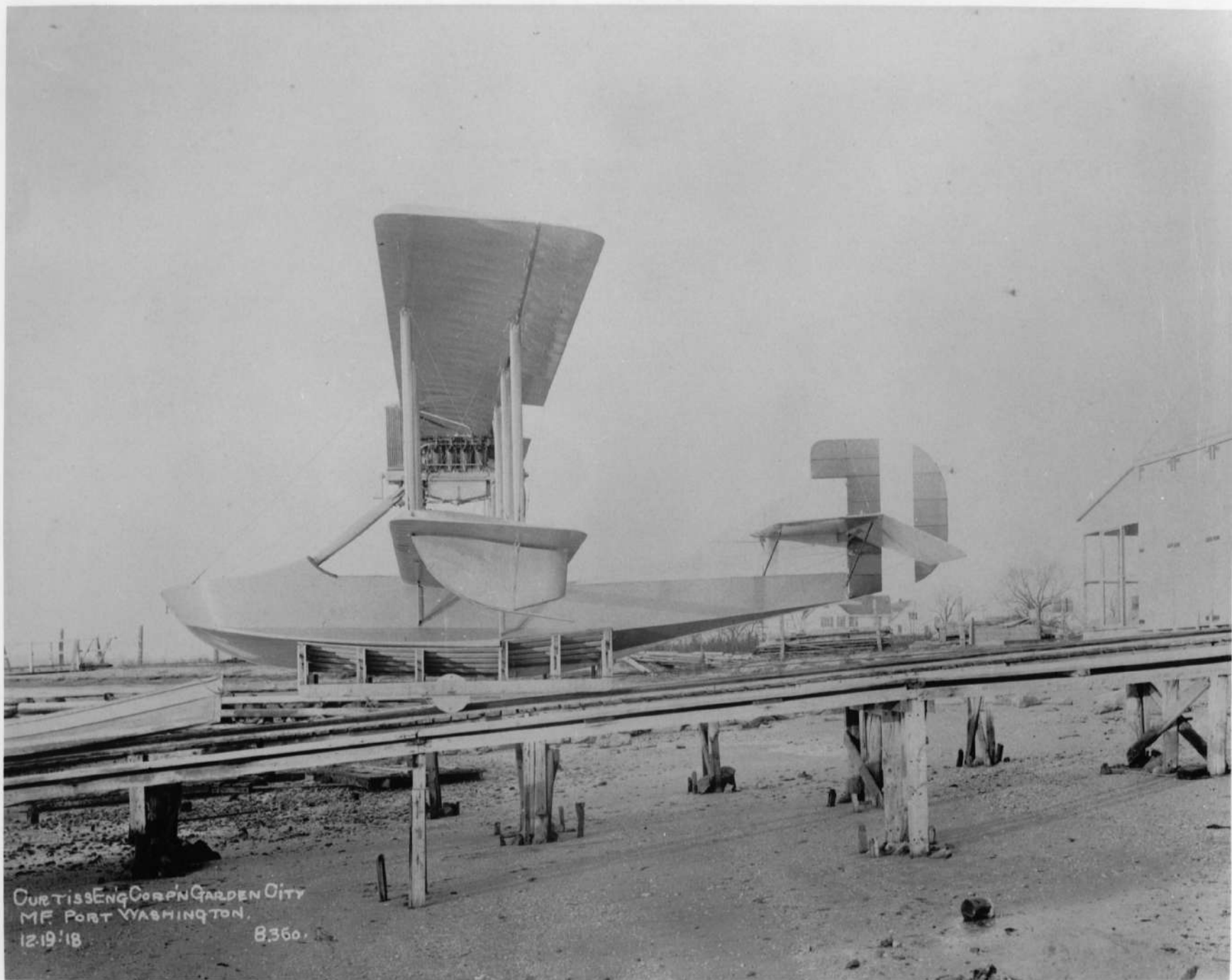
Roland Rohlf's pilots the MF-K-6 over the Port Washington yacht harbor with two passengers on one of several test flights in June 1919.



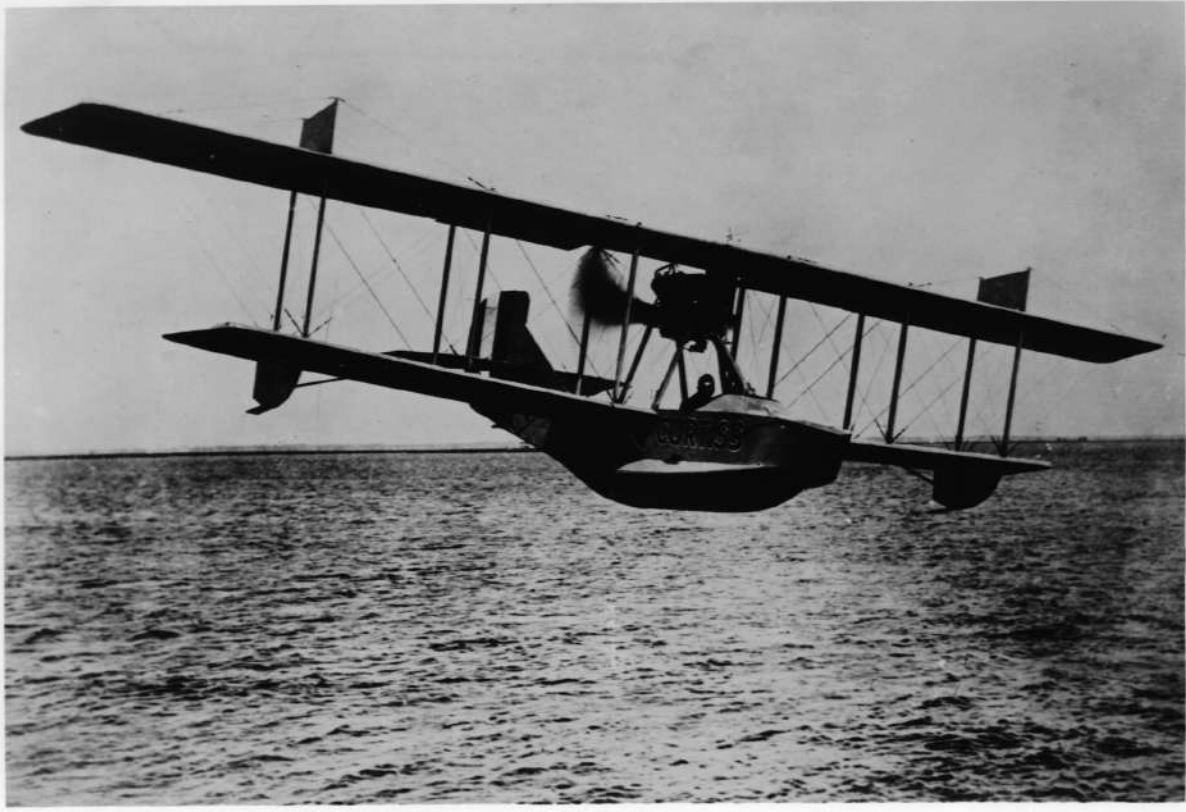


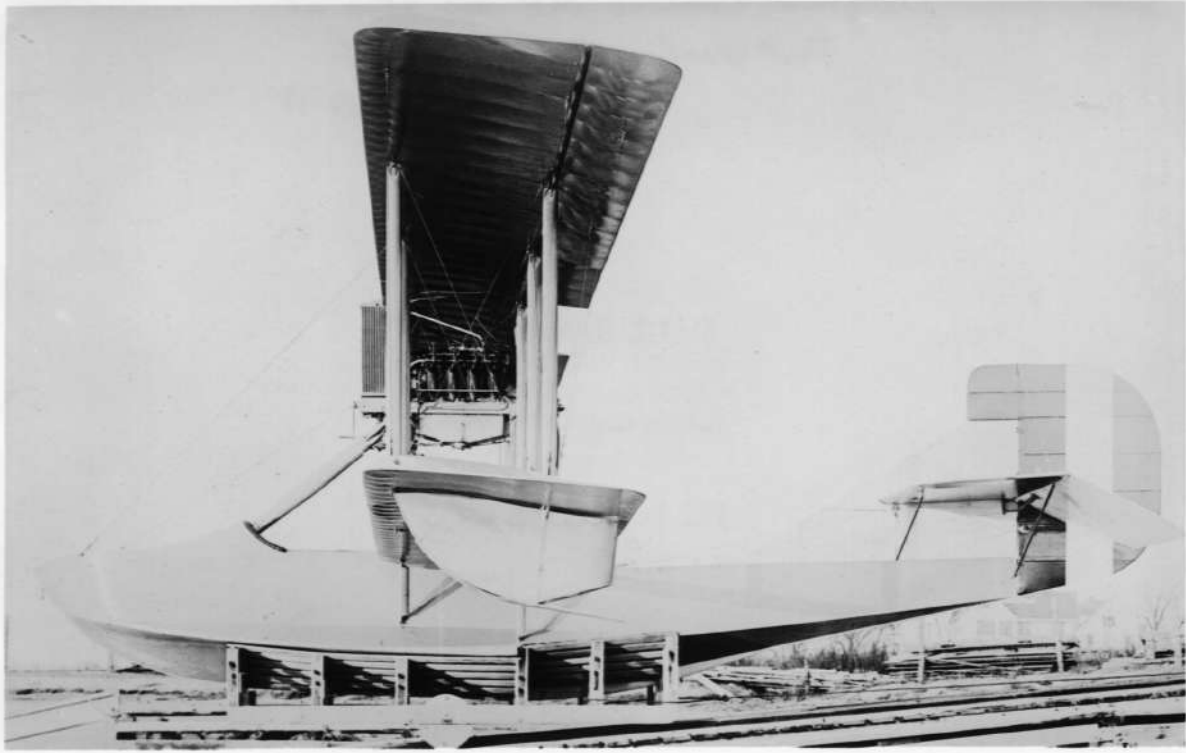
To Paul Matt - With Best Regards - Roland Rohlf's 6/14/65

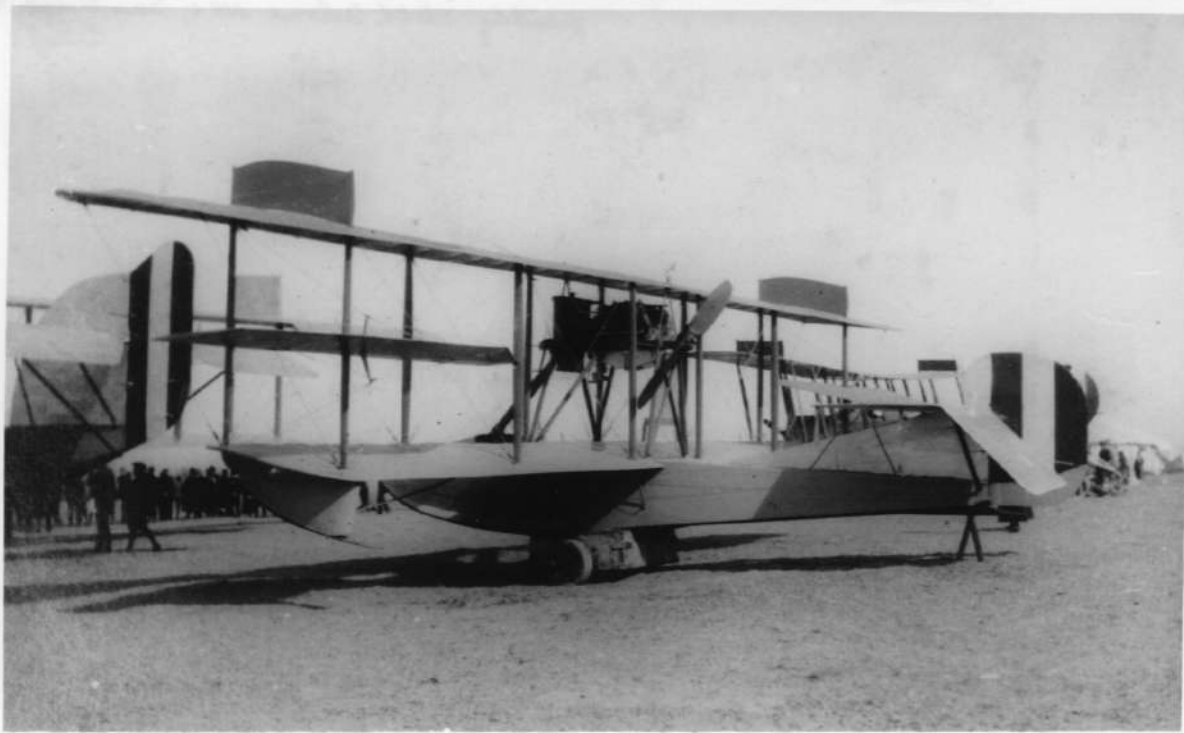


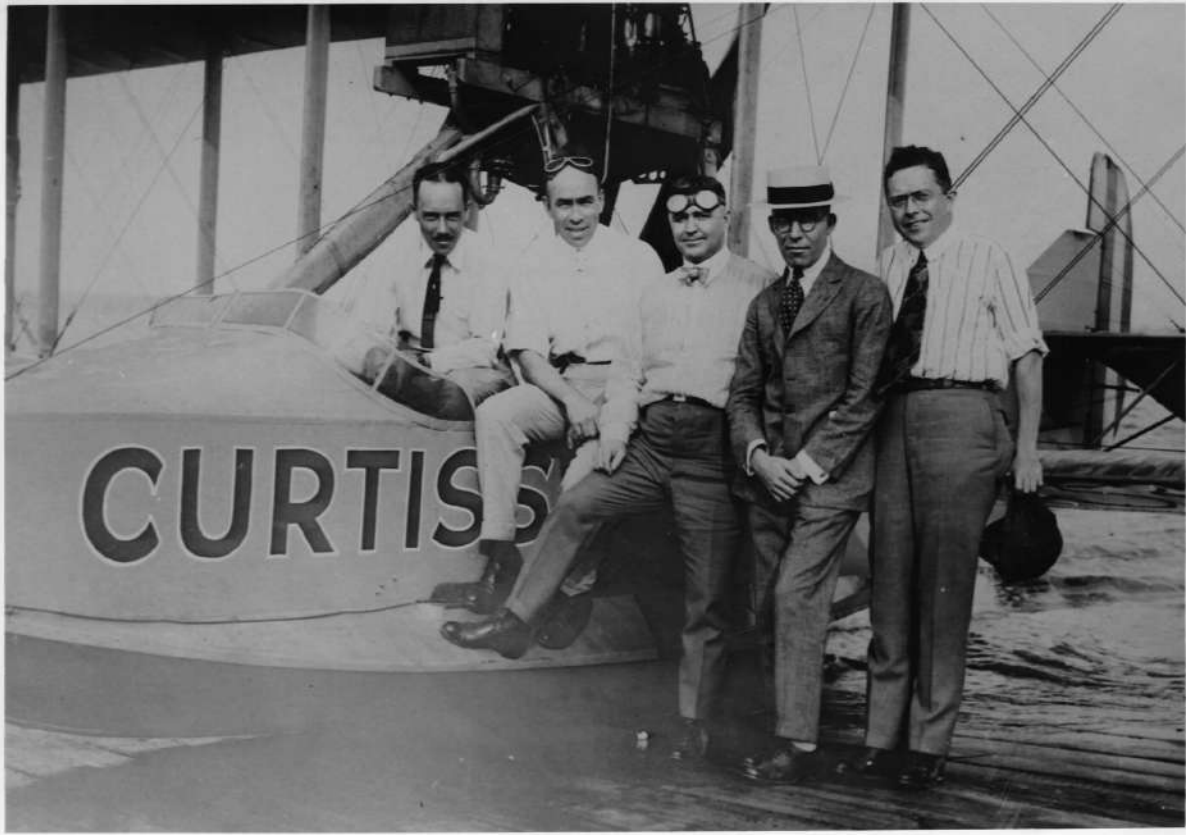


CURTIS ENG CORP N GARDEN CITY  
MF. PORT WASHINGTON.  
12-19-18 8360.





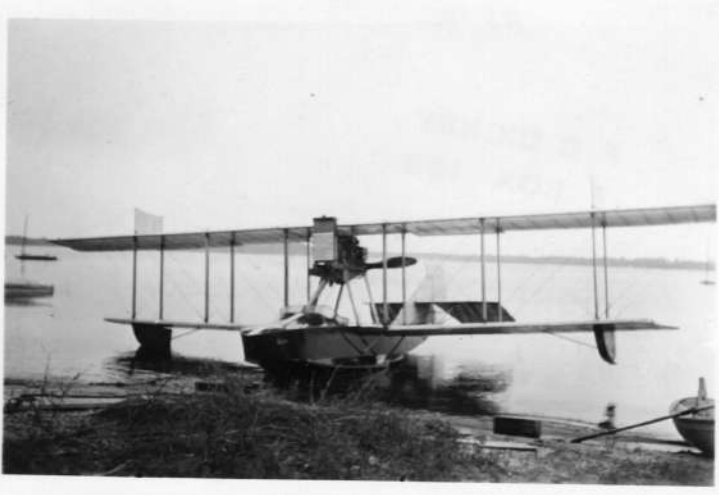














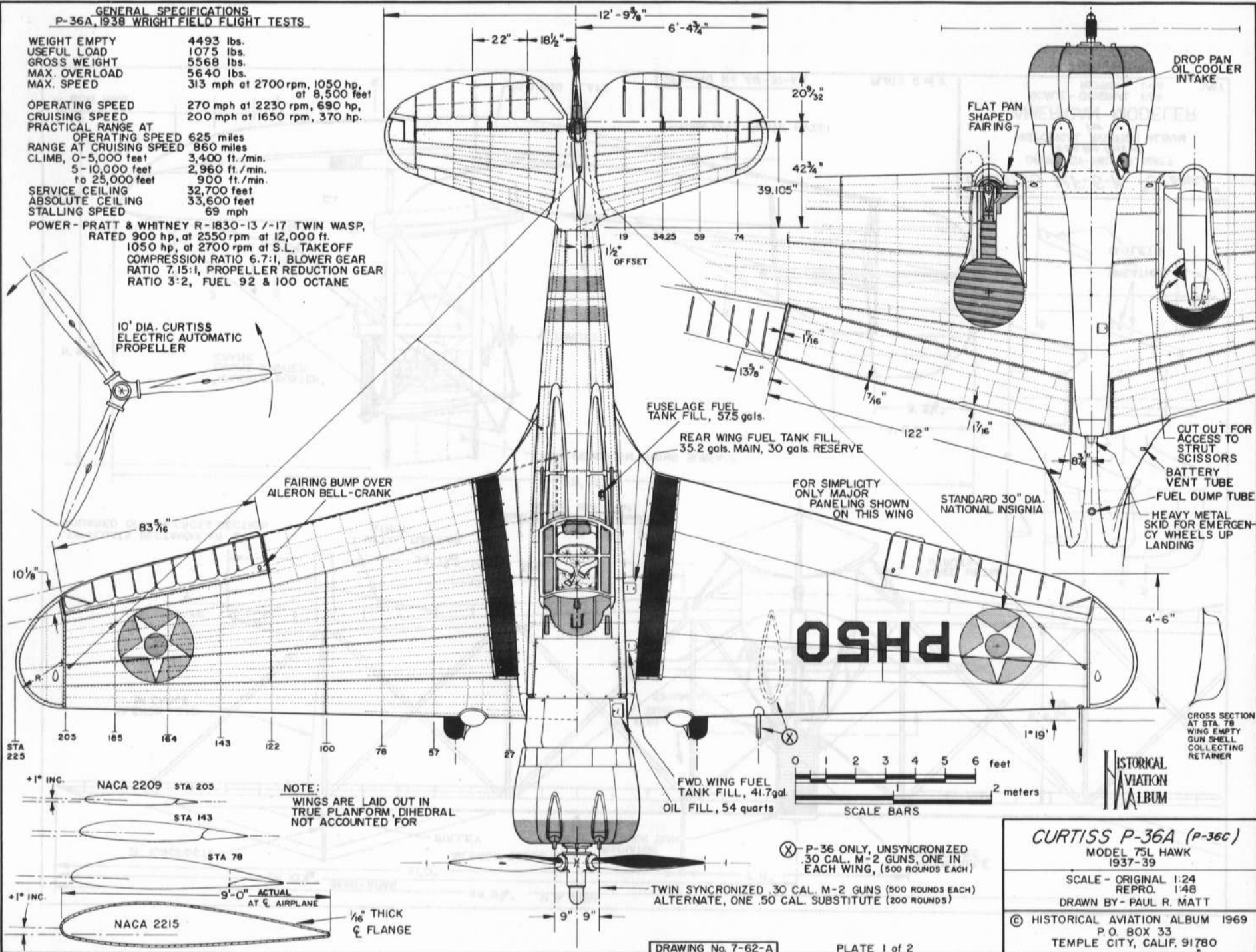
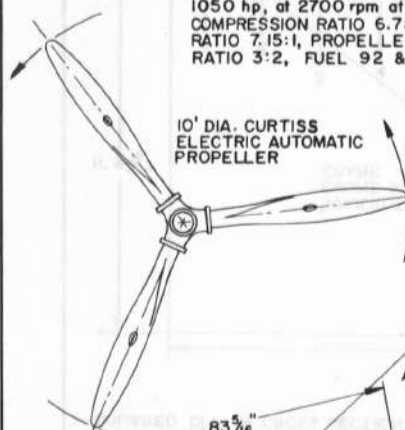






**GENERAL SPECIFICATIONS**  
**P-36A, 1938 WRIGHT FIELD FLIGHT TESTS**

WEIGHT EMPTY	4493 lbs.
USEFUL LOAD	1075 lbs.
GROSS WEIGHT	5568 lbs.
MAX. OVERLOAD	5640 lbs.
MAX. SPEED	313 mph at 2700 rpm, 1050 hp, at 8,500 feet
OPERATING SPEED	270 mph at 2230 rpm, 690 hp,
CRUISING SPEED	200 mph at 1650 rpm, 370 hp.
PRACTICAL RANGE AT	
OPERATING SPEED	625 miles
RANGE AT CRUISING SPEED	860 miles
CLIMB, 0-5,000 feet	3,400 ft./min.
5-10,000 feet	2,960 ft./min.
to 25,000 feet	900 ft./min.
SERVICE CEILING	32,700 feet
ABSOLUTE CEILING	33,600 feet
STALLING SPEED	69 mph
POWER - PRATT & WHITNEY R-1830-13 /-17 TWIN WASP,	
RATED 900 hp, at 2550 rpm at 12,000 ft.	
1050 hp, at 2700 rpm at S.L. TAKEOFF	
COMPRESSION RATIO 6.7:1, BLOWER GEAR	
RATIO 7.15:1, PROPELLER REDUCTION GEAR	
RATIO 3:2, FUEL 92 & 100 OCTANE	



HISTORICAL AVIATION ALBUM

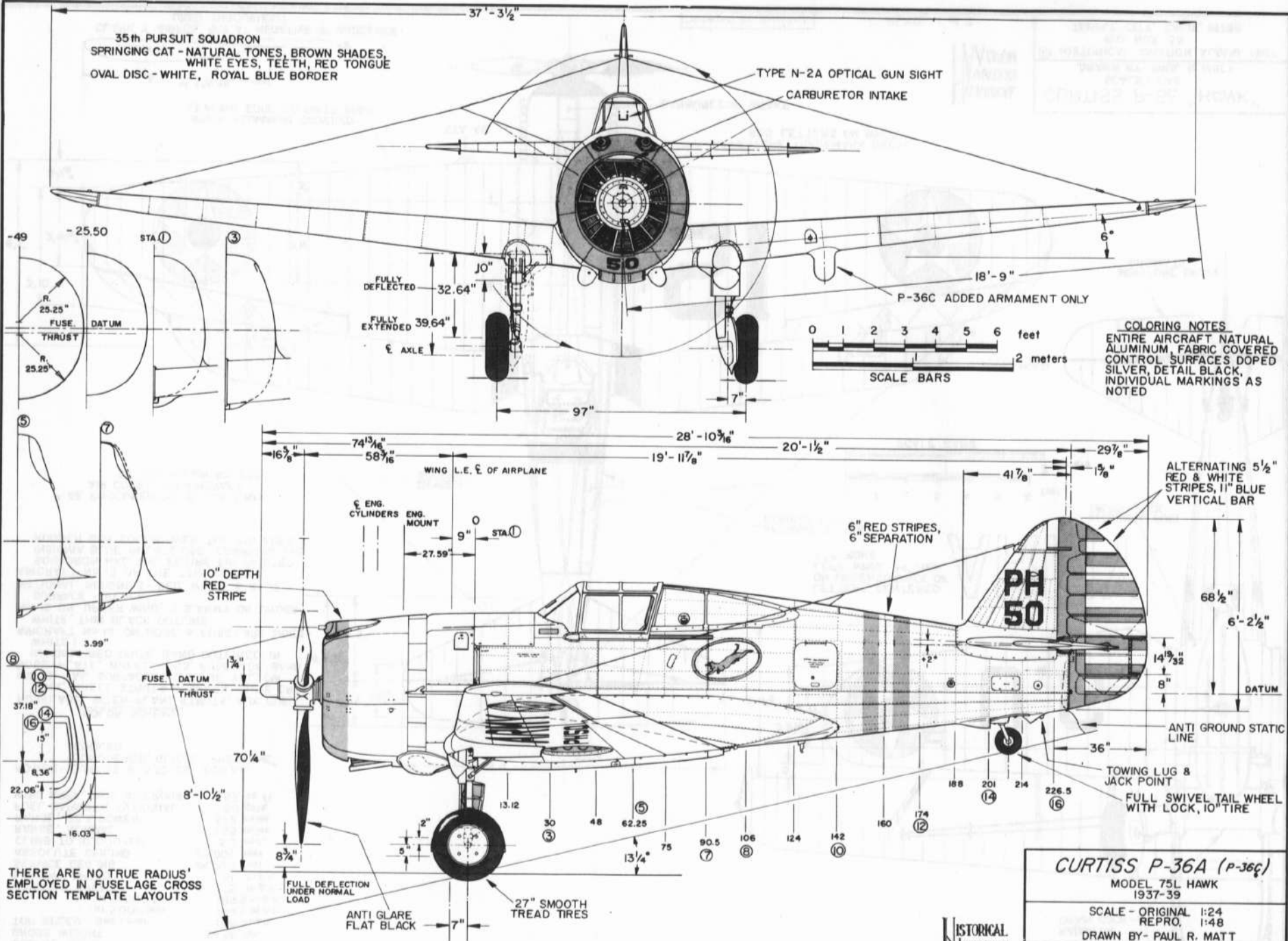
**CURTISS P-36A (P-36C)**  
 MODEL 75L HAWK  
 1937-39

SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT

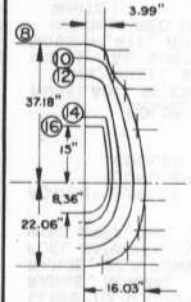
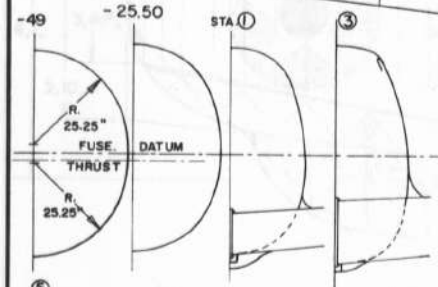
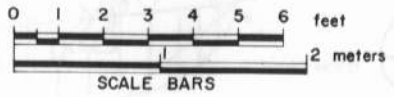
© HISTORICAL AVIATION ALBUM 1969  
 P.O. BOX 33  
 TEMPLE CITY, CALIF. 91780

35th PURSUIT SQUADRON  
 SPRINGING CAT - NATURAL TONES, BROWN SHADES,  
 WHITE EYES, TEETH, RED TONGUE  
 OVAL DISC - WHITE, ROYAL BLUE BORDER

TYPE N-2A OPTICAL GUN SIGHT  
 CARBURETOR INTAKE



**COLORING NOTES**  
 ENTIRE AIRCRAFT NATURAL ALUMINUM, FABRIC COVERED  
 CONTROL SURFACES DOPED SILVER, DETAIL BLACK, INDIVIDUAL MARKINGS AS NOTED



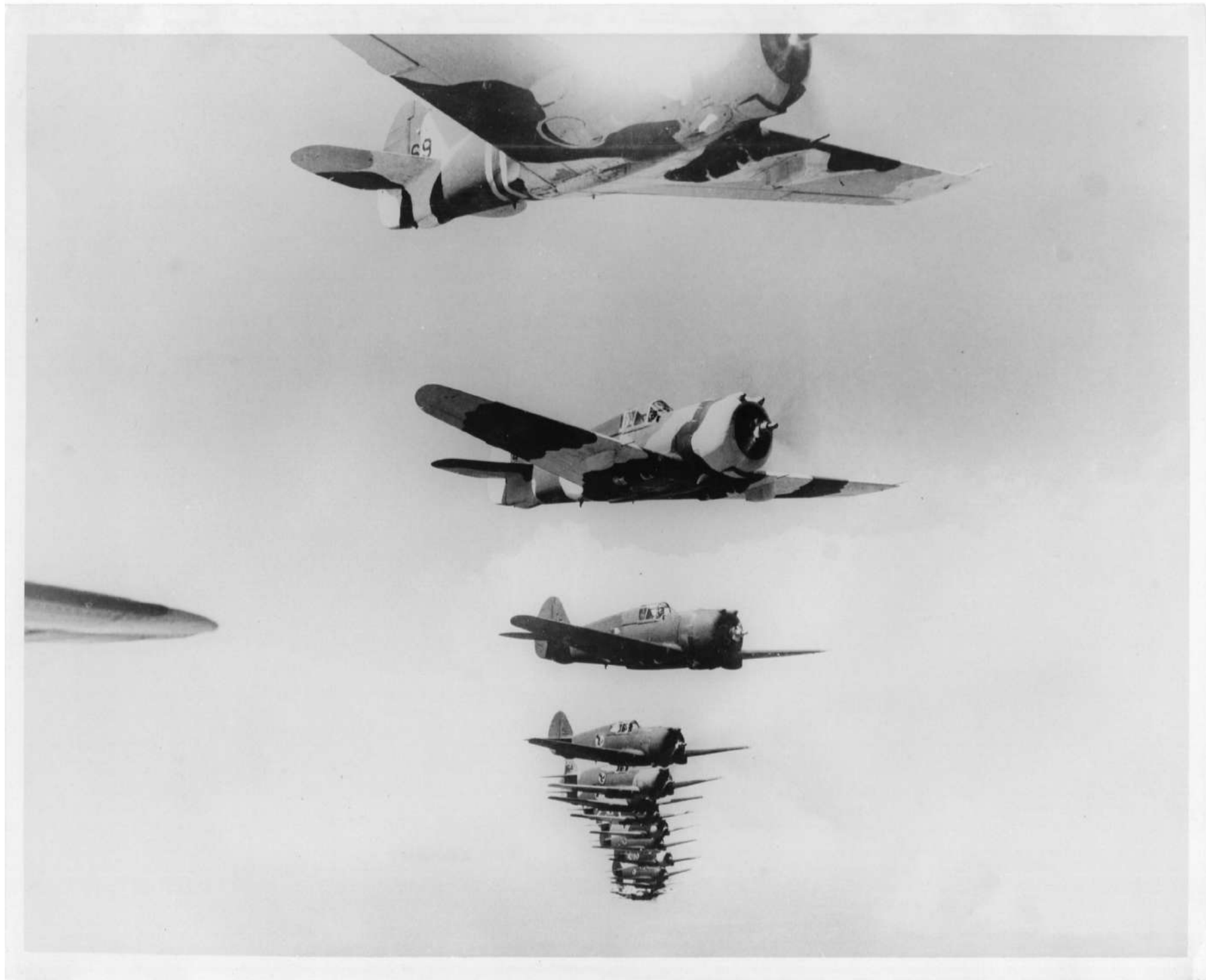
THERE ARE NO TRUE RADIUS' EMPLOYED IN FUSELAGE CROSS SECTION TEMPLATE LAYOUTS

<b>CURTISS P-36A (P-36C)</b>	
MODEL 75L HAWK 1937-39	
SCALE - ORIGINAL	1:24
REPRO,	1:48
DRAWN BY- PAUL R. MATT	
© HISTORICAL AVIATION ALBUM 1969	
P.O. BOX 33	
TEMPLE CITY, CALIF. 91780	





19450 A.C.













(C. 375-852L-2) (S. 37-9130A) P-36 Pursuit.











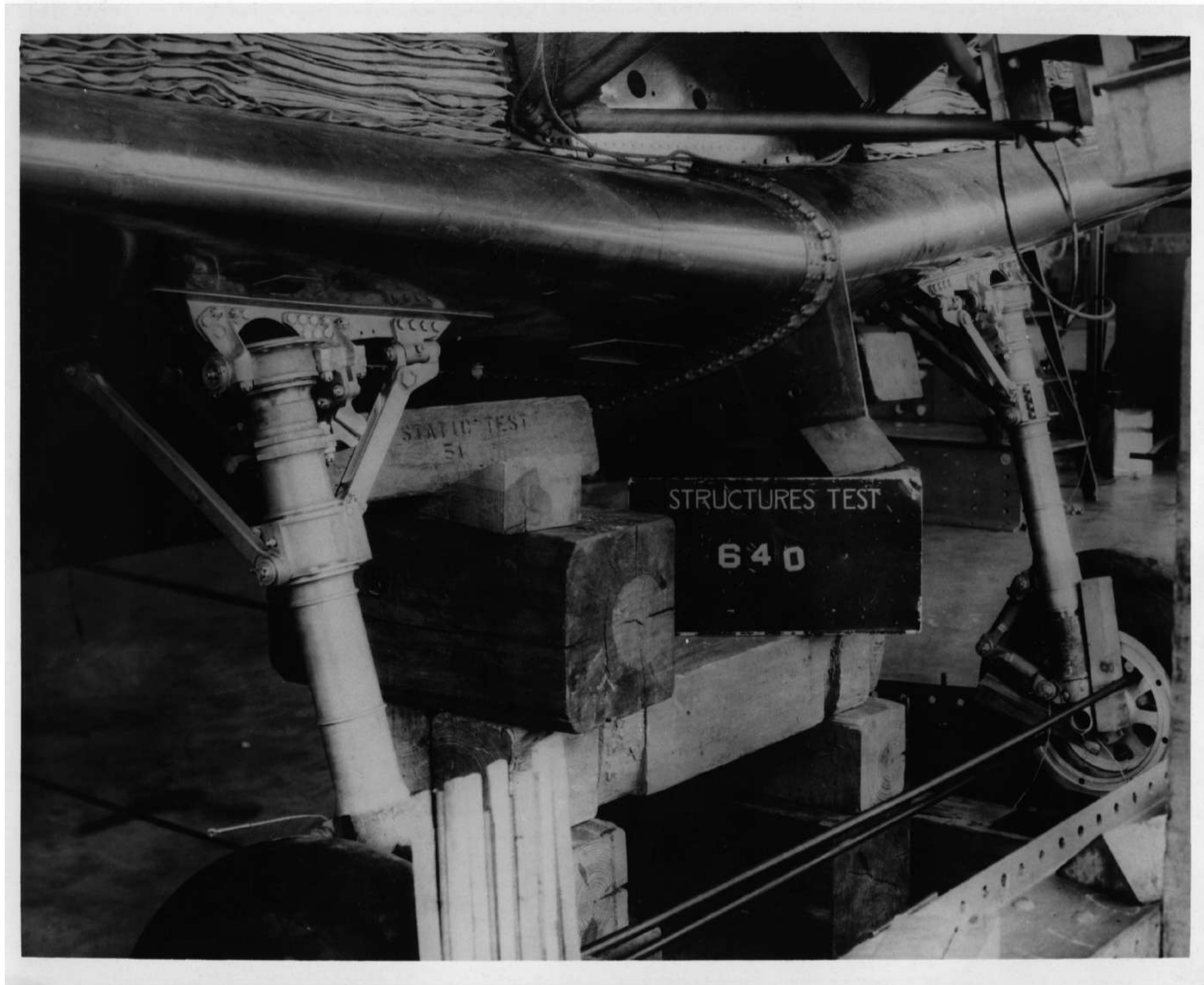






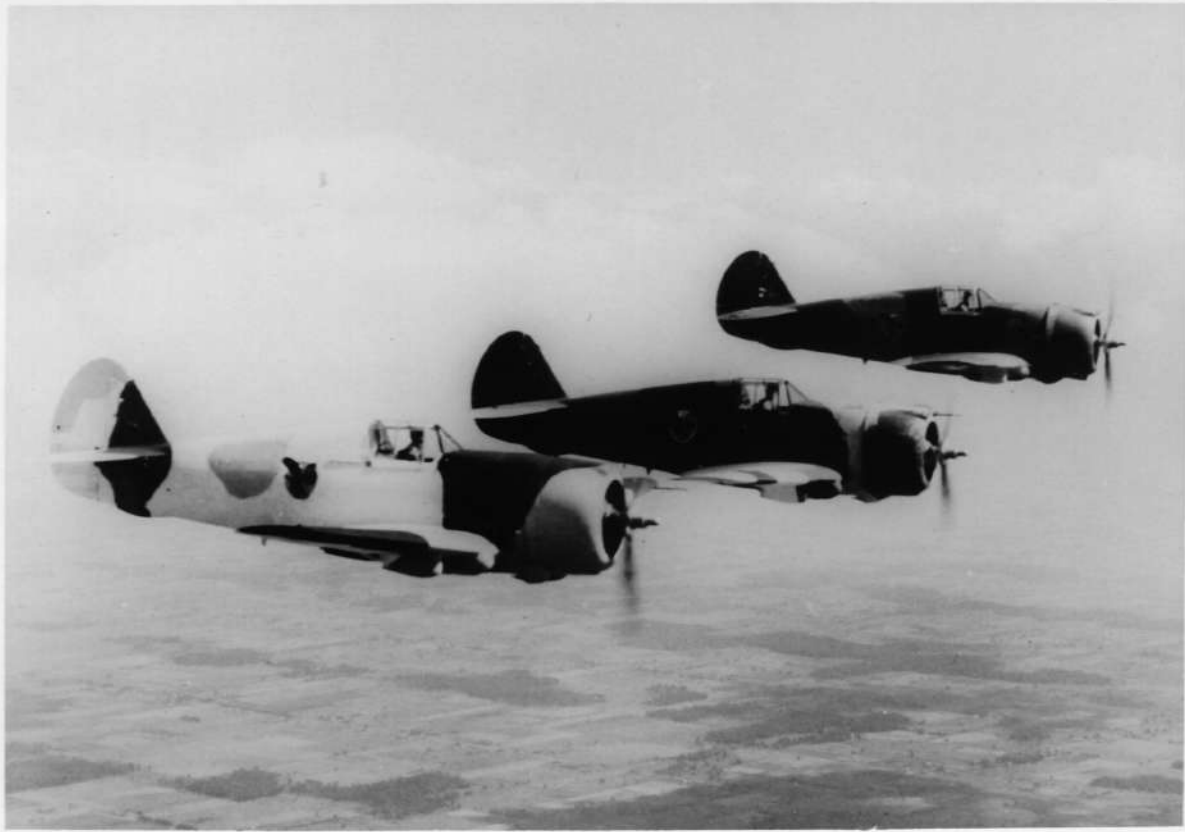
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C2785

















**GENERAL SPECIFICATIONS**

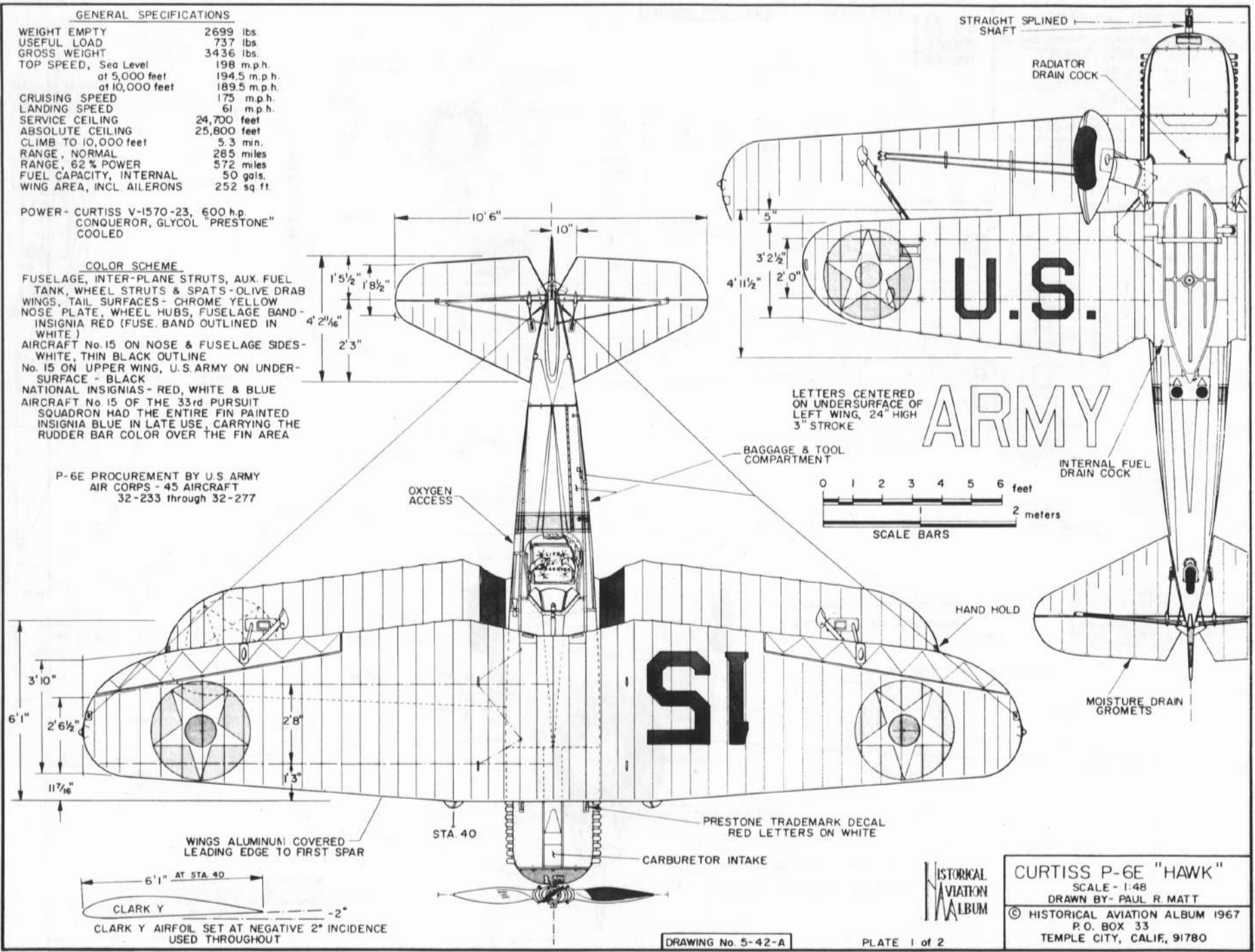
WEIGHT EMPTY	2699 lbs.
USEFUL LOAD	737 lbs.
GROSS WEIGHT	3436 lbs.
TOP SPEED, Sea Level	198 m.p.h.
at 5,000 feet	194.5 m.p.h.
at 10,000 feet	189.5 m.p.h.
CRUISING SPEED	175 m.p.h.
LANDING SPEED	61 m.p.h.
SERVICE CEILING	24,700 feet
ABSOLUTE CEILING	25,800 feet
CLIMB TO 10,000 feet	5.3 min.
RANGE, NORMAL	285 miles
RANGE, 62% POWER	572 miles
FUEL CAPACITY, INTERNAL	50 gals.
WING AREA, INCL.AILERONS	252 sq. ft.

POWER - CURTISS V-1570-23, 600 h.p.  
CONQUEROR, GLYCOL "PRESTONE"  
COOLED

**COLOR SCHEME**

FUSELAGE, INTER-PLANE STRUTS, AUX. FUEL TANK, WHEEL STRUTS & SPATS - OLIVE DRAB  
WINGS, TAIL SURFACES - CHROME YELLOW  
NOSE PLATE, WHEEL HUBS, FUSELAGE BAND - INSIGNIA RED (FUSE. BAND OUTLINED IN WHITE)  
AIRCRAFT No. 15 ON NOSE & FUSELAGE SIDES - WHITE, THIN BLACK OUTLINE  
No. 15 ON UPPER WING, U. S. ARMY ON UNDERSURFACE - BLACK  
NATIONAL INSIGNIAS - RED, WHITE & BLUE  
AIRCRAFT No. 15 OF THE 33rd PURSUIT SQUADRON HAD THE ENTIRE FIN PAINTED INSIGNIA BLUE IN LATE USE, CARRYING THE RUDDER BAR COLOR OVER THE FIN AREA

P-6E PROCUREMENT BY U.S. ARMY  
AIR CORPS - 45 AIRCRAFT  
32-233 through 32-277



HISTORICAL AVIATION ALBUM

CURTISS P-6E "HAWK"  
SCALE - 1:48  
DRAWN BY - PAUL R. MATT  
© HISTORICAL AVIATION ALBUM 1967  
P. O. BOX 33  
TEMPLE CITY, CALIF. 91780

DRAWING No. 5-42-A

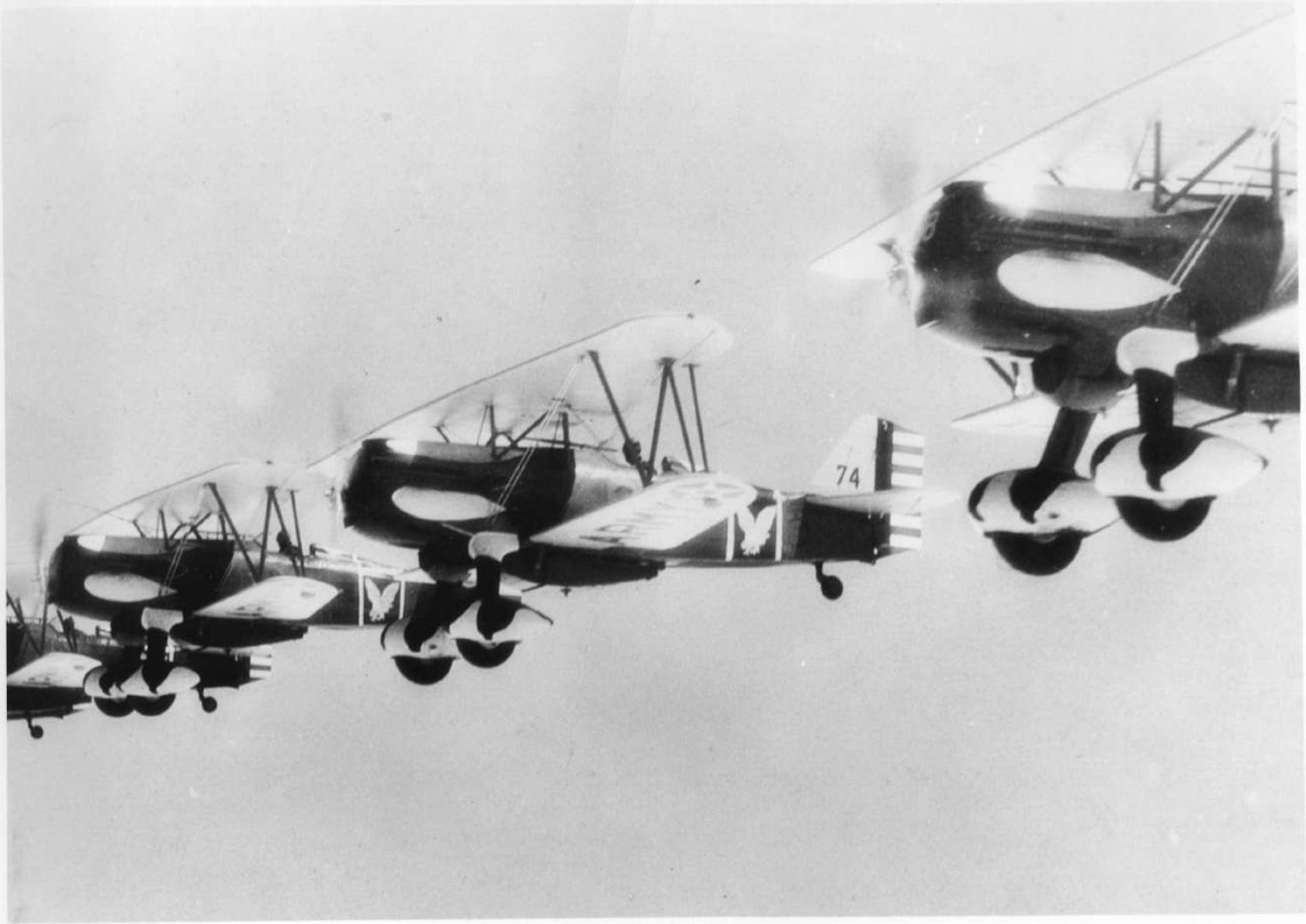
PLATE 1 of 2



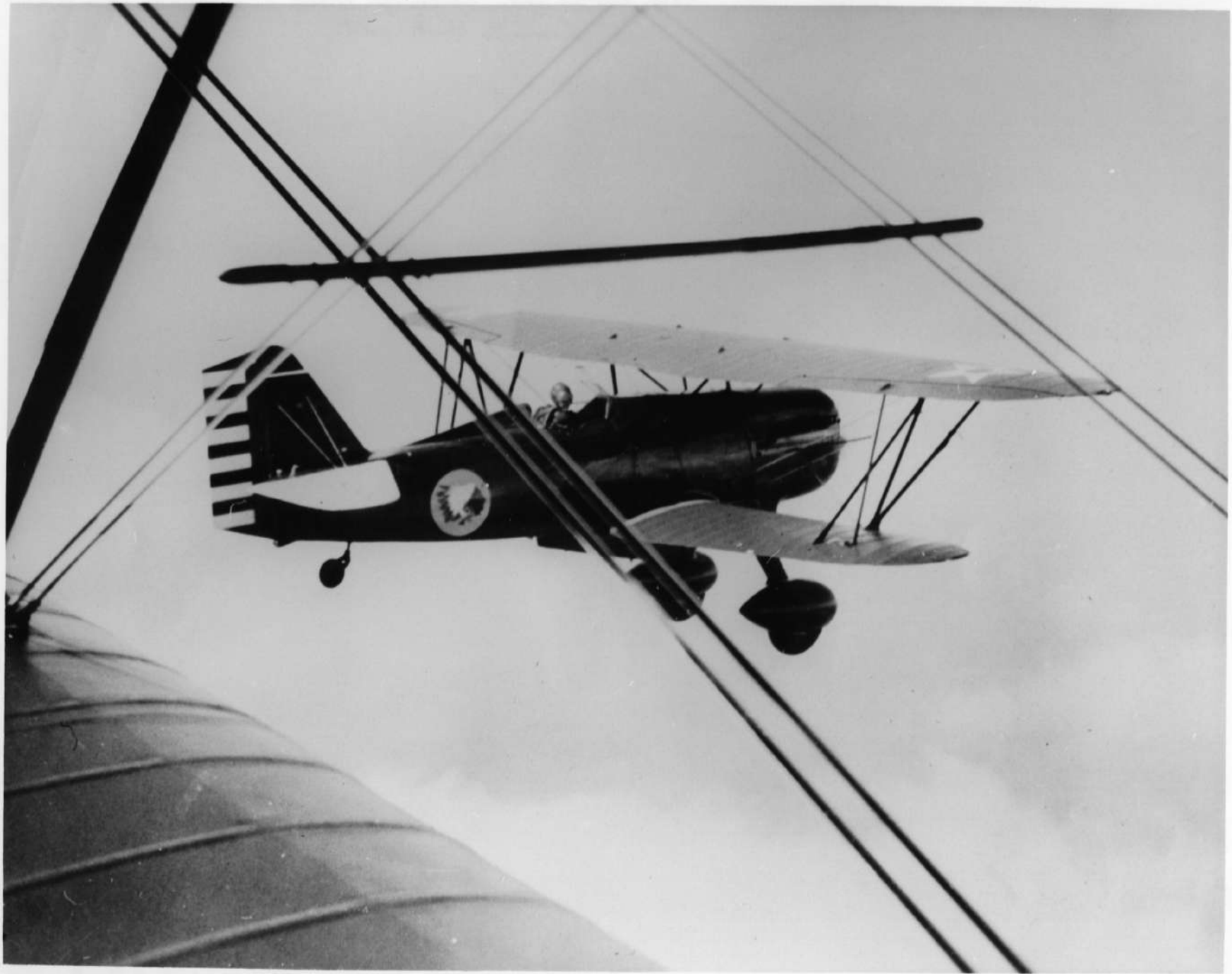












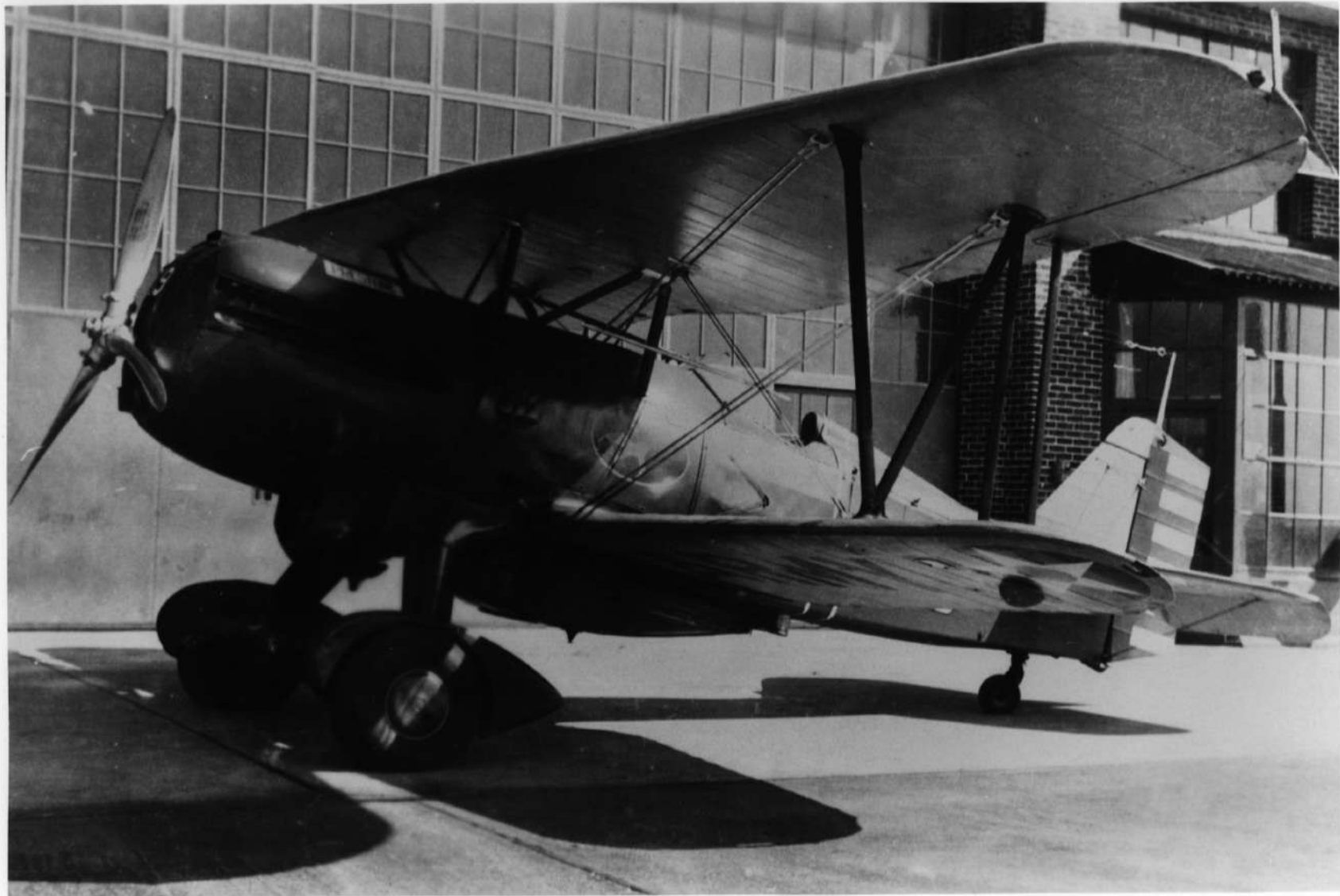


(G-11243A - 745K)(9/31/34 - 2:25P)(R-6E 32-246)



(G-44-109N II W/2-23)(5-9-33-11:20A)

P-65















CURTIS 1930 HAWK WITH COOLEY CONQUEROR ENGINE  
7-4-30 1-5479







CURTISS HAWK XP-6E 3/4 FRONT VIEW  
W-6546 11-4-31





CURTISS P-6C 3/4 FRONT VIEW  
W-7883



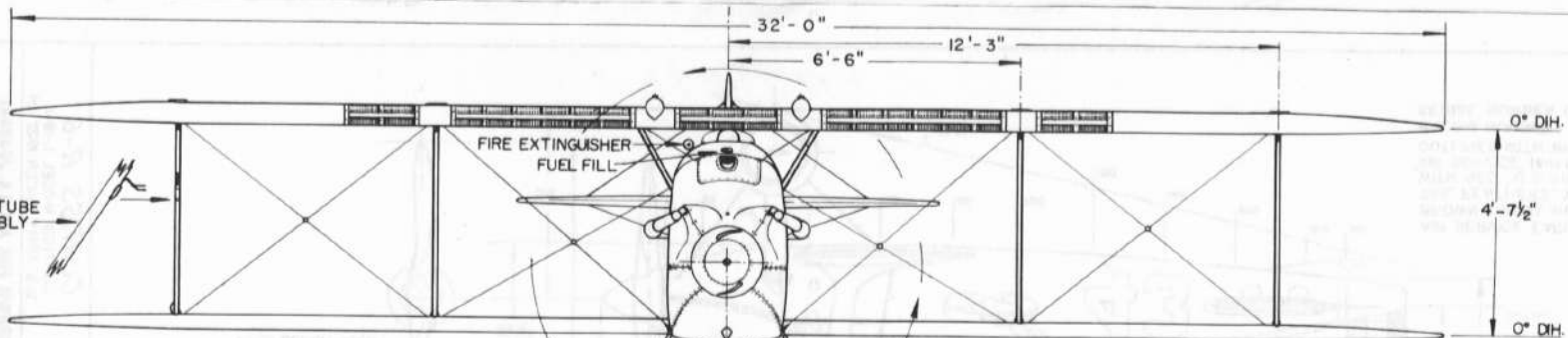




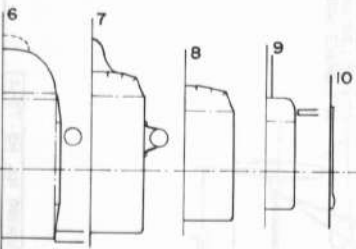
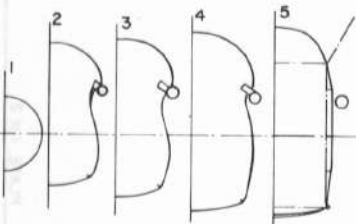




PITOT TUBE ASSEMBLY



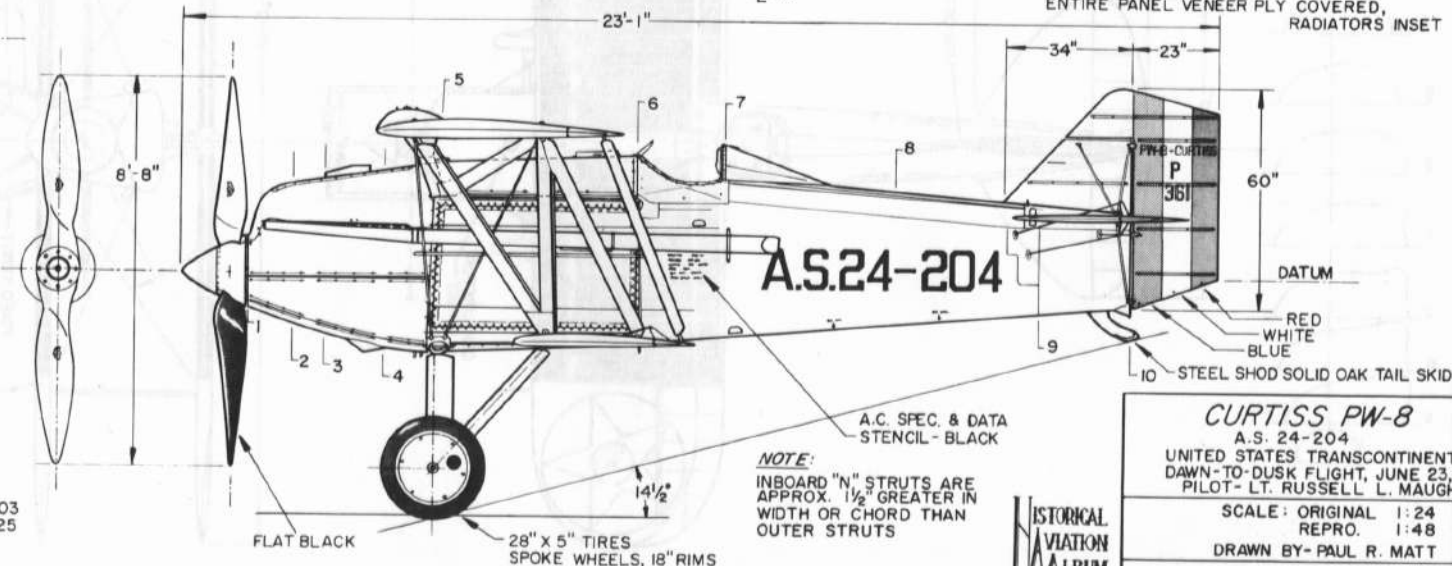
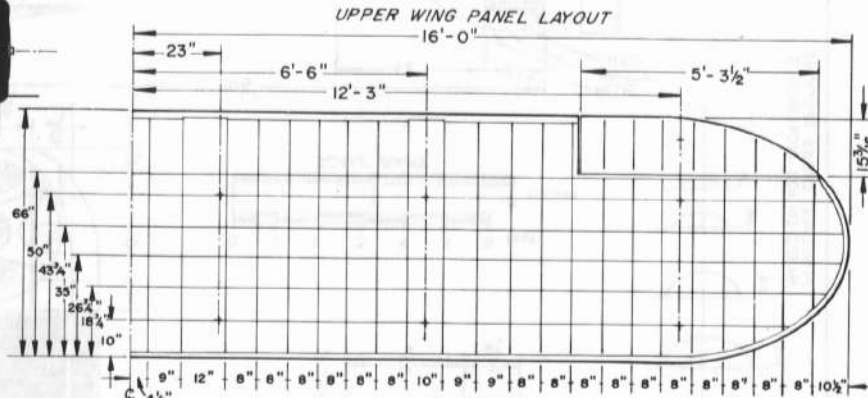
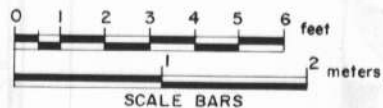
IN THE PREPARATIONS OF THESE DRAWINGS WE WERE FORTUNATE IN OBTAINING THREE SETS OF "OFFICIAL" SPECIFICATIONS RELATING TO THE PW-8 TYPE AIRCRAFT. ALL DIFFERED IN TECHNICAL DATA, SOME TIMES UNBELIEVABLY SO. IN SORTING THROUGH THIS HOWEVER, WE BELIEVE WE HAVE MADE A CORRECT AND AUTHENTIC PRESENTATION OF THE PW-8 AND OF A.S. 24-204 IN PARTICULAR.



CURTISS-REED TWISTED DURAL PROPELLER, Ex - 32919, 7'-9 1/4" PITCH

**COLORING NOTES**  
ENTIRE AIRCRAFT - GLOSS OLIVE DRAB, GREEN  
WING RADIATORS - NATURAL GOLD BRASS  
ALL LETTERING & DETAILS - BLACK  
PROPELLER - POLISHED STEEL  
ENGINE EXHAUST PIPING ORIGINALLY BLACK, TOOK ON A BURNT BROWN-BLACK APPEARANCE WITH USAGE.

**CURTISS PW-8 PRODUCTION**  
PW-8 (XPW-8) Prototypes 3 23-1201-1203  
PW-8 Production 25 24-201-225



**NOTE:**  
INBOARD "N" STRUTS ARE APPROX. 1/2" GREATER IN WIDTH OR CHORD THAN OUTER STRUTS

A.C. SPEC. & DATA STENCIL - BLACK

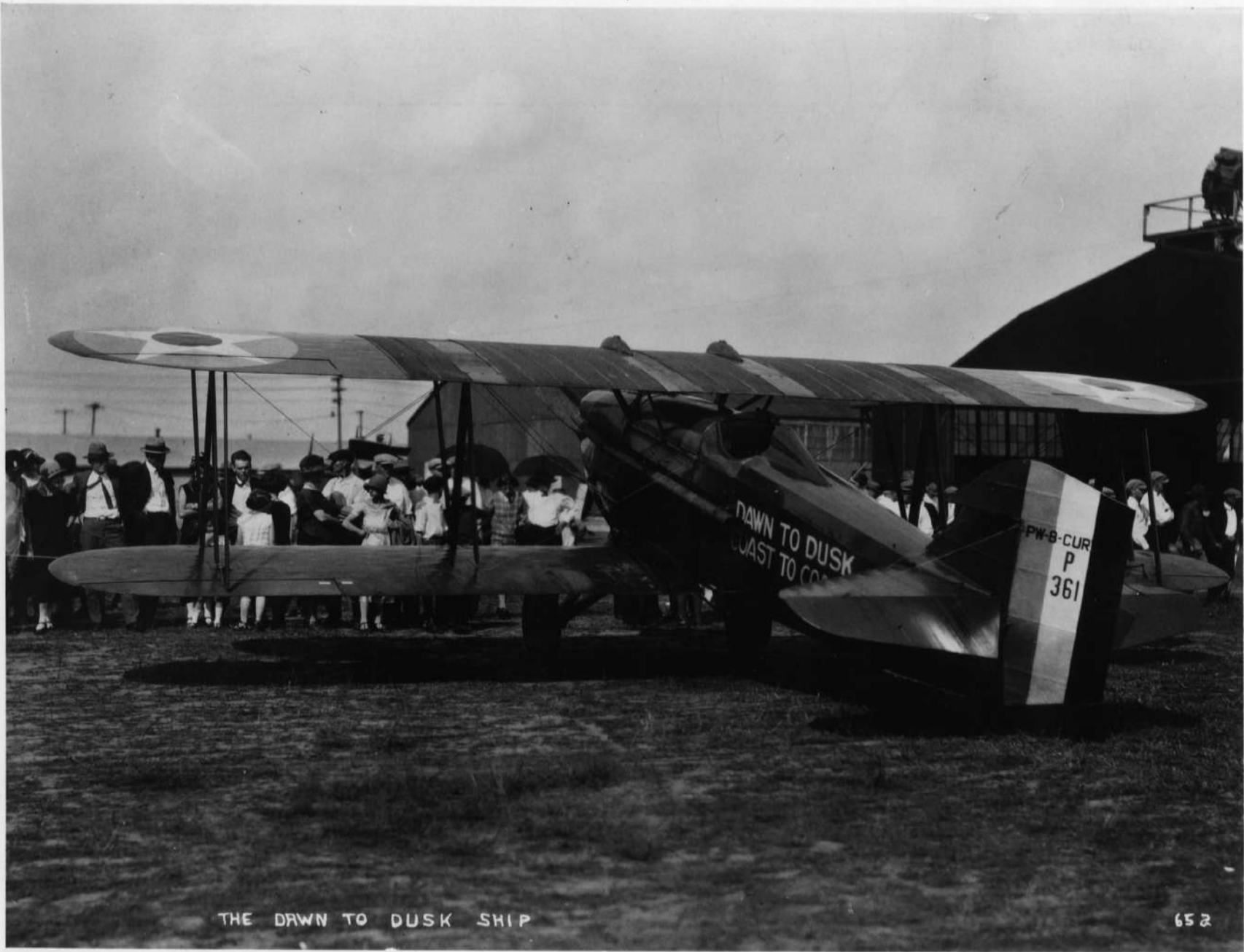
FLAT BLACK  
28" x 5" TIRES SPOKE WHEELS, 18" RIMS

<b>CURTISS PW-8</b> A.S. 24-204 UNITED STATES TRANSCONTINENTAL DAWN-TO-DUSK FLIGHT, JUNE 23, 1924 PILOT - LT. RUSSELL L. MAUGHAN	
SCALE: ORIGINAL	1:24
REPRO.	1:48
DRAWN BY - PAUL R. MATT	
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THE DAWN TO DUSK SHIP





A 5.23 1101

CURTISS P.M.B.  
P  
295

11016 - A.S.

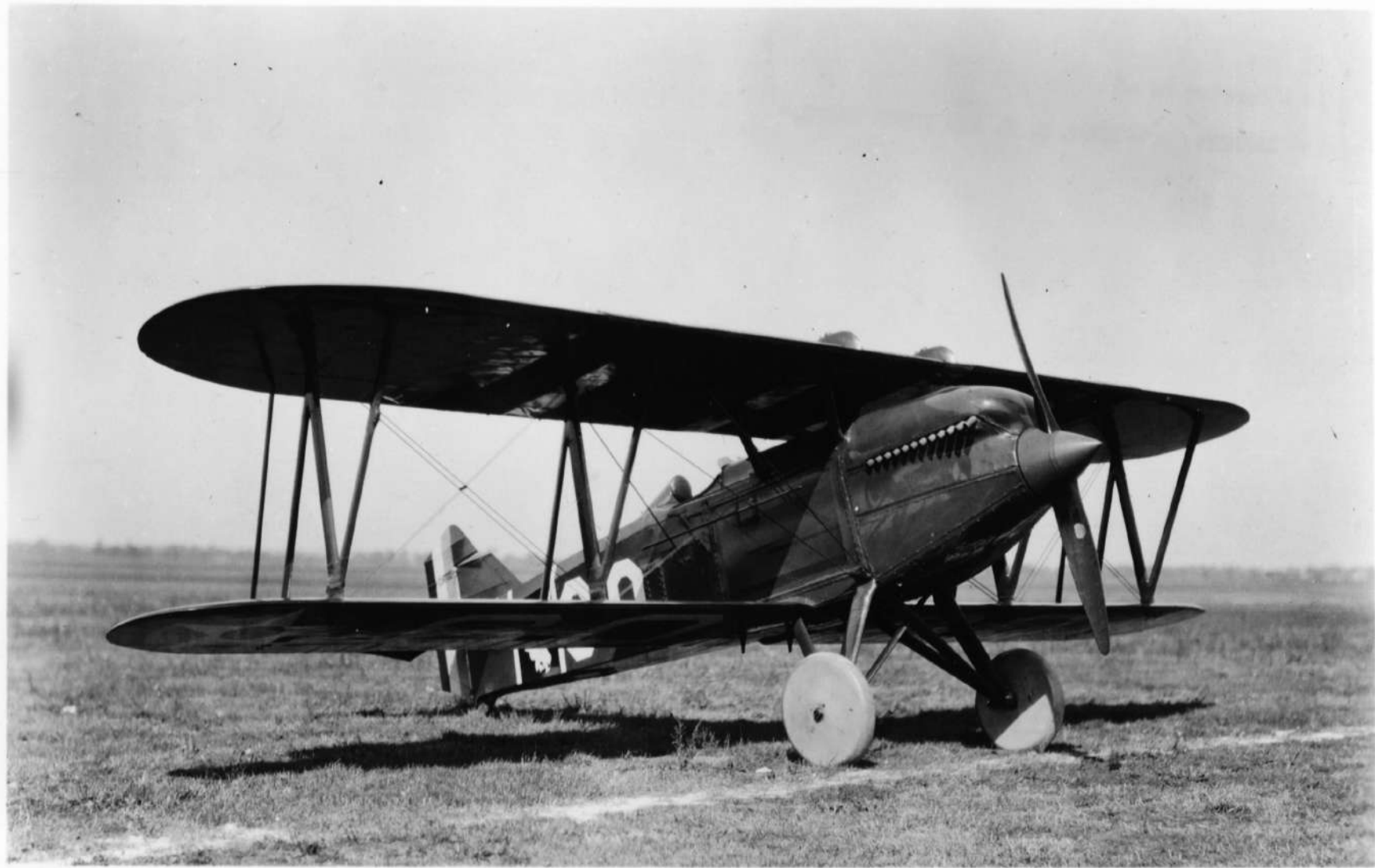
CURTISS PURSUIT. COAST TO COAST SHIP.  
LT. R.L. MAUGHAN. PILOT. U.S.A.  
6-29-23. T-2453.





CURTISS PURSUIT DAWN TO DUSK. COAST TO COAST SHIP.  
6-10-24 LT R. L. MAUGHAN. PILOT U.S.A. T. 2673.





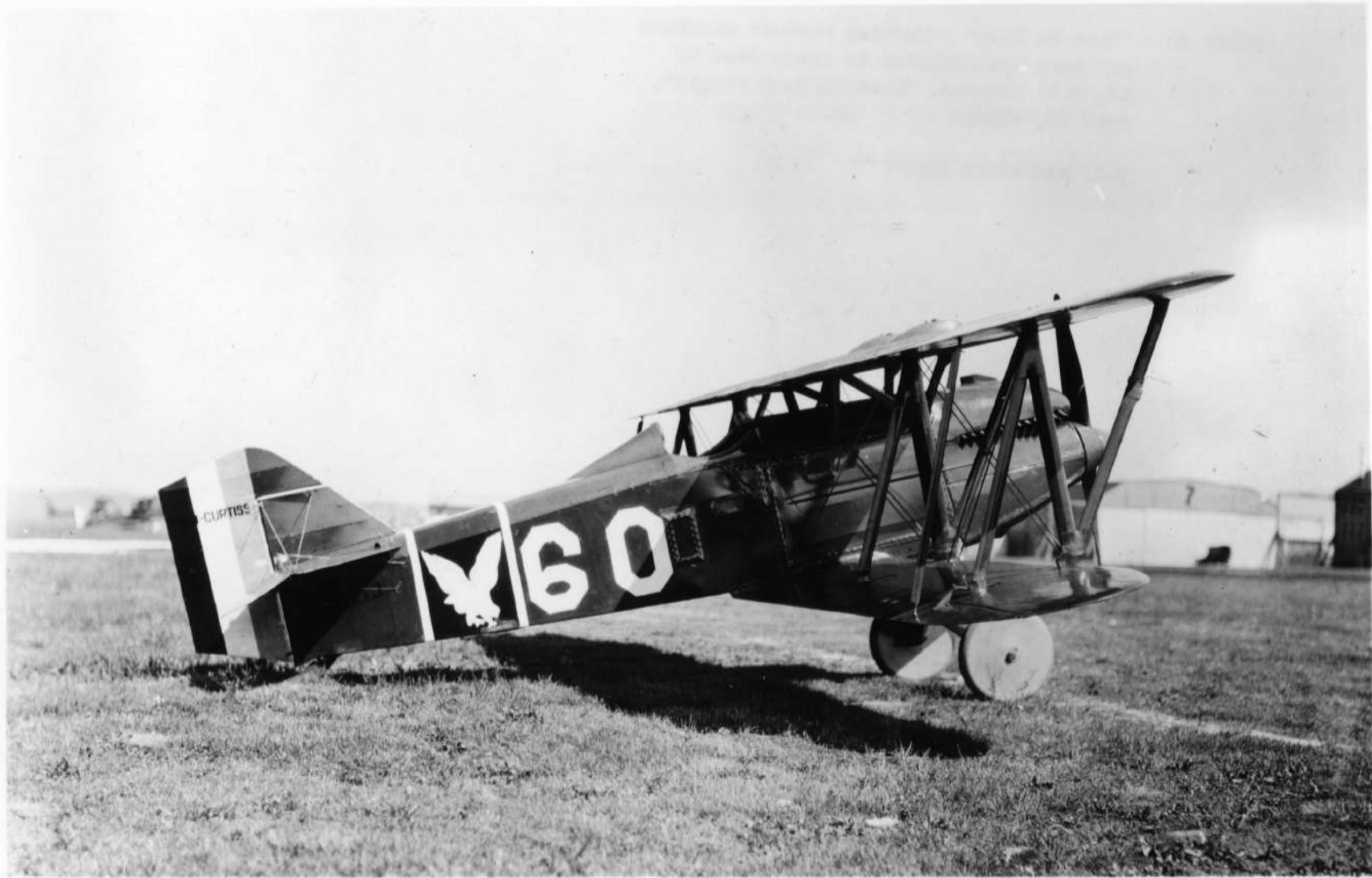








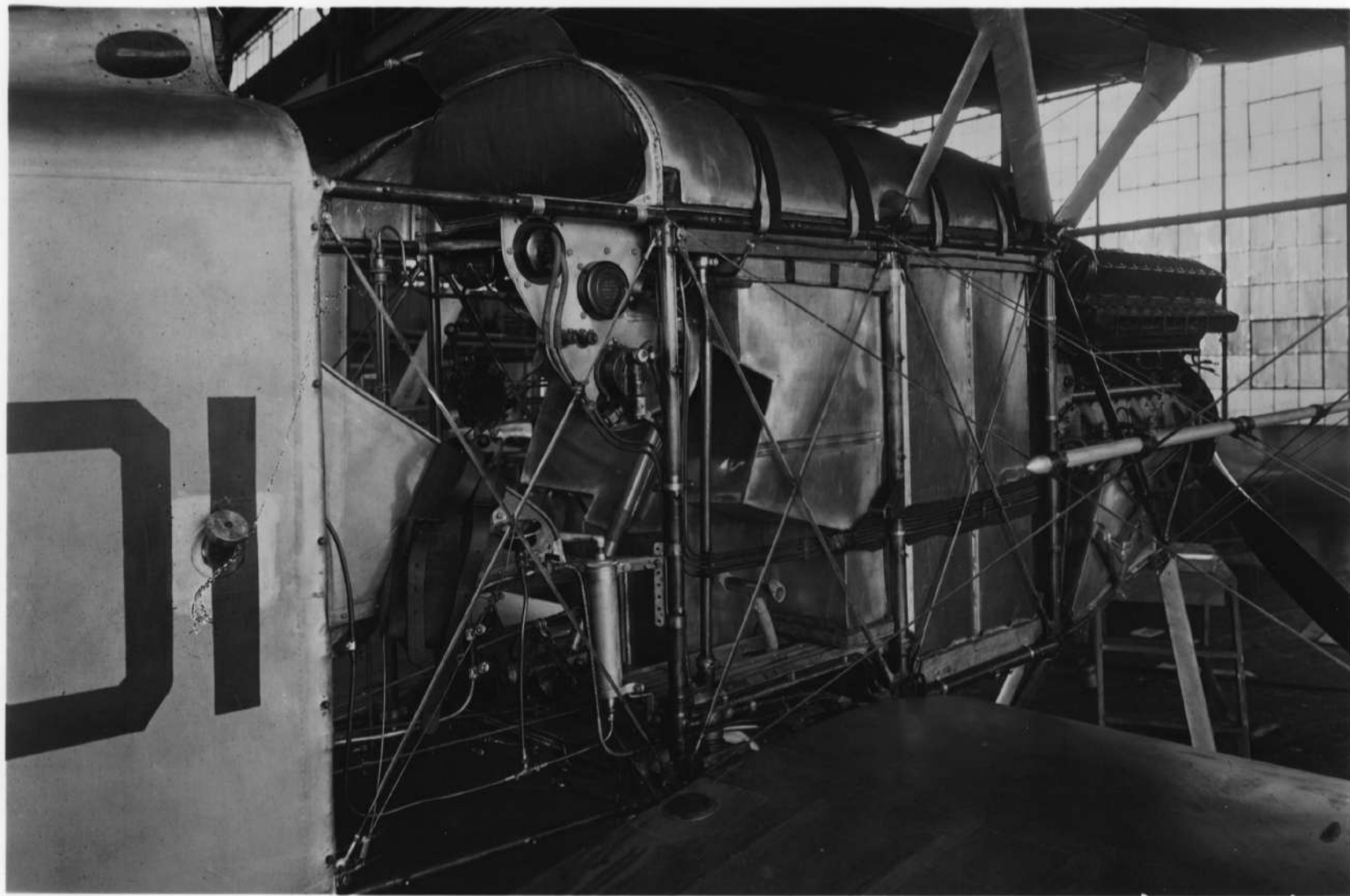




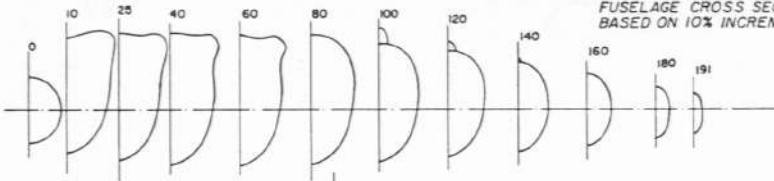




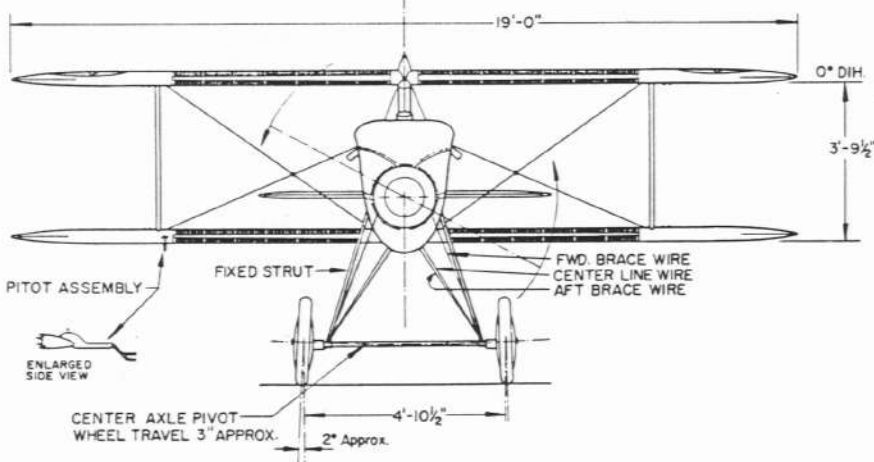
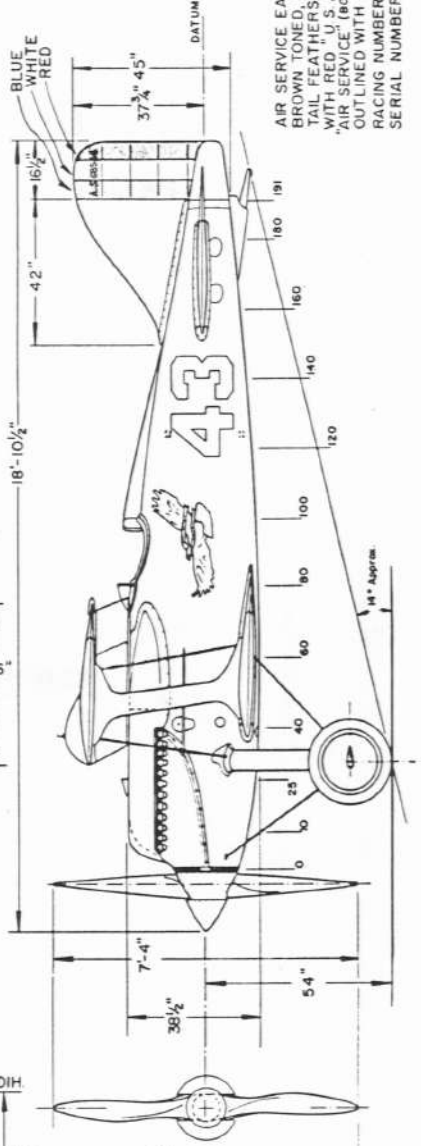
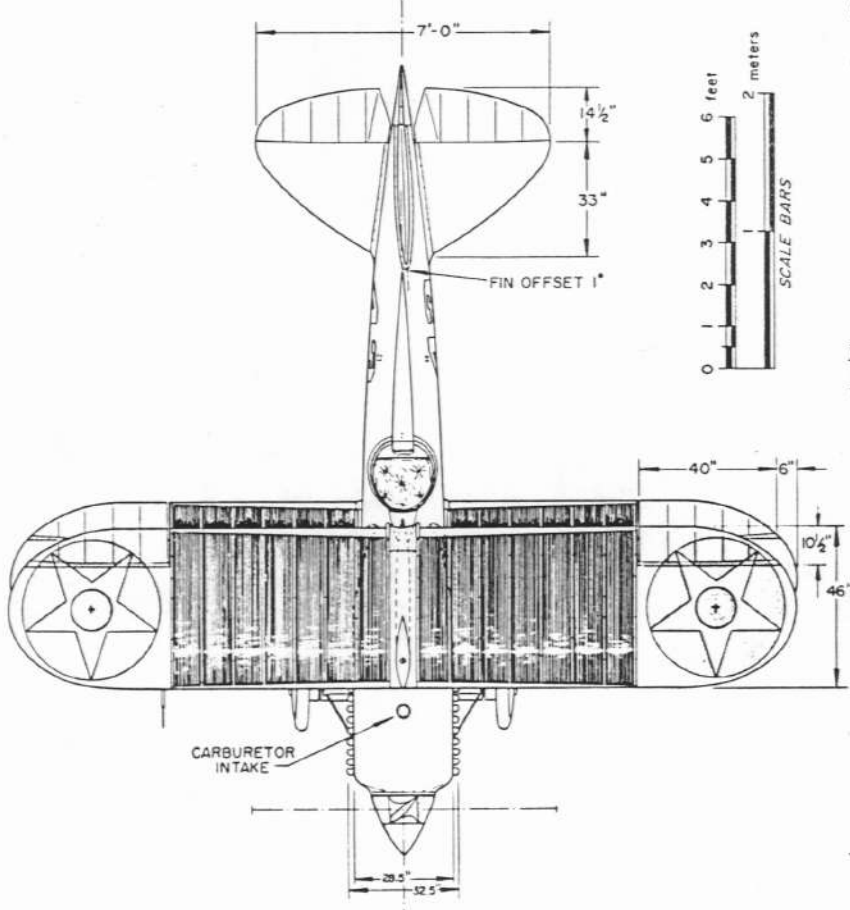








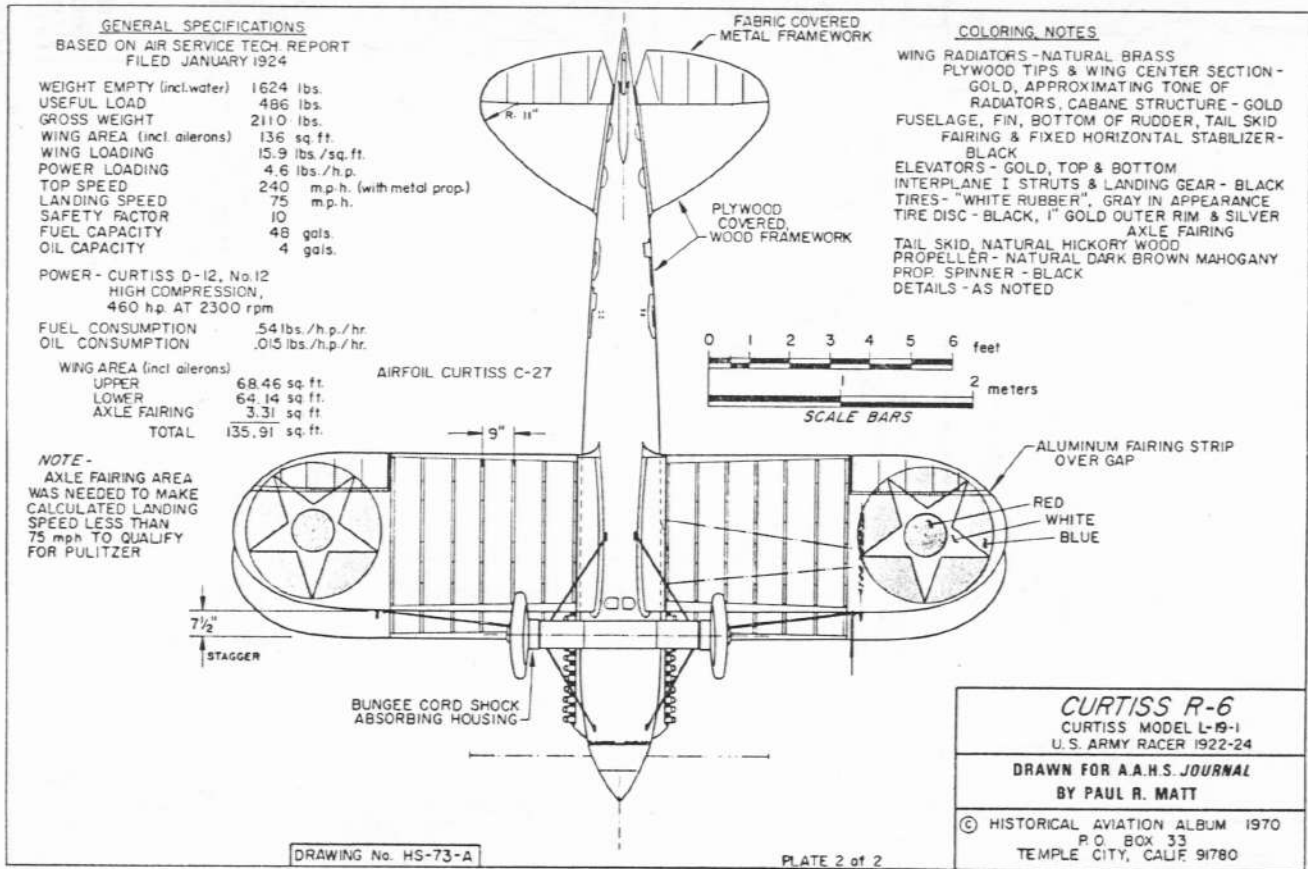
AIR SERVICE EAGLE INSIGNIA,  
BROWN TONED, WHITE HEAD &  
TAIL FEATHERS, YELLOW BEAK  
WITH RED U.S. ARMY (TOP)  
"AIR SERVICE (BOTTOM)" STREAMER  
OUTLINED WITH WHITE PINSTRIPES  
RACING NUMBER ON RUDDER -  
BLACK



1922 WOOD PROPELLER  
1923/24 REED D-27  
TWISTED DURAL  
PROPELLER USED

<b>CURTISS R-6</b>	
CURTISS MODEL L-19-1 U.S. ARMY RACER 1922-24	
DRAWN FOR A.A.H.S. JOURNAL BY PAUL R. MATT	
© HISTORICAL AVIATION ALBUM 1970 P.O. BOX 33 TEMPLE CITY, CALIF. 91780	





Curtiss 1922 Army Racer at Selfridge Field. Winner of Pulitzer Trophy, October 14, 1922.

15145



ARMY CURTISS RACER  
1919

CURTISS R-6

1514C



ARMY CURTISS RACER  
LT. J. W. MATHIAS, P.O. U.S.A.

CURTISS R-6

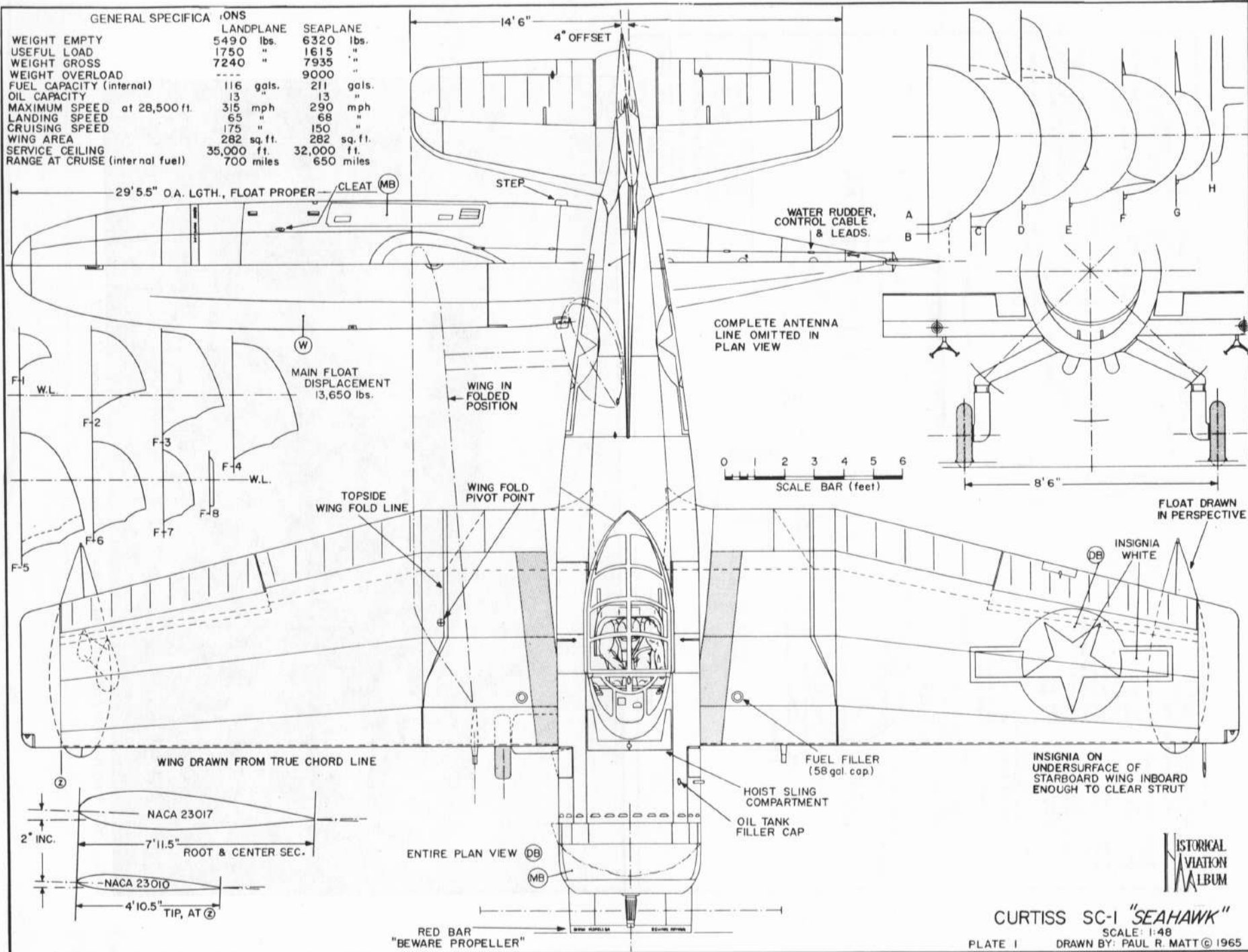
15147



ARMY CURTISS RACER 1  
9-25-22  
12290

GENERAL SPECIFICATIONS

	LANDPLANE	SEAPLANE
WEIGHT EMPTY	5490 lbs.	6320 lbs.
USEFUL LOAD	1750 "	1615 "
WEIGHT GROSS	7240 "	7935 "
WEIGHT OVERLOAD	----	9000 "
FUEL CAPACITY (internal)	116 gals.	211 gals.
OIL CAPACITY	13 "	13 "
MAXIMUM SPEED at 28,500 ft.	315 mph	290 mph
LANDING SPEED	65 "	68 "
CRUISING SPEED	175 "	150 "
WING AREA	282 sq. ft.	282 sq. ft.
SERVICE CEILING	35,000 ft.	32,000 ft.
RANGE AT CRUISE (internal fuel)	700 miles	650 miles



HISTORICAL AVIATION MUSEUM

CURTISS SC-1 "SEAHAWK"

SCALE: 1:48

PLATE I

DRAWN BY: PAUL R. MATT © 1965











CURTISS SC-2  
C3-19849 6-9-47





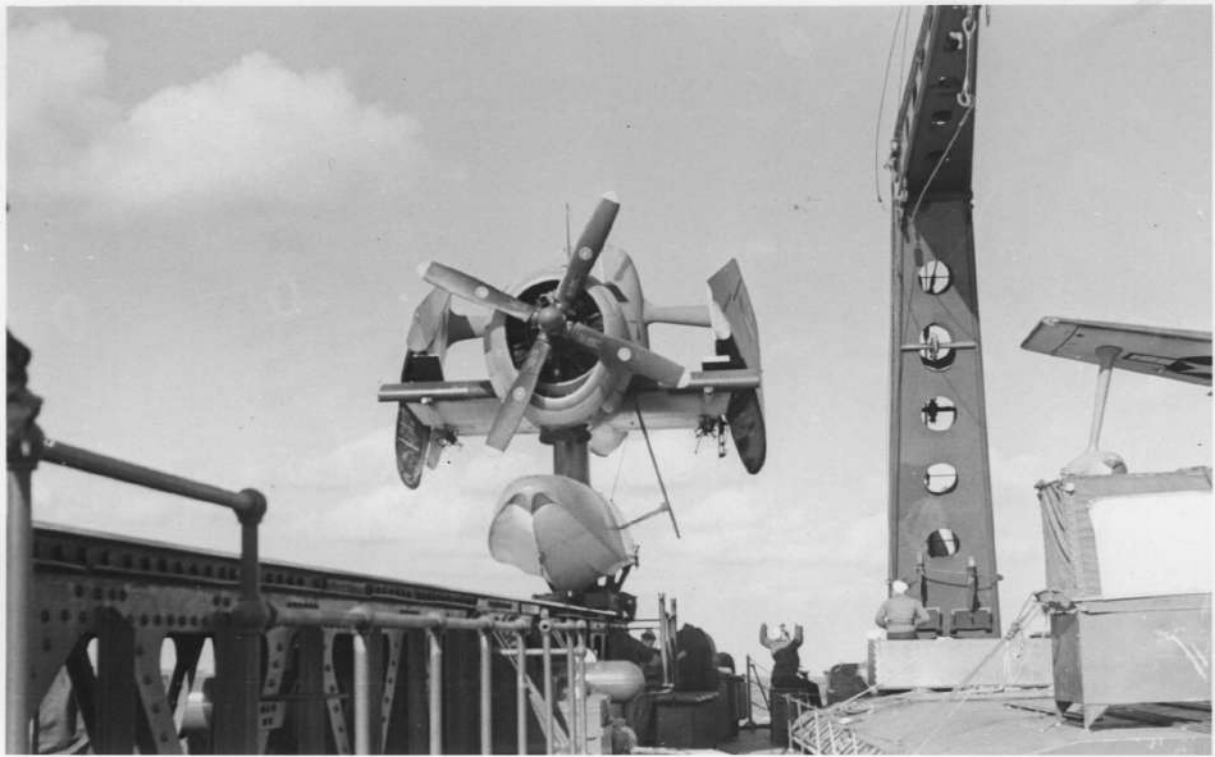


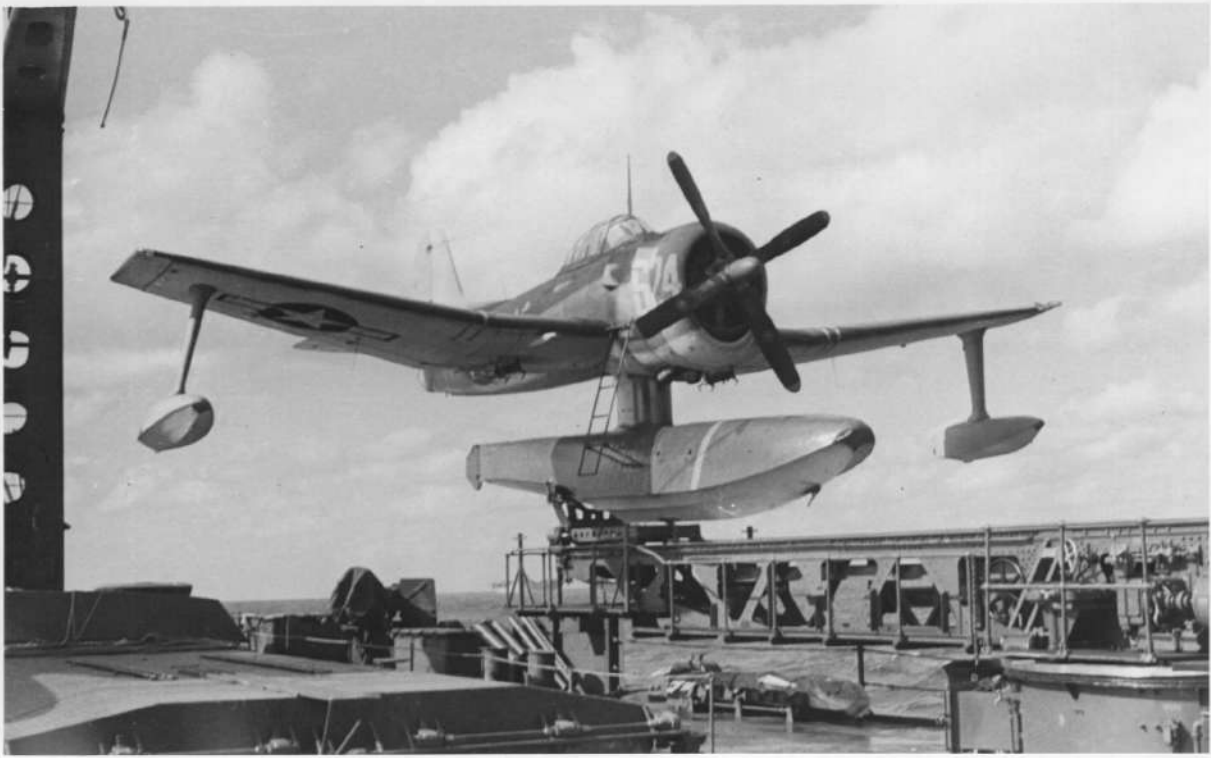






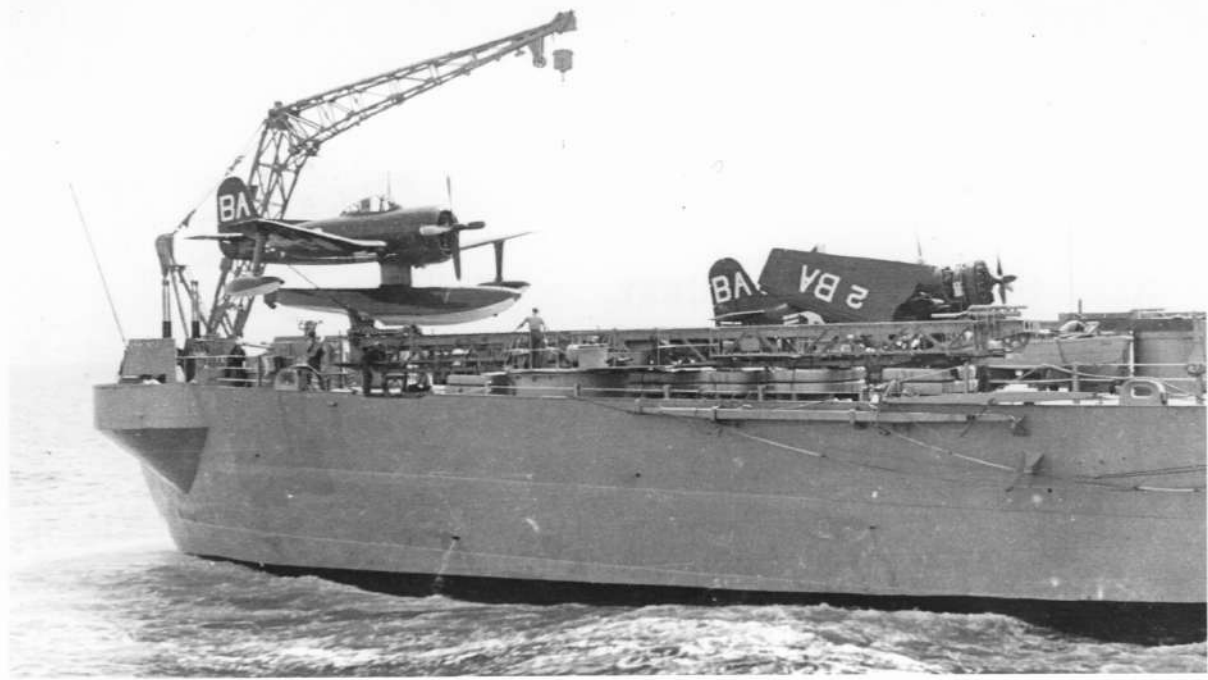






















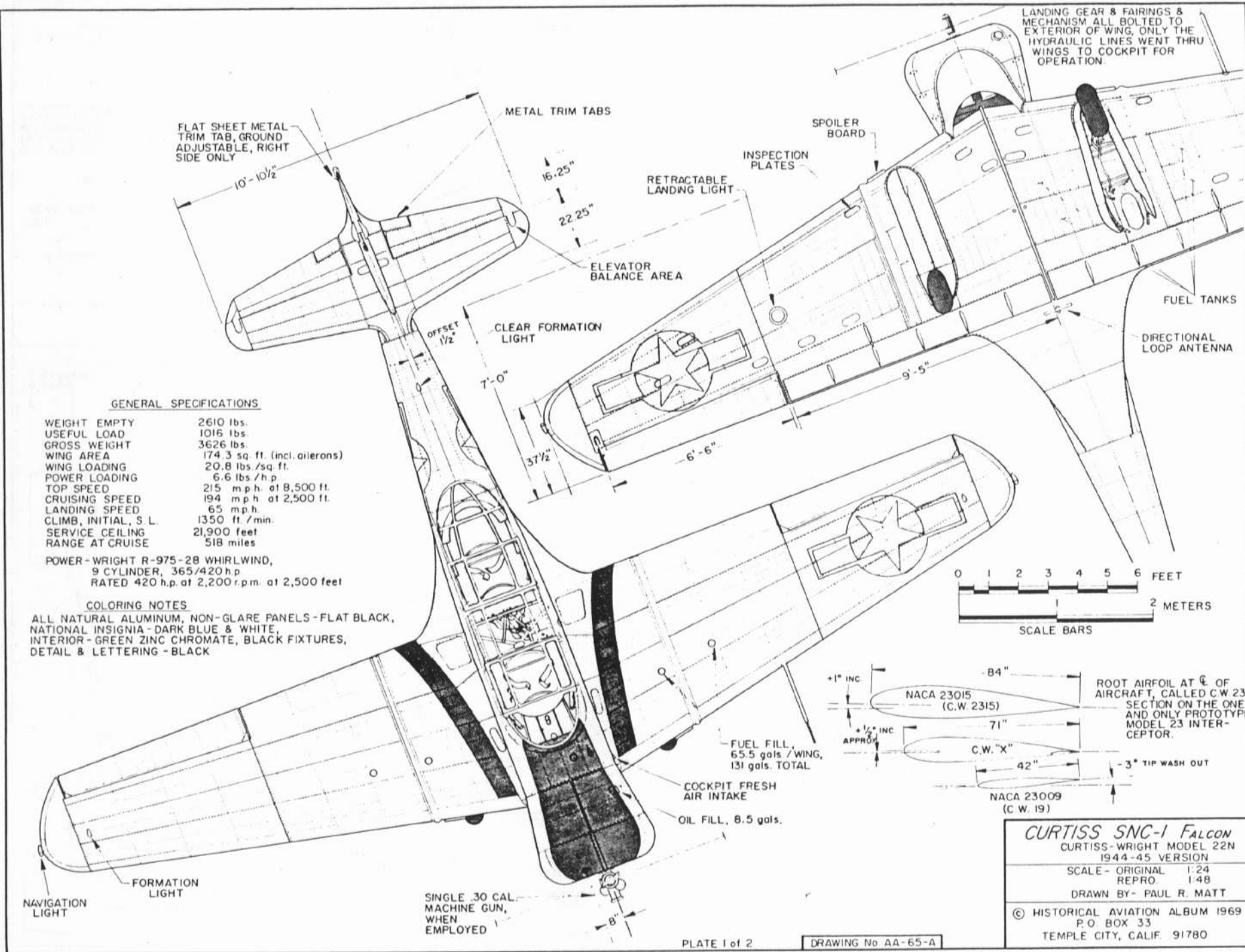












FLAT SHEET METAL TRIM TAB, GROUND ADJUSTABLE, RIGHT SIDE ONLY

10'-10 1/2"

METAL TRIM TABS

16.25"

22.25"

ELEVATOR BALANCE AREA

OFFSET 1/2"

CLEAR FORMATION LIGHT

7'-0"

37 1/2"

6'-6"

SPOILER BOARD

INSPECTION PLATES

RETRACTABLE LANDING LIGHT

LANDING GEAR & FAIRINGS & MECHANISM ALL BOLTED TO EXTERIOR OF WING, ONLY THE HYDRAULIC LINES WENT THRU WINGS TO COCKPIT FOR OPERATION.

FUEL TANKS

DIRECTIONAL LOOP ANTENNA

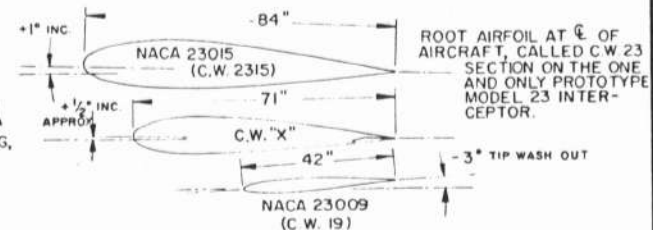
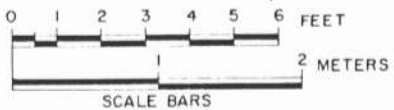
**GENERAL SPECIFICATIONS**

WEIGHT EMPTY	2610 lbs.
USEFUL LOAD	1016 lbs.
GROSS WEIGHT	3626 lbs.
WING AREA	174.3 sq. ft. (incl. ailerons)
WING LOADING	20.8 lbs./sq. ft.
POWER LOADING	6.6 lbs./h.p.
TOP SPEED	215 m.p.h. at 8,500 ft.
CRUISING SPEED	194 m.p.h. at 2,500 ft.
LANDING SPEED	65 m.p.h.
CLIMB, INITIAL, S.L.	1350 ft./min.
SERVICE CEILING	21,900 feet
RANGE AT CRUISE	518 miles

POWER - WRIGHT R-975-28 WHIRLWIND, 9 CYLINDER, 365/420 h.p. RATED 420 h.p. at 2,200 r.p.m. at 2,500 feet

**COLORING NOTES**

ALL NATURAL ALUMINUM, NON-GLARE PANELS - FLAT BLACK, NATIONAL INSIGNIA - DARK BLUE & WHITE, INTERIOR - GREEN ZINC CHROMATE, BLACK FIXTURES, DETAIL & LETTERING - BLACK



FUEL FILL, 65.5 gals./WING, 131 gals. TOTAL

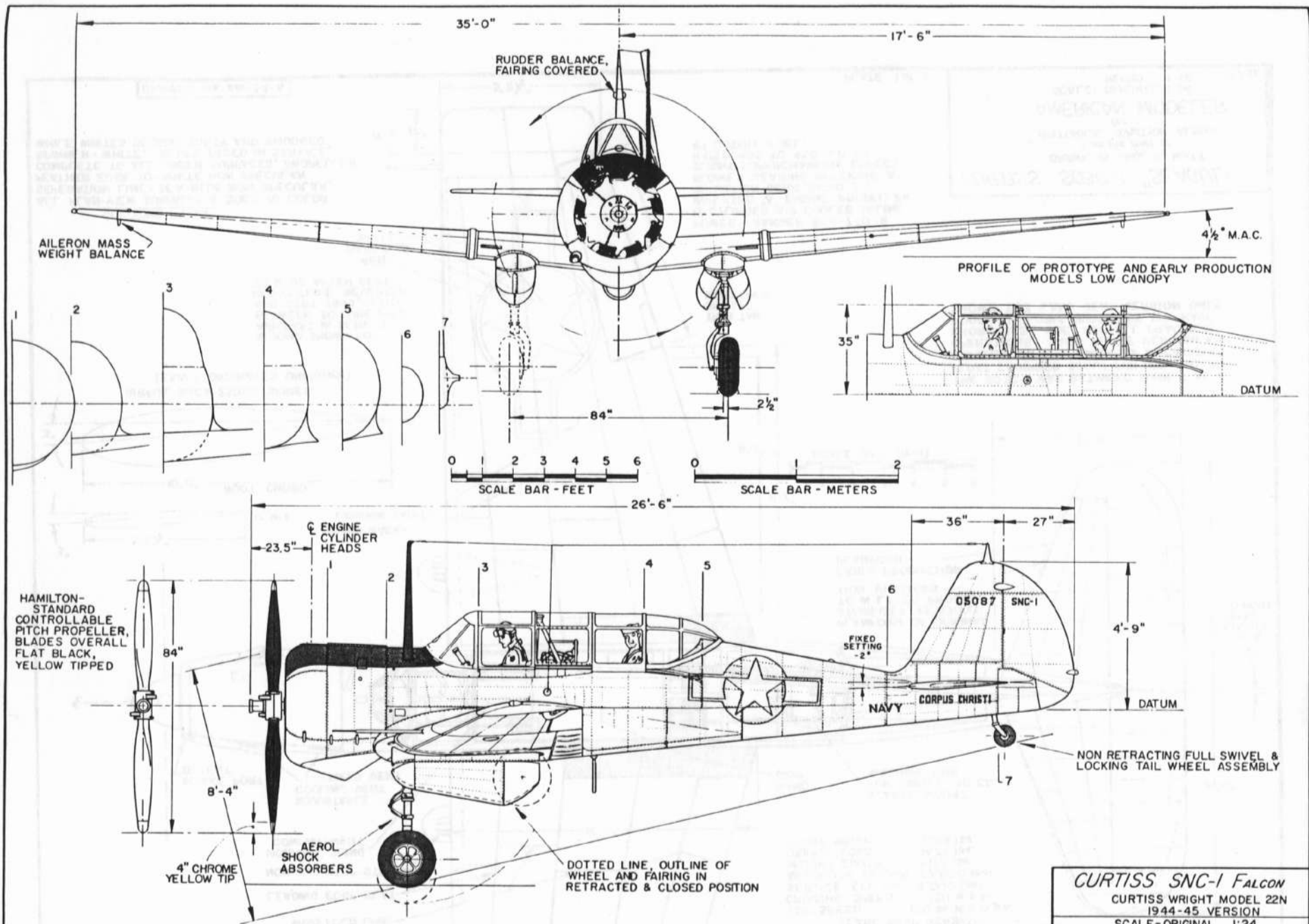
COCKPIT FRESH AIR INTAKE  
OIL FILL, 8.5 gals.

SINGLE .30 CAL. MACHINE GUN, WHEN EMPLOYED

NAVIGATION LIGHT

FORMATION LIGHT

**CURTISS SNC-1 FALCON**  
 CURTISS-WRIGHT MODEL 22N  
 1944-45 VERSION  
 SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT  
 © HISTORICAL AVIATION ALBUM 1969  
 P.O. BOX 33  
 TEMPLE CITY, CALIF. 91780



*CURTISS SNC-1 FALCON*  
 CURTISS WRIGHT MODEL 22N  
 1944-45 VERSION  
 SCALE-ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY- PAUL R. MATT  
 © HISTORICAL AVIATION ALBUM 1969  
 P.O. BOX 33  
 TEMPLE CITY, CALIF. 91780



SNC-1







14-10



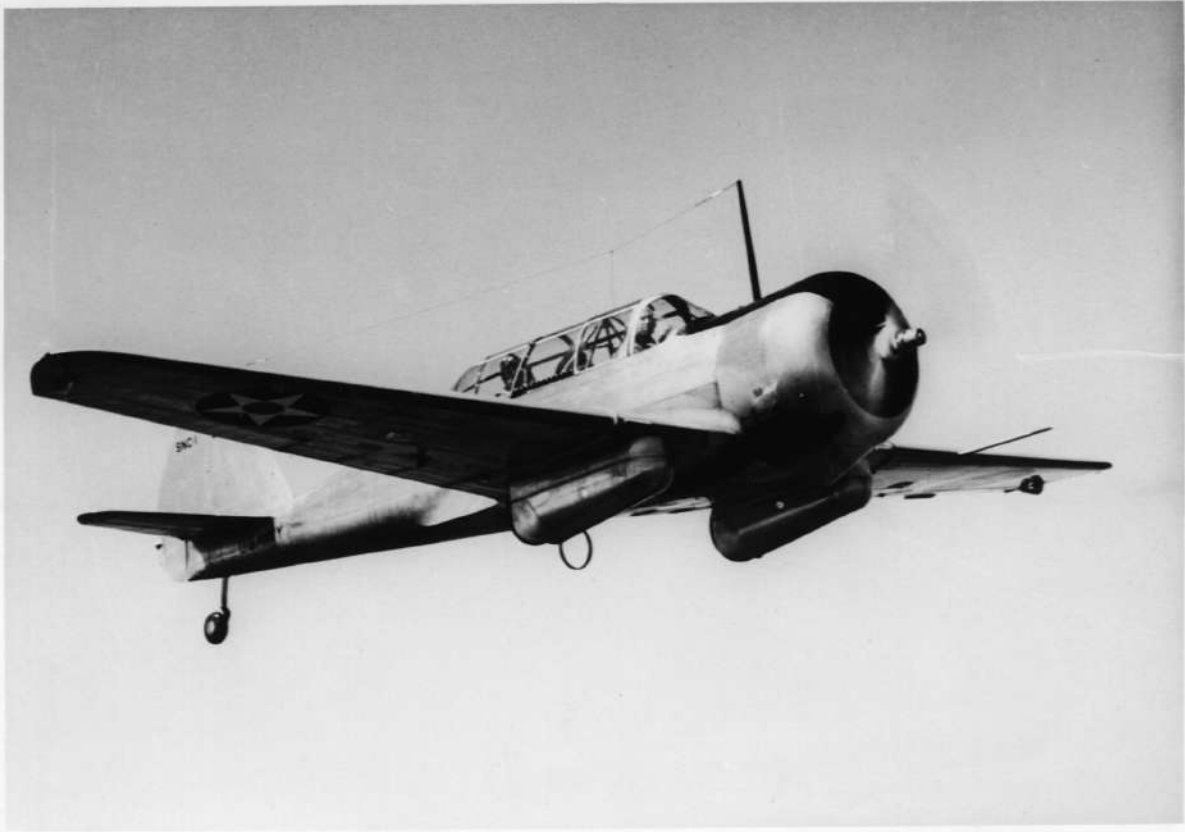


14-40

















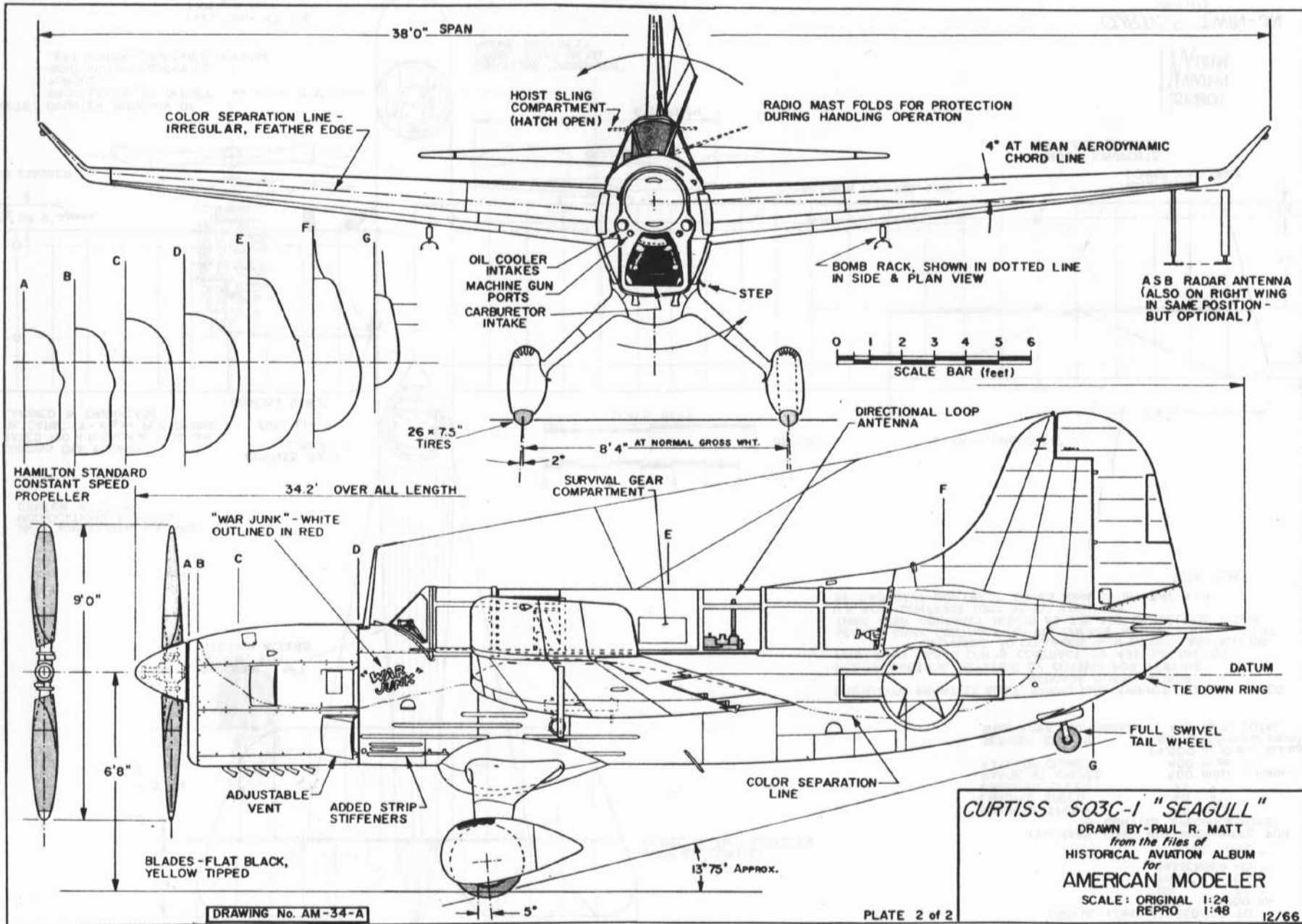














503C







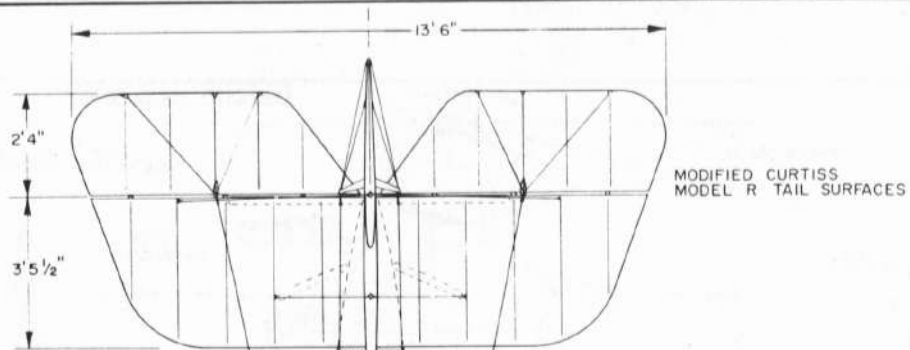




"SEA GULL"







GENERAL SPECIFICATIONS

WEIGHT EMPTY	2110 lbs.
USEFUL LOAD	1040 "
GROSS WEIGHT	3150 "
USEFUL LOAD ACCREDITED TO	
FUEL	650 lbs.
OIL	60 "
PILOT	165 "
PASSENGER	165 "
TOTAL 1040 "	
(MILITARY LOAD NOT ACCOUNTED FOR IN CURTISS SPECIFICATIONS)	
MAXIMUM SPEED	85 m.p.h.
LANDING SPEED	48 "
CRUISING SPEED	75 "
RANGE AT CRUISE	600 miles (approx.)
RATE OF CLIMB	400 ft. per min.
(4,000 in 10 min. average)	
SERVICE CEILING	8,000 ft. (normal conditions)
WING AREA (incl. ailerons)	415 sq. ft. TOTAL

REMOVABLE AFT DECKING FOR INTERIOR ACCESS

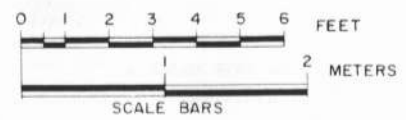
JN-4 WINGS-WITH INBOARD MODIFICATIONS & ADDED CENTER SECTION

CURTISS OXX ENGINE - RATED 100 H.P. EACH AT 1400 rpm. OIL CAPACITY - 4 gals PER ENGINE CARRIED IN CRANKCASE

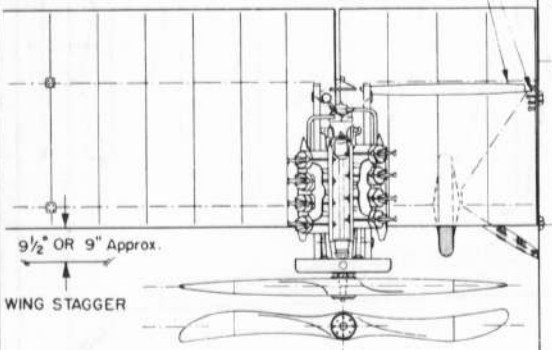
CURTISS D.E.P. CONTROLS

FUEL LINES

BRACING STRUT

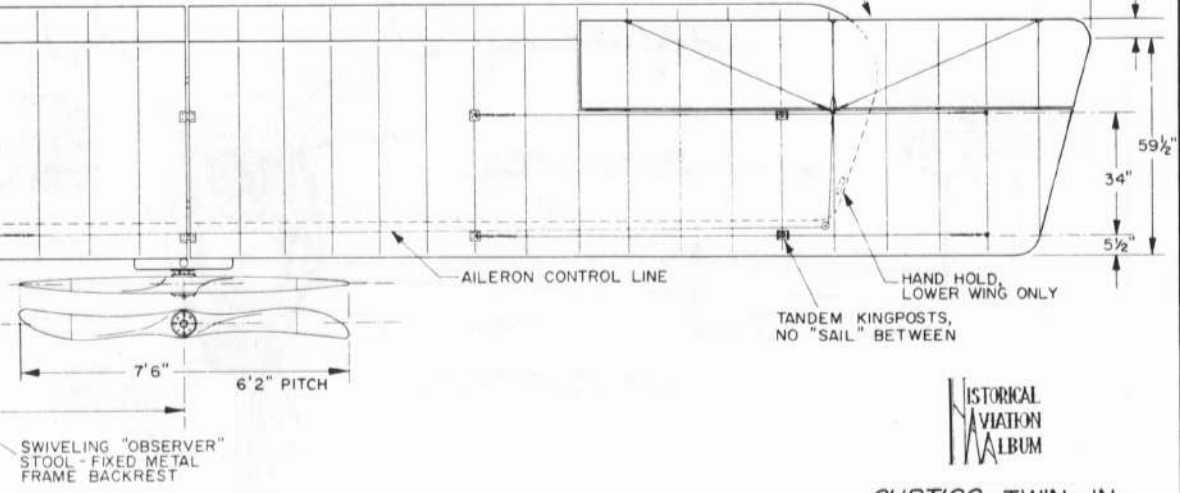


PROTOTYPE, PRIVATELY BUILT, SPRING 1916, SHIPPED TO NEW MEXICO NATIONAL GUARD, 5/15/16 -1  
 PRE-PRODUCTION, RETAINED BY CURTISS FOR TESTING -1  
 FIRST ARMY SIGNAL CORPS CONTRACT (51-43) S/N 102-107 DELIVERED TO COLUMBUS, NEW MEXICO, JULY-AUG. 1916 -6  
 SECOND ARMY CONTRACT (61-91), S/N 428 TO MINEOLA, L.I., 2/1/17 -1  
 THIRD ARMY CONTRACT (6500) AS S/N 470 CANCELLED 1/15/18 -0  
 U.S. NAVY CONTRACT (ONA 35-16) S/N A-93 -1  
 SECOND NAVY CONTRACT CR-65 (ONA 35-16) S/N A-198 -1  
 TOTAL BUILT 11



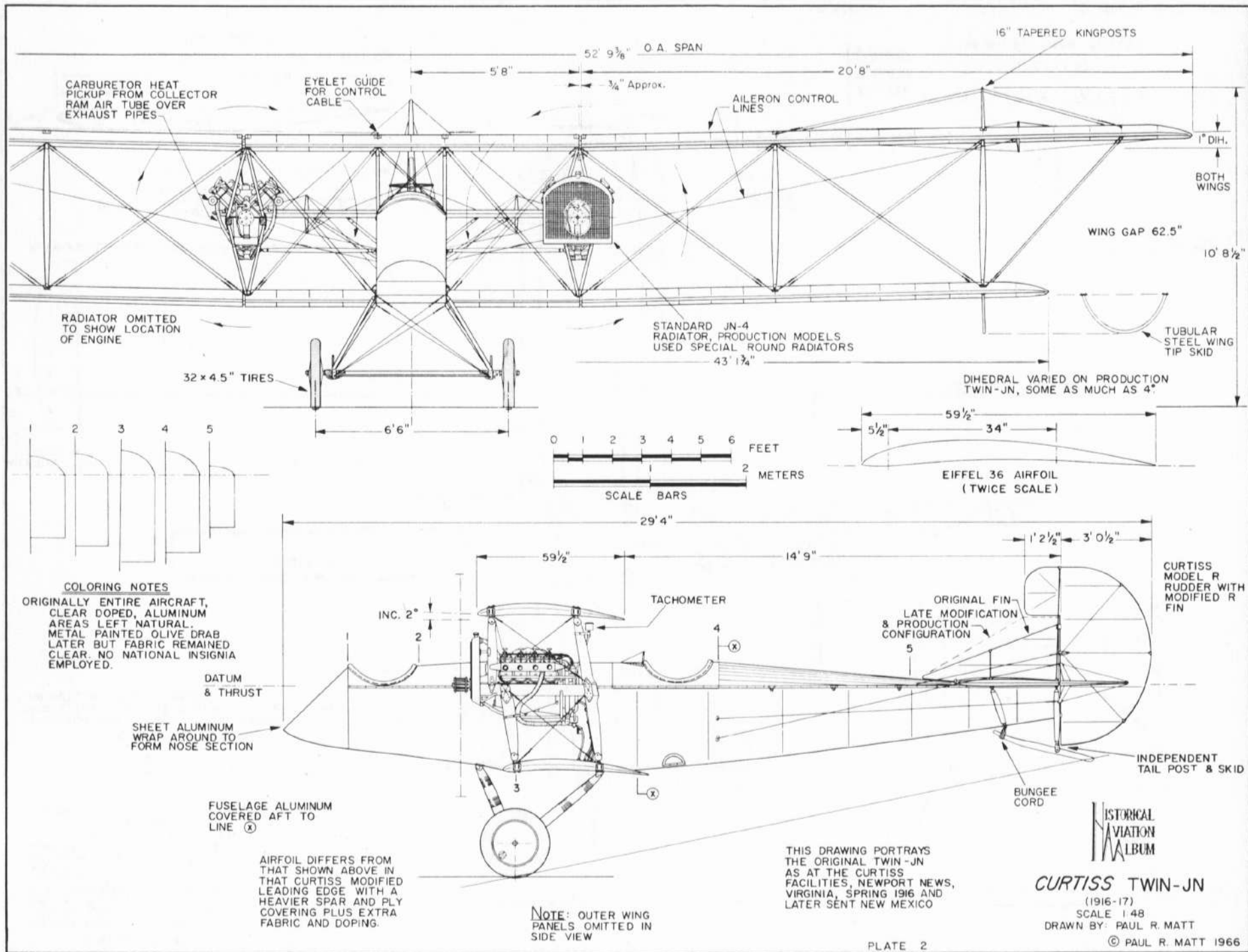
NOTE: COUNTER ROTATION OF PROPELLERS TO OFFSET TORQUE. RIGHT MOTOR - CLOCKWISE LEFT MOTOR - COUNTER CLOCKWISE

FUEL TANK AT C.G. (105 gals cap.) LOCATED IN THREE SEPERATE TANKS



HISTORICAL AVIATION ALBUM

CURTISS TWIN-JN  
 (1916-17)  
 SCALE 1:48  
 DRAWN BY: PAUL R. MATT



HISTORICAL  
 AVIATION  
 ALBUM

**CURTISS TWIN-JN**

(1916-17)  
 SCALE 1:48  
 DRAWN BY: PAUL R. MATT

© PAUL R. MATT 1966

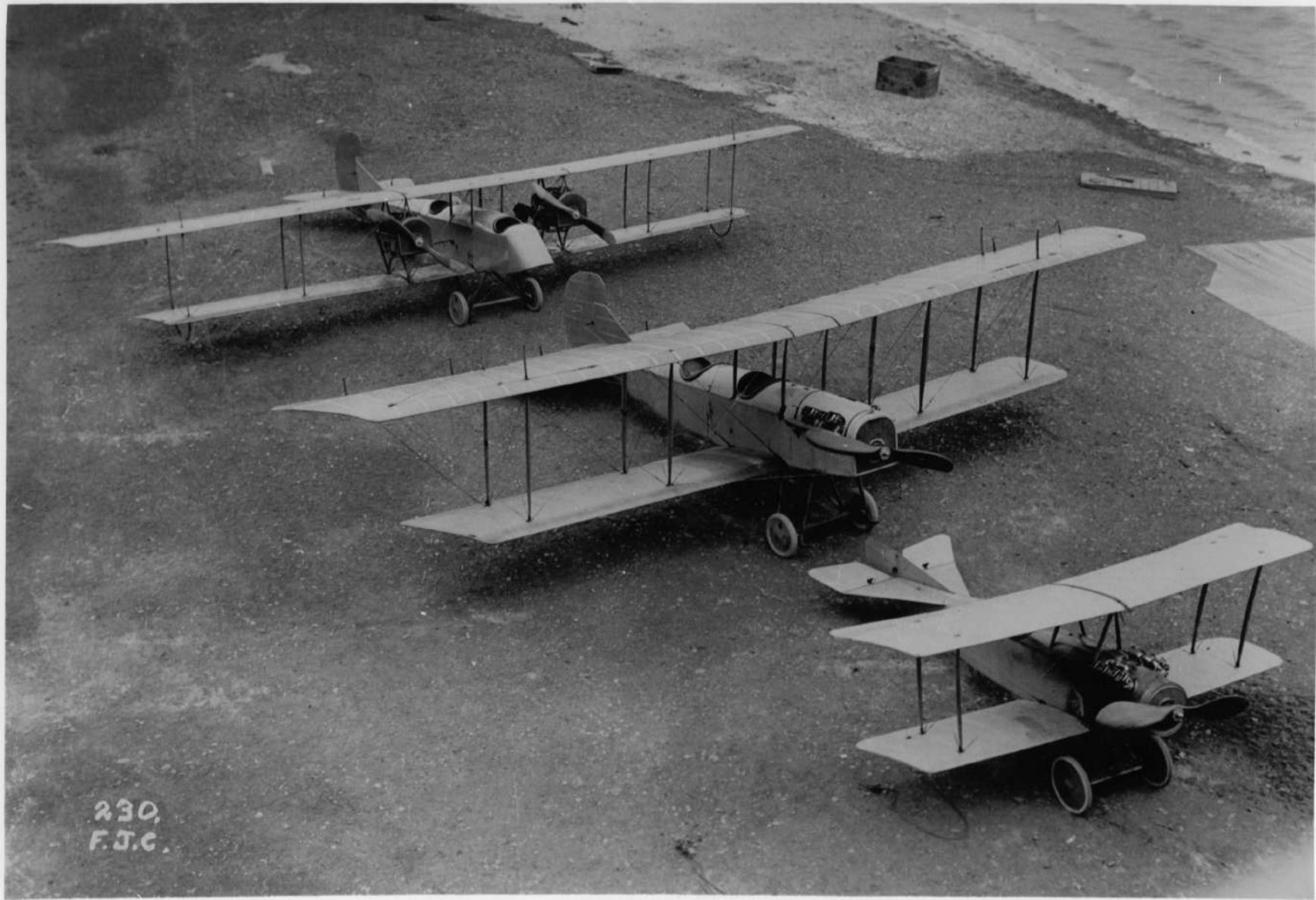




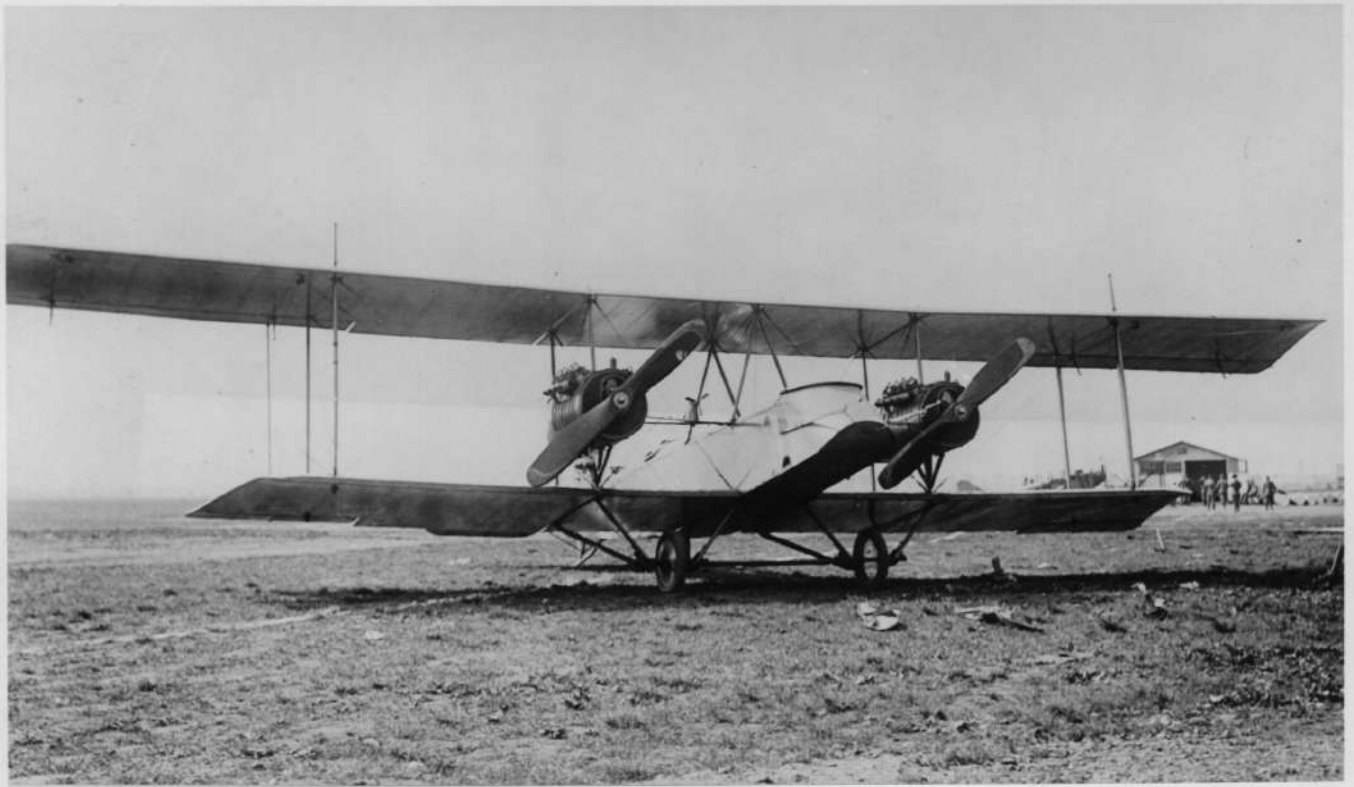
216.  
F.J.C.

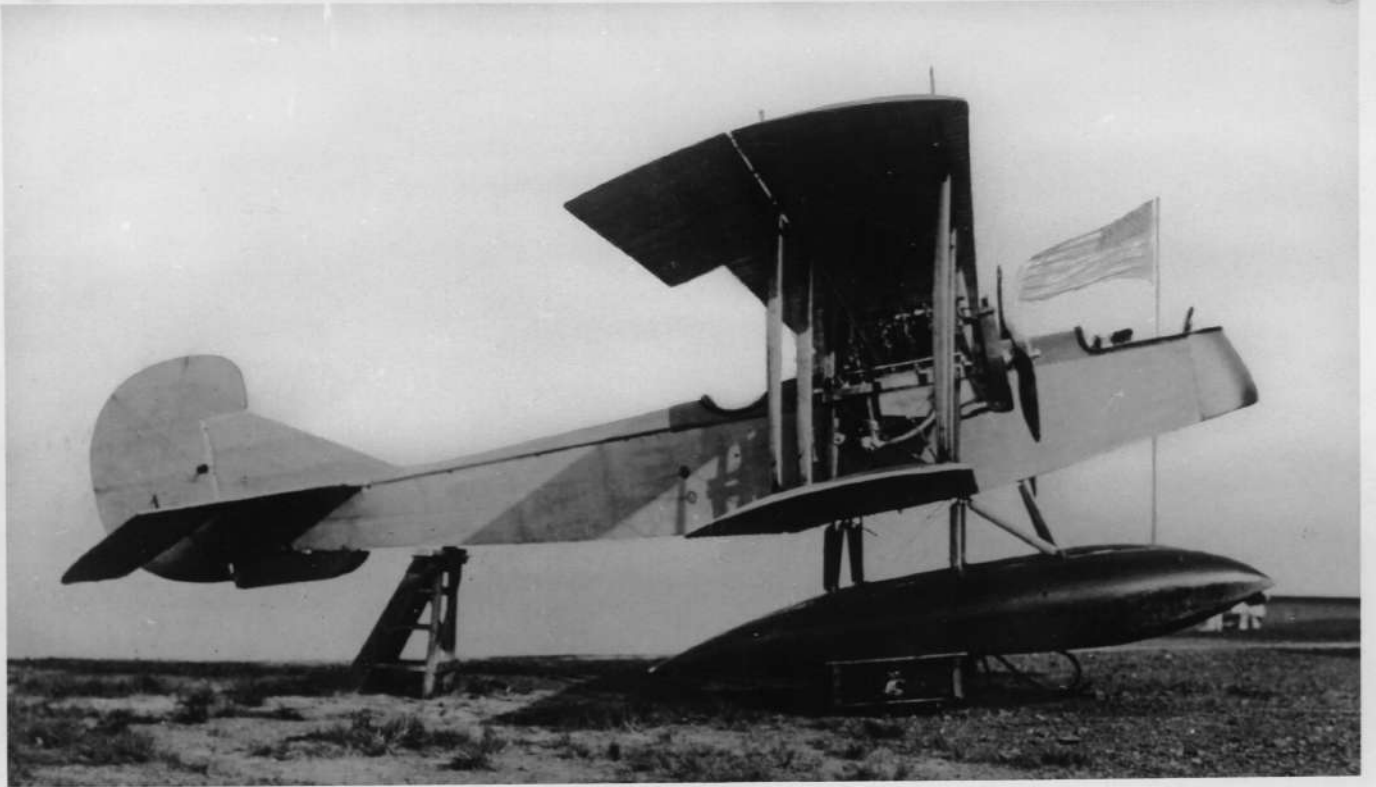


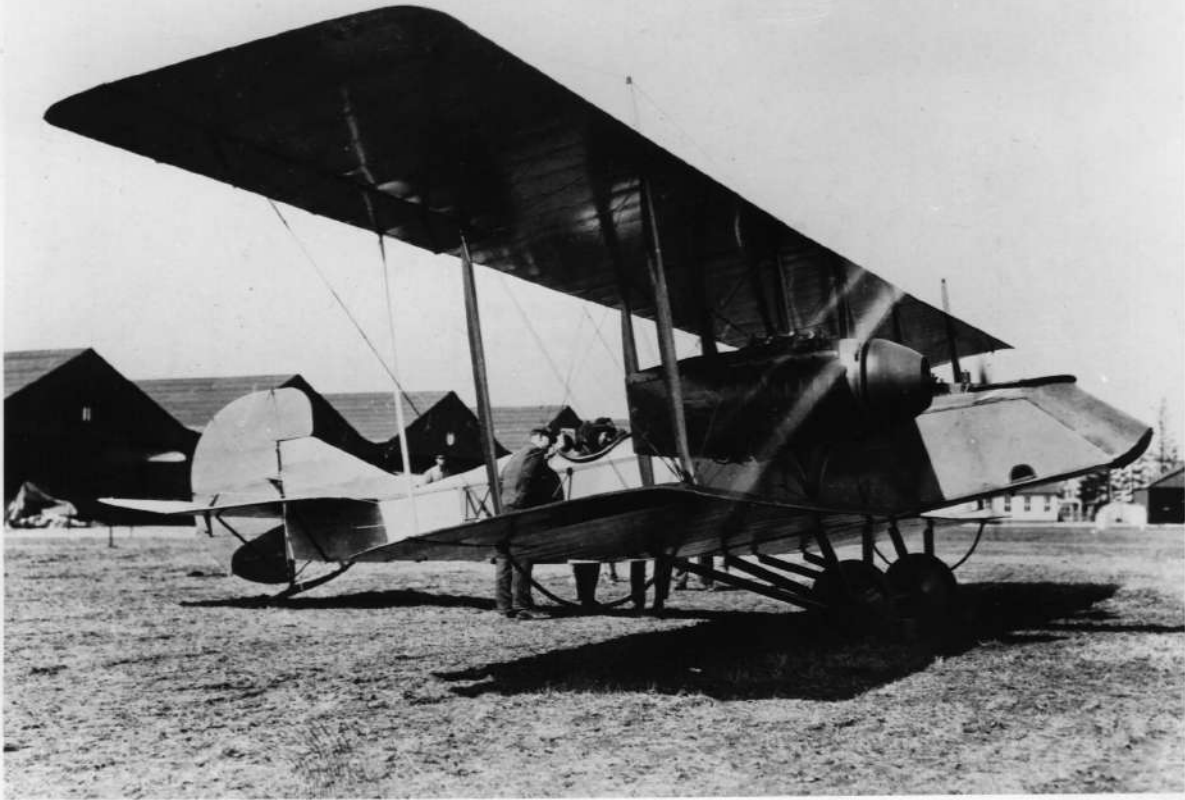
The twin-motor ~~Carter~~ Curtiss plane donated by the citizens  
of New Mexico.

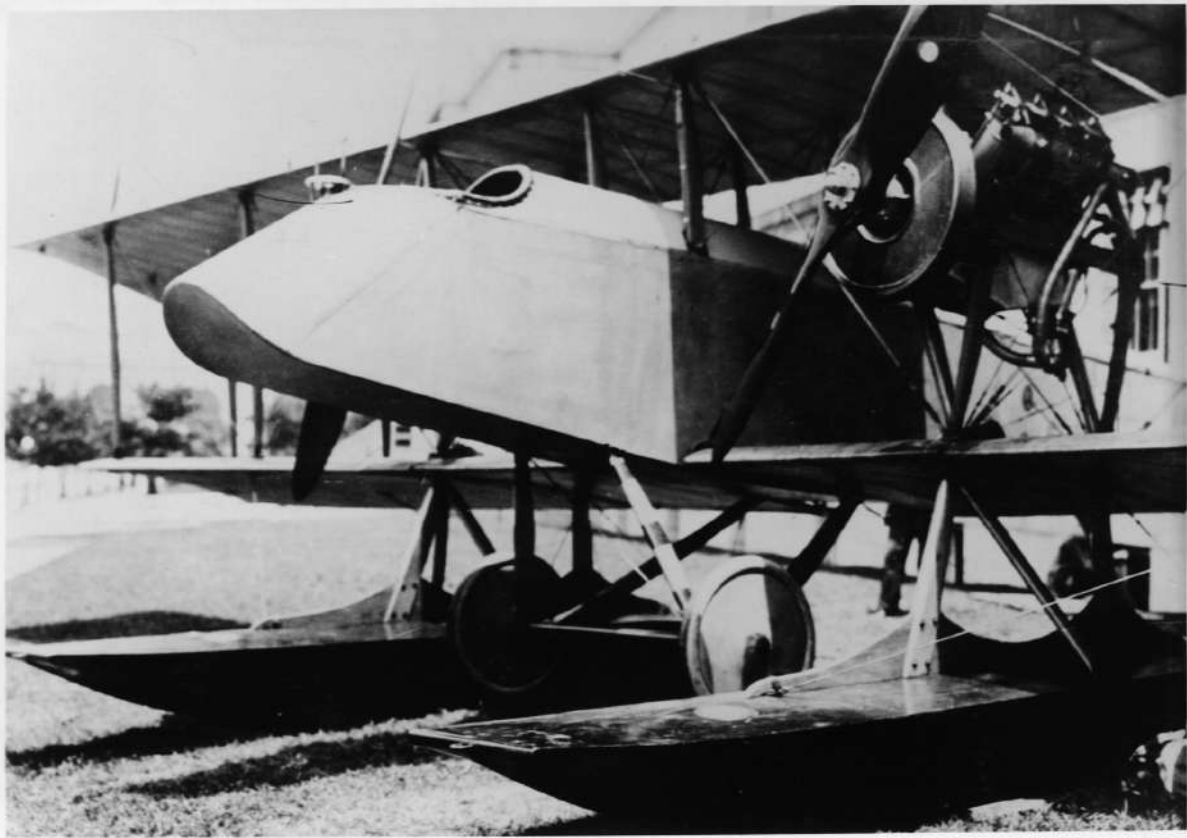


230,  
F.J.C.



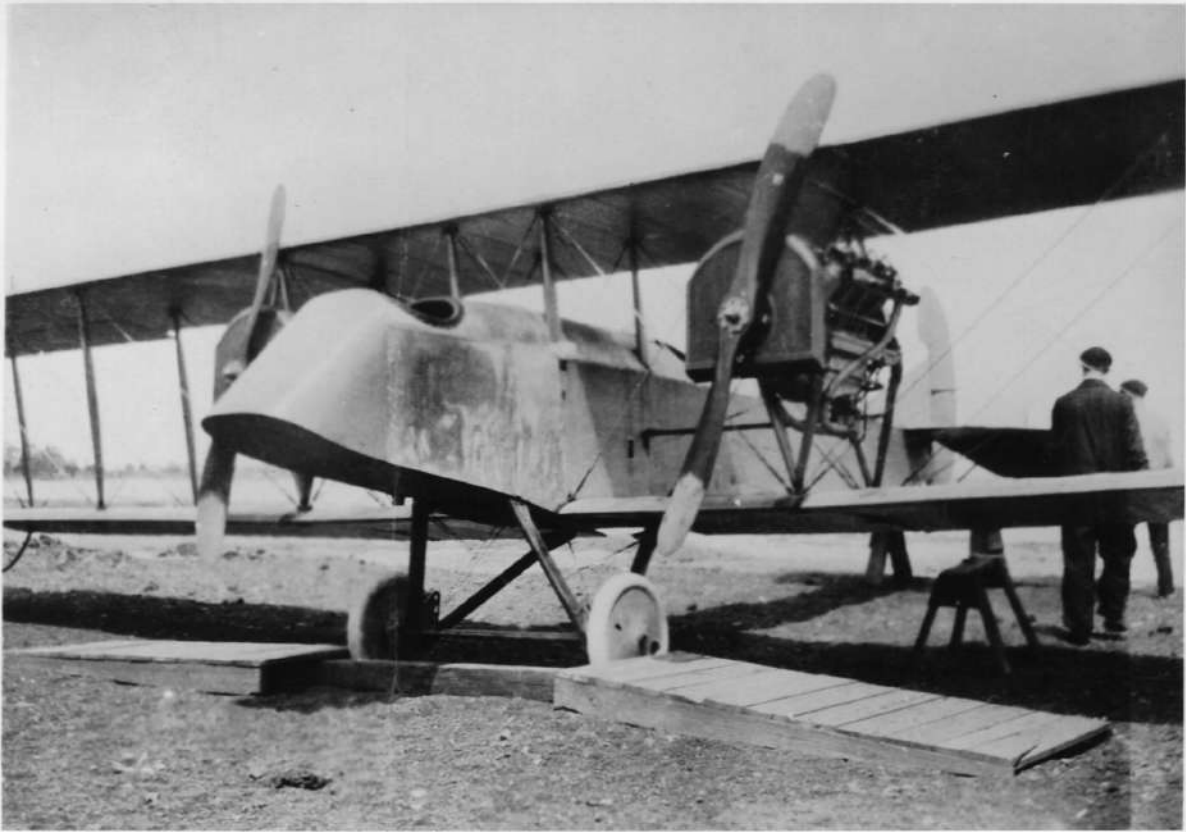


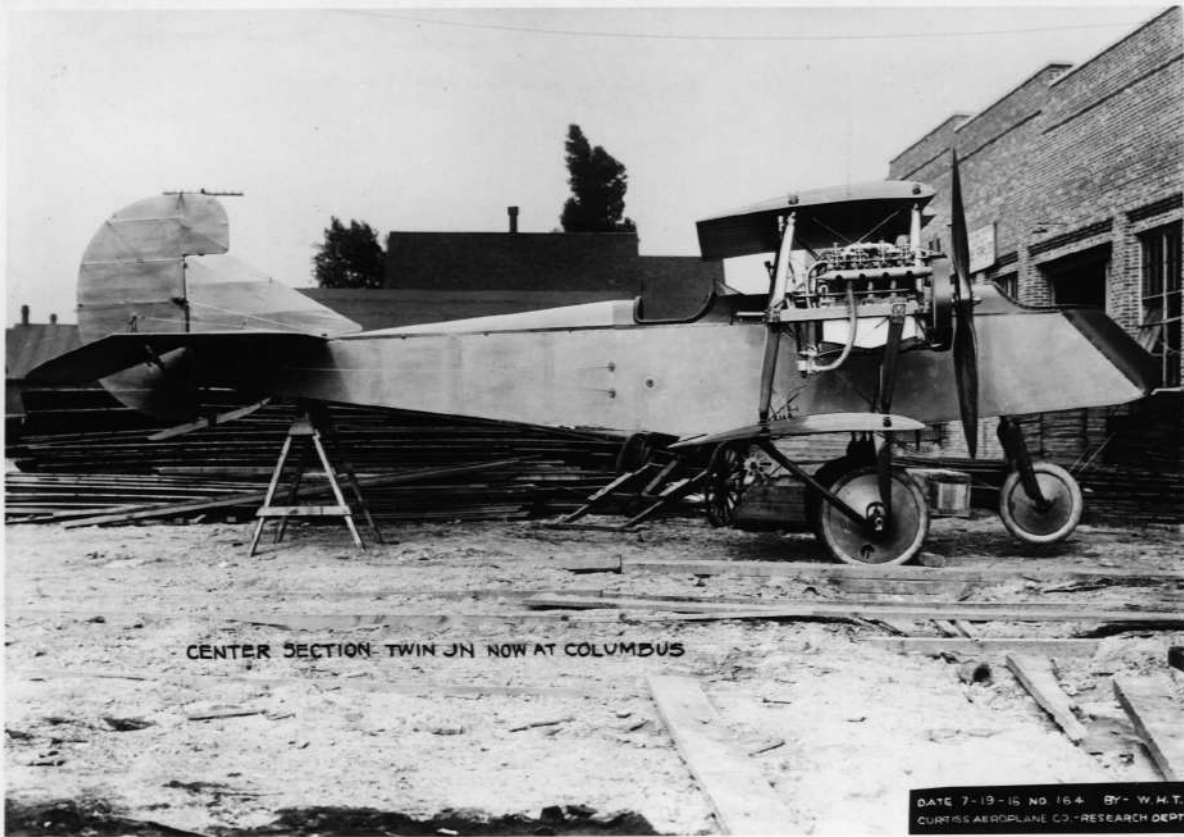






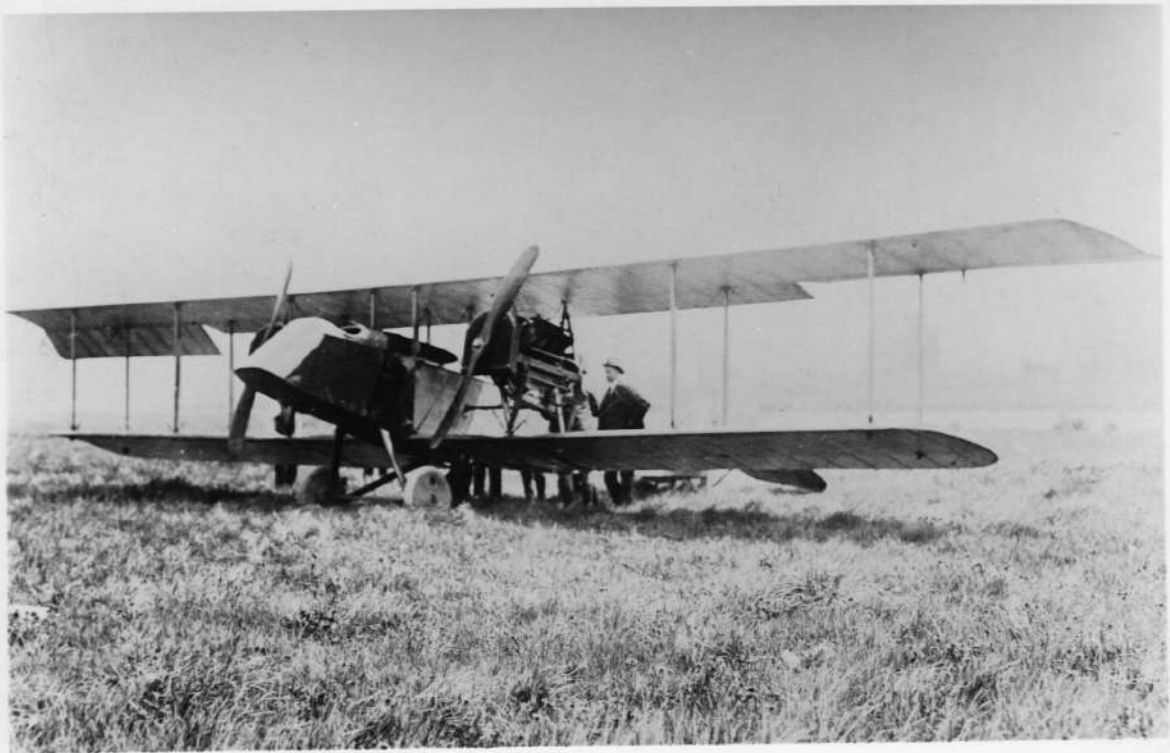


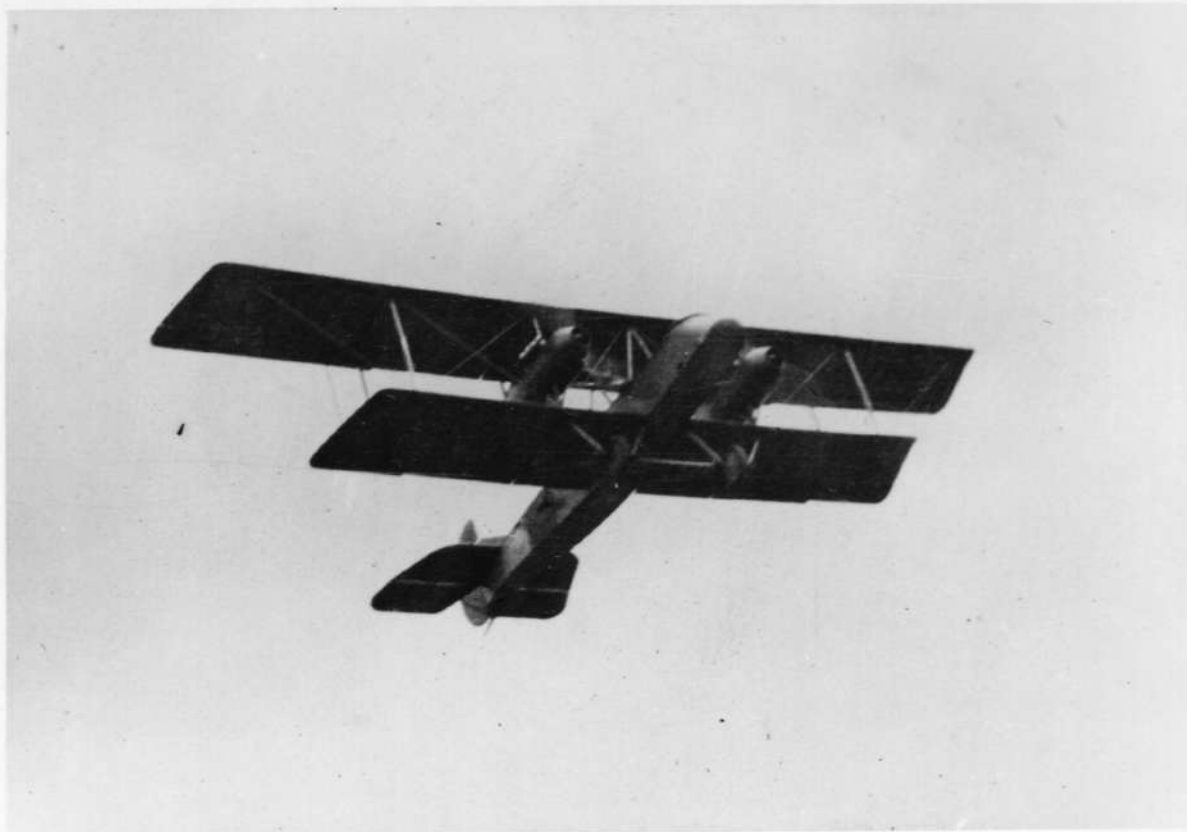


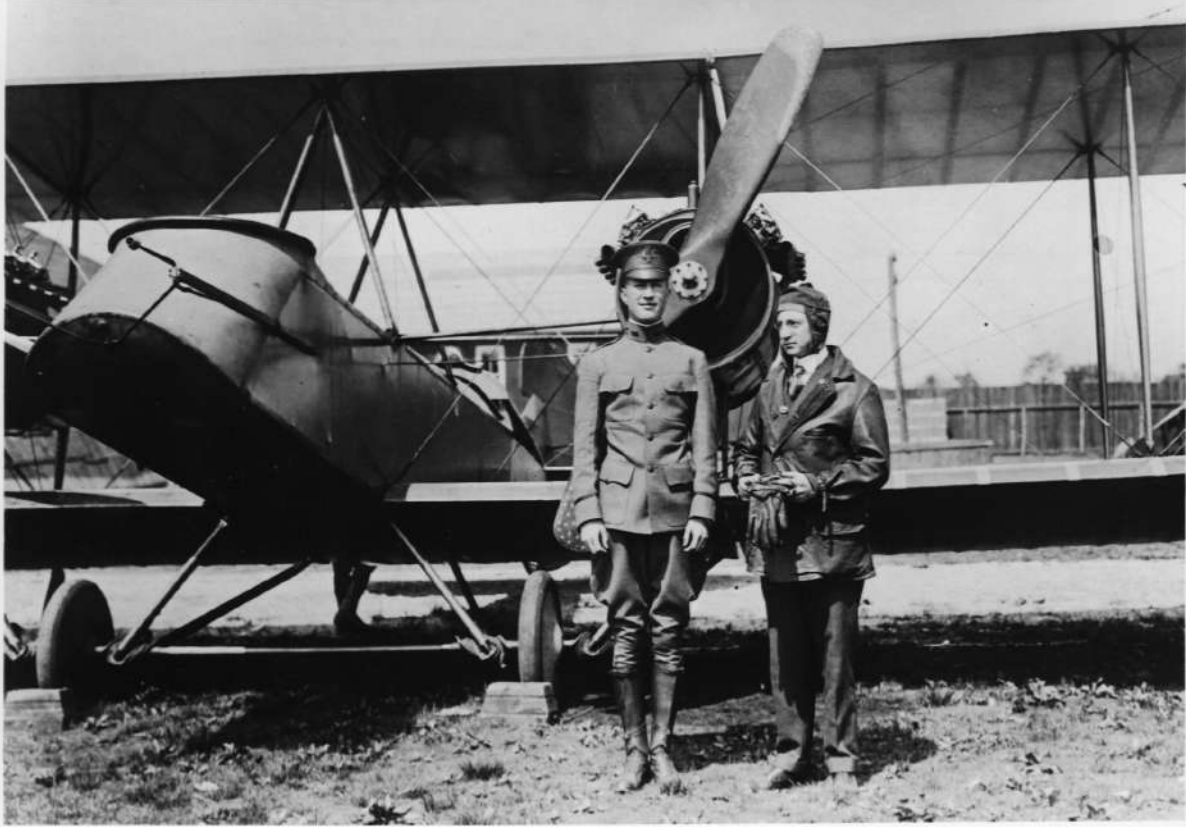


CENTER SECTION TWIN JN NOW AT COLUMBUS

DATE 7-19-16 NO. 164 BY W.H.T.  
CURTIS AIRPLANE CO. RESEARCH DEPT.

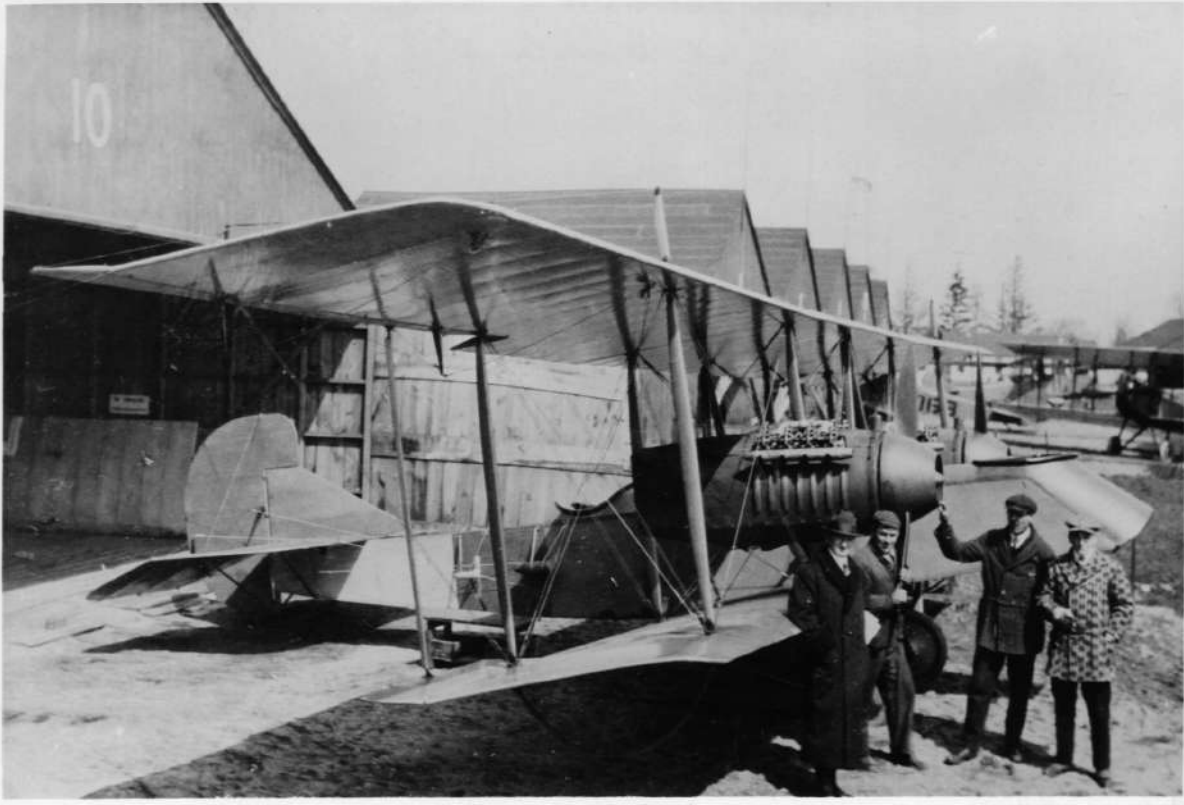


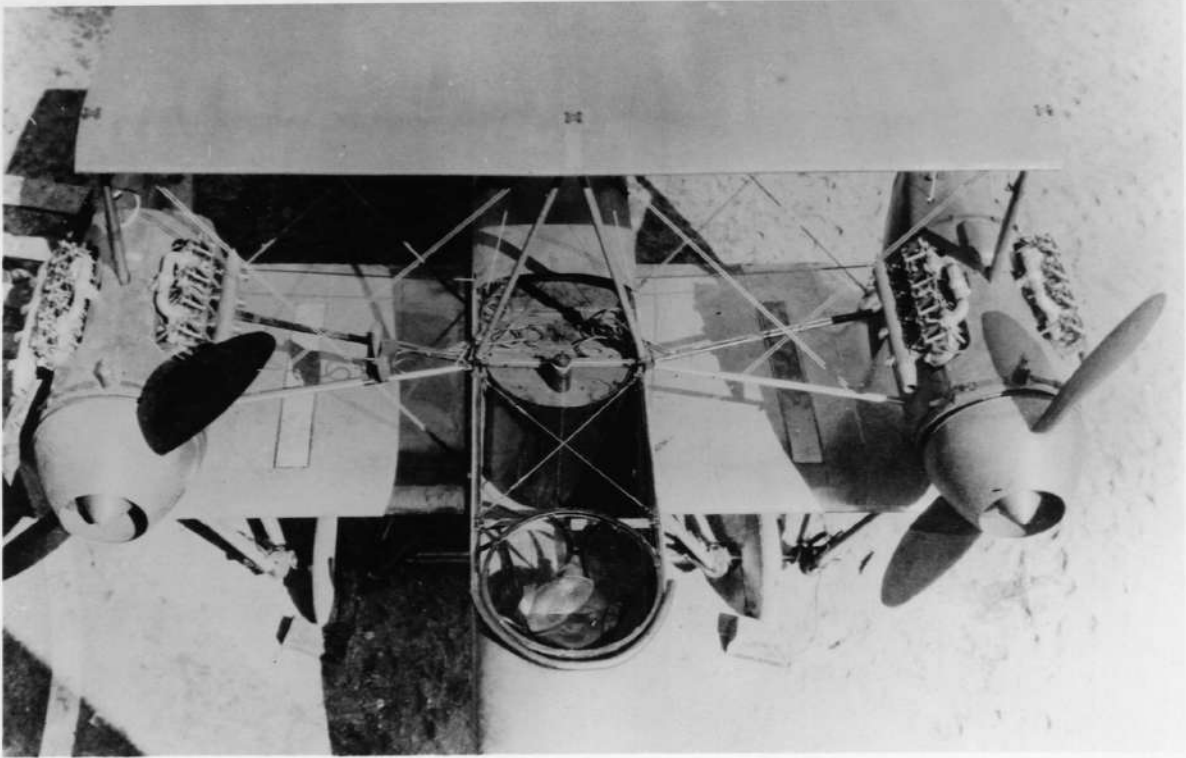


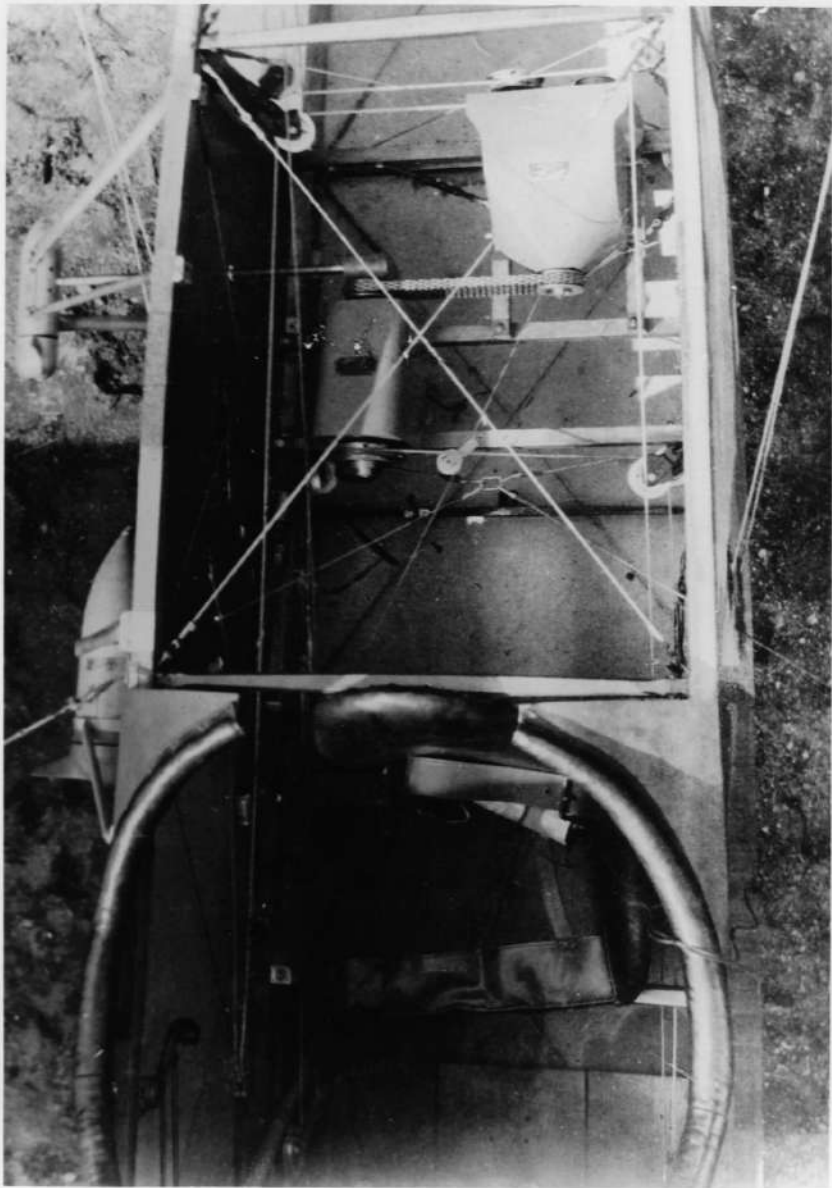


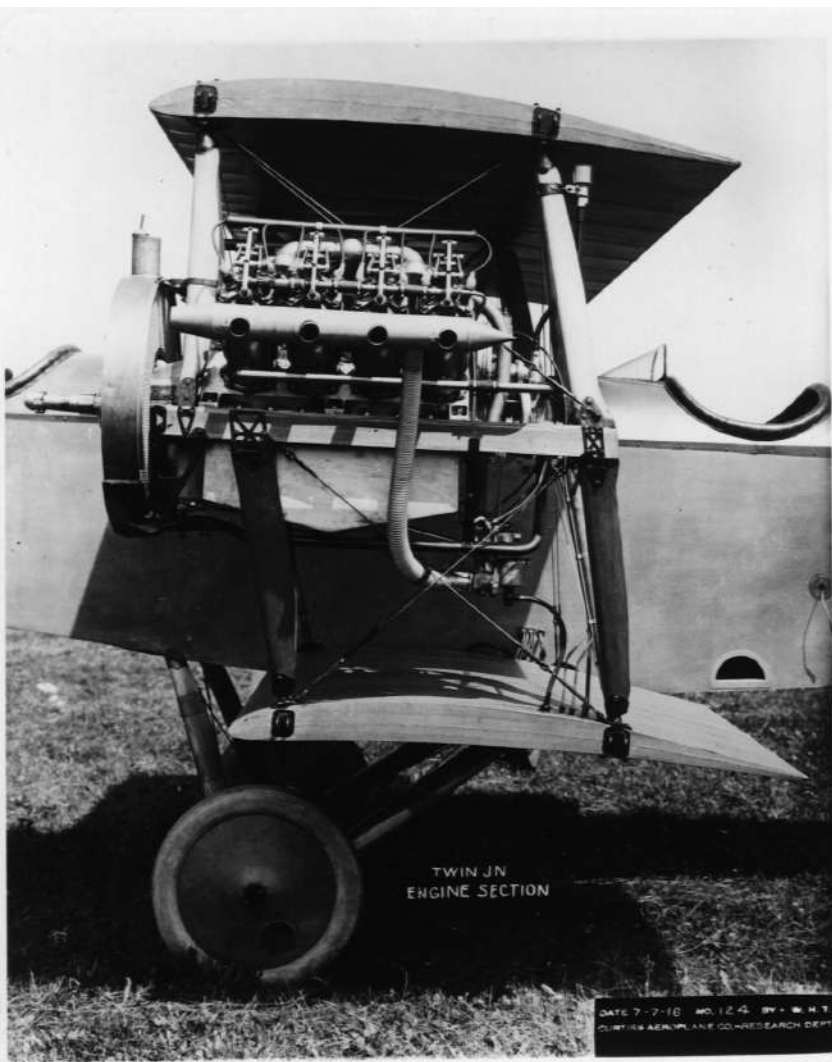












TWIN JN  
ENGINE SECTION

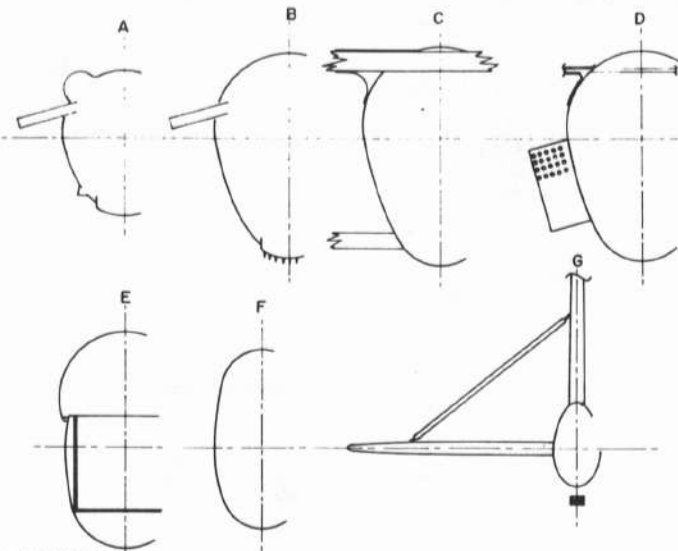
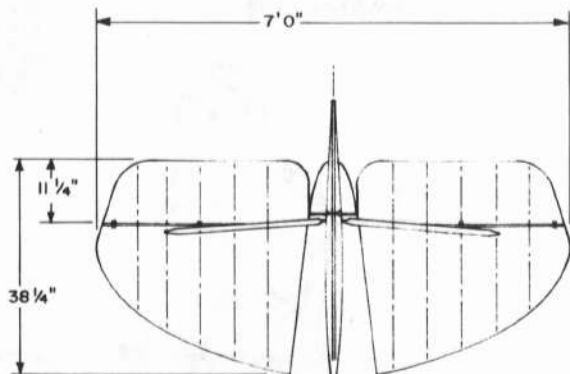
DATE 7-7-18 NO. 124 BY - M. H. T.  
COURTESY AIRPLANE CO. RESEARCH DEPT.

GENERAL SPECIFICATIONS

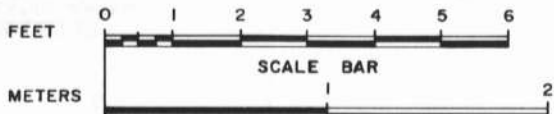
WEIGHT EMPTY	1816 lbs.
USEFUL LOAD	591 lbs.
GROSS WEIGHT	2407 lbs.
FUEL CAPACITY	40 gals.
OIL CAPACITY	8 gals.
WATER	10 lbs.
MAXIMUM SPEED	190 m.p.h.
LANDING SPEED	100 m.p.h.
PERFORMANCE ESTIMATED AS BIPLANE	
POWER - 400 H.P. CURTISS-KIRKHAM K-12 (C-12)	

COLORING NOTES

FUSELAGE AND SPINNER - FIRE ENGINE RED  
 WINGS, TAIL SURFACES & STRUTS - CLEAR DOPED  
 PROPELLER, DETAILS - BLACK



CANOPY SLID FORWARD ON RAILS, WOULD FLEX APART WITH FUSELAGE CONTOUR WHEN IN FORWARD POSITION. PILOT ROHLFS PERSONALLY SLIT THE TOP  $\frac{1}{2}$  OF CANOPY & INSTALLED WIRE RELEASE GROMETS AS AN EMERGENCY PRECAUTION AS SLIDES OCCASIONALLY STUCK OR WOULD BIND.



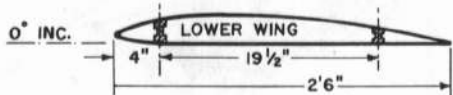
RADIATOR FILL CAP & EXPANSION TANK

AILERON CHORD  
9"

6'6"

PLYWOOD LEADING EDGE, FABRIC COVERED WINGS

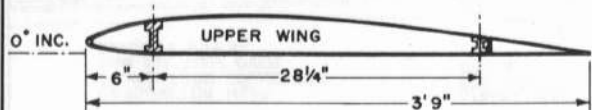
REMOVABLE WING TIPS



CARBURETOR INTAKES

5'0"

BONNET FAIRING OVER ENGINE CYLINDER HEADS



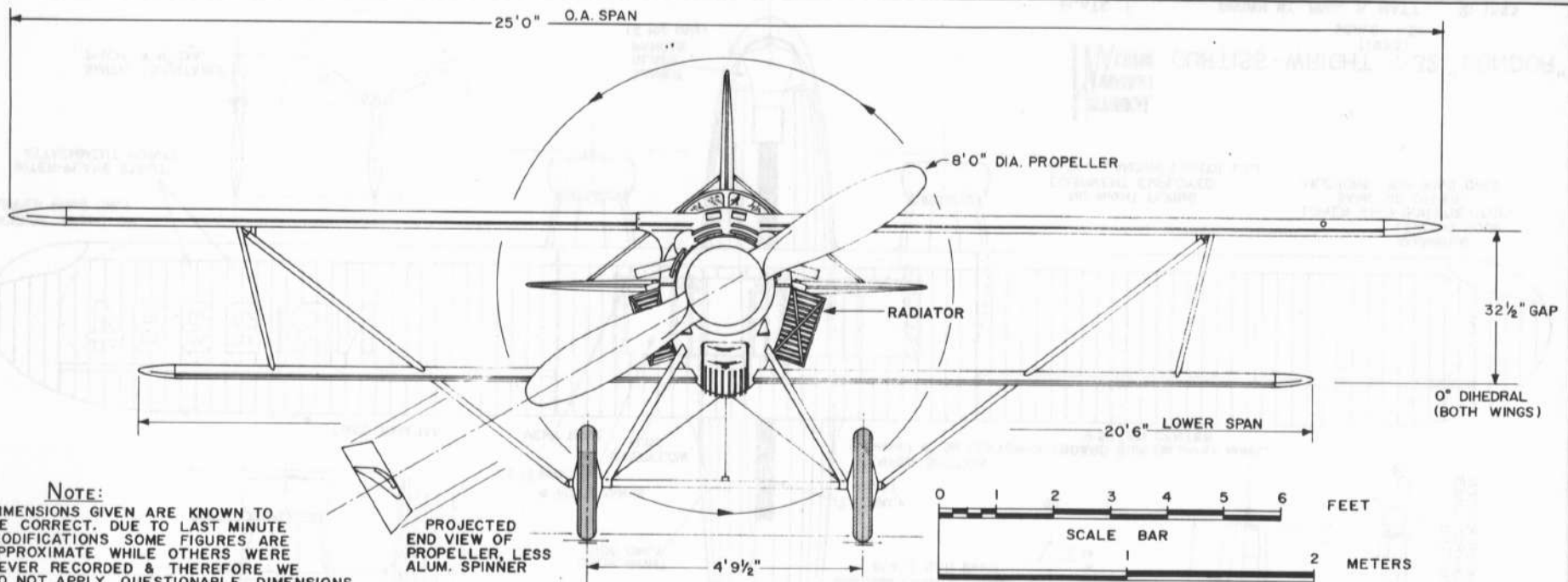
AIRFOILS SPECIAL DESIGN OF DR. A. F. ZAHM  
(TWICE SCALE)



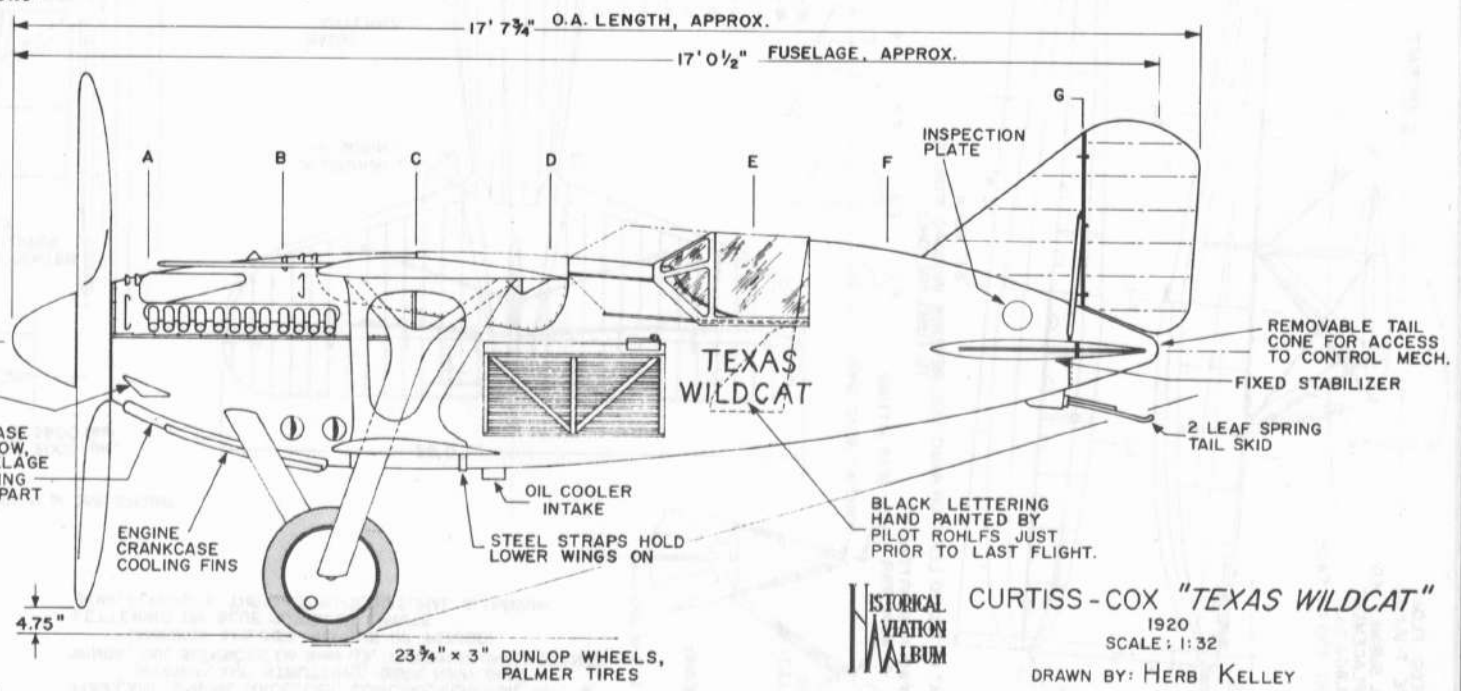
CURTISS-COX "TEXAS WILDCAT"

1920  
SCALE: 1:32

DRAWN BY: HERB KELLEY



**NOTE:**  
 DIMENSIONS GIVEN ARE KNOWN TO BE CORRECT. DUE TO LAST MINUTE MODIFICATIONS SOME FIGURES ARE APPROXIMATE WHILE OTHERS WERE NEVER RECORDED & THEREFORE WE DO NOT APPLY QUESTIONABLE DIMENSIONS.



FUSELAGE 3-PLY WOOD MONOCOQUE CONSTRUCTION, ALUMINUM COVERING & FAIRING OVER ENGINE & CENTER SECTION OF UPPER WING.

WHEEL FAIRINGS - "PANTIES" - WERE USED FOR PHOTOS & DISPLAY ONLY, AIRCRAFT NEVER FLOWN WITH THEM ON.

**HISTORICAL AVIATION ALBUM**

CURTISS-COX "TEXAS WILDCAT"

1920

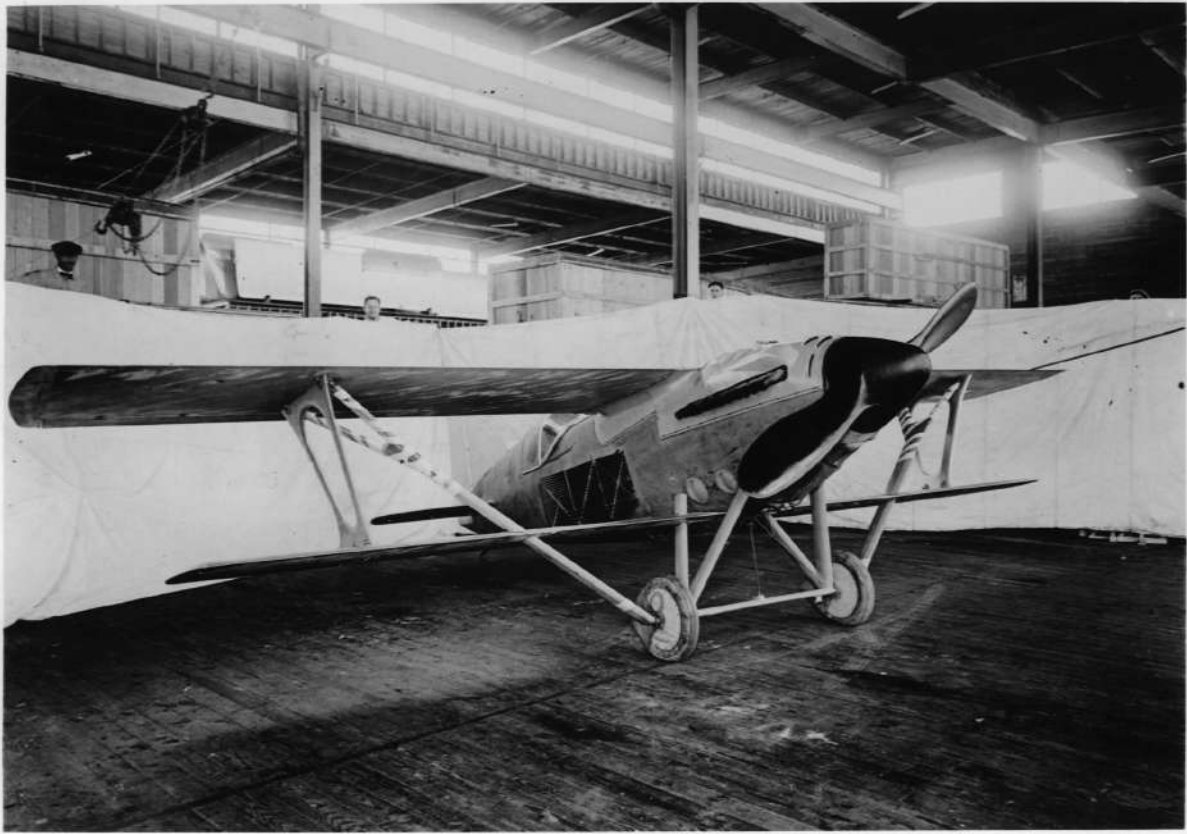
SCALE: 1:32

DRAWN BY: HERB KELLEY

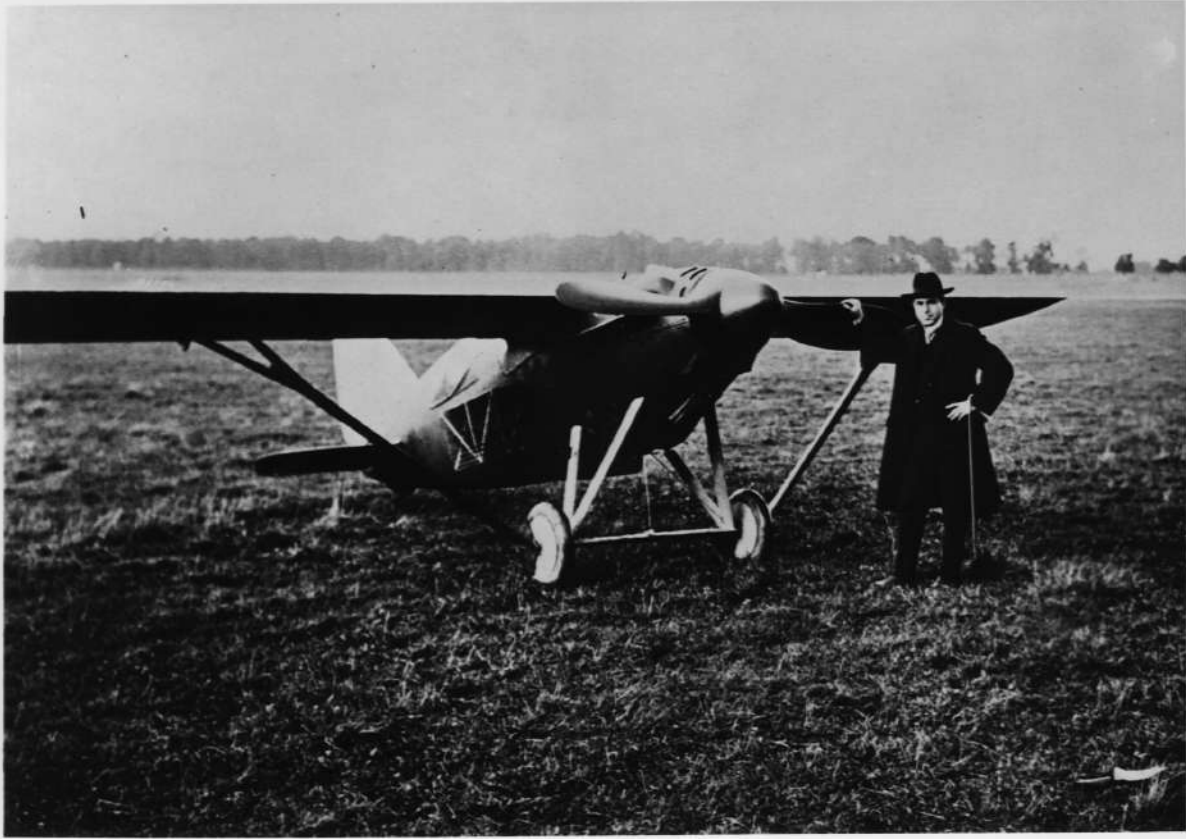


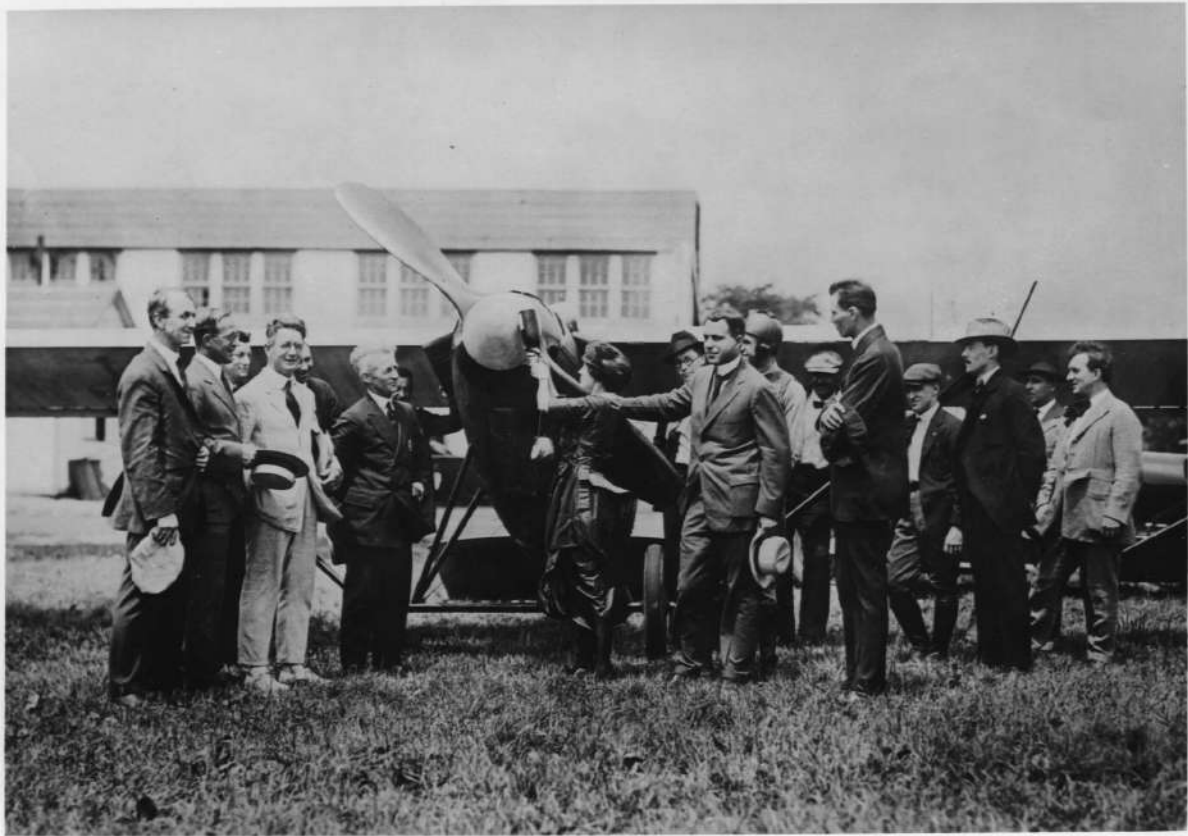


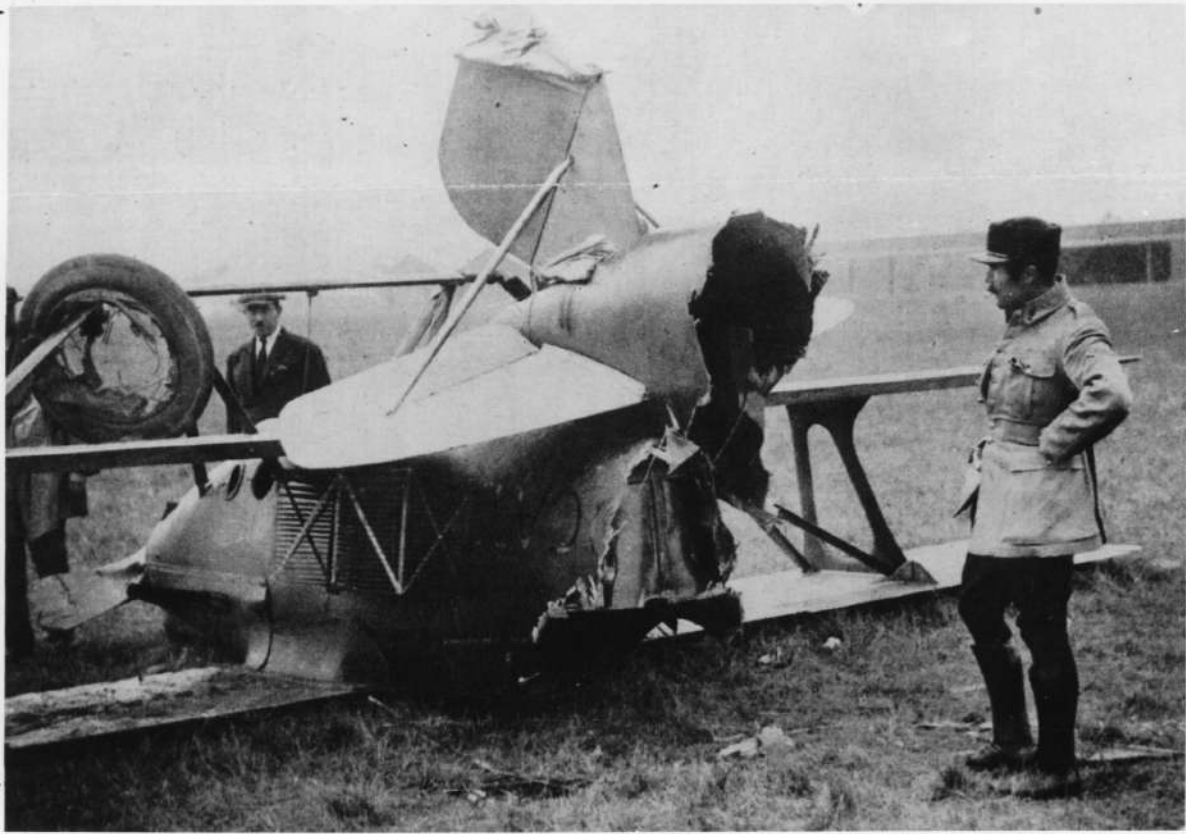












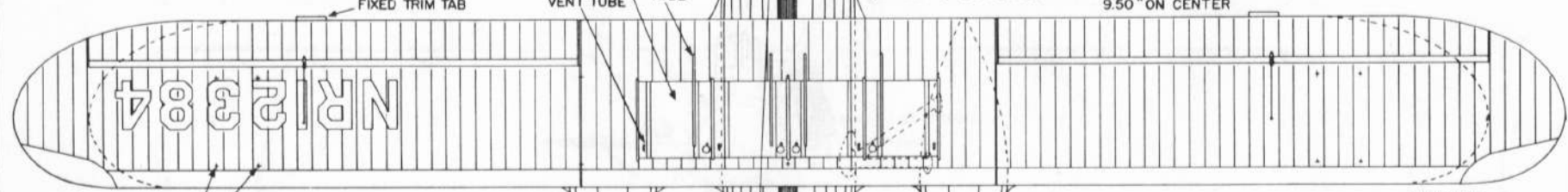
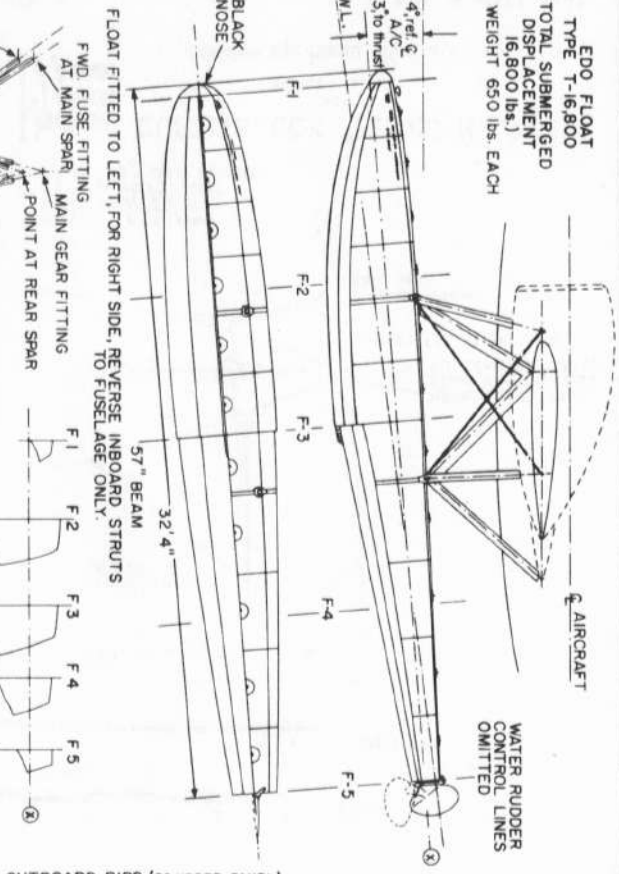
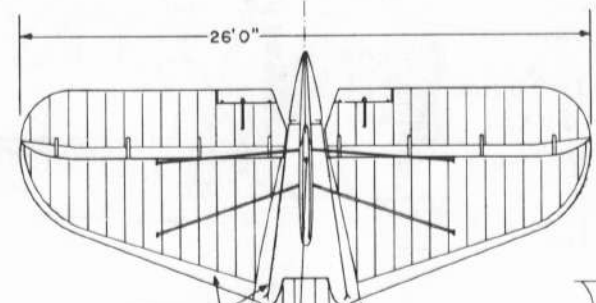
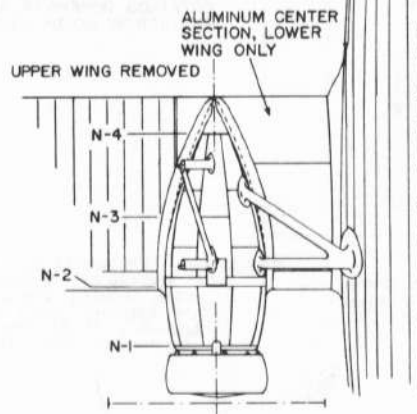
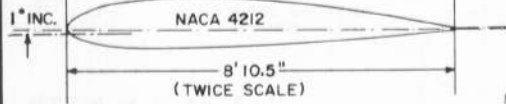
**GENERAL SPECIFICATIONS**  
(Adm. R.E. BYRD'S T-32, serial no. 41)

FIGURES APPROXIMATE

WEIGHT EMPTY	10026 lbs.
USEFUL LOAD	6774 "
WEIGHT GROSS	16800 "
FUEL CAPACITY	1100 gals.
OIL CAPACITY	60 "
MAXIMUM SPEED (wheel or ski)	170 mph
CRUISING SPEED	146 "
LANDING, STALLING SPEED	59 "
WING AREA (incl. ailerons)	1331 sq. ft.
SERVICE CEILING	15000 feet, 2000 ft. on ONE ENGINE
RANGE AT CRUISE	1200 miles
ENGINES - 9 cylinder WRIGHT 'Cyclone'	
SR-1B20F-2 UNGEARED - 703 H.P. ea., at 2000 rpm,	
at 3900 feet	

**COLOR NOTES**  
FUSELAGE, ENGINE MACELLES, COWLING, VERTICAL TAIL & INTER-PLANE STRUTTING, DARK NAVY BLUE  
WINGS, TAIL SURFACES (to lines ②), INTERNATIONAL ORANGE  
(AMERICA AIRLINES SCHEME OF PERIOD)  
LETTERING ON BLUE SURFACES, WHITE  
SKIIS, FLOATS & THEIR STRUTS, NATURAL ALUMINUM

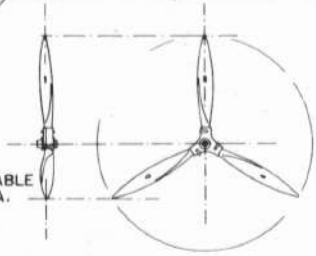
EDO FLOAT  
TYPE T-16,800  
TOTAL SUBMERGED  
DISPLACEMENT  
16,800 lbs.  
WEIGHT 650 lbs. EACH



LICENSE (black) ON UPPER WING ONLY

INTER-PLANE STRUT ATTACHMENT POINTS

SMITH ADJUSTABLE PITCH, 9' 8" DIA.



AMBER GLASS PANELS (2 top only)

NO NIGHT FLYING EQUIPMENT EMPLOYED (NAV. or LANDING LIGHTS, etc.)

ALUMINUM LEADING EDGE LOWER WING CONSTRUCTION SAME AS UPPER. AILERONS, TOP WING ONLY

HISTORICAL AVIATION MUSEUM

CURTISS-WRIGHT T-32 "CONDOR" (1933)

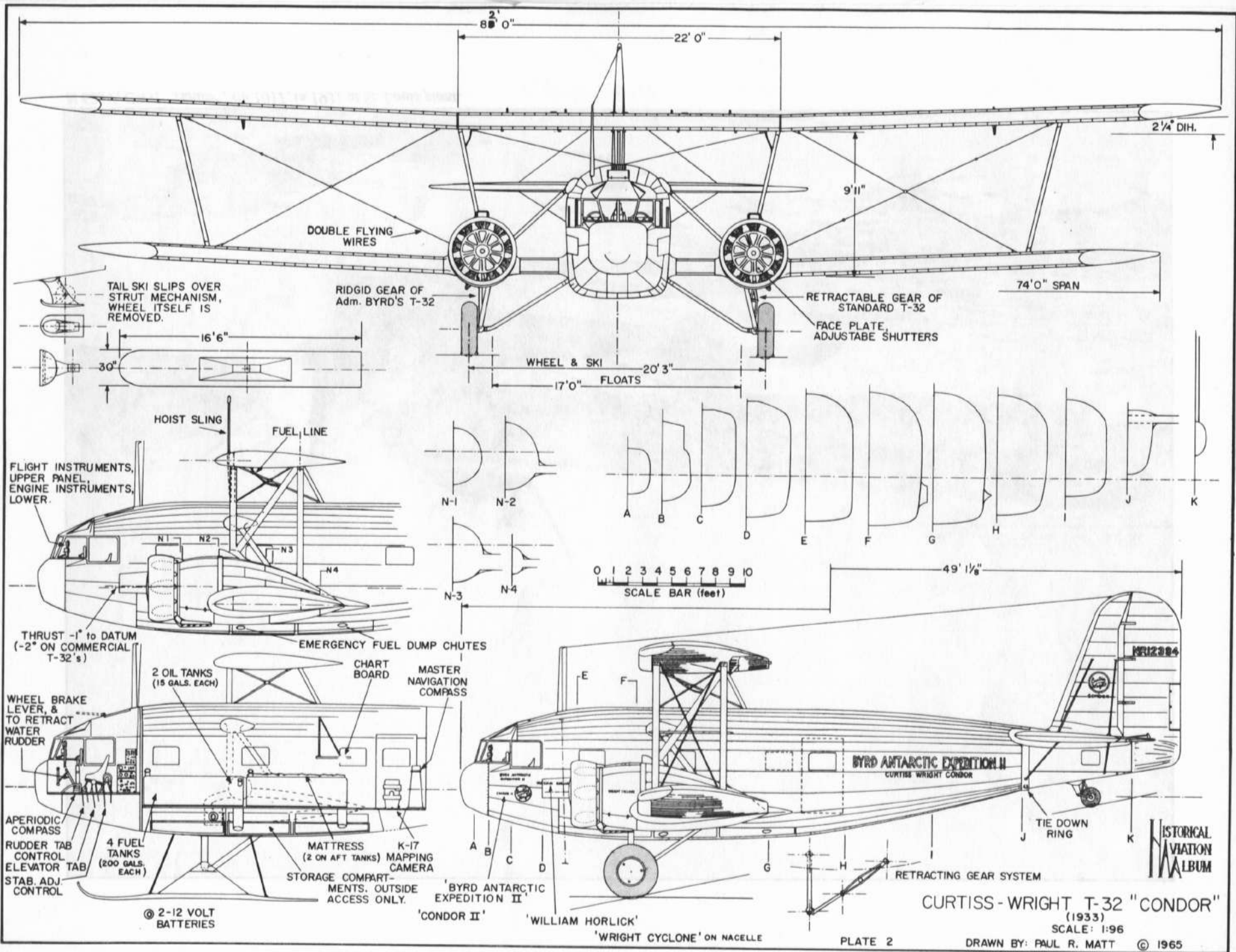
SCALE: 1:96

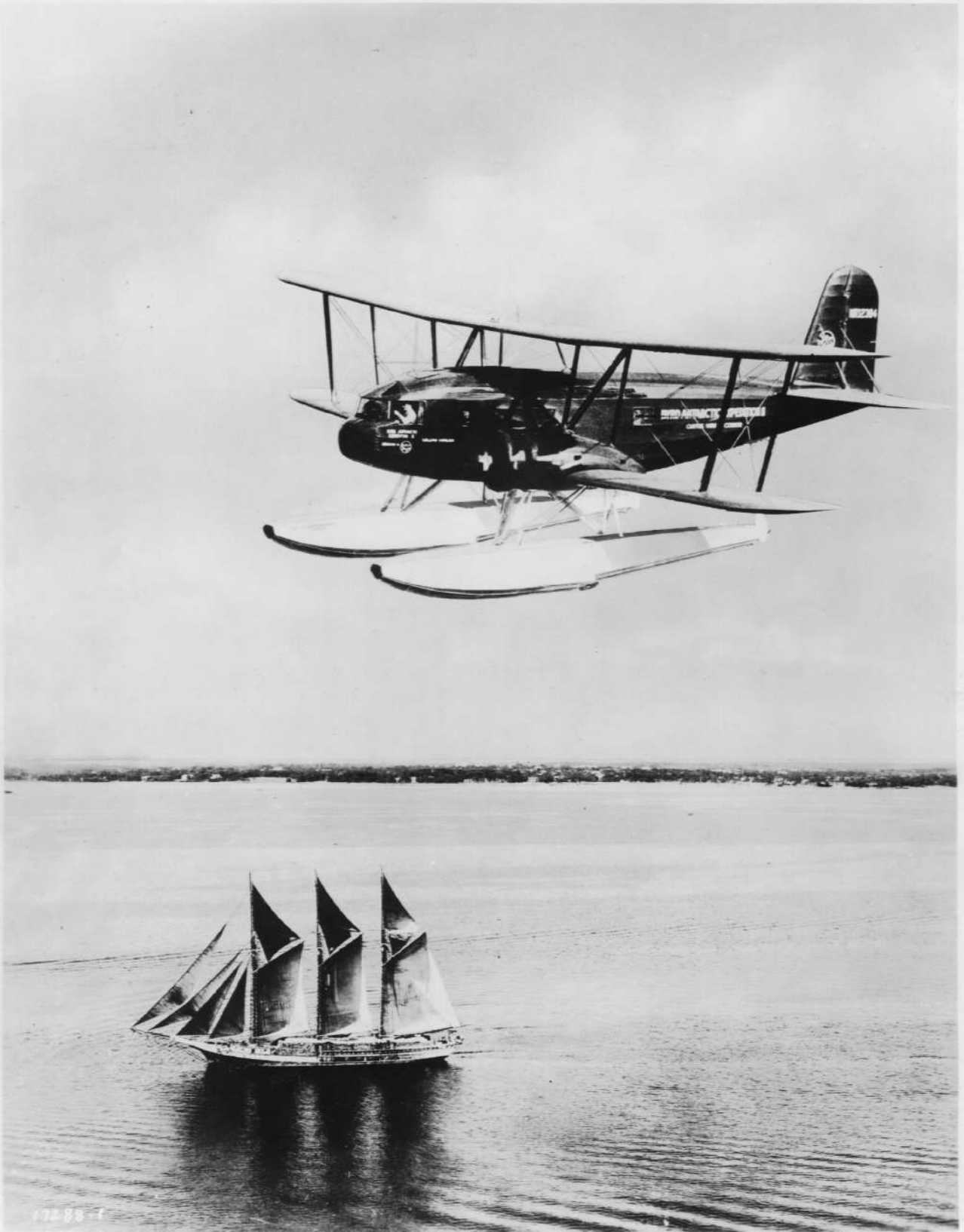
PLATE 1

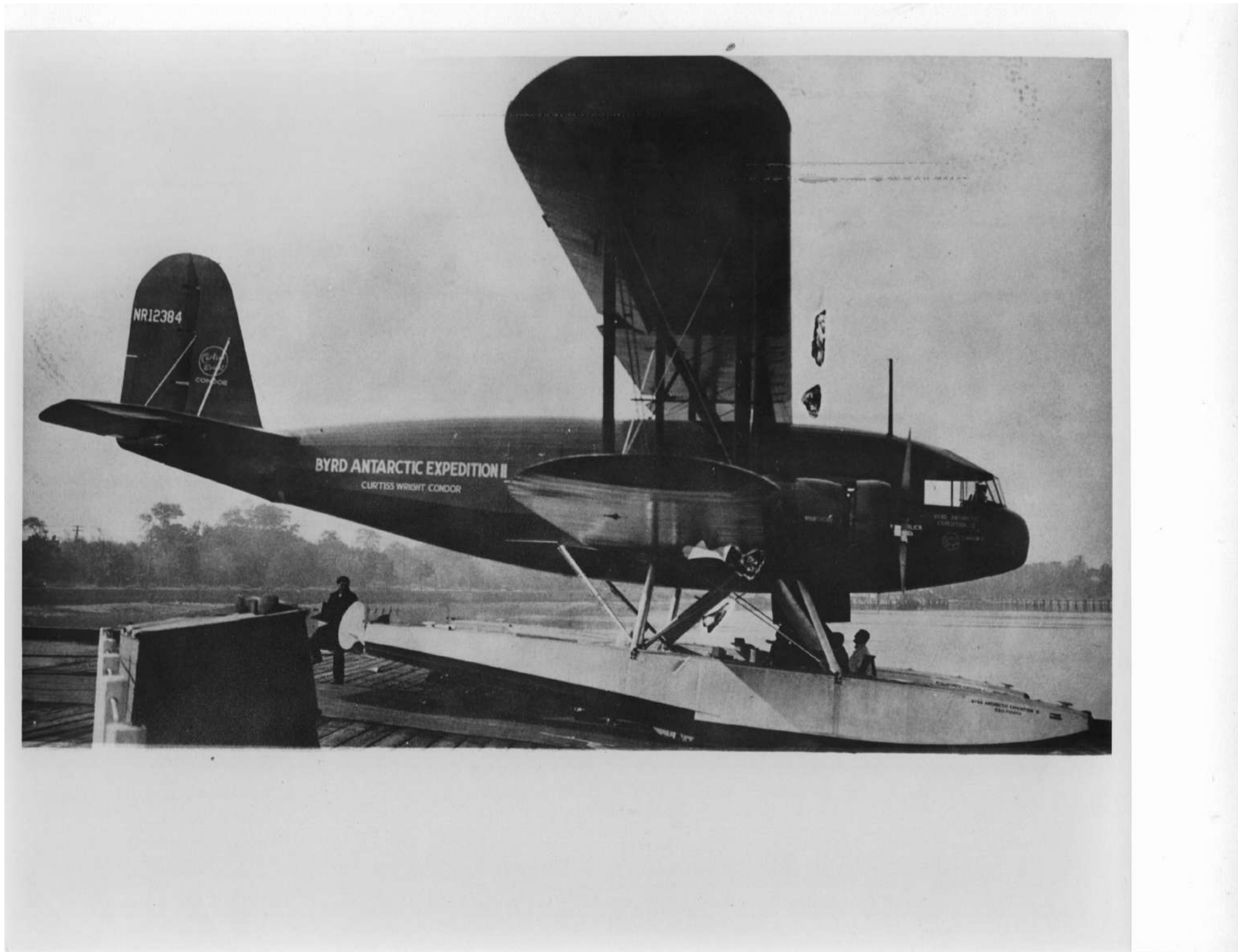
DRAWN BY: PAUL R. MATT

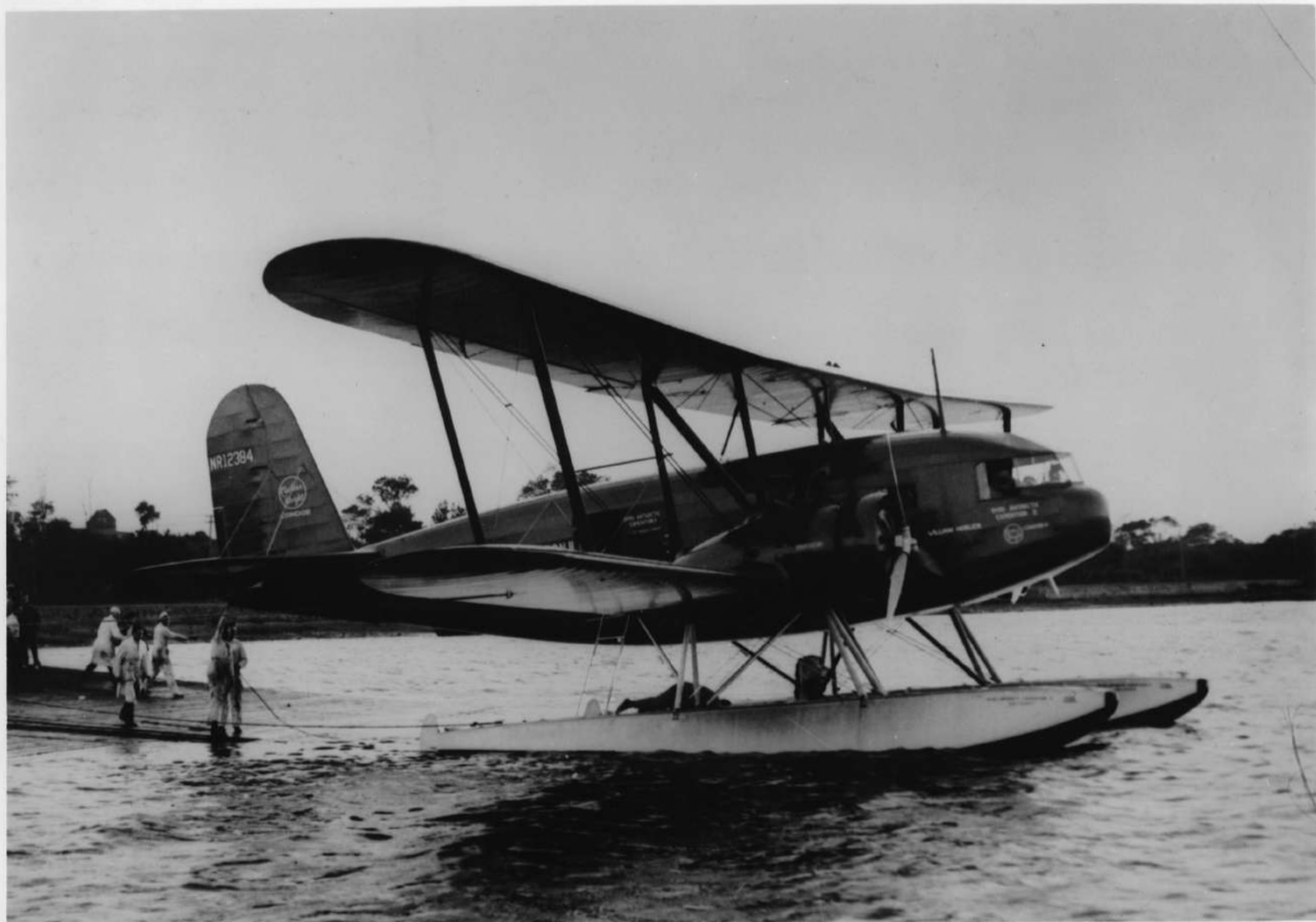
© 1965





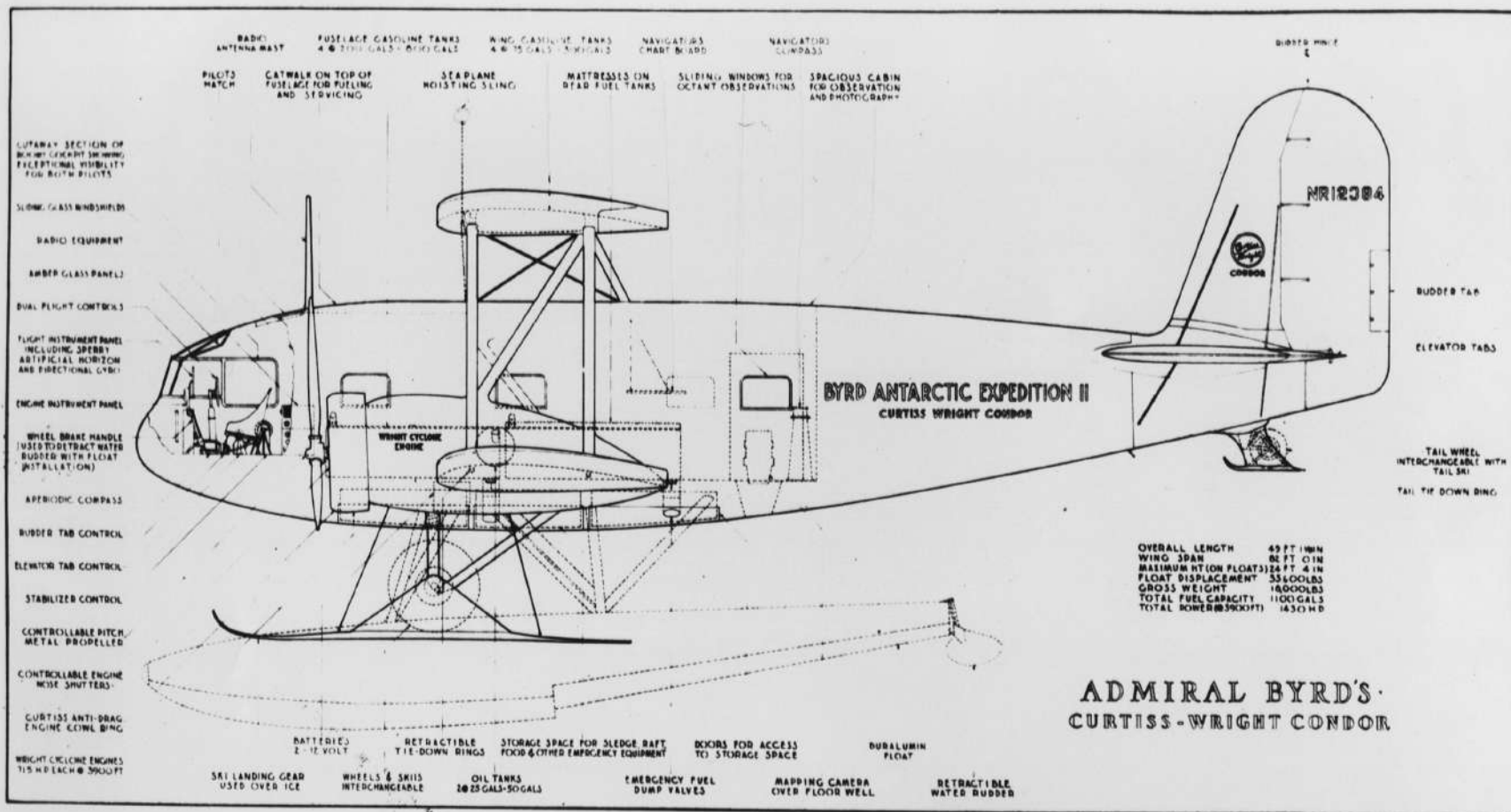












**T**HE Curtiss-Wright Condor biplane "William Horlick," which Admiral Byrd is now using on all his major flights in the South Polar regions, is the largest airplane in the world equipped with either pontoons for water operation or skis for landing on and taking-off from snow. At the time Admiral Byrd selected the Curtiss-Wright Condor, powered by two 715 h.p. Wright Cyclones, he stated that he believed he had obtained the best airplane available to meet the extremely hazardous operating conditions of the expedition — difficult landings and take-offs, flights over icy mountains with terrific down-drafts, and at times operating in temperatures as low as 70° F. below zero.

When Admiral Byrd

an aerial photographer and a mechanic; cameras; general supplies for plane and engine; emergency rations and full radio equipment — a total load exceeding nine tons. The large load-carrying capacity of the Condor, with its powerful 715 h.p. Wright Cyclone Engines, makes it possible to take along this complete equipment. Full radio equipment will be carried, and the actual details of the flight will be relayed to the world through the short-wave station at Little America. This flight will be the first over either of the Poles during which the world will be kept constantly informed of the thrilling adventure through the medium of the radio.

Admiral Byrd's Condor has a wing span of 82 feet and weighs approximately nine tons. The plane is

— the fastest airline on the European Continent. The Condor was the first of the modern airliners to be soundproofed, which makes it possible for passengers to carry on conversation without raising their voices. The entire structure of the airplane is of welded molybdenum steel covered with a cotton fabric, similar to that used on many types of military aircraft. This type of construction makes it possible to quickly repair any damage which may occur to the airplane during the gruelling flights of the Antarctic explorations.

The Condor's instrument panel is equipped with forty-five instruments. Two of these are of particular interest because they are operated by gyroscopes. The Sperry Artificial Horizon, operated by gyroscopes, shows the exact position of the plane at all times; that







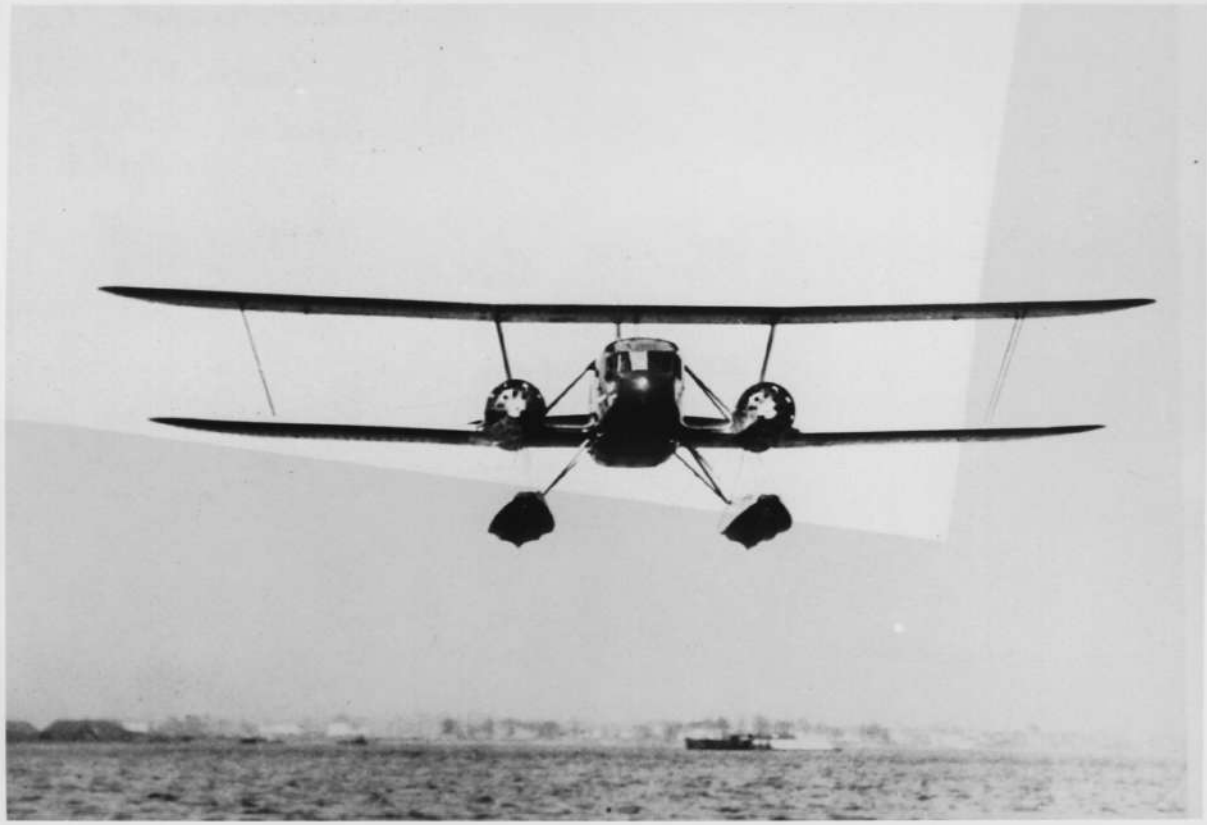
















Tourist class

B-20 Condor 1930

INTERIOR CURTAIN CONDOR TRANS

PMB

**GENERAL SPECIFICATIONS**

WEIGHT EMPTY	555 lbs.
USEFUL LOAD	420 lbs.
GROSS WEIGHT	975 lbs.
WING AREA (incl. ailerons)	176 sq. ft.
POWER LOADING	21.6 lbs./h.p.
WING LOADING	5.5 lbs./sq. ft.
TOP SPEED	75 m.p.h.
CRUISING SPEED	65 m.p.h.
LANDING SPEED	30 m.p.h.
RATE OF CLIMB, S.L., INITIAL	600 ft./min.
CLIMB IN 10 MINUTES	4,250 feet
CRUISE RADIUS	200 miles
FUEL CONSUMPTION	2.75 gals./hr.
(Curtiss-Wright data, Engine Mfr. figure slightly higher)	

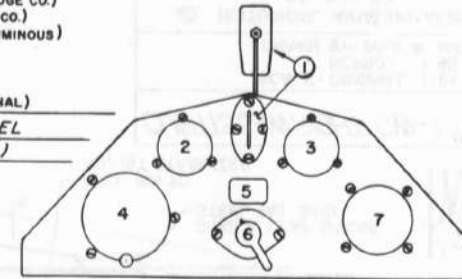
POWER: 3-Cyl. SZEKELY SR-3-O  
 ATC RATED 43.5 h.p. AT 1750 r.p.m.  
 45.0 h.p. AT 1850 r.p.m.

**COLORING NOTES**

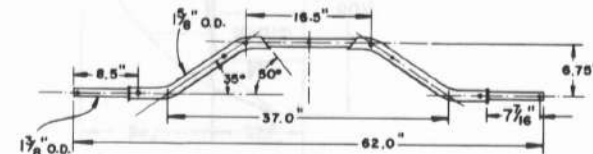
FUSELAGE & VERTICAL FIN - DARK BLUE OR RED  
 WINGS, HORIZONTAL TAIL SURFACES & RUDDER - SILVER  
 FUSELAGE TRIM STRIPE & INTERIOR SURFACES - SILVER  
 LETTERING - BLACK

1. BEECH Type Avv SPEED INDICATOR, ("SAFETY METER")
2. OIL PRESSURE GAUGE, (0-30lbs., U.S. GAUGE CO.)
3. OIL TEMP. GAUGE, (12 ft. LEAD, U.S. GAUGE CO.)
4. ALTIMETER, (ZENITH No. 30295/w NON-LUMINOUS)
5. COMPASS, (JONES AUTOMOBILE)
6. IGNITION SWITCH, (BRIGGS & STRATTON)
7. TACHOMETER, (WALTHAM, STANDARD. PIONEER TACH., OPTIONAL)

**INSTRUMENT PANEL**  
(NO SCALE)

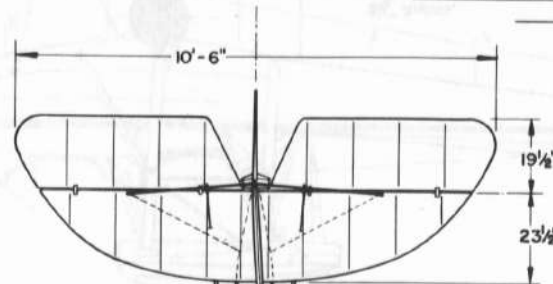


**ONE PIECE LANDING GEAR AXLE**  
 DROP HAMMER FORMED  
 WEIGHT, APPROX. 12 lbs.



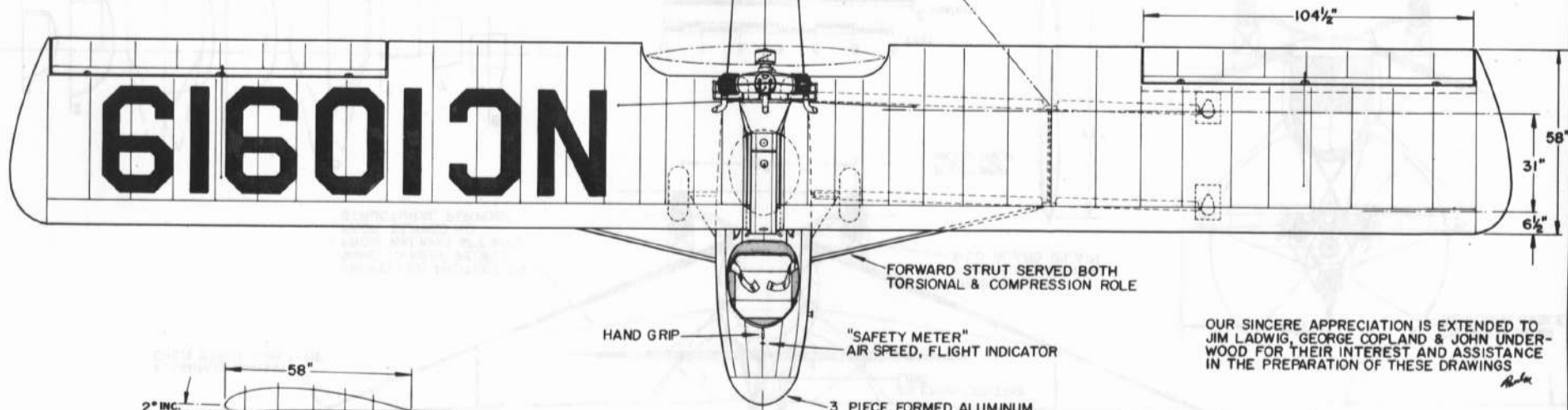
**TWICE G.A. SCALE**  
 (ORIG. 1:12  
 REPRO. 1:24)

LANDING GEAR RIGID, BALLOON TIRES ACTED AS ONLY SHOCK ABSORPTION



FIN OFFSET APPROX. 3°

PROPELLER  
 GUARD CABLE  
 "SAFETY WIRE" OR  
 BUNGLE LINE  
 (BOTH SIDES WHEN EMPLOYED)

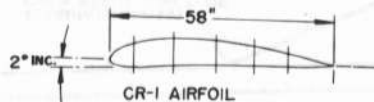


FORWARD STRUT SERVED BOTH  
 TORSIONAL & COMPRESSION ROLE

HAND GRIP

"SAFETY METER"  
 AIR SPEED, FLIGHT INDICATOR

3 PIECE, FORMED ALUMINUM  
 NOSE CAP



CR-1 AIRFOIL  
 (CURTISS-ROBERTSON, ONE)  
 DEVELOPED FROM NAVY N-22 SECTION  
 (ORDINATES AVAILABLE UPON REQUEST)

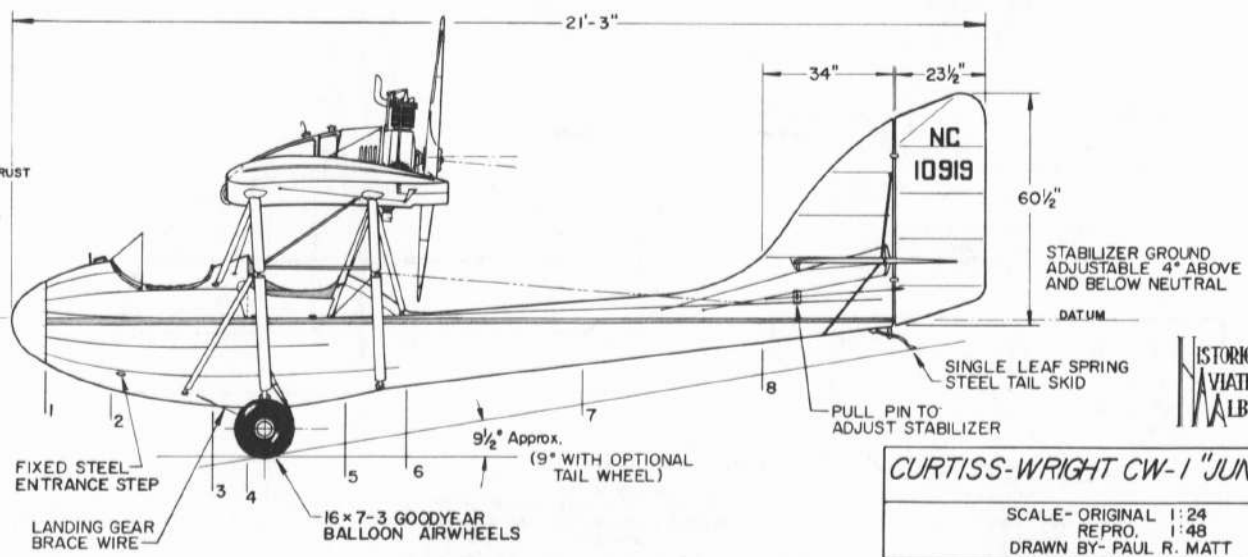
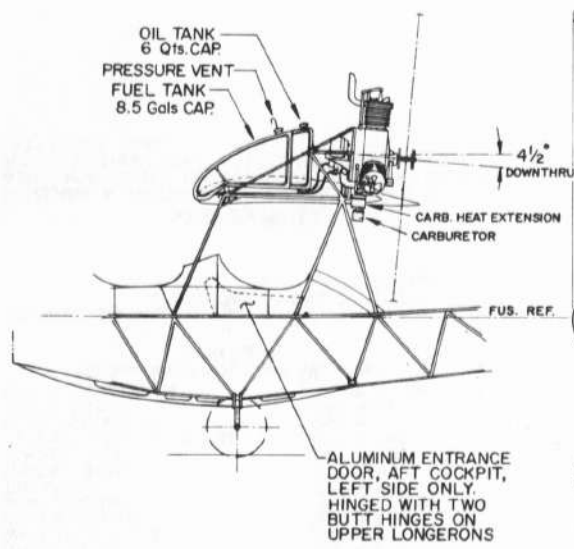
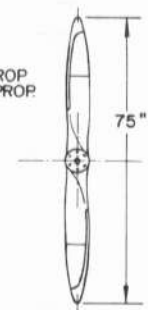
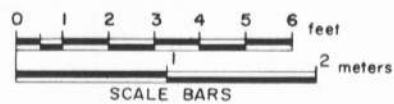
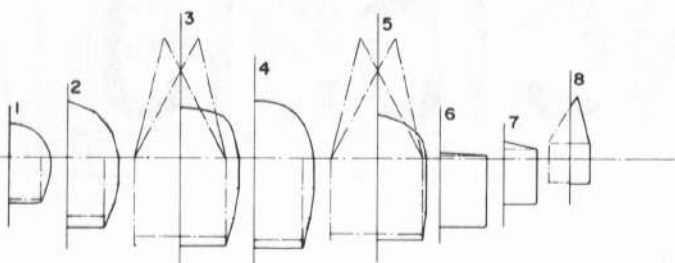
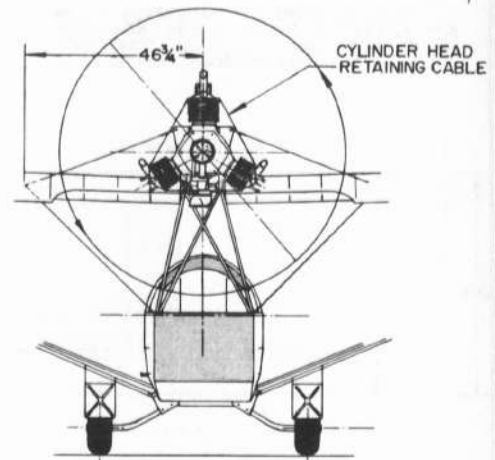
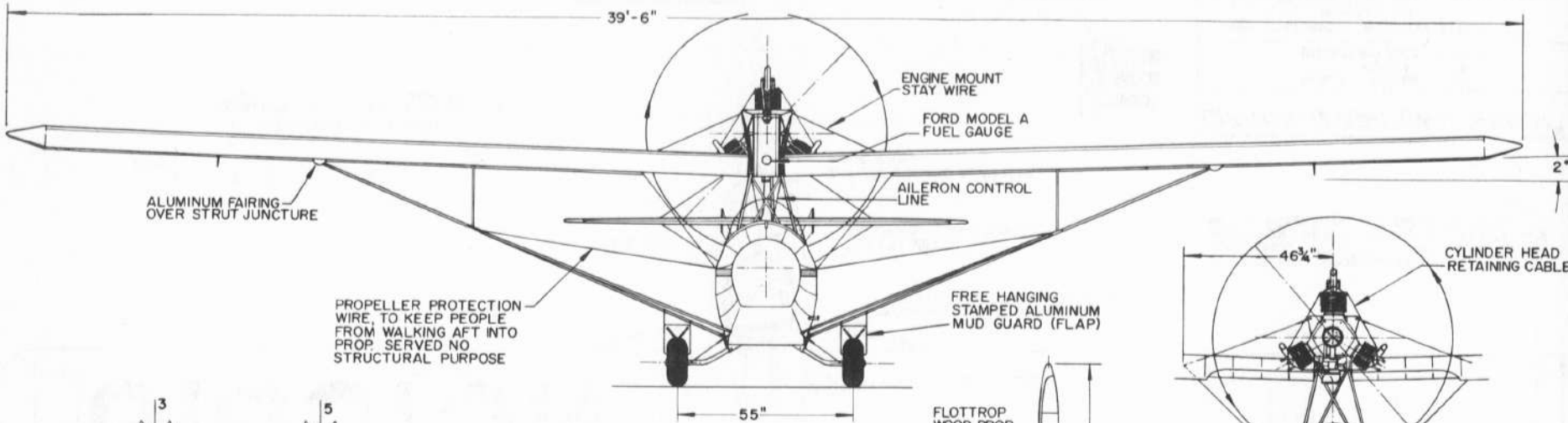
OUR SINCERE APPRECIATION IS EXTENDED TO  
 JIM LADWIG, GEORGE COPLAND & JOHN UNDER-  
 WOOD FOR THEIR INTEREST AND ASSISTANCE  
 IN THE PREPARATION OF THESE DRAWINGS



**CURTISS-WRIGHT CW-1 "JUNIOR"**

SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT

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 P.O. BOX 33  
 TEMPLE CITY, CALIF., 91780



HISTORICAL  
AVIATION  
ALBUM

**CURTISS-WRIGHT CW-1 "JUNIOR"**

SCALE- ORIGINAL 1:24  
REPRO. 1:48  
DRAWN BY- PAUL R. MATT

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CURTISS WRIGHT JUNIOR  
17454







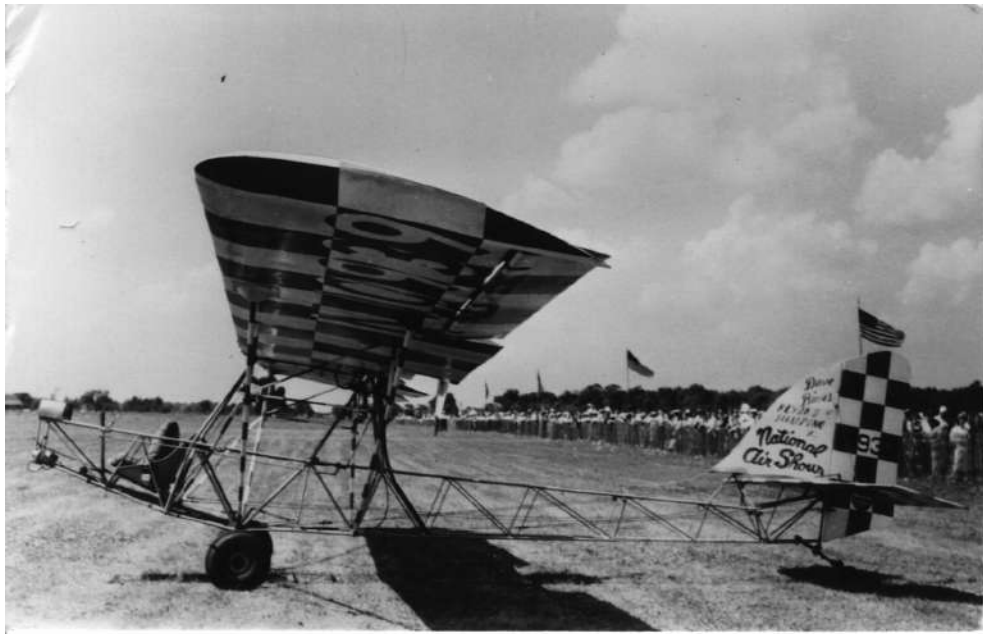


























1110912

10813

**MUNICIPAL AIRPORT**

COVER PLUMMER WHICH BASED IN COLORADO  
ON THE LEFT, NOW OWNED BY L. A. WARD.  
AND ON THE RIGHT.



GENERAL SPECIFICATIONS

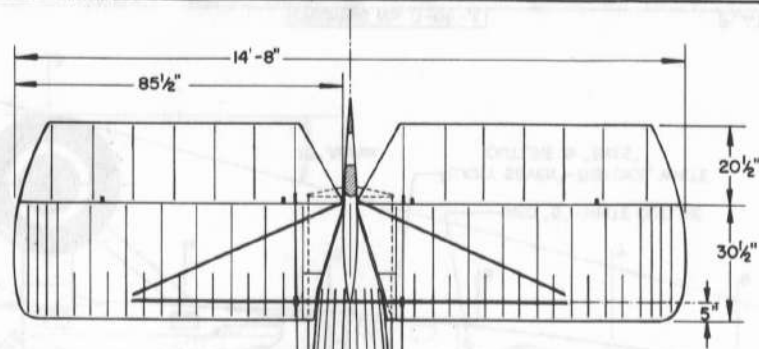
WEIGHT EMPTY	3032 lbs
USEFUL LOAD, NORMAL	1753 lbs
GROSS WEIGHT	4785 lbs
WING AREA (including ailerons)	411 sq. ft.
WING LOADING	11.64 lbs/sq. ft.
POWER LOADING	10.9 lbs/H.P.
TOP SPEED, S.L.	128.5 mph
TOP SPEED @ 10,000 feet	113.8 mph
CRUISING SPEED, 80% POWER	103 mph
CRUISING ENDURANCE	3 1/2 hrs
CLIMB, INITIAL, S.L.	807 ft/min
SERVICE CEILING	16,275 feet
ABSOLUTE CEILING	18,600 feet
STALLING SPEED	76 mph
LANDING SPEED	65 mph
FUEL CAPACITY (4 TANKS)	120 gallons
RESERVE TANK UPPER WING	9.5 gallons
OIL CAPACITY	13.5 gallons

POWER: LIBERTY 12      400 hp @ 1700 RPM  
 439 hp @ 1825 RPM

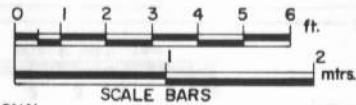
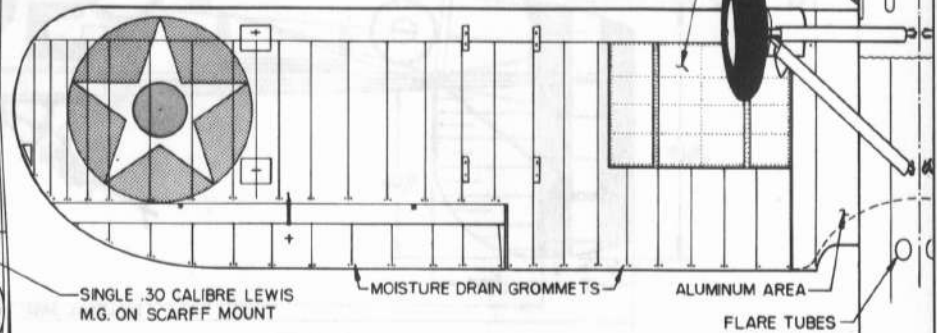
COLORING NOTES  
 AIRCRAFT PORTRAYED - A. S. 25-351

ENTIRE AIRCRAFT - OLIVE DRAB (GREEN)  
 90th ATTACK SQUADRON MARKINGS  
 ALTERNATING RED & WHITE, HAND PAINTED,  
 DETAILS VARIED FROM PLANE TO PLANE.

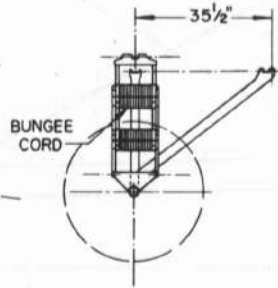
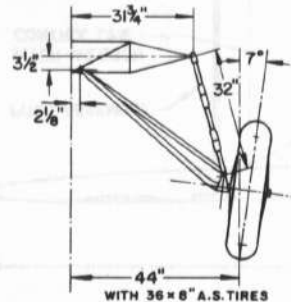
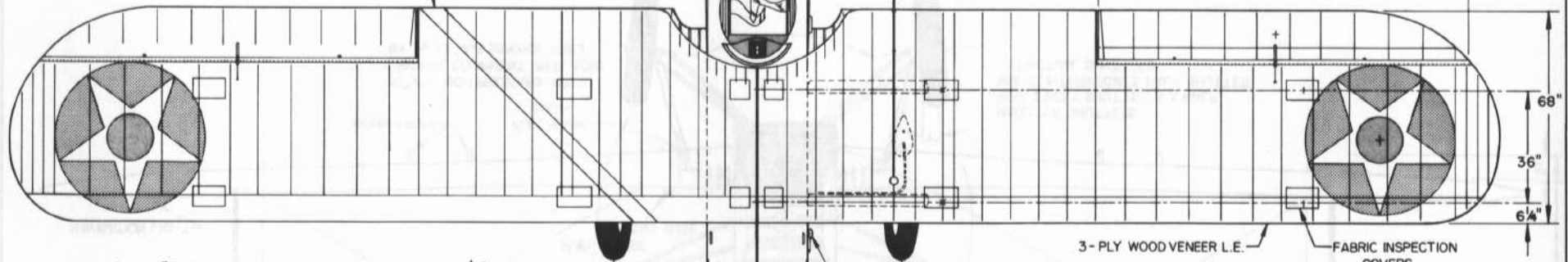
WE EXTEND OUR APPRECIATION TO: MR. HARRY GANN  
 OF THE MCDONNELL DOUGLAS CORPORATION FOR  
 INVALUABLE ASSISTANCE IN THE PREPARATION OF  
 THESE DRAWINGS.



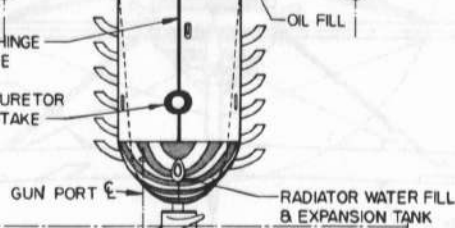
EXPOSED ALUMINUM FUEL TANKS,  
 FOR EASY REMOVAL, (LOWER WINGS  
 ONLY) 2 TANKS PER PANEL,  
 30 GALLONS PER TANK



WHITE 45° DIAGONAL  
 FORMATION STRIPE



PIANO HINGE  
 LINE  
 CARBURETOR  
 INTAKE



30 CAL. M.G. UNDER COWL  
 AT CABANE STRUT AREA.  
 9" TO RIGHT OF AIRCRAFT

HISTORICAL  
 AVIATION  
 ALBUM

DOUGLAS O-2  
 1925-27

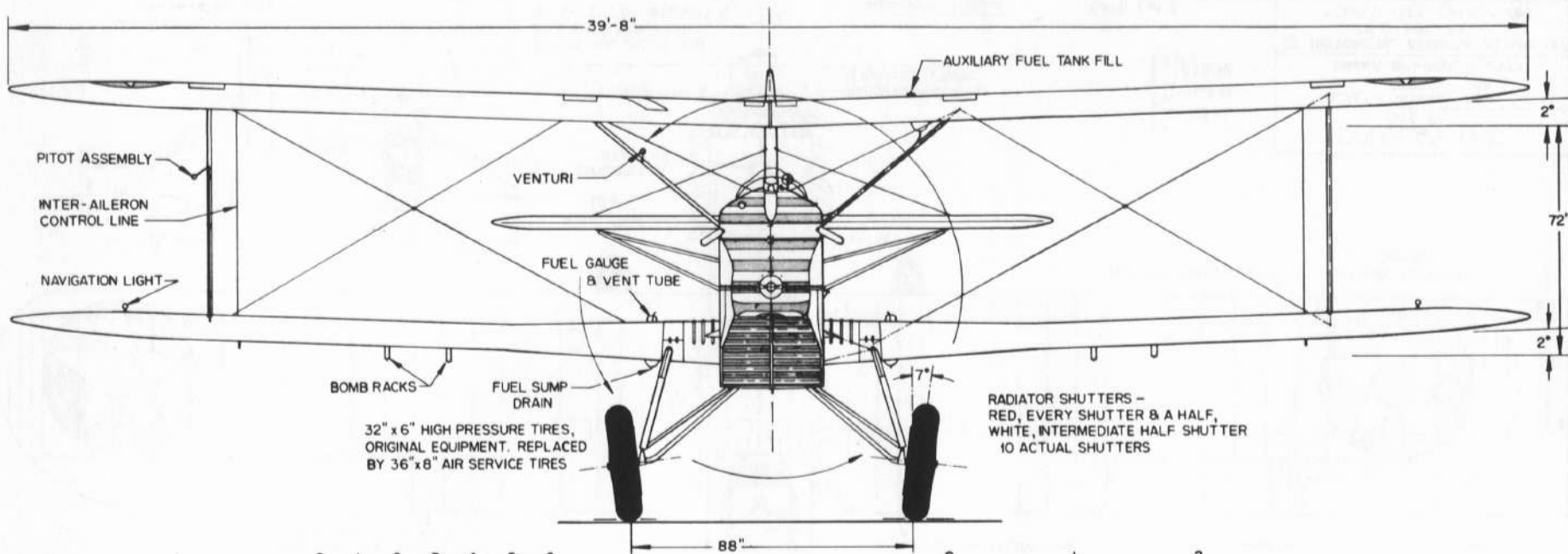
SCALE - ORIGINAL 1:24  
 REPRO. 1:48

DRAWN BY - PAUL R. MATT

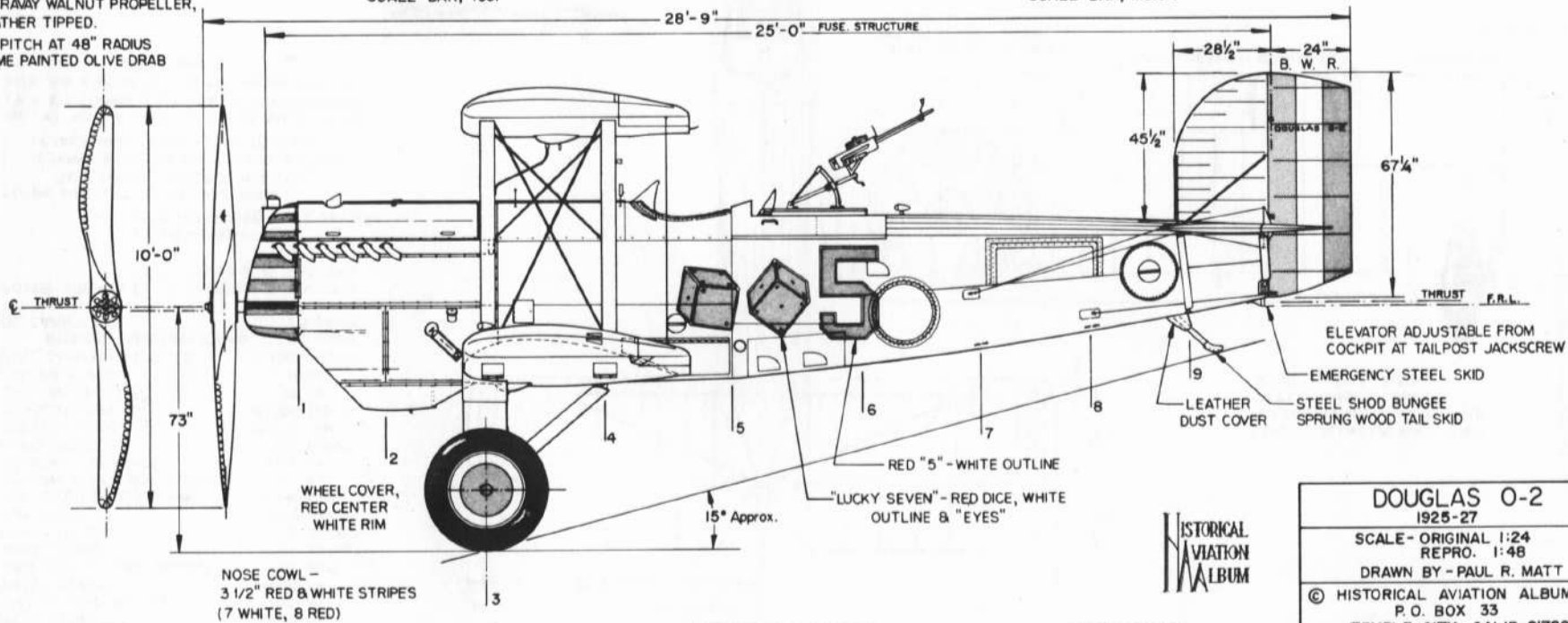
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DRAWING No. 11-86-A

PLATE 1 of 3



STANDARD LIBERTY ENGINE  
CHARAWAY WALNUT PROPELLER,  
LEATHER TIPPED.  
18° PITCH AT 48" RADIUS  
SOME PAINTED OLIVE DRAB



DRAWING No. 11-86-A

PLATE 2 of 3

HISTORICAL  
AVIATION  
ALBUM

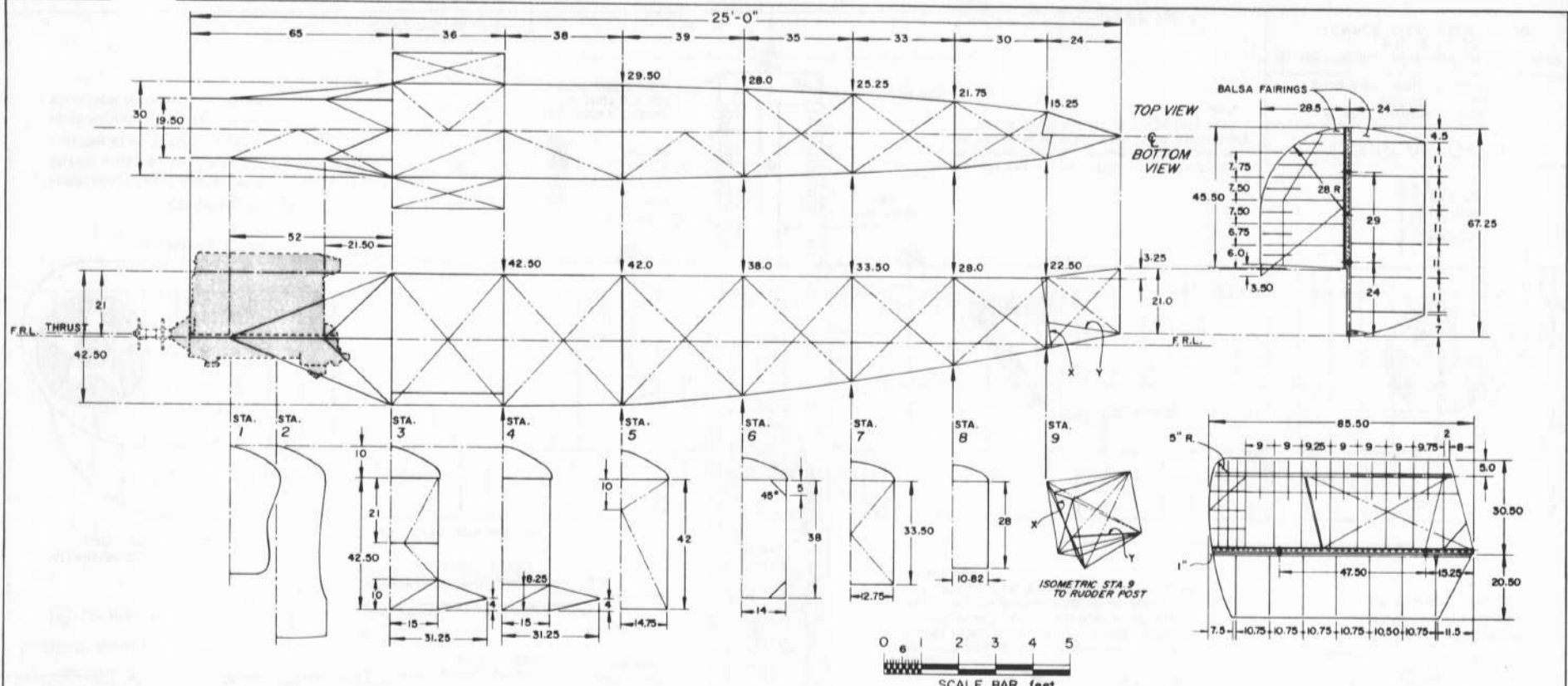
DOUGLAS O-2  
1925-27

SCALE - ORIGINAL 1:24  
REPRO. 1:48

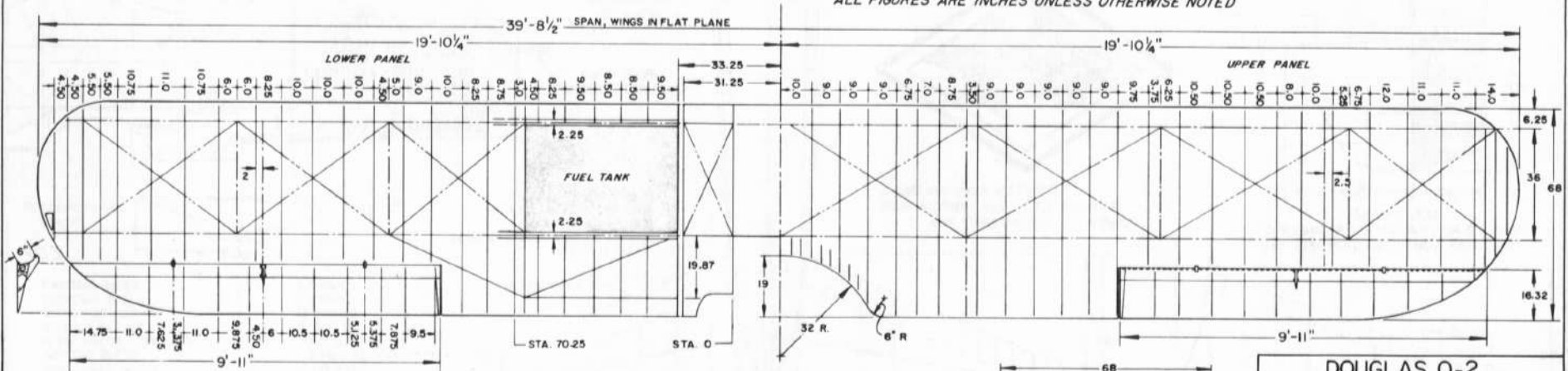
DRAWN BY - PAUL R. MATT

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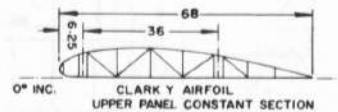




0 1 2 3 4 5  
SCALE BAR, feet  
ALL FIGURES ARE INCHES UNLESS OTHERWISE NOTED

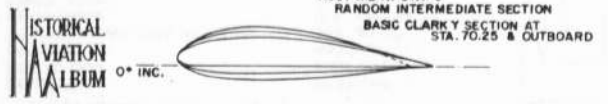


CENTER-LINE DRAWINGS OF MAJOR INTERNAL STRUCTURES



**DOUGLAS O-2**  
1925-27  
SCALE, ORIGINAL 1:24  
REPRO. 1:48  
DRAWN BY - PAUL R. MATT

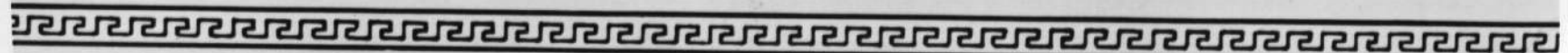
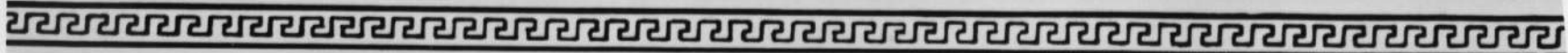
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375-8  
0-2  
9-25-25





















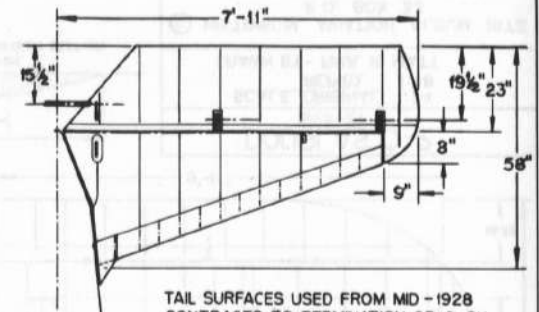
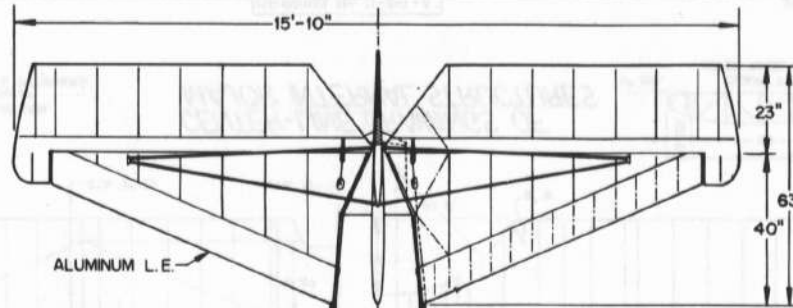




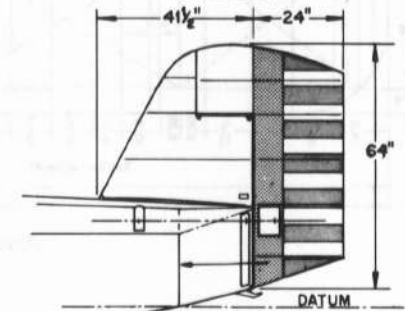


**GENERAL SPECIFICATIONS**

WEIGHT EMPTY	2857 LBS
USEFUL LOAD	1693 LBS
GROSS WEIGHT	4550 LBS
WING AREA (INCLUDING AILERONS)	362 SQ. FT.
WING LOADING	12.40 LBS/SQ. FT.
POWER LOADING	10.82 LBS/SQ. FT.
TOP SPEED, SEA LEVEL	134.5 MPH
TOP SPEED, 10,000	127.8 MPH
CRUISING SPEED	110 MPH AT 1,550 RPM
CLIMB, INITIAL, SEA LEVEL	1,075 FT./MIN
SERVICE CEILING	16,900 FT.
ABSOLUTE CEILING	18,600 FT.
STALLING SPEED	60 MPH
LANDING SPEED	58 MPH



TAIL SURFACES USED FROM MID-1928 CONTRACTS TO TERMINATION OF O-2H PRODUCTION



6" BLUE VERTICAL STRIPE  
SEVEN 5" RED STRIPES  
SIX 4" WHITE STRIPES

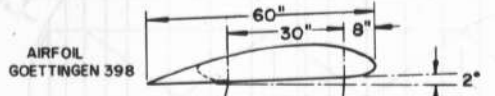
POWER: LIBERTY 12  
400 HP @ 1,700 RPM  
420 HP @ 1,760 RPM  
439 HP @ 1,825 RPM

91st OBSERVATION SQUADRON  
SQDN. INSIGNIAS ARE BASED ON IDYLIC  
THEME AND VARY IN DETAILS.

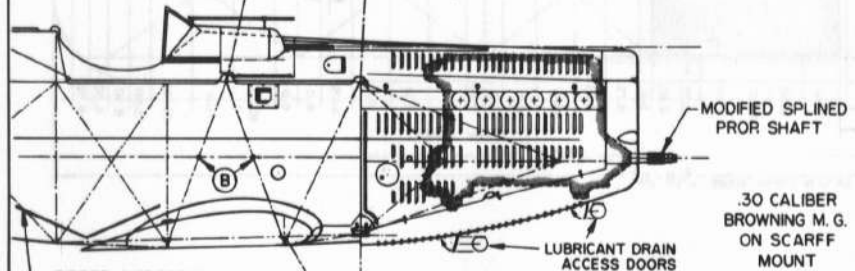


Twice Scale  
of G. A. Dwgs

COLORS:  
KNIGHTS ARMOR, GRAY; GREEN SHIELD; BLACK  
CROSS PIPED WHITE; YELLOW PLUME; BROWN  
SPEAR; BLACK HORSE; YELLOW HARNESS; RED  
DEVIL; YELLOW BACKGROUND; BROWN FORK;  
SUPERIMPOSED ON DIAMOND; UPPER HALF, BLUE;  
LOWER HALF, GREEN.



AIRFOIL  
GOETTINGEN 398



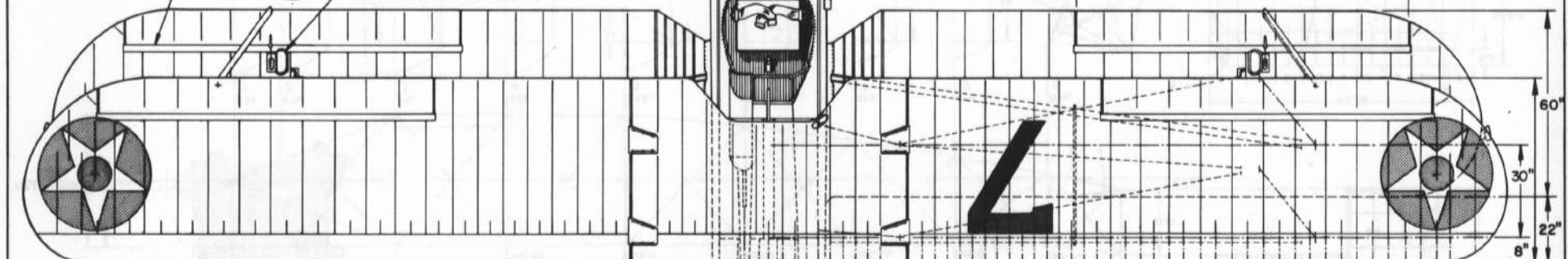
MODIFIED SPLINED  
PROP SHAFT  
  
.30 CALIBER  
BROWNING M. G.  
ON SCARFF  
MOUNT

ZIPPER INSPECTION FLAP

LEVELING PINS

ALUMINUM AILERON  
GAP COVER

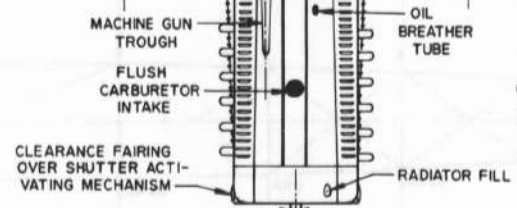
CLEAR INSPECTION WINDOW



ALUMINUM L. E.

**COLORING NOTES**

FUSELAGE, CABANE & INTER-PLANE STRUTS: LIGHT BLUE  
ENTIRE WINGS & TAIL SURFACES: CHROME YELLOW  
LANDING GEAR STRUTS: SILVER  
NOSE RADIATOR: WHITE  
SQUADRON MARKINGS, AS NOTED



OUR SINCERE APPRECIATION TO MR. HARRY GANN,  
OF THE MC DONNELL-DOUGLAS CORP., AND TO  
MR. PETER M. BOWERS, FOR THEIR ASSISTANCE  
IN THE PREPARATION OF THESE DRAWINGS.

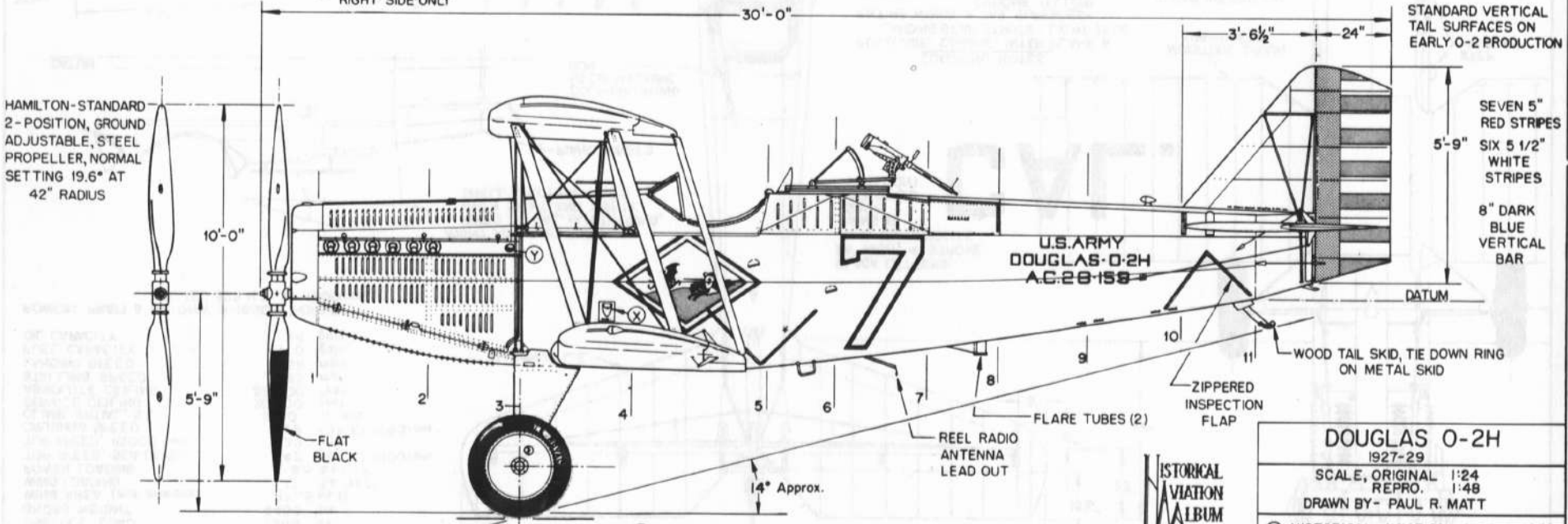
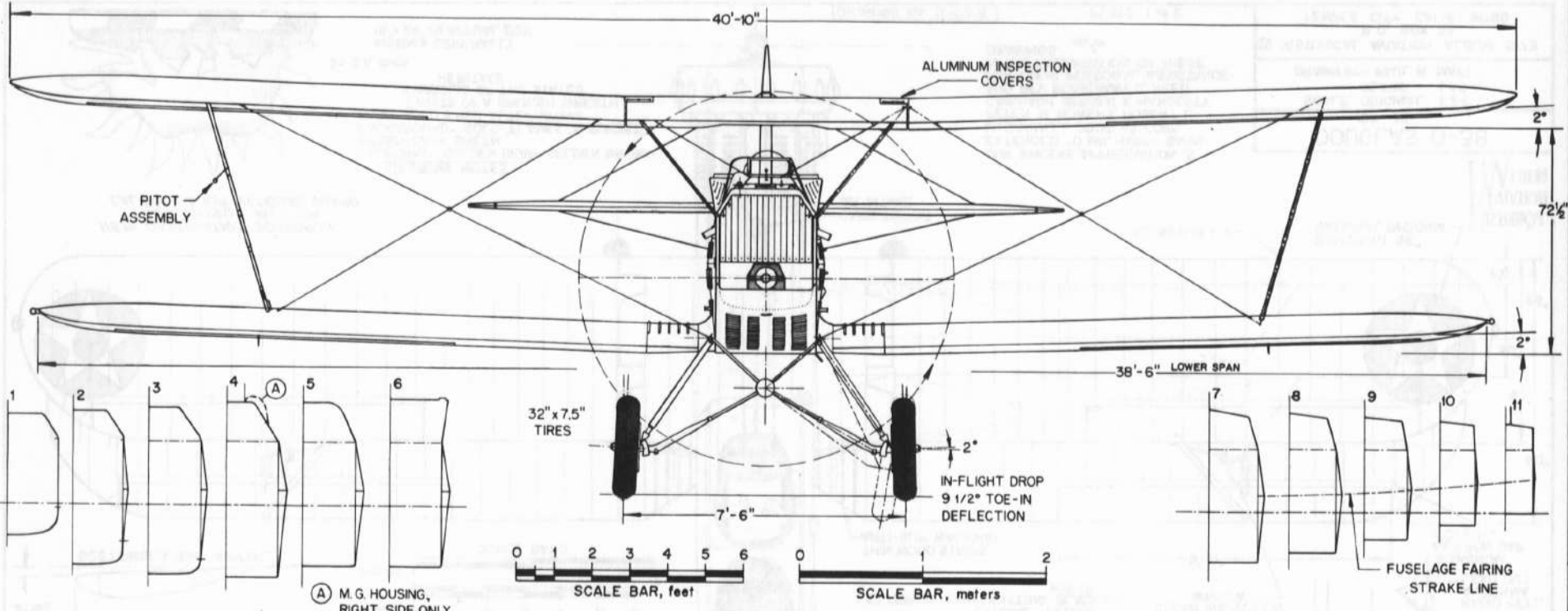


**DOUGLAS O-2H**  
1927-29

SCALE, ORIGINAL 1:24  
REPRO. 1:48  
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- (X) FUEL FILL (110 GALLONS)
- (Y) OIL FILL (9.5 GALLONS)

DRAWING No. 11-87-A

PLATE 2 of 2



<b>DOUGLAS O-2H</b>	
1927-29	
SCALE, ORIGINAL 1:24	
REPRO. 1:48	
DRAWN BY - PAUL R. MATT	
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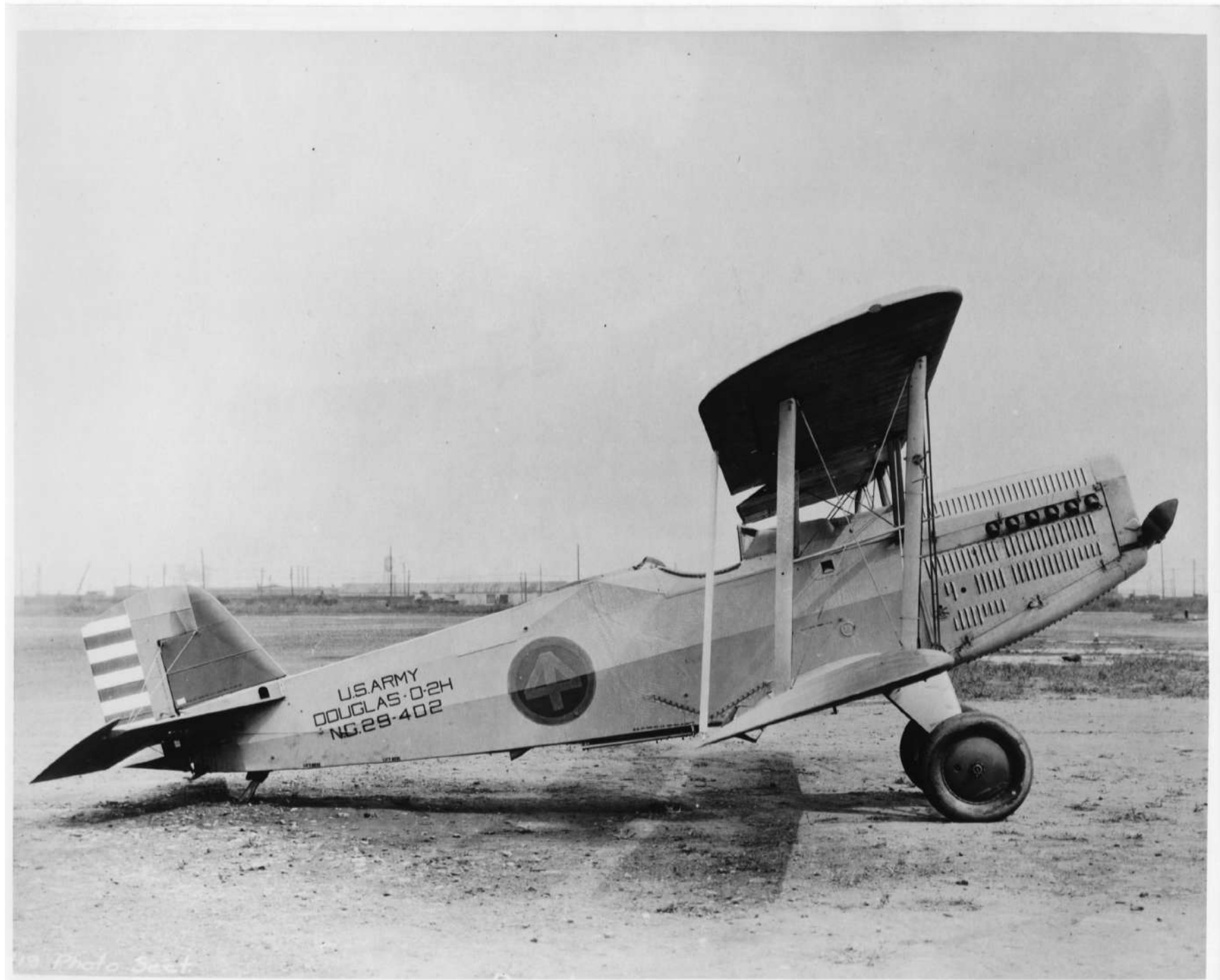










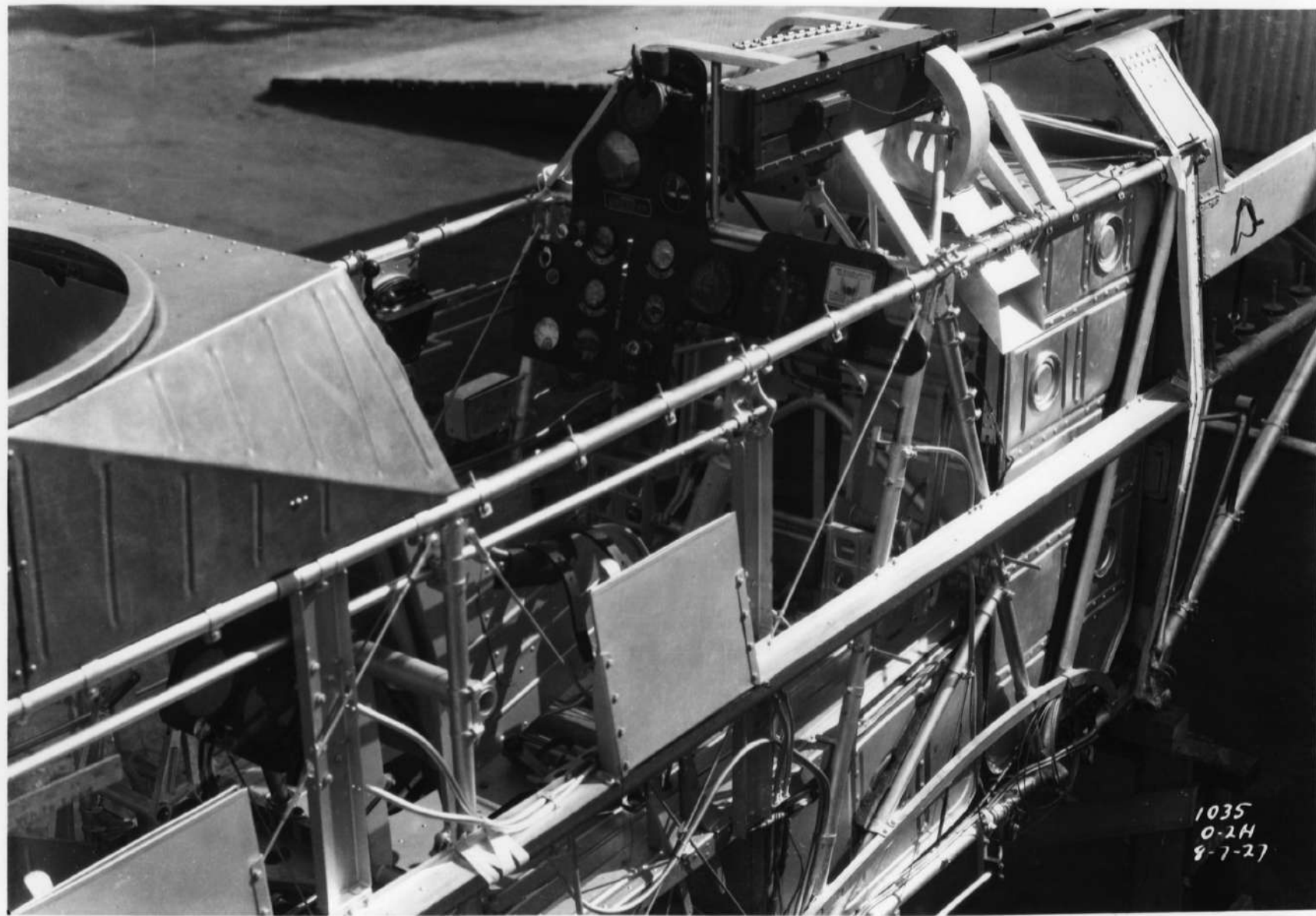


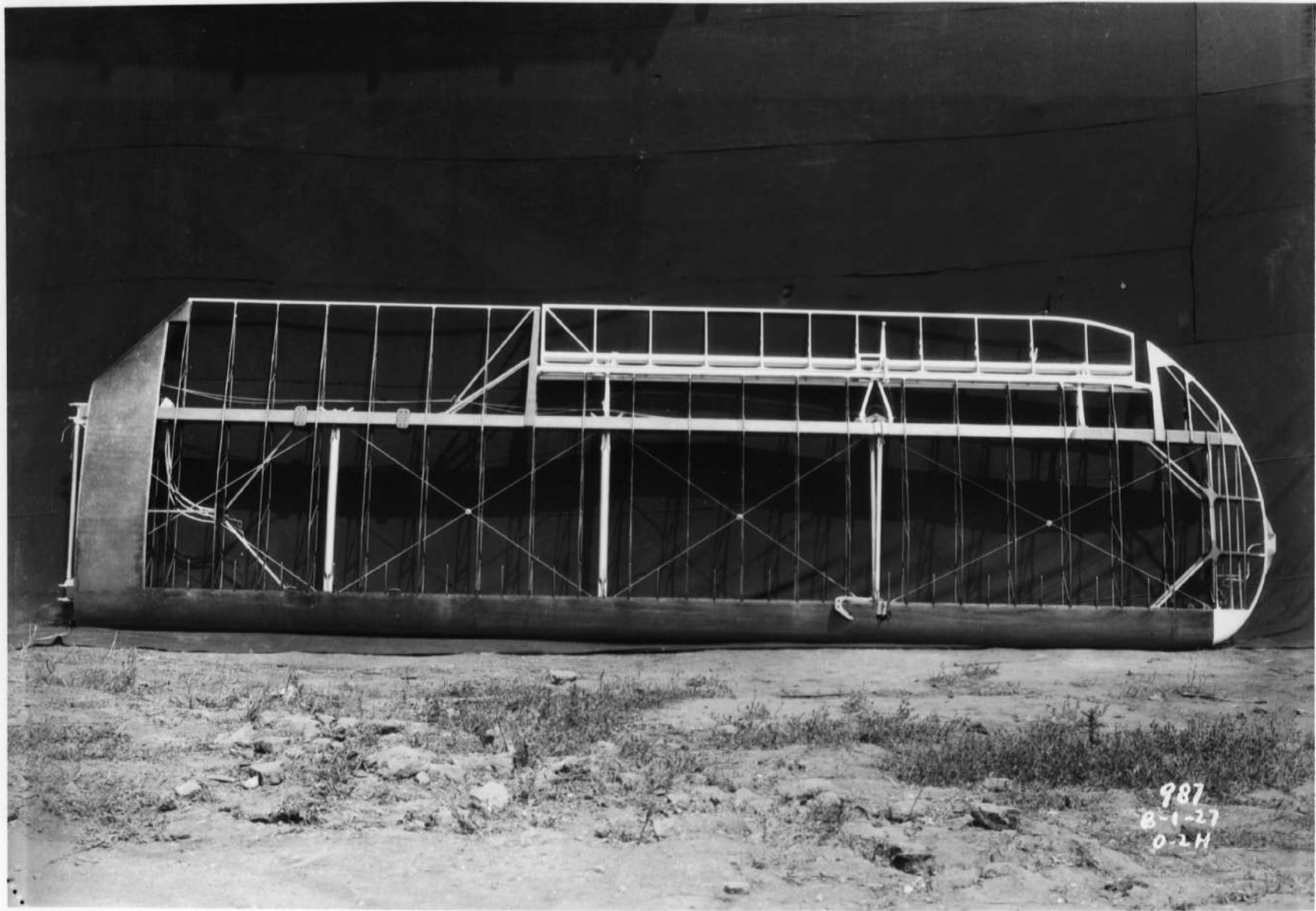
19 Photo Sect.



8674 A.S.

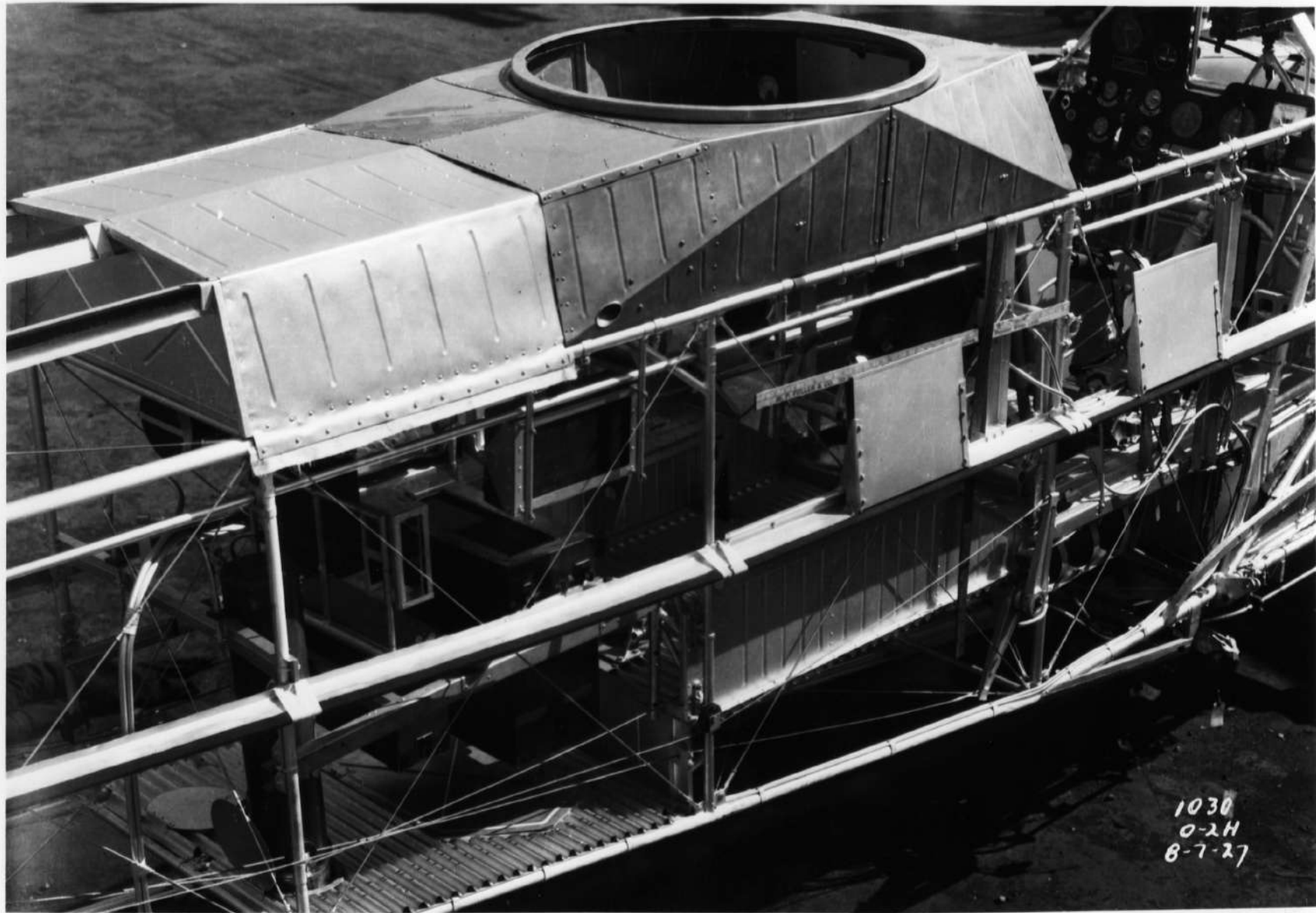






987  
8-1-27  
O-2H







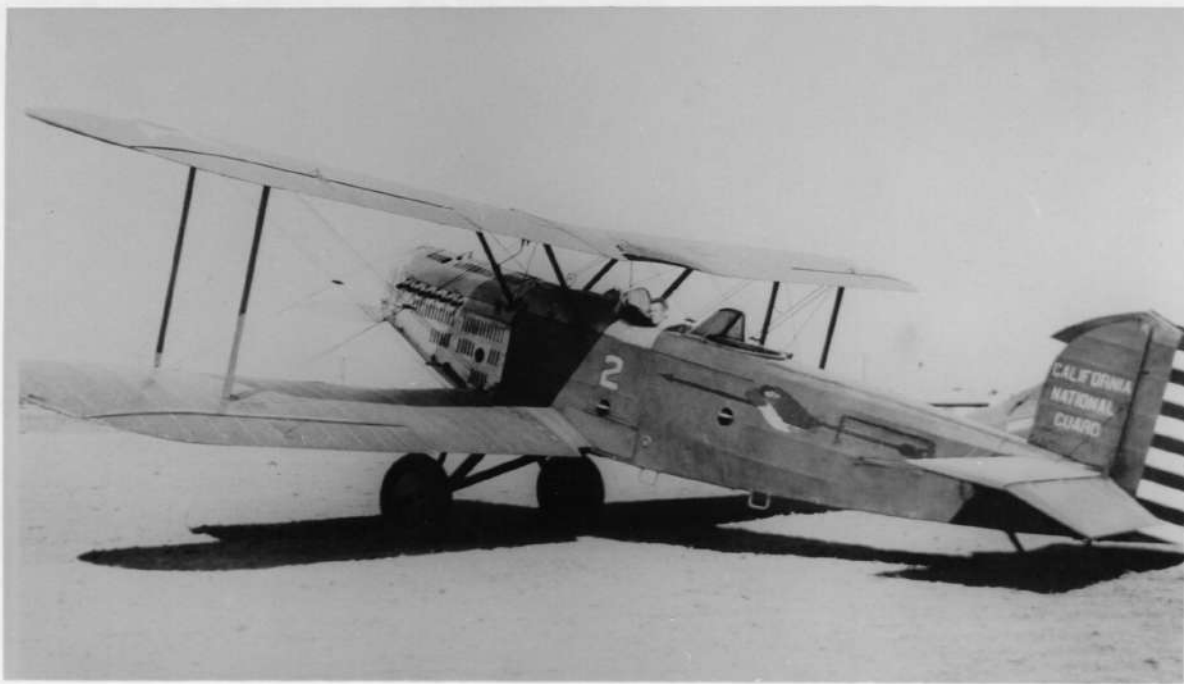
U.S. ARMY  
A.C.-28-129  
DOUGLAS-O-2H

MIS. 52

LT. HANSEN & LT. COOPER, 91<sup>st</sup> OBS. SQDN.









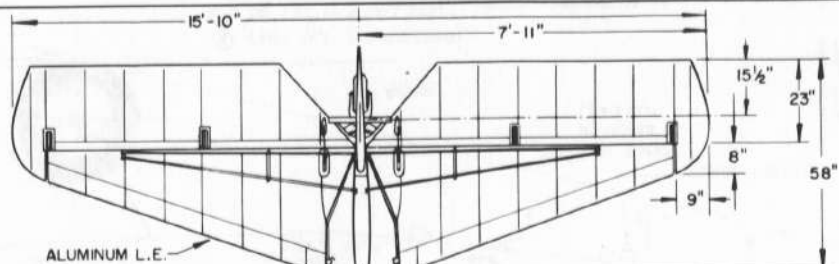




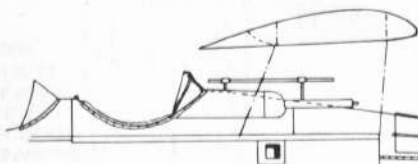
**GENERAL SPECIFICATIONS**

WEIGHT EMPTY	3072 lbs.
USEFULL LOAD	1386 lbs.
GROSS WEIGHT	4458 lbs.
WING AREA (incl ailerons)	371.5 sq. ft.
WING LOADING	12 lbs./sq. ft.
POWER LOADING	8.5 lbs./HP
TOP SPEED, SEA LEVEL	142 mph AT 1900rpm
TOP SPEED, 10,000 feet	139 mph
CRUISING SPEED	128 mph AT 1695rpm
CLIMB INITIAL, S.L.	1240 ft./min.
SERVICE CEILING	20,700 feet
ABSOLUTE CEILING	22,500 feet
STALLING SPEED	63 mph
LANDING SPEED	59 mph
FUEL CAPACITY	110 gals.
OIL CAPACITY	14 gals.

POWER: PRATT & WHITNEY R-1690 B 'HORNET'  
RATED 525 H.P. AT 1900rpm



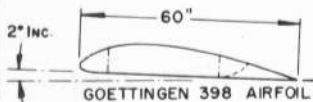
RIGHT PROFILE, SHOWING  
FIXED .30 CAL. GUN HOUSING,  
OPEN SIGHT AND EMPTY  
SHELL EJECTION CHUTE



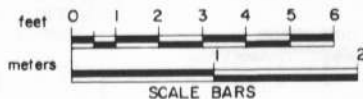
PIANO HINGES

COLT-BROWNING  
.30 Cal. MACHINE  
GUN

DATUM



GOETTINGEN 398 AIRFOL



BLACK LETTERS,  
24" HIGH, 4" STROKE  
(N.G. ON OPPOSITE  
WING IN  
SAME  
CENTERED  
POSITION)

**CAL.**

**COLORING NOTES**  
FUSELAGE, CABANE, INTER-PLANE &  
LANDING GEAR STRUTS - LIGHT BLUE  
ENTIRE WINGS & TAIL SURFACES -  
CHROME YELLOW  
LETTERING - CONTRASTING BLACK OR  
WHITE

MOISTURE DRAIN  
GROMMETS

CLEAR INSPECTION  
WINDOW

STEP  
PLATES

RADIO REEL  
ANTENNA  
LEAD OUT

ALUMINUM  
AILERON GAP  
COVER

THIN WOOD STRIPS,  
ANTI-SLIP WALKWAY

9'-0"

60"

60"

30"

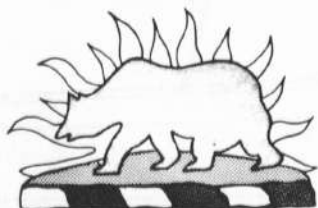
26"

8 1/2"

STANDARD 36"  
NATIONAL INSIGNIA



115th OBSERVATION SQUADRON  
40th DIVISION AVIATION  
CALIFORNIA AIR NATIONAL GUARD



**COLORING NOTES**  
CALIFORNIA GOLDEN BEAR - GOLDEN BROWN  
GRASS - DARK GREEN  
BACKGROUND - GOLD "FLAMES OF SUNSET"  
BASE - GOLD & RED ALTERNATING  
TWISTS OF A SPANISH WREATH,  
SYMBOLIC OF THE STATES  
HERITAGE

3 x G.A. dwgs.

INSIGNIA GENERALLY  
18" x 24" IN ACTUAL SIZE

OUR SINCERE APPRECIATION IS  
EXTENDED TO MR. HARRY GANN,  
McDONNELL DOUGLAS CORP.  
PETER M BOWERS, ROBERT L  
CAVANAGH, BERGEN F HARDESTY  
AND REV. BOARDMAN C. REED  
FOR THEIR PERSONAL ASSISTANCE  
IN THE PREPARATION OF THESE  
DRAWINGS.

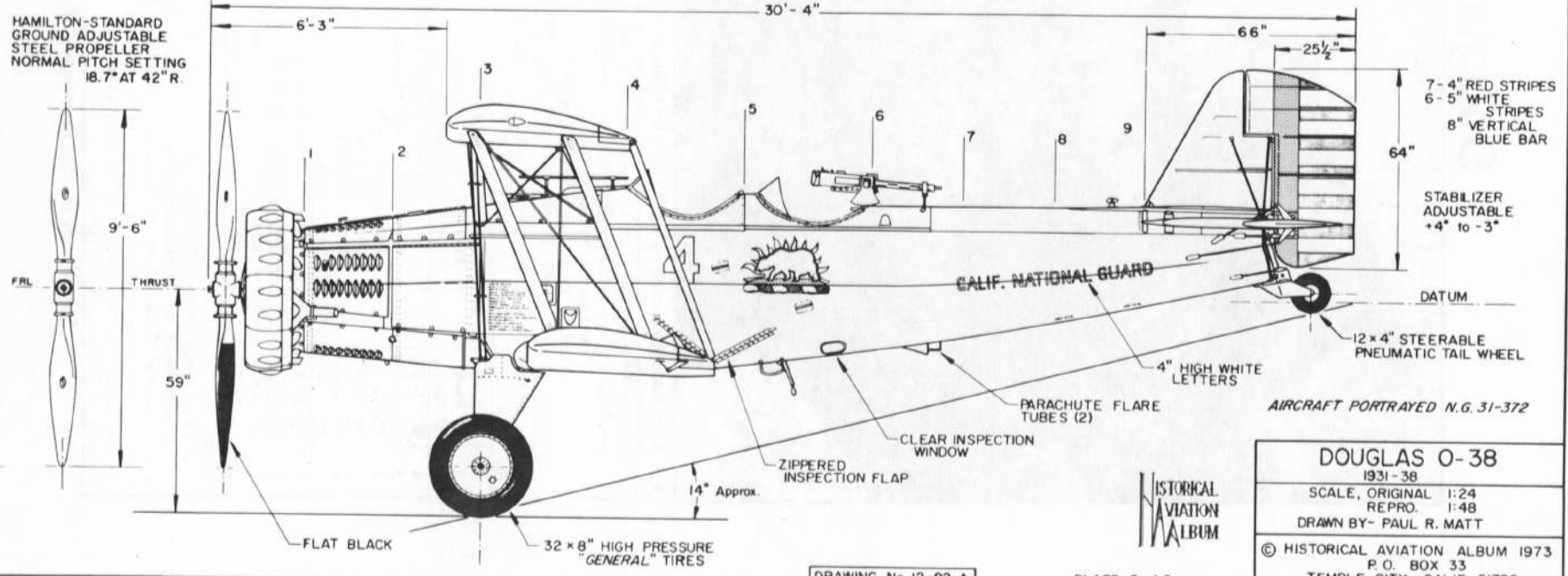
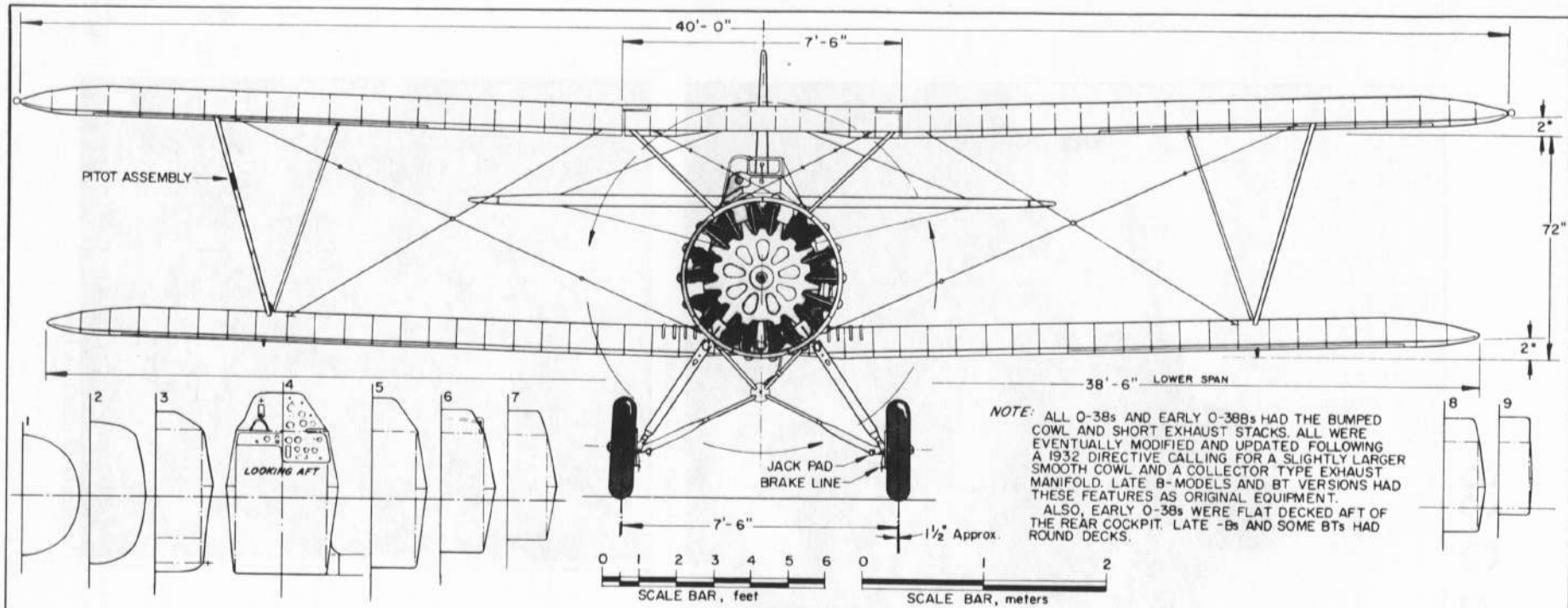
**DOUGLAS O-38**  
1931-38

SCALE, ORIGINAL 1:24  
REPRO. 1:48  
DRAWN BY - PAUL R. MATT

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DRAWING No. 12-92-A

PLATE 1 of 2



DRAWING No. 12-92-A

PLATE 2 of 2

HISTORICAL AVIATION ALBUM

<b>DOUGLAS O-38</b>	
1931-38	
SCALE, ORIGINAL	1:24
REPRO.	1:48
DRAWN BY- PAUL R. MATT	
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14-905-115 (2-21-32)

3790  
7-7-32







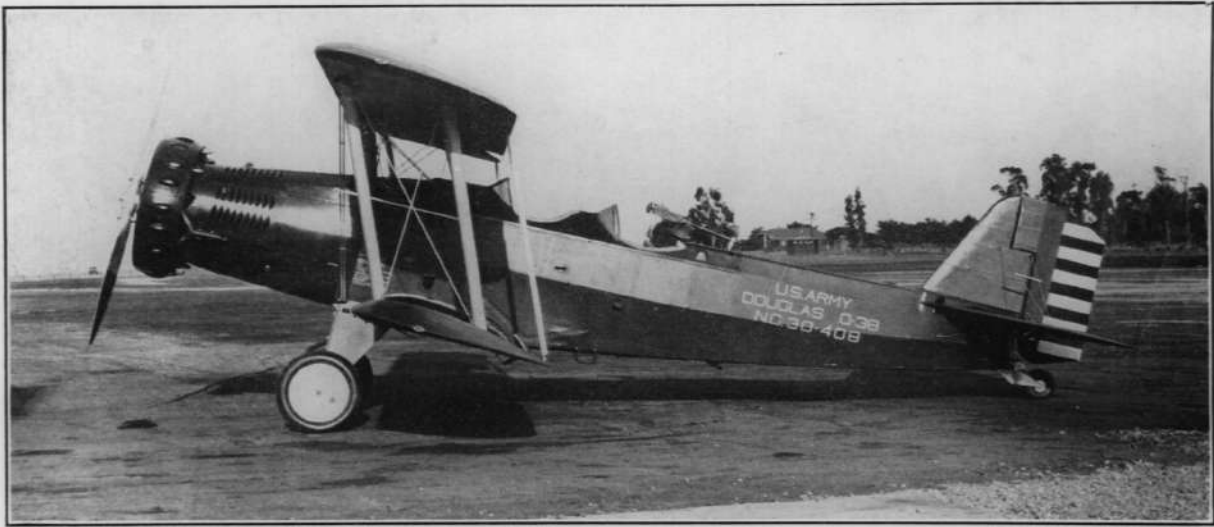
27TH DIV. AVIATION, N. Y. N. G.  
102ND PHOTO SECTION  
MILLER FIELD, S. I., N. Y.











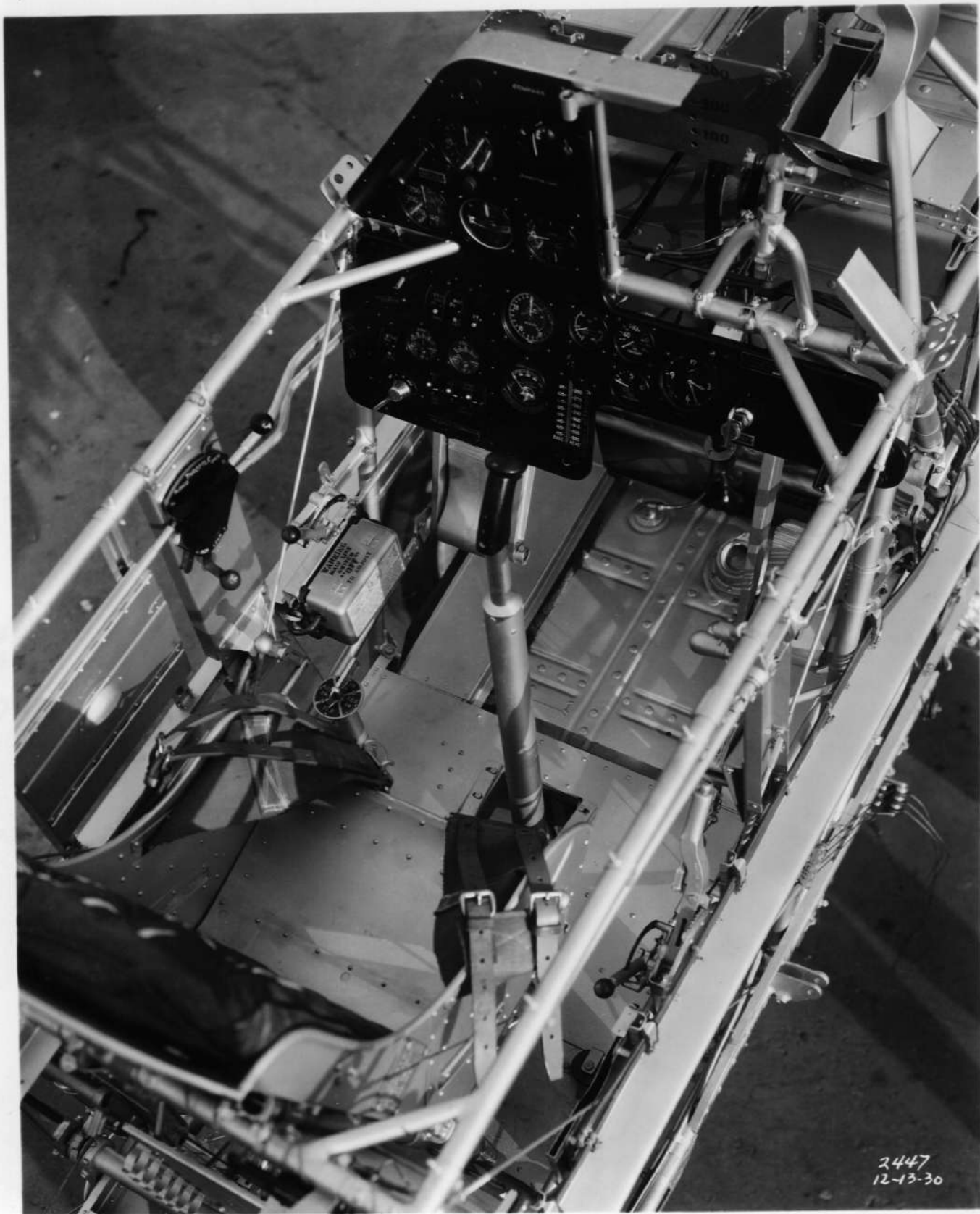






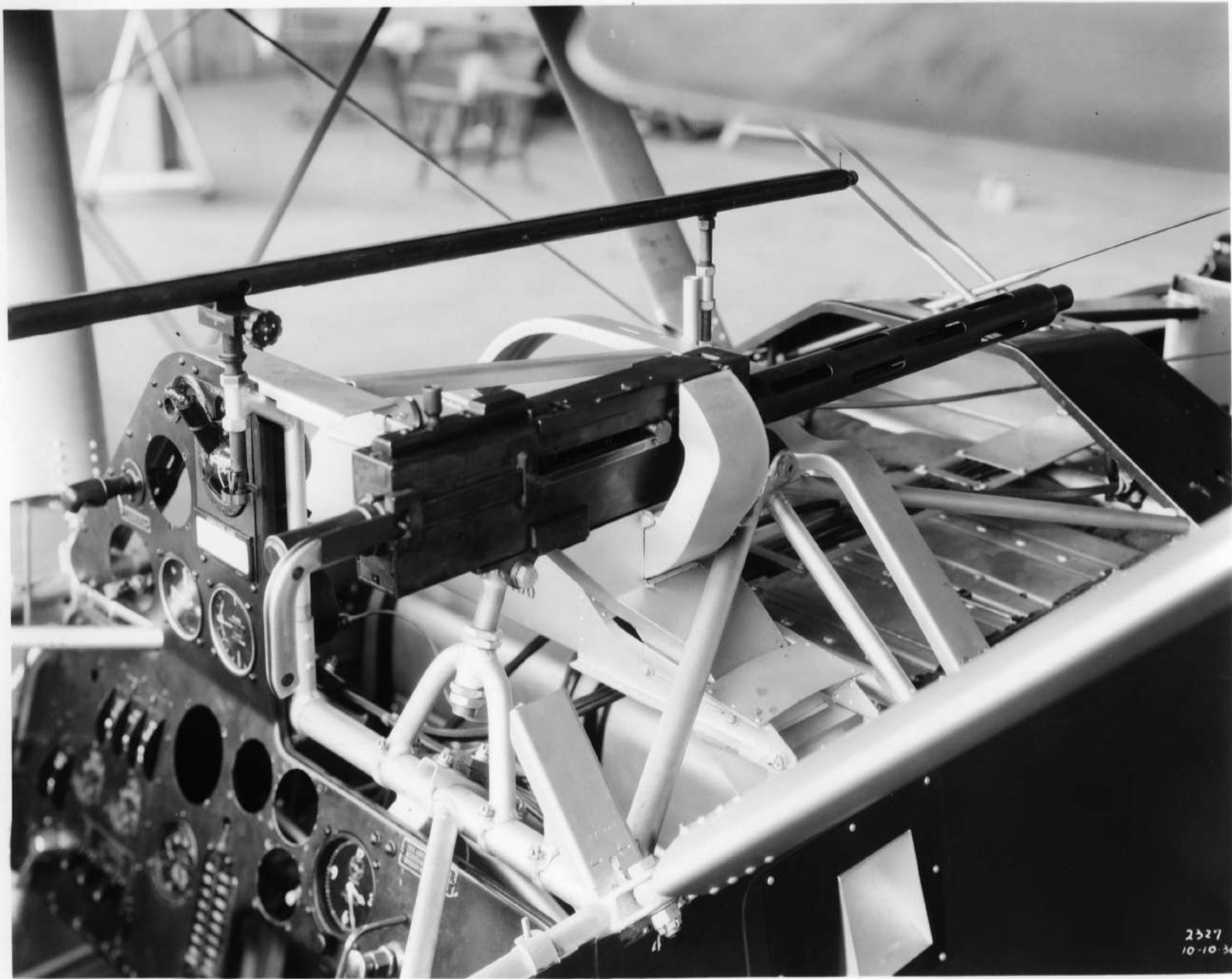
3073  
7-17-31

866



2447  
12-13-30











#BROB (2-1-34)





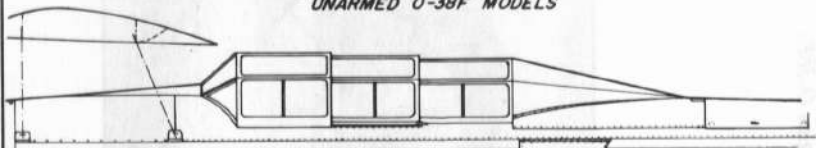


**GENERAL SPECIFICATIONS**

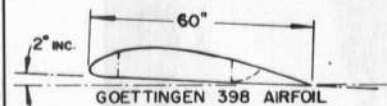
WEIGHT EMPTY	3489 lbs.
USEFUL LOAD	1407 lbs.
GROSS WEIGHT	4896 lbs.
WING AREA (incl ailerons)	362 sq. ft.
WING LOADING	13.7 lbs./sq. ft.
POWER LOADING	7.9 lbs./H.P.
TOP SPEED, S.L.	153.8 mph AT 2000 rpm
TOP SPEED, 10,000 feet	146.5 mph
CRUISING SPEED	133 mph AT 1850 rpm
STALLING SPEED	62 mph
LANDING SPEED	60 mph
CLIMB, INITIAL, S.L.	1,230 ft./min.
SERVICE CEILING	20,200 feet
ABSOLUTE CEILING	21,000 feet
FUEL CAPACITY	146.5 gals.
OIL CAPACITY	14 gals.

POWER: P & W R-1690-9-13 'HORNET',  
RATED 625 H.P. AT 2000 rpm

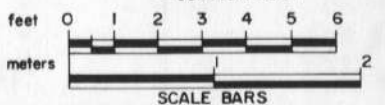
CANOPY ARRANGEMENT OF  
UNARMED O-38F MODELS



DATUM



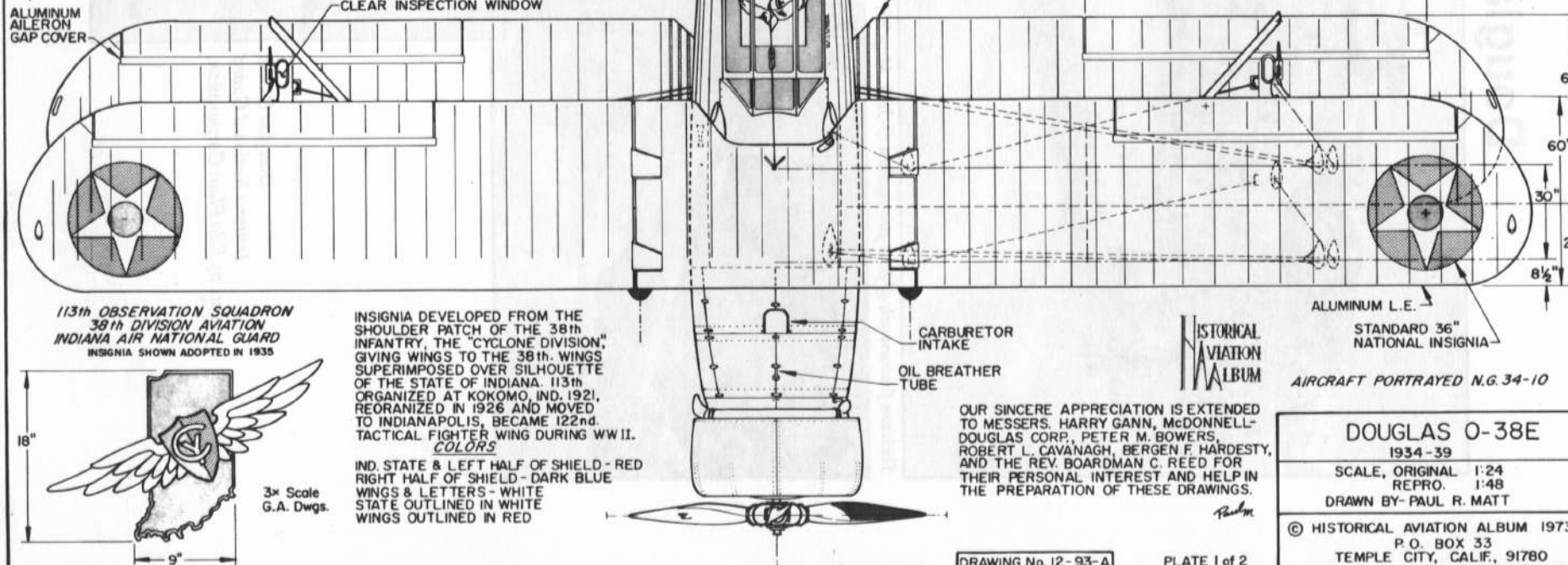
GOETTINGEN 398 AIRFOIL



SCALE BARS

ALUMINUM  
AILERON  
GAP COVER

CLEAR INSPECTION WINDOW



ALUMINUM L.E.

FLUSH PIANO HINGE

AUX LIGHT STORAGE  
COMPARTMENTS

BLACK LETTERS  
24" HIGH, 4" STROKE  
N.G. ON OPPOSITE  
WING IN SAME  
CENTERED POSITION

**IND.**

MOISTURE  
DRAIN GROMMETS

MOUNTING  
STEP BAR  
THIN WOOD STRIPS  
ANTI-SLIP WALKWAY

CARBURETOR  
INTAKE  
OIL BREATHER  
TUBE

ALUMINUM L.E.  
STANDARD 36"  
NATIONAL INSIGNIA

113th OBSERVATION SQUADRON  
38th DIVISION AVIATION  
INDIANA AIR NATIONAL GUARD  
INSIGNIA SHOWN ADOPTED IN 1935



3x Scale  
G.A. Dwgs.

INSIGNIA DEVELOPED FROM THE  
SHOULDER PATCH OF THE 38th  
INFANTRY, THE "CYCLONE DIVISION,"  
GIVING WINGS TO THE 38th. WINGS  
SUPERIMPOSED OVER SILHOUETTE  
OF THE STATE OF INDIANA. 113th  
ORGANIZED AT KOKOMO, IND. 1921,  
REORGANIZED IN 1926 AND MOVED  
TO INDIANAPOLIS, BECAME 122nd  
TACTICAL FIGHTER WING DURING WW II.

COLORS  
IND. STATE & LEFT HALF OF SHIELD - RED  
RIGHT HALF OF SHIELD - DARK BLUE  
WINGS & LETTERS - WHITE  
STATE OUTLINED IN WHITE  
WINGS OUTLINED IN RED

HISTORICAL  
AVIATION  
ALBUM

AIRCRAFT PORTRAYED N.G. 34-10

OUR SINCERE APPRECIATION IS EXTENDED TO  
MESSRS. HARRY GANN, McDONNELL-  
DOUGLAS CORP., PETER M. BOWERS,  
ROBERT L. CAVANAGH, BERGEN F. HARDESTY,  
AND THE REV. BOARDMAN C. REED FOR  
THEIR PERSONAL INTEREST AND HELP IN  
THE PREPARATION OF THESE DRAWINGS.

**DOUGLAS O-38E**

1934-39

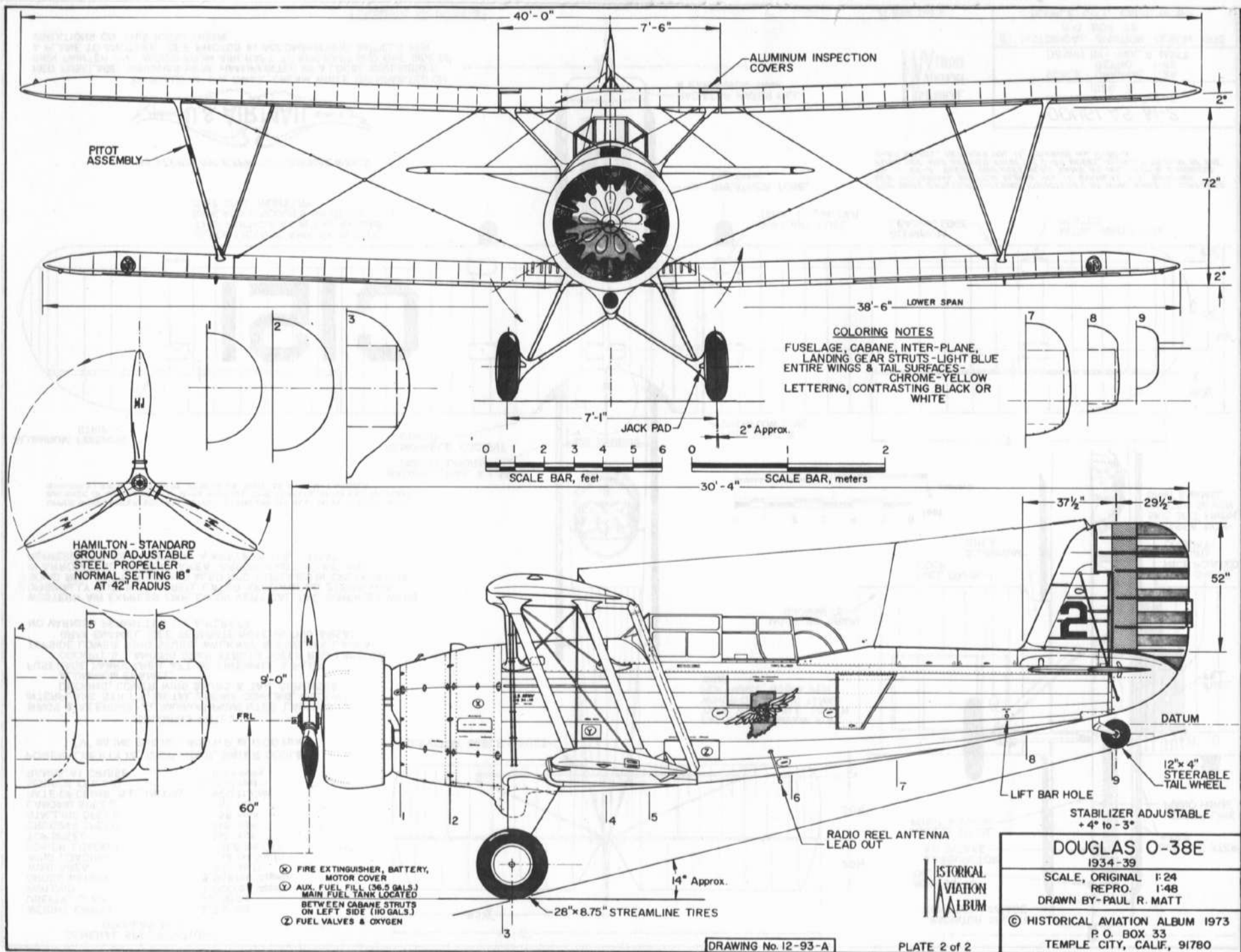
SCALE, ORIGINAL 1:24

REPRO. 1:48

DRAWN BY- PAUL R. MATT

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4711  
O-38F  
5-19-33





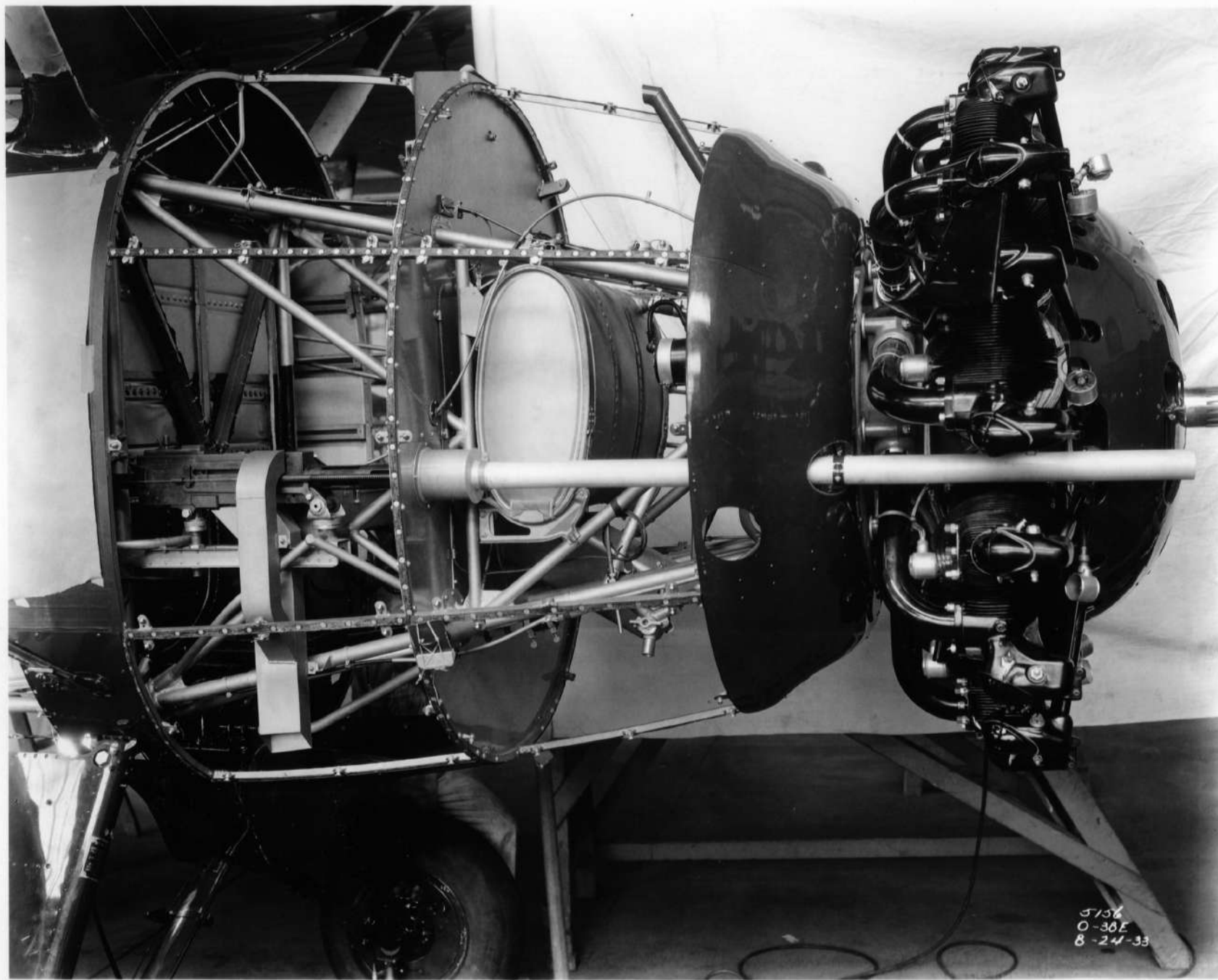


020-4671-20C11-1-35X9A12 DOUGLAS OBSERVATION (NG) O38-E RANDOLPH FIELD TEXAS -





4027  
O-38E  
5-26-33



5156  
O-30E  
8-24-33

R7B











915

1076







907







**GENERAL SPECIFICATIONS  
DOUGLAS M-2**

WEIGHT EMPTY	2,910 lbs.
USEFUL LOAD	2,058 lbs.
PAYLOAD	1,000 lbs. Approx.
GROSS WEIGHT	5,968 lbs. Approx.
WING AREA	411 sq. ft.
WING LOADING	12 lbs./sq. ft.
POWER LOADING	11.8 lbs./H.P.
TOP SPEED	135 mph
CRUISING SPEED	115 mph
STALLING SPEED	58 mph
LANDING SPEED	55 mph
RATE OF CLIMB, S.L., INITIAL	900 ft./min.
SERVICE CEILING	16,000 feet
RANGE, AT CRUISE	650 miles

POWER - LIBERTY 12, 12 CYLINDER, WATER COOLED,  
"V" INLINE ENGINE, 400 H.P. at 1700 rpm

**COLORING NOTES**

WINGS &AILERONS - ALUMINIUM PIGMENTED LACQUER.  
INTERPLANE STRUTS, METAL ENGINE COWLING, COCKPIT  
DECKING, LOWER WING STUBS & TAIL SURFACES -  
ALUMINIUM ENAMEL.  
FUSELAGE FABRIC AREA AFT OF FIREWALL & PILOT  
COCKPIT & LANDING GEAR STRUTS - DEEP RED LACQUER  
TOPSIDE LOWER WING STUBS, WALKWAY & FUEL FILL AREA -  
GRAY ENAMEL (SEE SEPARATE NOTE IN THIS AREA)  
NO VARNISH PERMITTED ON AIRCRAFT

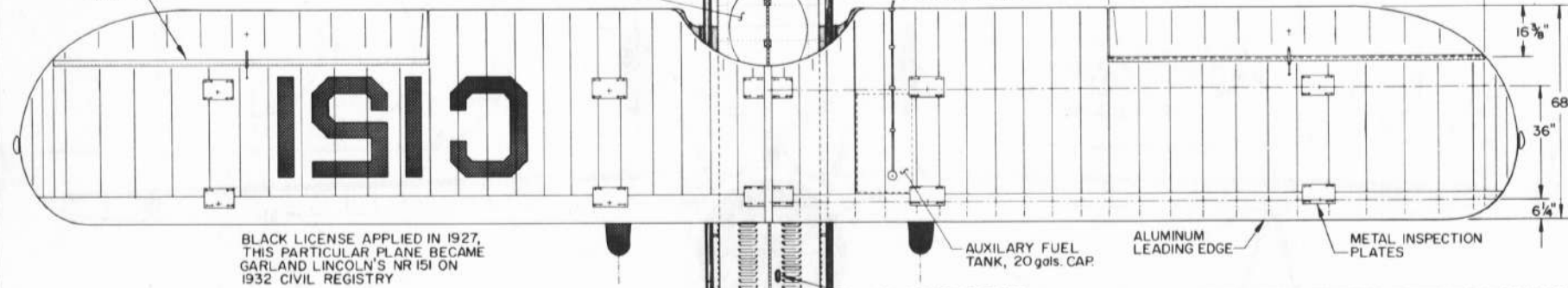
WESTERN AIR EXPRESS EMBLEM ON VERTICAL TAIL SURFACES WERE  
ORIGINALLY OUTLINED IN RED, LATER ARROWHEAD DESIGN WAS  
SOLID RED, LETTERING WAS ALSO RED, OUTLINED IN CREAM-WHITE  
IN ARROWHEAD OVERLAY AREA. ARROWHEAD OUTLINE WAS  
REPRESENTED AS A ROPE OR A WESTERN U.S. LARIAT.

UPPER WING CENTER SECTION CUTOUT STANDARD ON ALL M-2s & MOST M-3s,  
BALANCE OF M-3s AND ALL M-4s OMITTED THIS FEATURE. M-4s HAD INCREASED  
WINGSPAN - 44'-6", BUT WERE OTHERWISE SAME AS M-2, M-3 MODELS.

ALUMINUM FINISHING  
STRIP

BAGGAGE, MAIL & LARGE  
PARCEL DOORS  
REMOVABLE COCKPIT  
COVER

FUEL VENT &  
OVERFLOW LINE



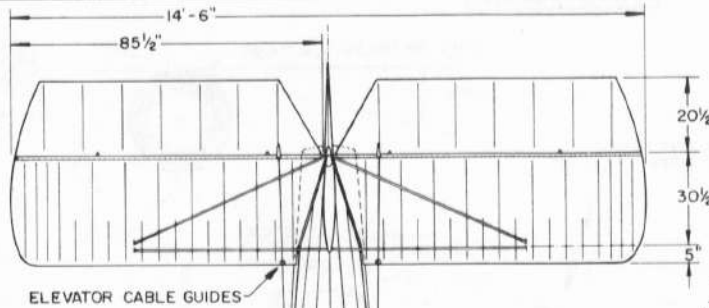
BLACK LICENSE APPLIED IN 1927,  
THIS PARTICULAR PLANE BECAME  
GARLAND LINCOLN'S NR 151 ON  
1932 CIVIL REGISTRY

WESTERN AIR EXPRESS - AIRMAIL WINGS



2x SCALE OF G.A. DWGS., CREAM WHITE OVERPAINTED ON  
RED FUSELAGE. INSIGNIAS WERE HANDPAINTED BY A LOCAL WINEBIBBER  
SIGN PAINTER AND VARIED FROM AIRCRAFT TO AIRCRAFT AND ONE SIDE OF  
A PLANE TO ANOTHER. SEE PHOTOS IN ACCOMPANYING ARTICLE FOR  
VARIATIONS ON THIS BASIC THEME.

DRAWING No. 14-68-A



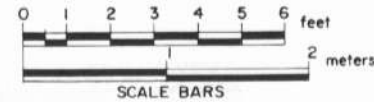
ELEVATOR CABLE GUIDES

EXPOSED ALUMINIUM FUEL  
TANK, REMOVABLE, LOWER  
WINGS ONLY, TWO TANKS  
PER PANEL, 55 gals. PER  
WING

MOISTURE DRAIN  
GROMMETS

FUEL DRAIN  
COCK

ALUMINIUM  
AREA



SCALE BARS

RADIATOR SHUTTERS  
CONTROL LINKAGE

ACCESS TO  
OIL FILTER

CARBURETOR  
AIR INTAKE

ACCESS TO OIL  
PUMP & DRAIN

SERVICE STEP  
BARS

CENTER LINE  
PIANO HINGE

FUEL  
FILL

FUEL GAUGE,  
FACE POINTED  
TOWARD  
COCKPIT

PLY AREA, NON-  
SKID GRIT FINISH,  
PAINTED SILVER  
GRAY ENAMEL

FOR MORE EXTENSIVE INTERIOR STRUCTURES OF WING AND TAIL SURFACES  
SEE HISTORICAL AVIATION ALBUM VOL. 11, DOUGLAS O-2, DRAWING  
No. 11-86-A. THESE SURFACES WERE SAME AS MILITARY O-2 MODELS.  
FUSELAGE WAS DERIVED FROM THE O-2C MODEL, CLOSELY TO THAT OF THE  
O-2H MODEL, REF HAA VOL. 11, DRAWING No. 11-87-A.

HISTORICAL  
AVIATION  
ALBUM

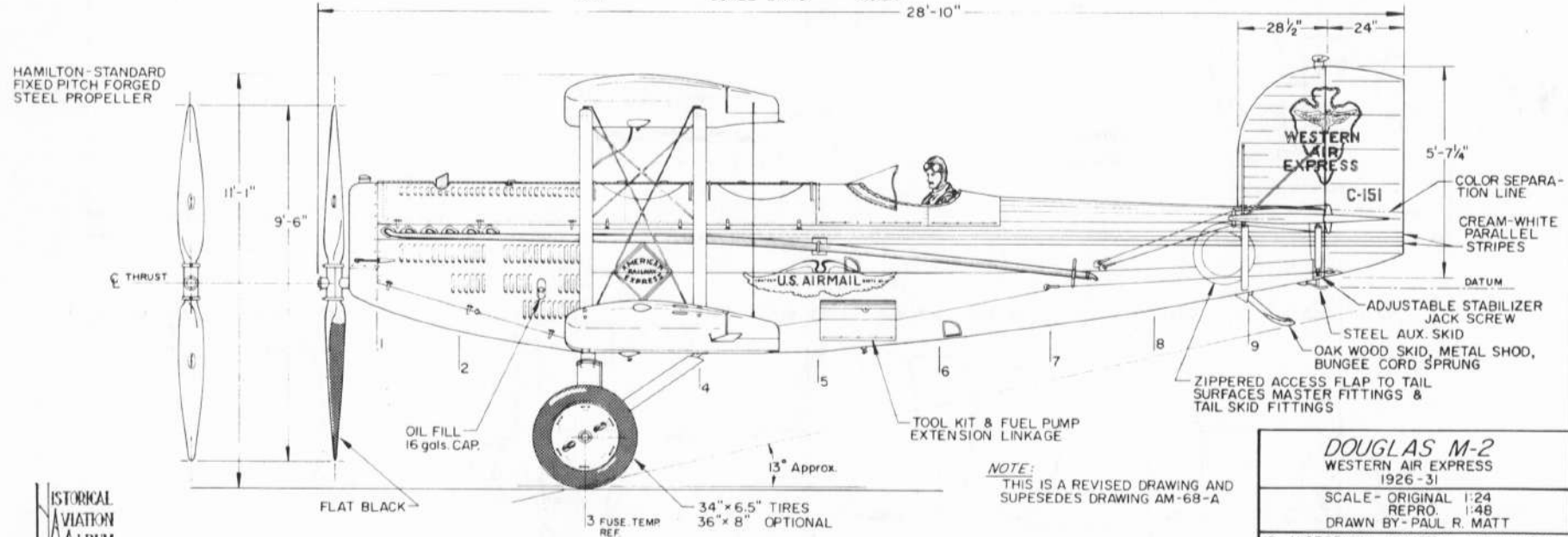
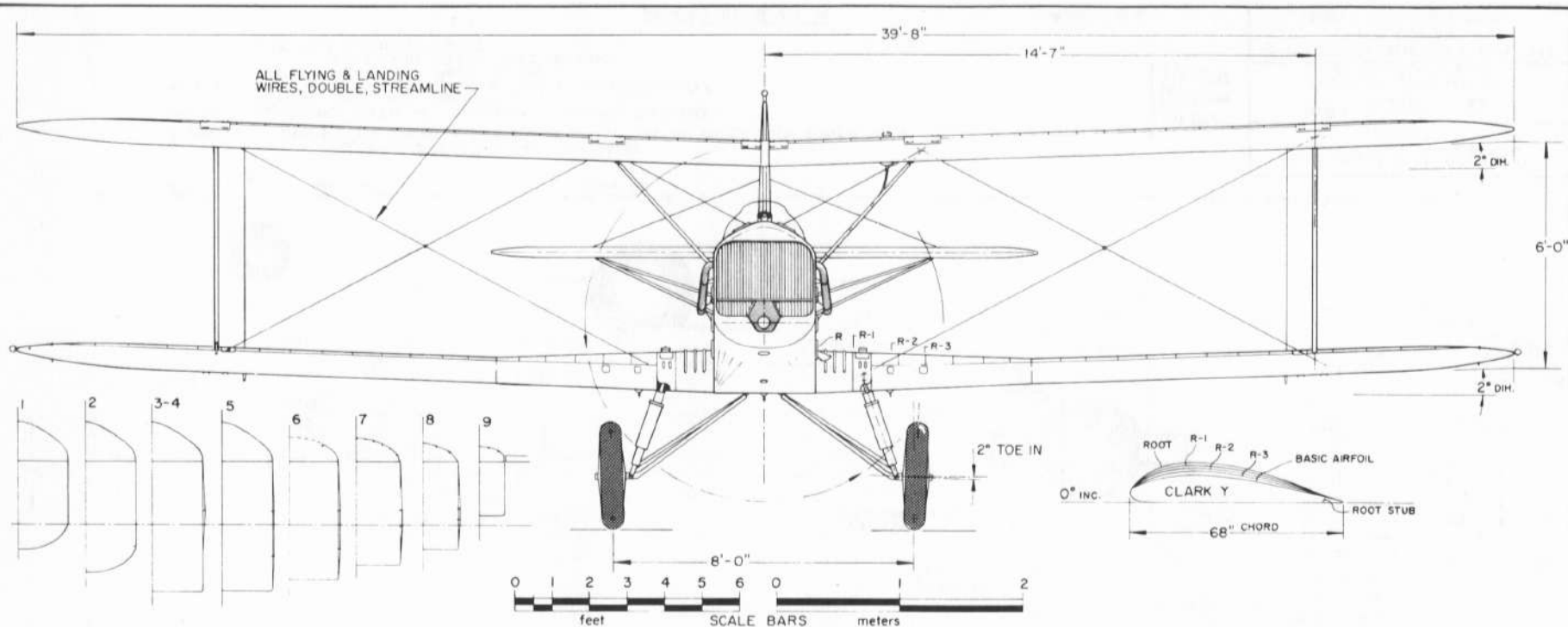
DOUGLAS M-2  
WESTERN AIR EXPRESS  
1926 - 31

SCALE - ORIGINAL 1:24  
REPRO. 1:48  
DRAWN BY - PAUL R. MATT

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PLATE 1 of 2



<b>DOUGLAS M-2</b> WESTERN AIR EXPRESS 1926-31	
SCALE - ORIGINAL	1:24
REPRO.	1:48
DRAWN BY - PAUL R. MATT	
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HISTORICAL  
AVIATION  
ALBUM

*Fly*  
**WESTERN AIR LINES**

C150  
LOS ANGELES  
SALT LAKE

CC-555

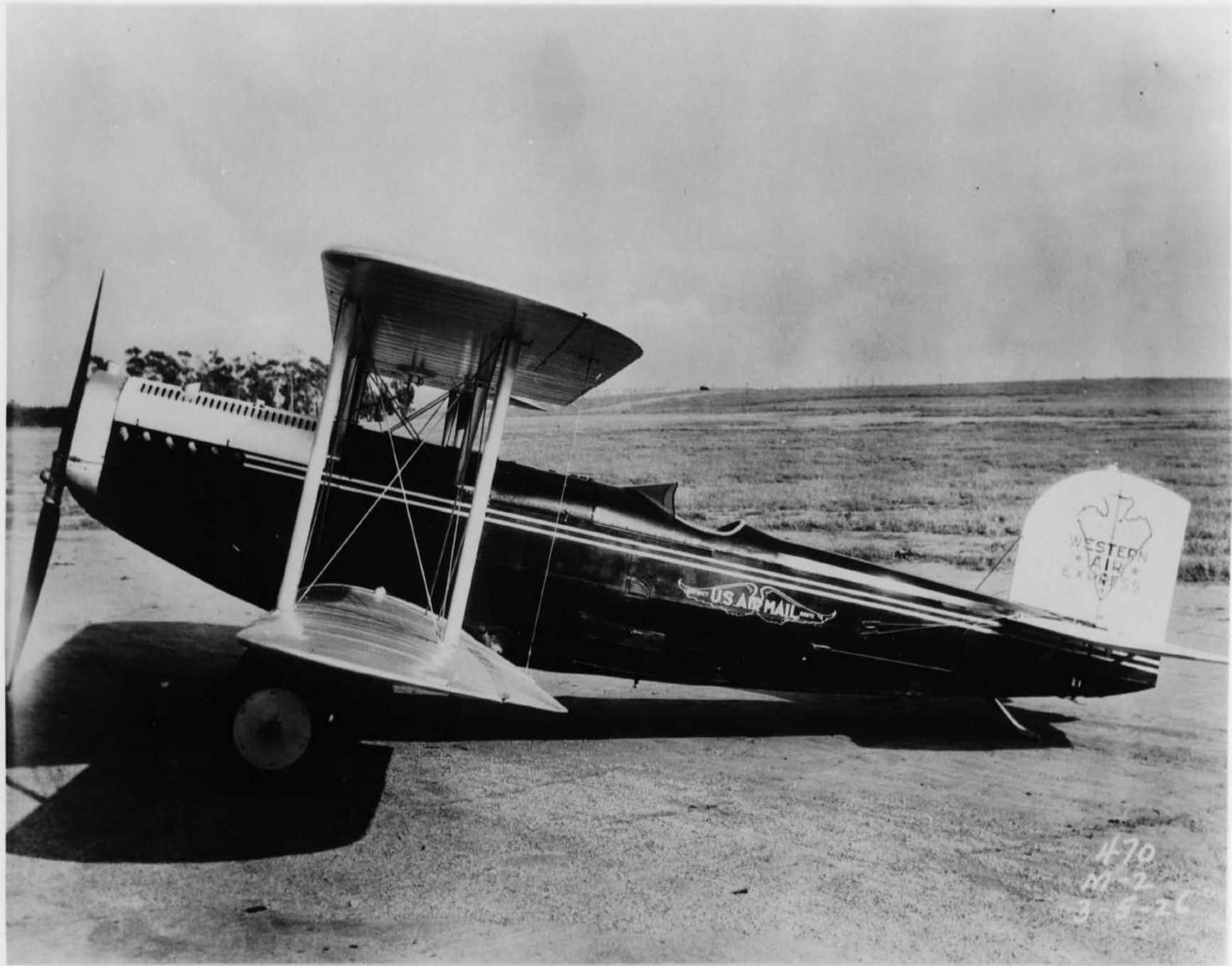








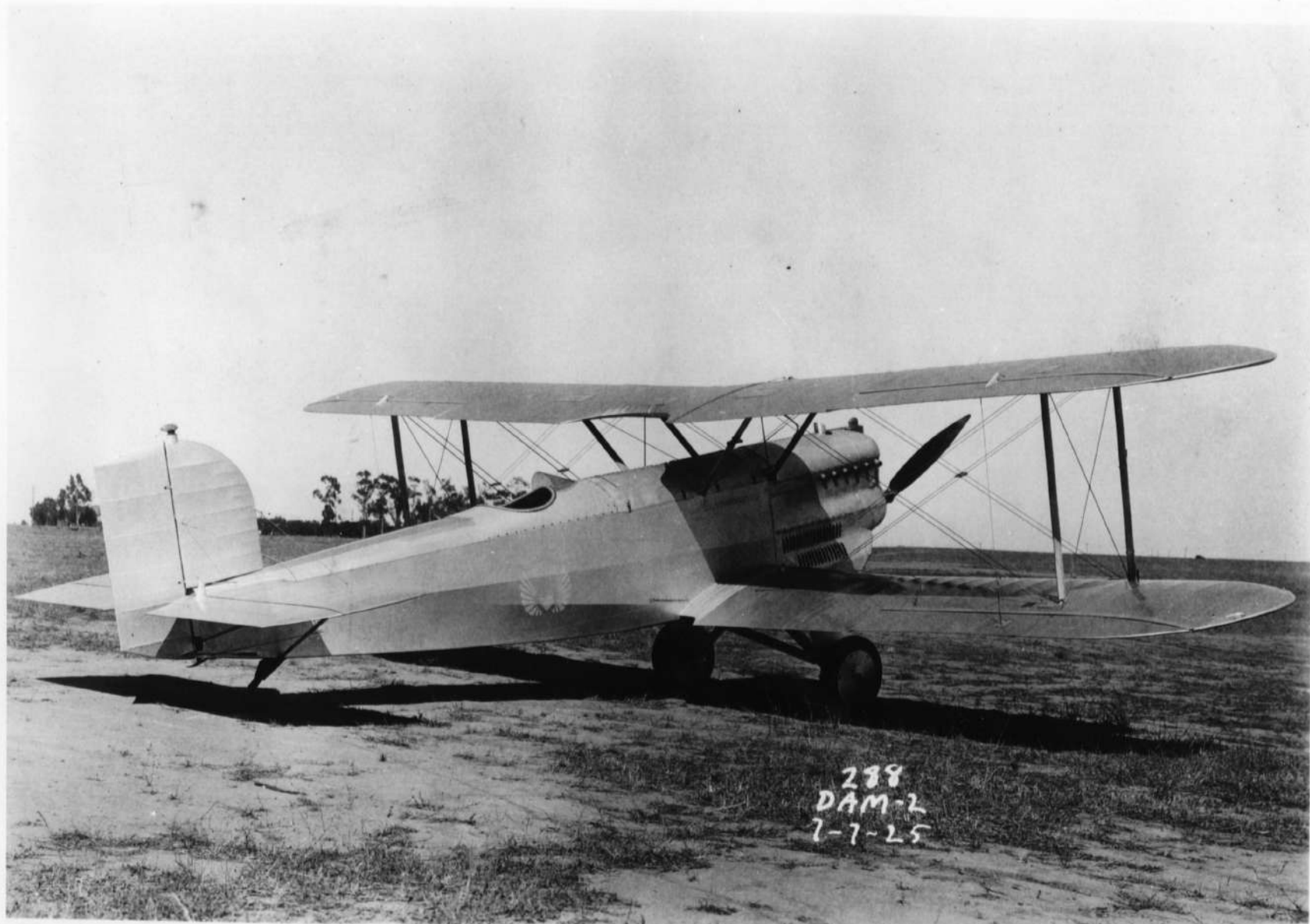




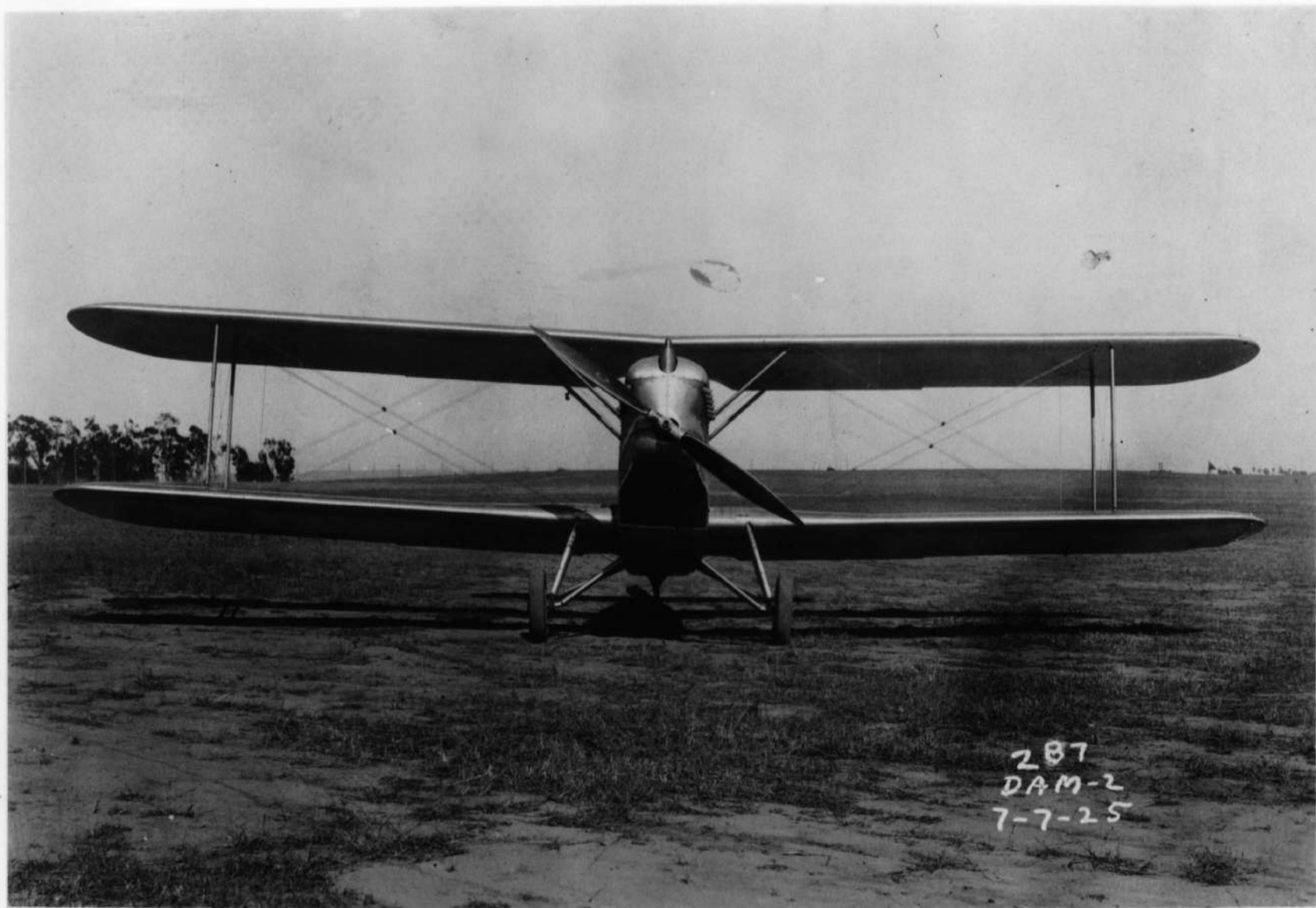








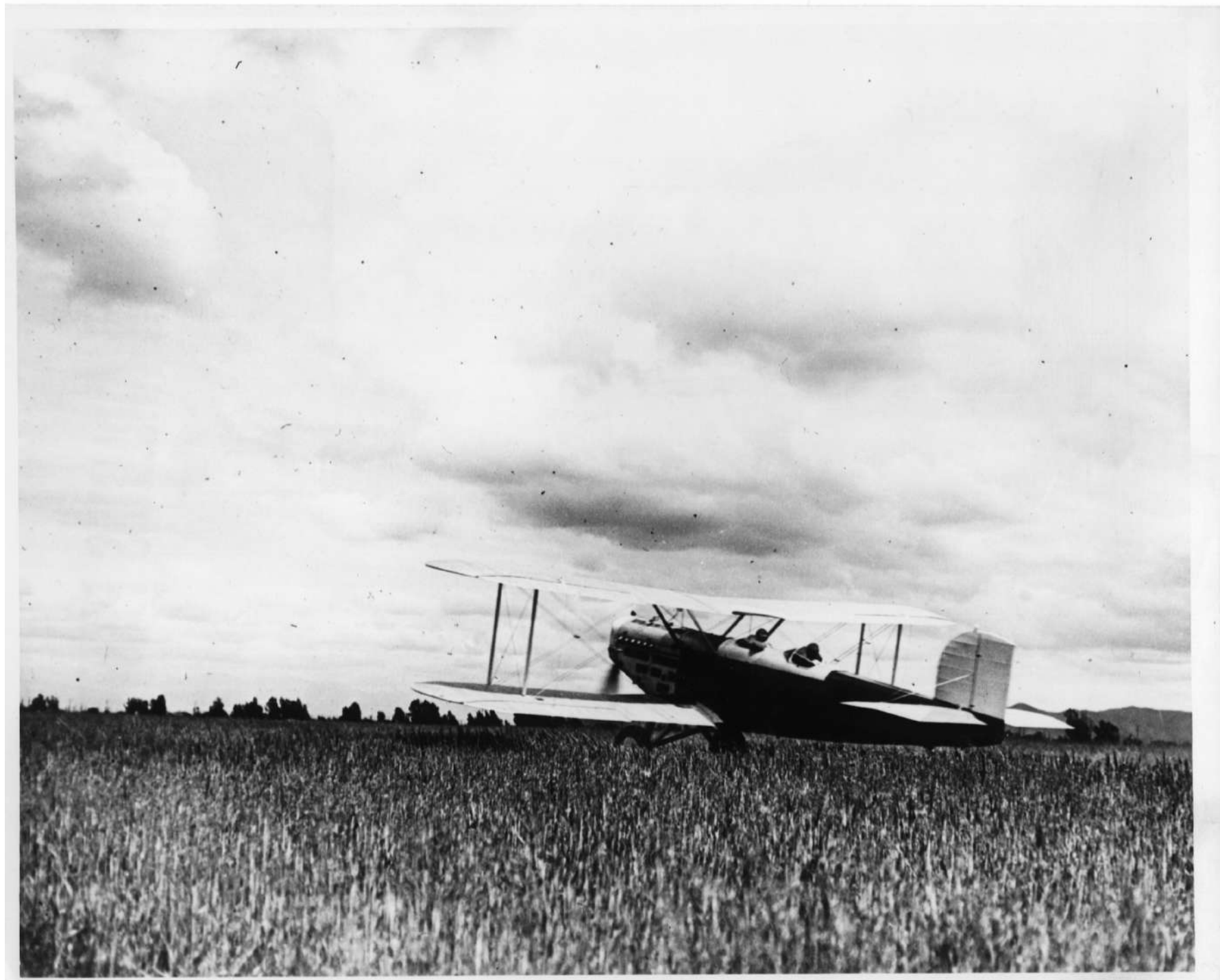
288  
DAM-2  
7-7-25



287  
DAM-2  
7-7-25







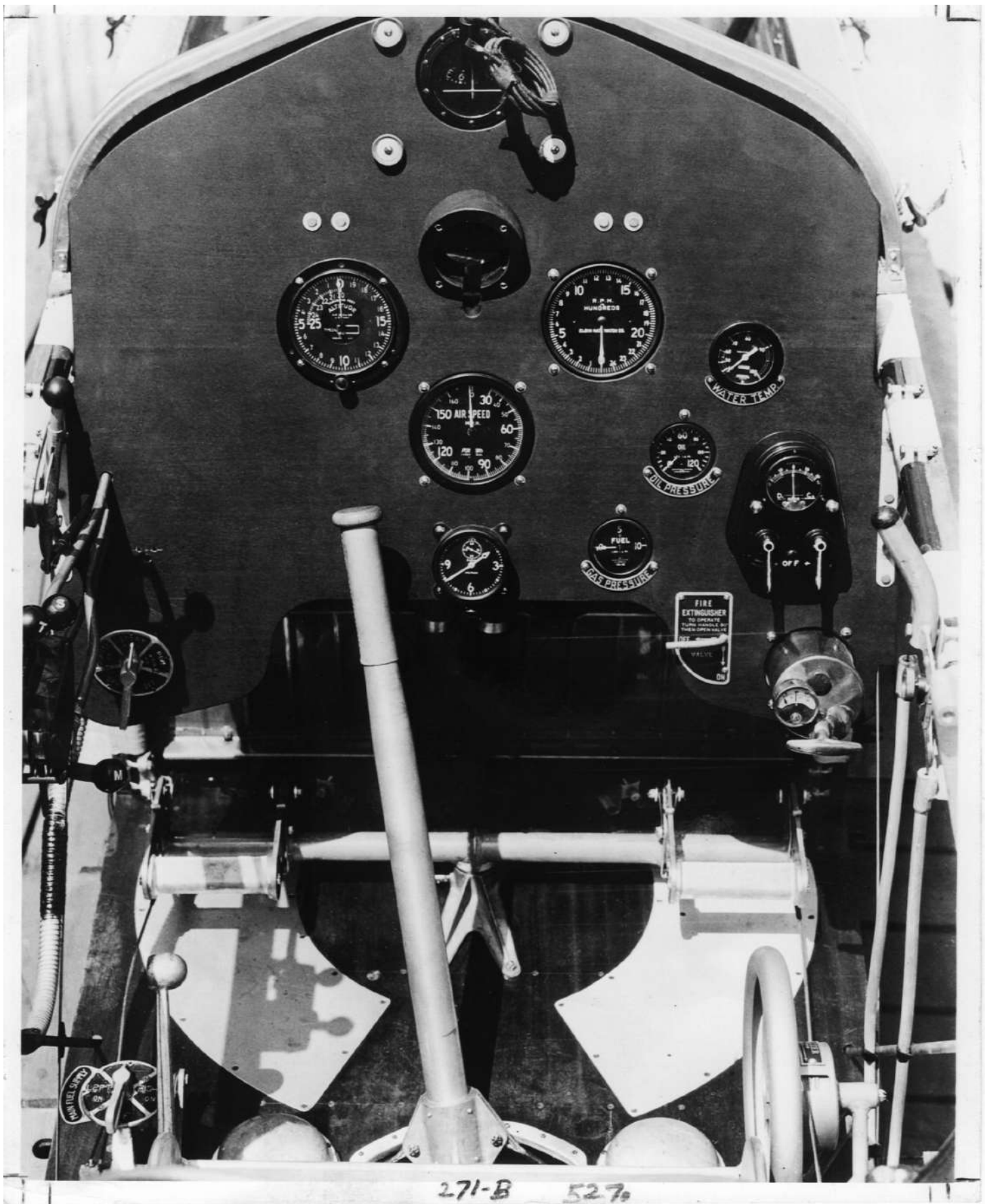


CONTRACT

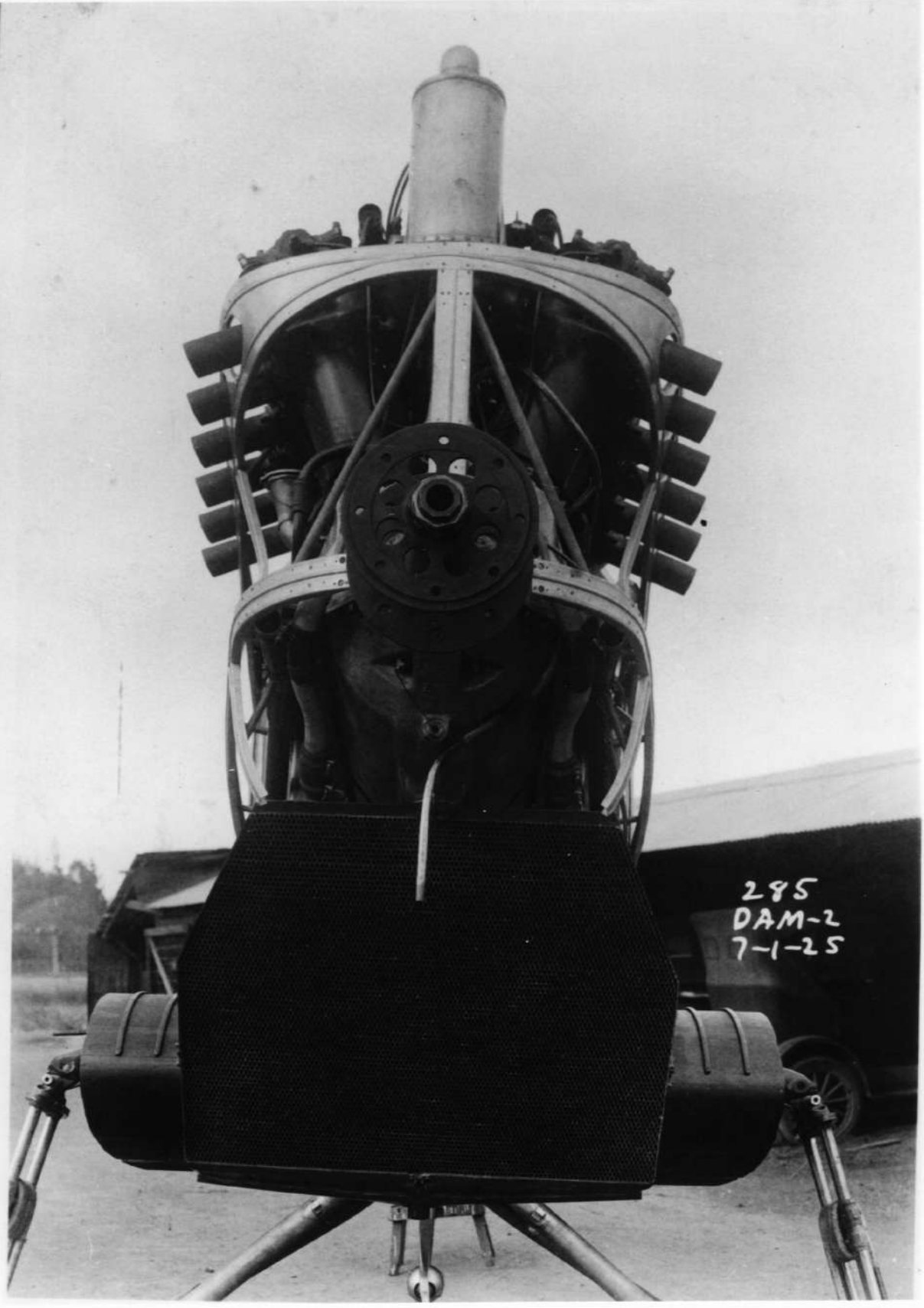
U.S. AIR MAIL

475  
M-2  
3-5-26

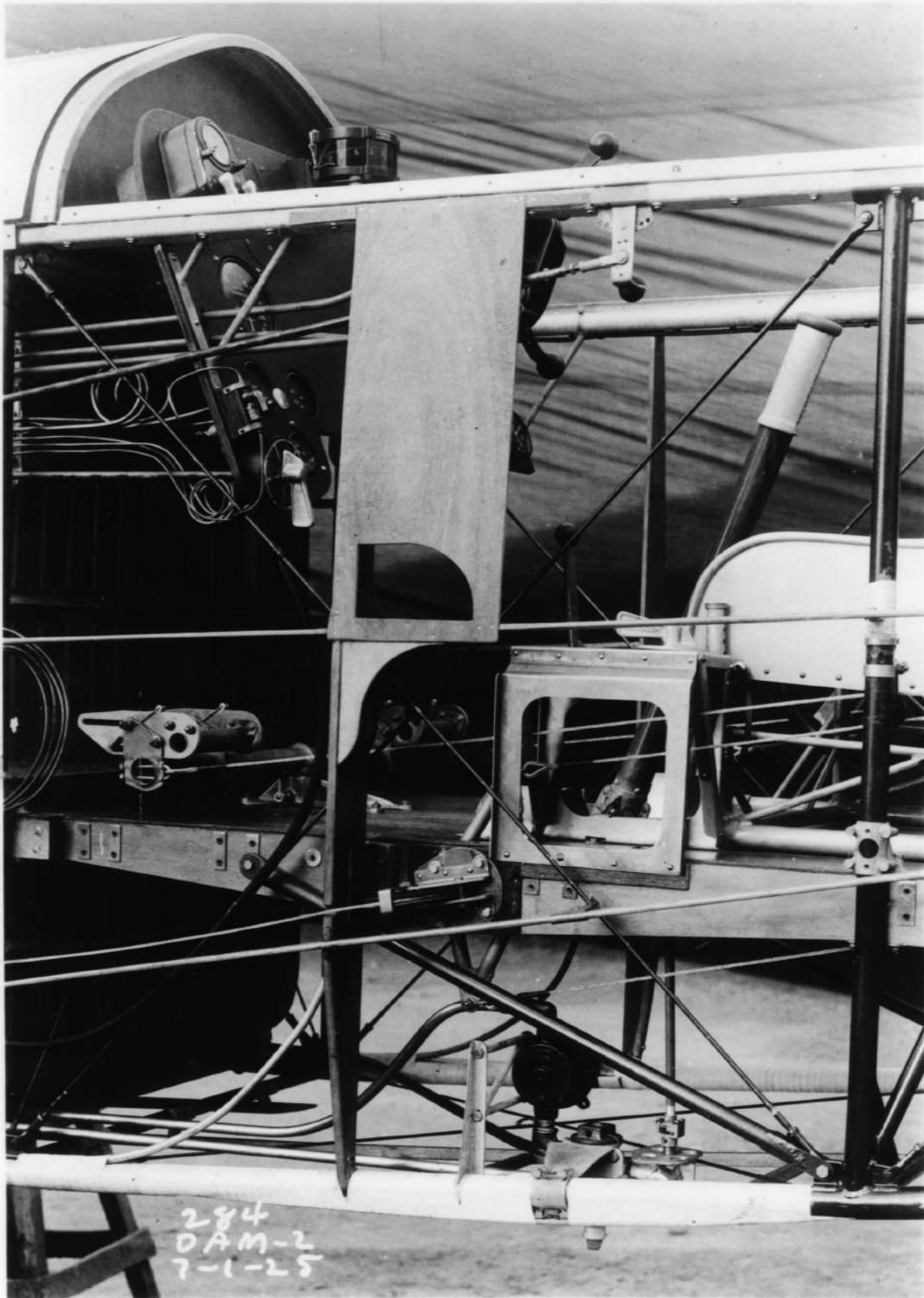


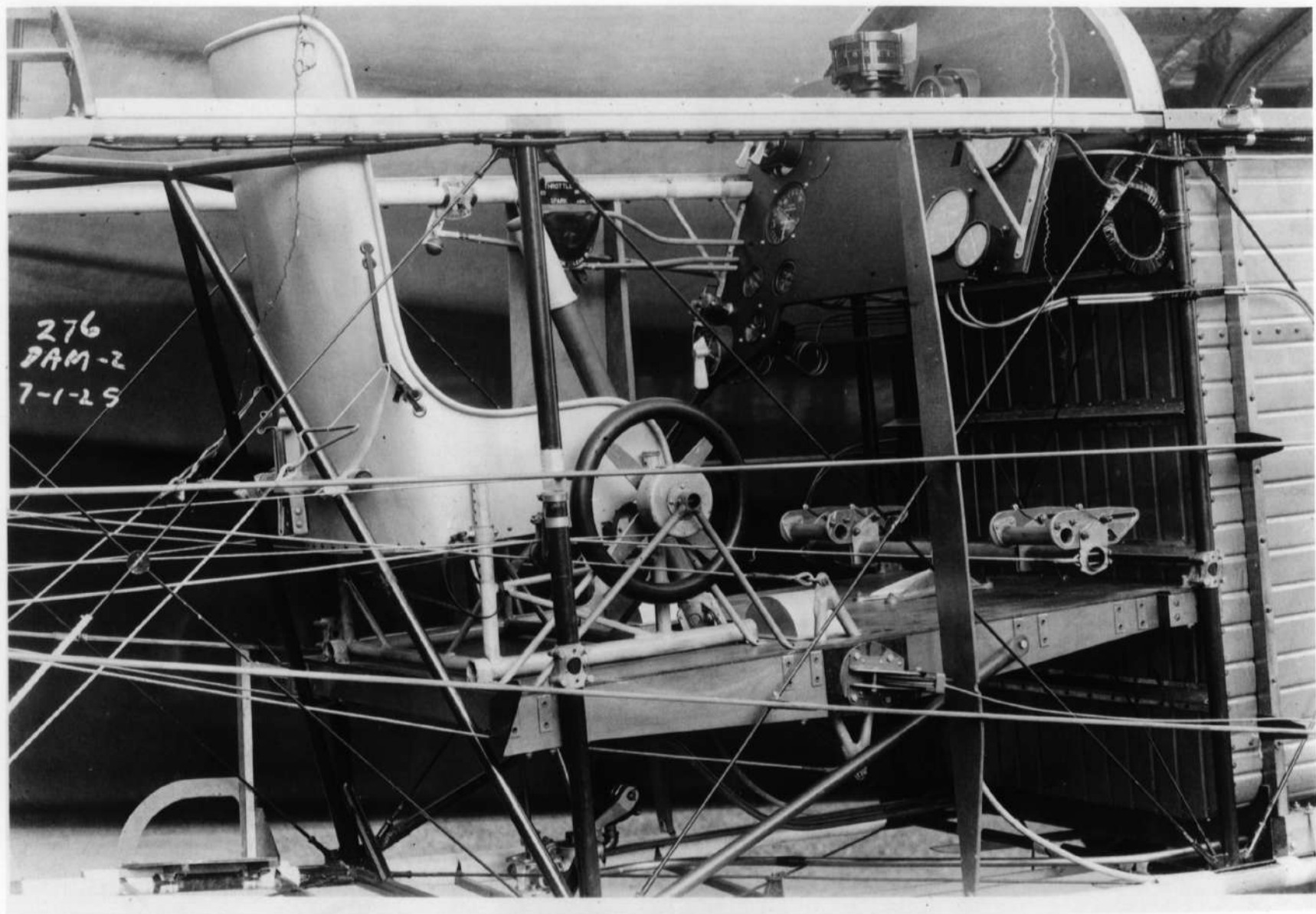


271-B 527



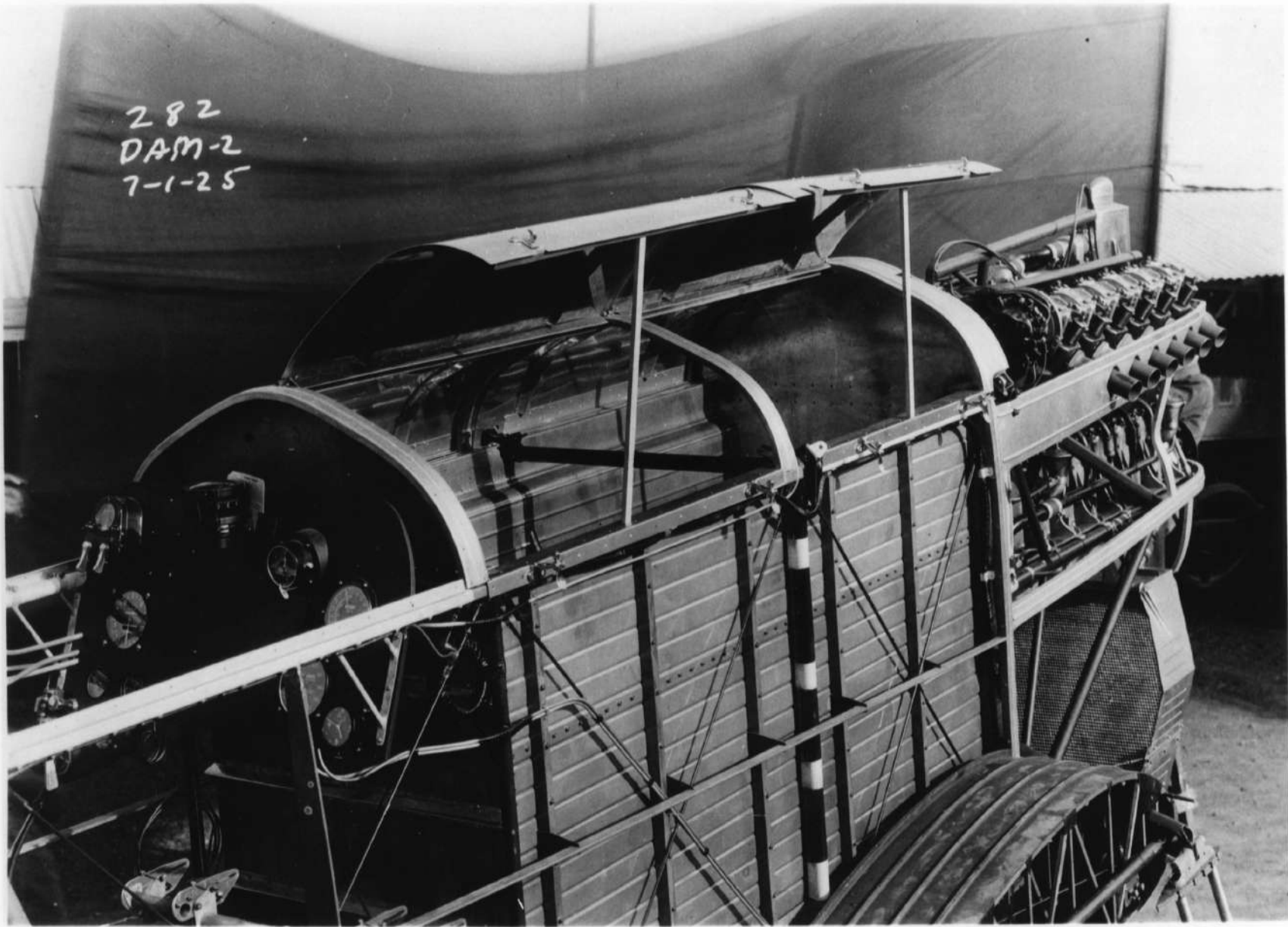
285  
DAM-2  
7-1-25

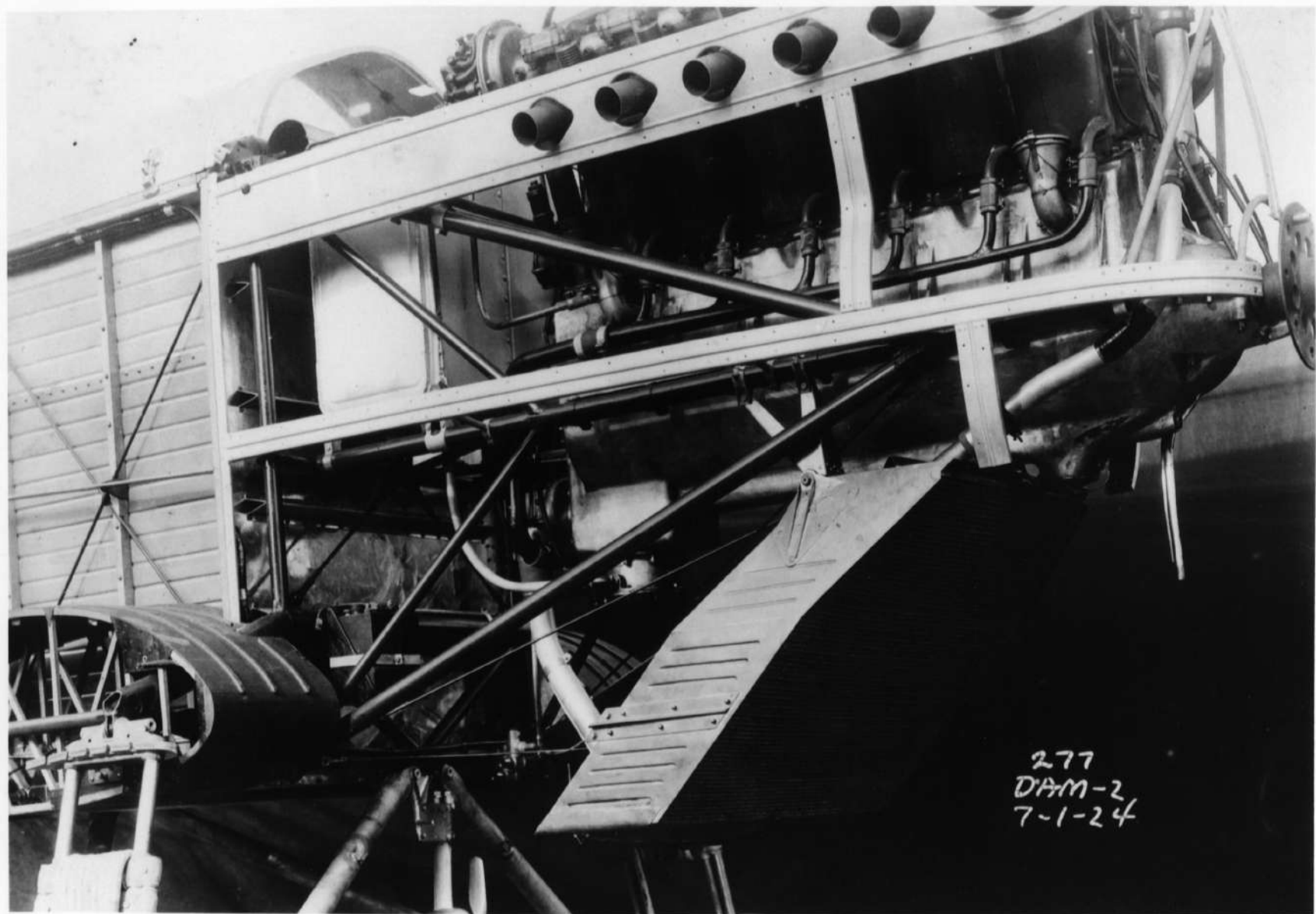


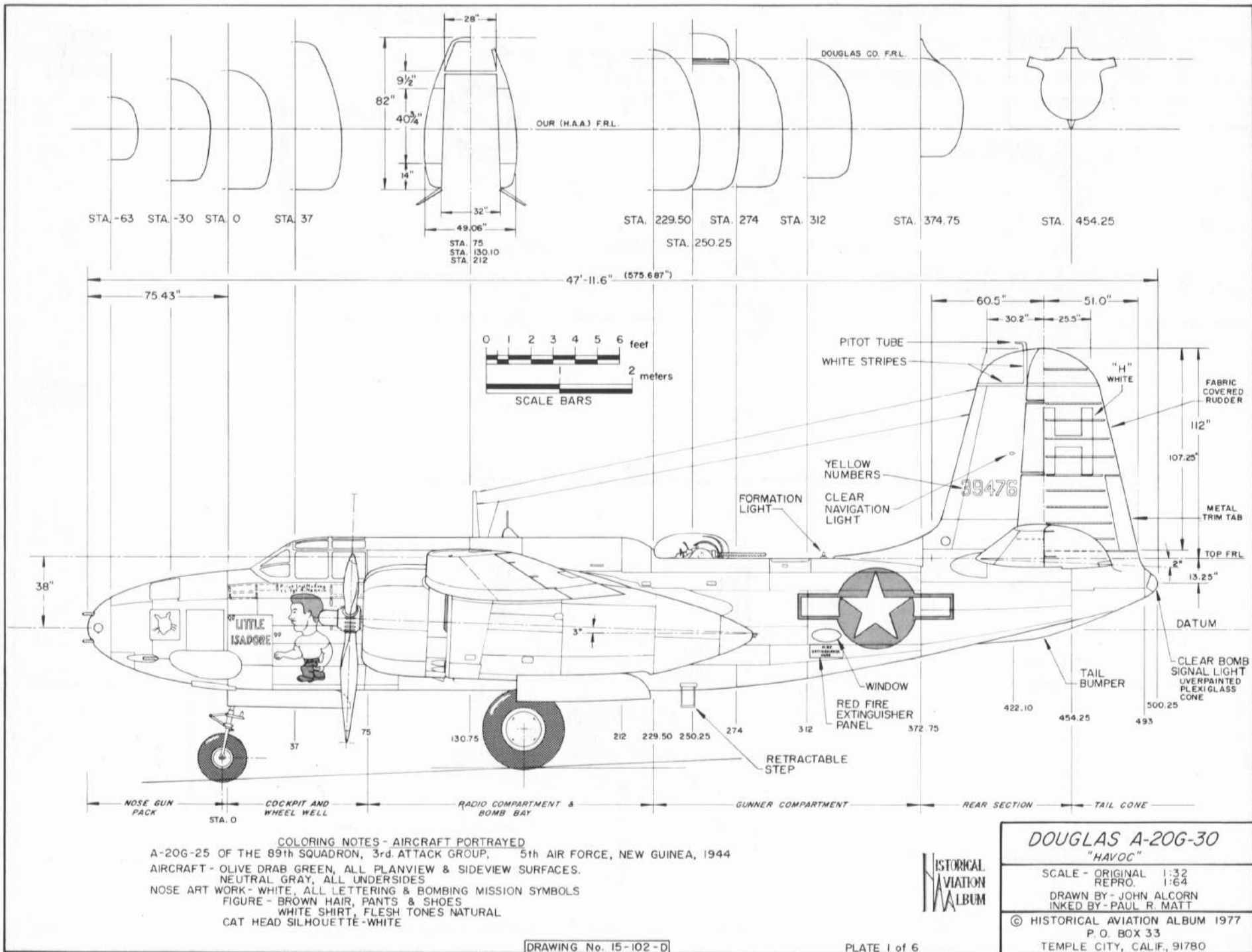




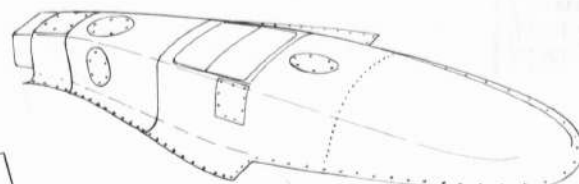
282  
DAM-2  
7-1-25



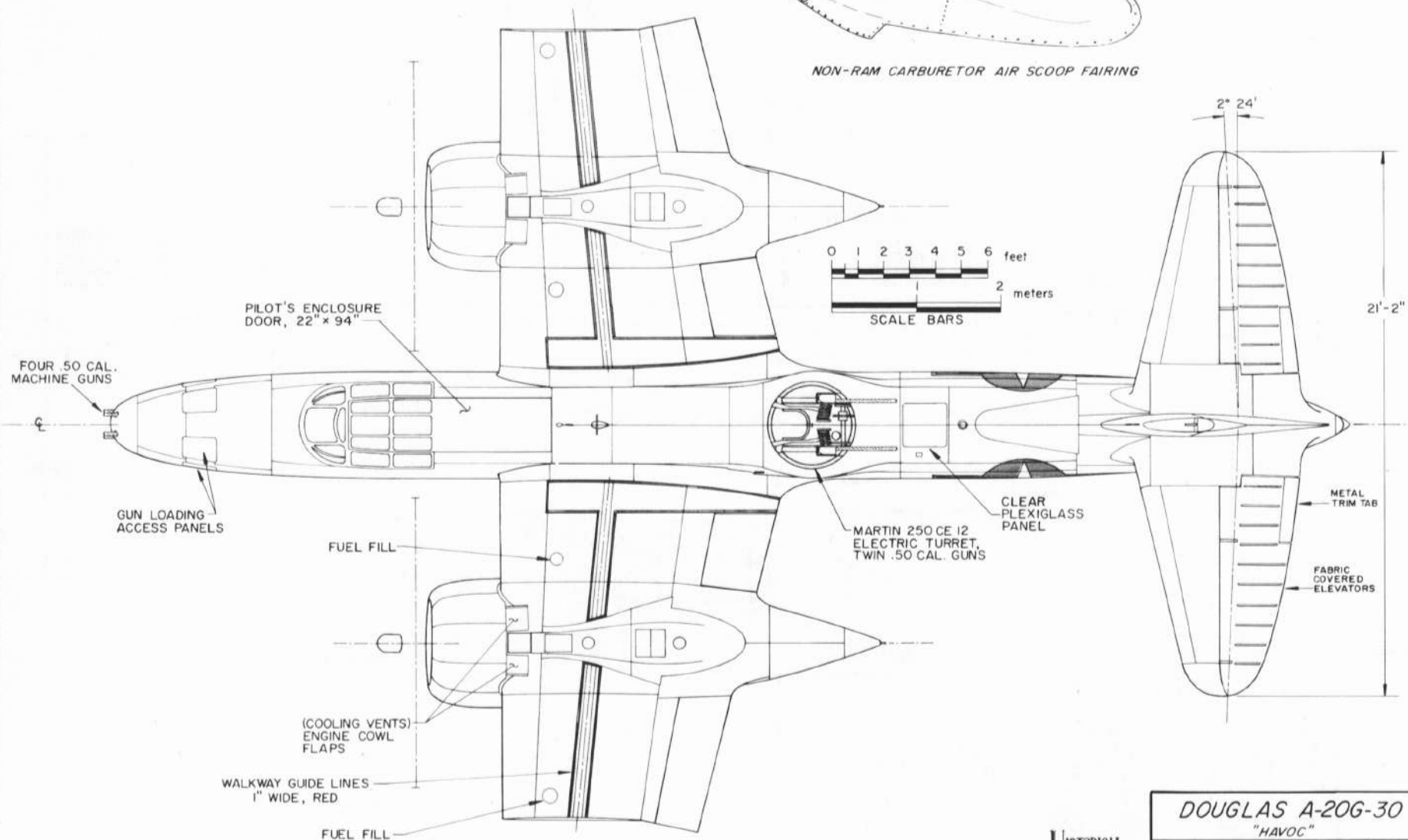




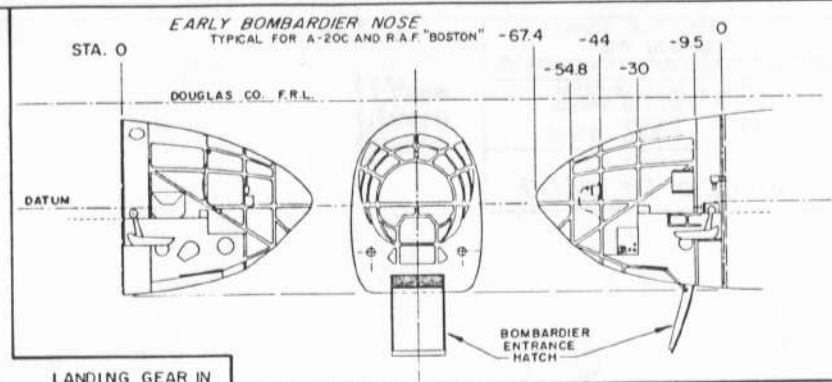




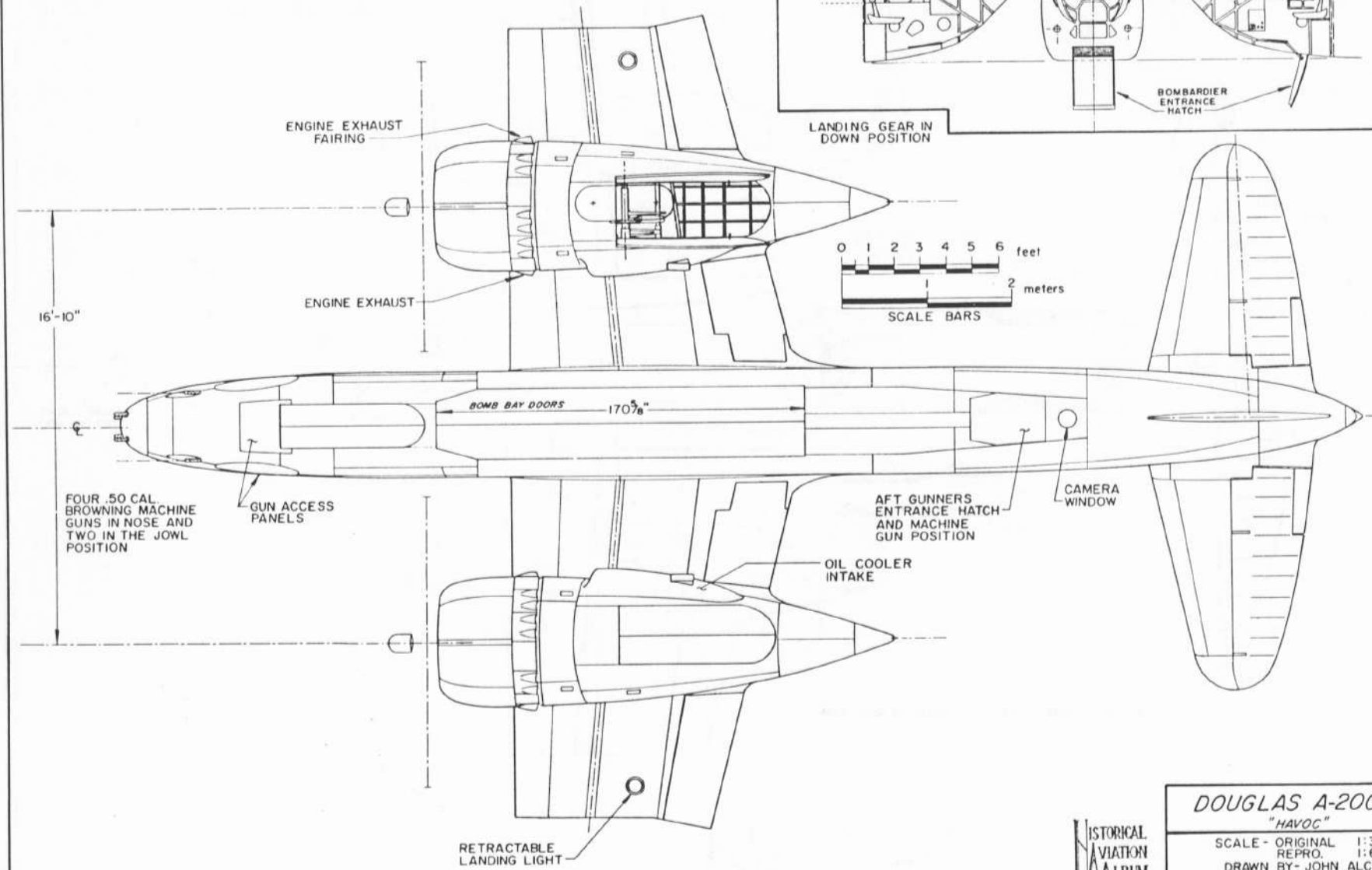
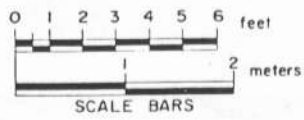
NON-RAM CARBURETOR AIR SCOOP FAIRING



<b>DOUGLAS A-20G-30</b> "HAVOC"	
SCALE - ORIGINAL	1:32
REPRO.	1:64
DRAWN BY - JOHN ALCORN	
INKED BY - PAUL R. MATT	
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LANDING GEAR IN DOWN POSITION



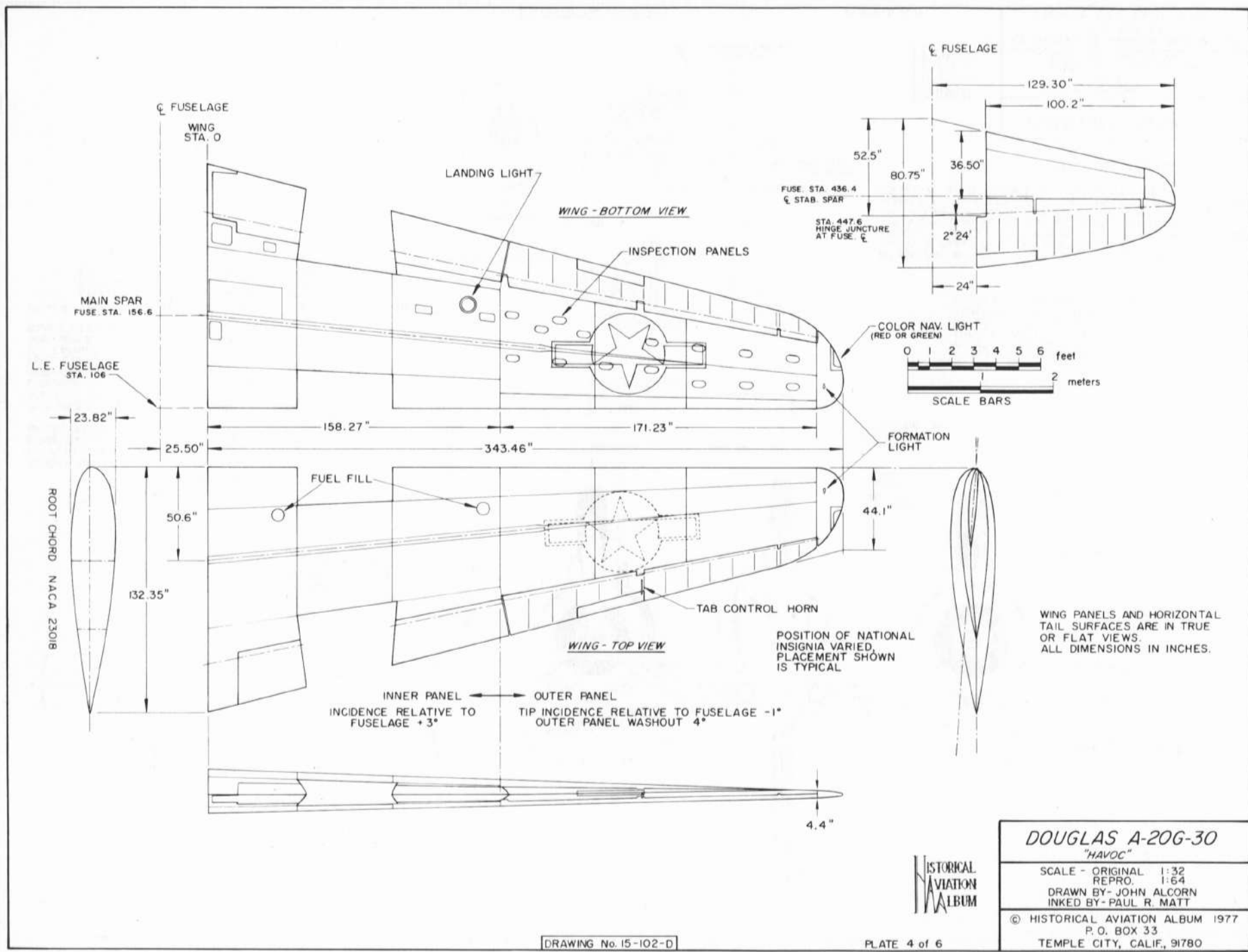
HISTORICAL AVIATION ALBUM

DOUGLAS A-20G-30  
"HAVOC"

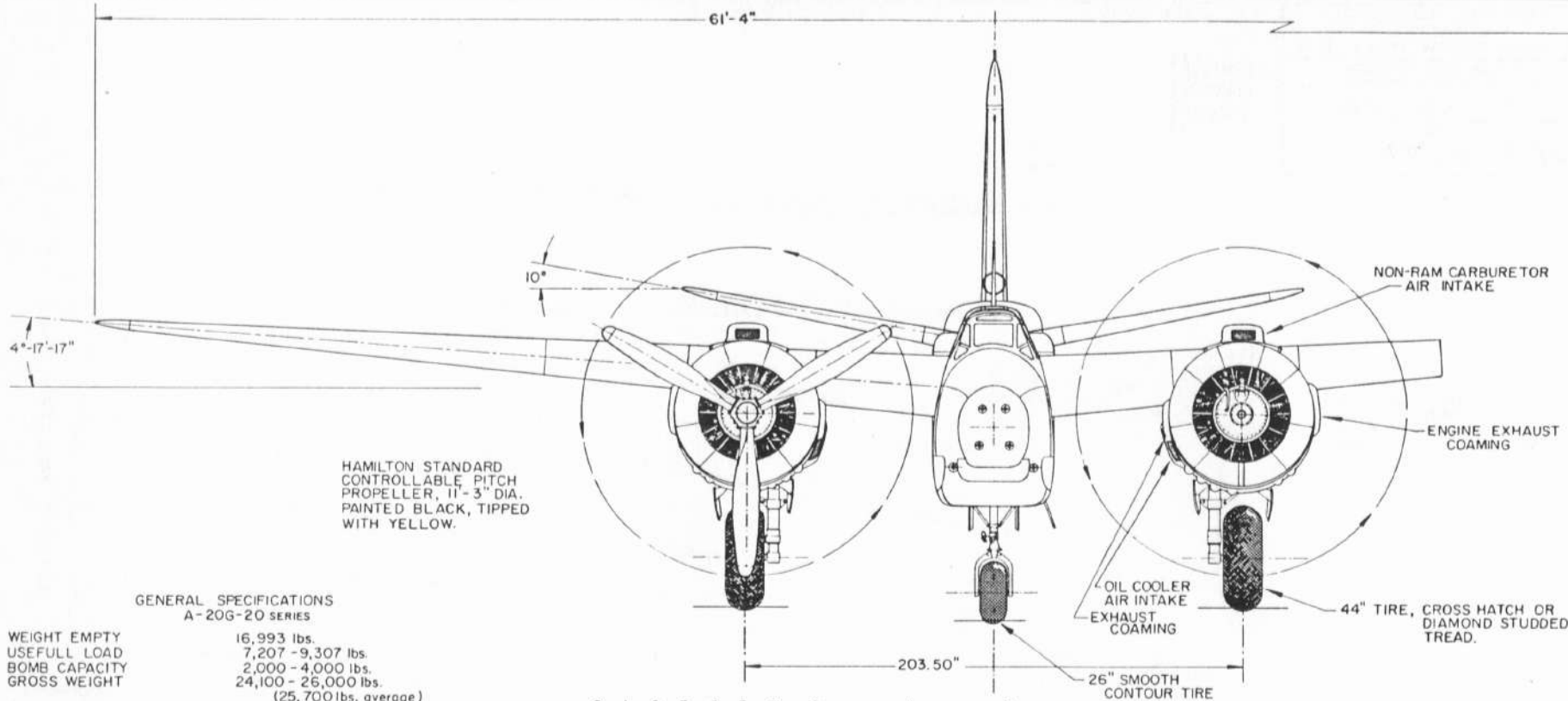
SCALE - ORIGINAL 1:32  
REPRO. 1:64

DRAWN BY - JOHN ALCORN  
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<b>DOUGLAS A-20G-30</b> <i>"HAVOC"</i>	
SCALE - ORIGINAL	1:32
REPRO.	1:64
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HAMILTON STANDARD  
CONTROLLABLE PITCH  
PROPELLER, 11'-3" DIA.  
PAINTED BLACK, TIPPED  
WITH YELLOW.

GENERAL SPECIFICATIONS  
A-20G-20 SERIES

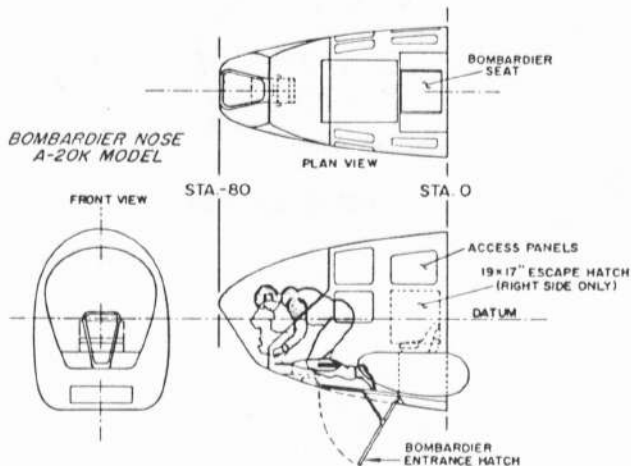
WEIGHT EMPTY	16,993 lbs.
USEFULL LOAD	7,207 - 9,307 lbs.
BOMB CAPACITY	2,000 - 4,000 lbs.
GROSS WEIGHT	24,100 - 26,000 lbs. (25,700 lbs. average)
TOP SPEED	280 mph (317 mph, A.C. empty)
STALLING SPEED	115 mph
LANDING SPEED	100 mph
SERVICE CEILING	23,700 ft.
FUEL CAPACITY	725 - 1105 gals.
OIL CAPACITY	40 gals.
WING AREA	464.8 sq. ft.
RANGE AT CRUISE	1,000 miles

POWER: TWO WRIGHT 14-CYLINDER R-2600-23 "CYCLONE" ENGINES  
 1,600 HP AT 2,400 rpm AT 1,000 feet (MAX.)  
 1,400 HP AT 2,400 rpm AT 10,000 ft. (MILITARY RATING)  
 1,275 HP AT 2,300 rpm AT 11,500 ft. (NORMAL RATING)



NOTE:

ALL DIMENSIONS SHOWN IN THIS SERIES OF DRAWINGS ARE GIVEN OR DETERMINED FROM ESTABLISHED REFERENCES, OR MEASURED FROM ACTUAL AIRCRAFT. NO DIMENSIONS ARE ESTIMATED OR SCALED FROM PHOTOGRAPHS OR DRAWINGS.



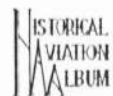
MY SINCERE APPRECIATION IS EXTENDED TO MESSRS. HARRY S GANN, DOUGLAS AIRCRAFT CORP.; PAUL PRICE, ANTELOPE VALLEY AIR MUSEUM; WINTHRUP SHAW, NATIONAL AIR & SPACE MUSEUM, SMITHSONIAN INSTITUTION; DUSTIN CARTER, AAHS; THE AIR FORCE MUSEUM AND AS ALWAYS GEORGE LEE, FOR THEIR HELP IN MAKING THESE DRAWINGS AS ACCURATE AND AUTHENTIC AS POSSIBLE.

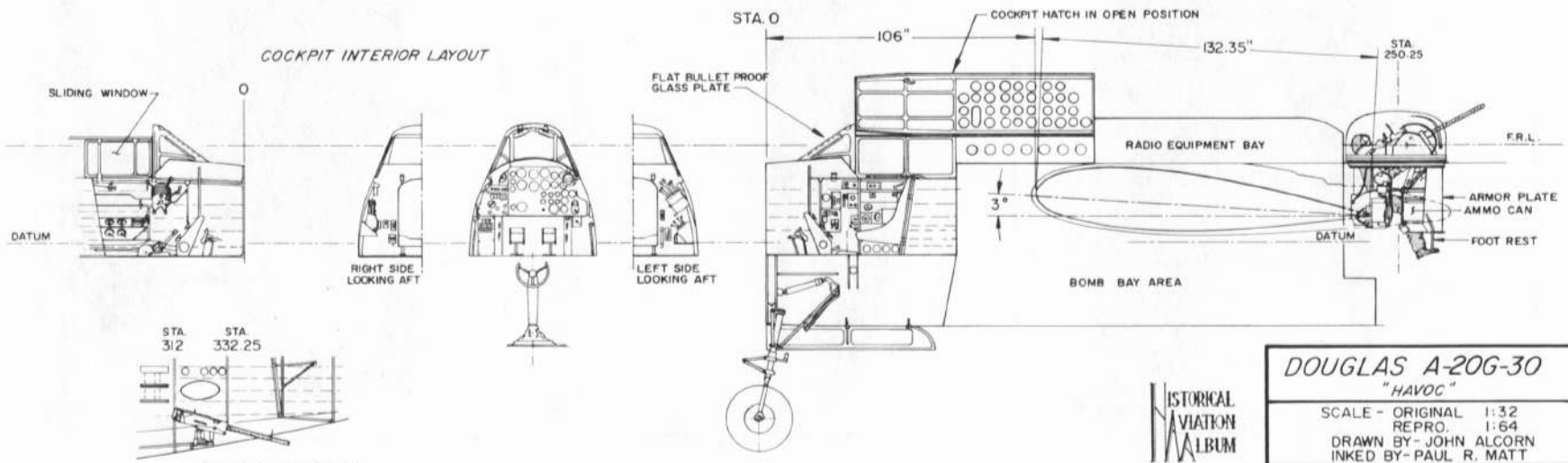
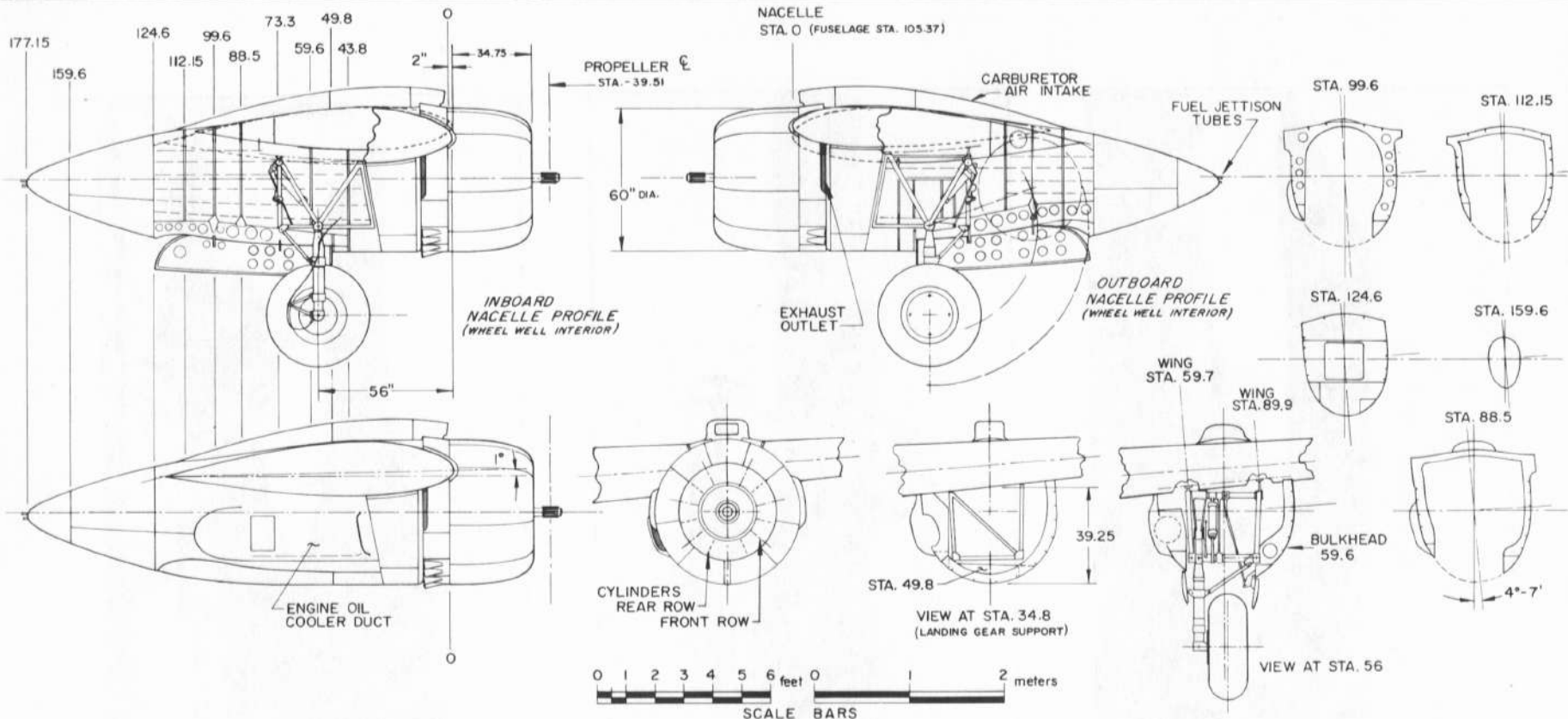
*John Alcorn*

DOUGLAS A-20G-30  
"HAVOC"

SCALE - ORIGINAL 1:32  
REPRO. 1:64  
DRAWN BY - JOHN ALCORN  
INKED BY - PAUL R. MATT

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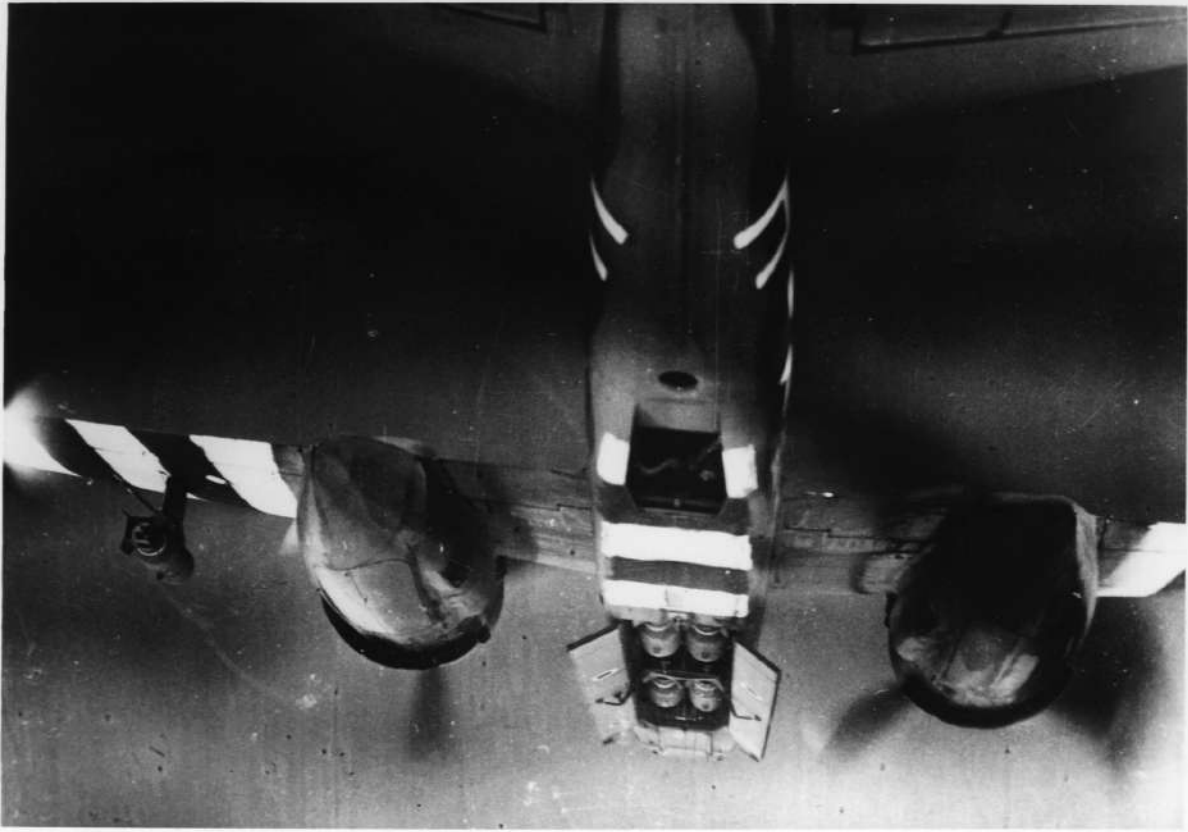
8785 DOUGLAS EL 9. DIV.  
A20 FINAL VIEW LEFT SIDE









































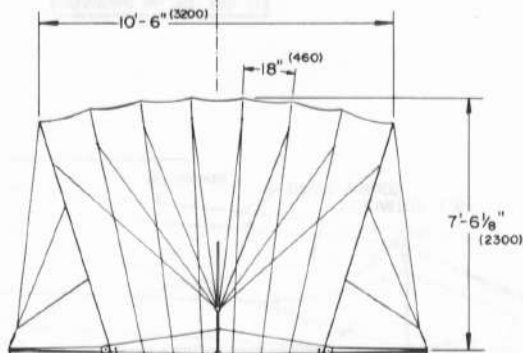
GENERAL SPECIFICATIONS  
(FIGURES ARE ESTIMATED)

WEIGHT EMPTY 950 lbs.  
TOP SPEED 60 mph  
POWER - 95 hp (PS), DAIMLER-MERCEDES,  
6-cyl. WATER COOLED ENGINE

COLORING NOTES

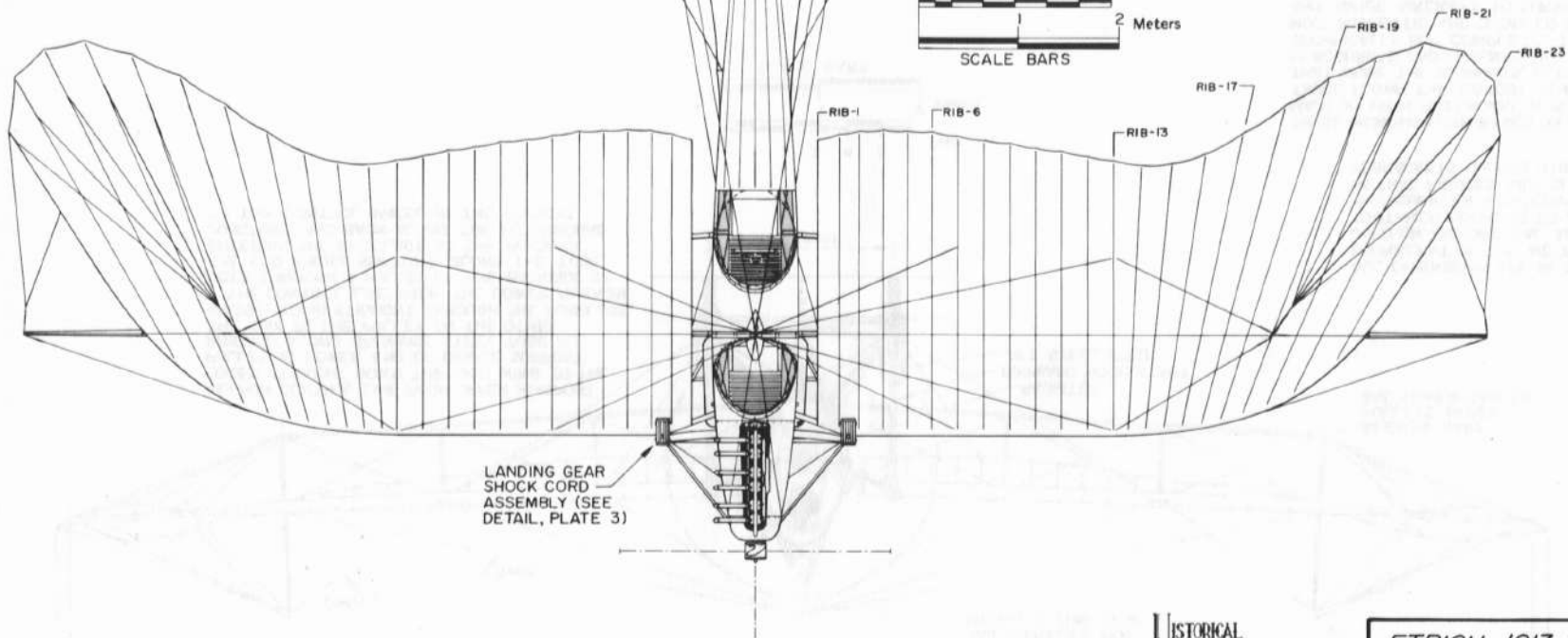
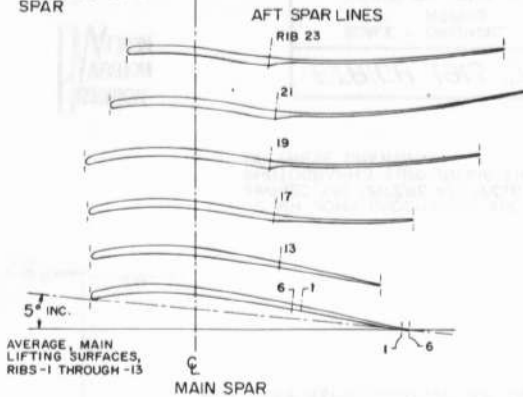
TAUBES WERE GENERALLY COVERED WITH "BALLOON CLOTH", A LIGHT LINEN LIKE FABRIC, THAT WAS SEALED ON THE OUTSIDE WITH A RUBBERIZED SUBSTANCE. SINCE FEW WERE PAINTED, THE FINAL APPEARANCE WAS AN UNEVEN, STREAKED, MOTTLED GREYISH-BROWN COLOR THAT DIRTIED EASILY.

3mm DRAG WIRES  
4mm RUDDER CONTROL WIRE



ASH & SPRUCE  
RIB CONSTRUCTION  
FORWARD OF AFT  
SPAR

BAMBOO FLEXIBLE AREA  
AFT OF SECOND SPAR



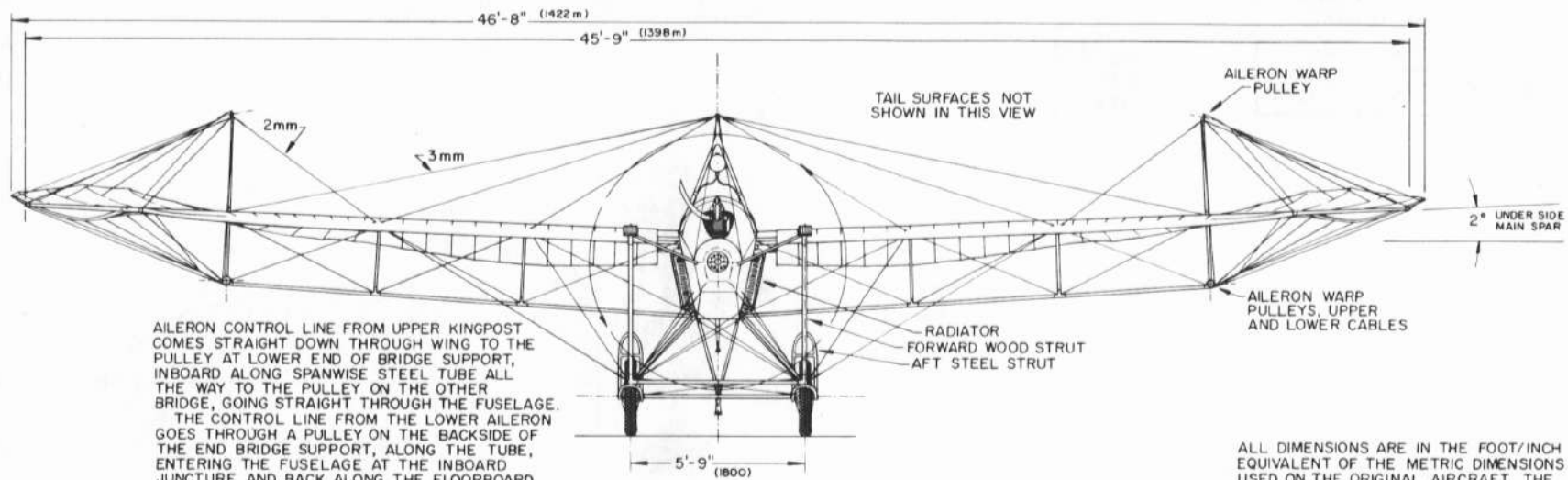
LANDING GEAR  
SHOCK CORD  
ASSEMBLY (SEE  
DETAIL, PLATE 3)

HISTORICAL  
AVIATION  
ALBUM

ETRICH 1913 "TAUBE"

SCALE - ORIGINAL 1:32  
REPRO. 1:64  
DRAWN BY - PAUL R. MATT

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AILERON CONTROL LINE FROM UPPER KINGPOST COMES STRAIGHT DOWN THROUGH WING TO THE PULLEY AT LOWER END OF BRIDGE SUPPORT, INBOARD ALONG SPANWISE STEEL TUBE ALL THE WAY TO THE PULLEY ON THE OTHER BRIDGE, GOING STRAIGHT THROUGH THE FUSELAGE.

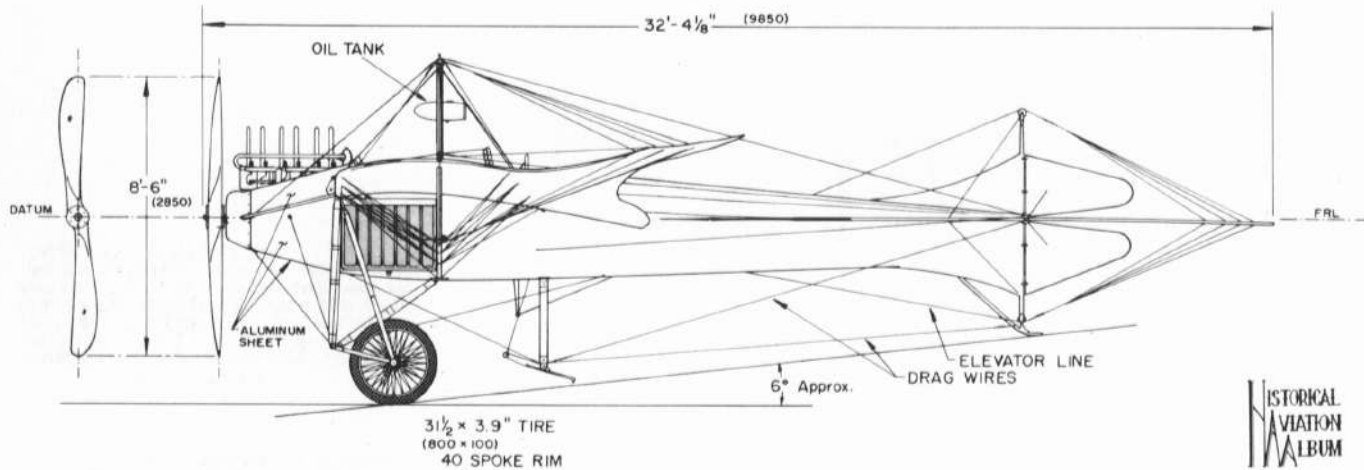
THE CONTROL LINE FROM THE LOWER AILERON GOES THROUGH A PULLEY ON THE BACKSIDE OF THE END BRIDGE SUPPORT, ALONG THE TUBE, ENTERING THE FUSELAGE AT THE INBOARD JUNCTURE AND BACK ALONG THE FLOORBOARD TO THE CONTROL WHEEL IN THE COCKPIT.

ALL DIMENSIONS ARE IN THE FOOT/INCH EQUIVALENT OF THE METRIC DIMENSIONS USED ON THE ORIGINAL AIRCRAFT. THE FOOT/INCH FIGURE IS TO THE NEAREST ONE-QUARTER INCH CONVERSION. ALL METRIC FIGURES ARE CENTIMETERS IN BRACKETS UNLESS OTHERWISE NOTED.



THESE DRAWINGS ARE BASED ON ORIGINAL PRINTS MADE BY MR. H. ROZENDAAL IN 1913 OF AN ETRICH TAUBE FLOWN THROUGHOUT GERMANY DURING THAT YEAR. THE DRAWINGS, ALTHOUGH EXTREMELY ACCURATE AND DIMENSIONED IN DETAIL, WERE TECHNICALLY NOT COMPLETE. THEY ARE THE MOST AUTHENTIC AND DETAILED DRAWINGS OF ANY TAUBE AIRCRAFT TO SURVIVE THE RAVAGES OF MAN AND TIME FOR OVER SIXTY YEARS. IT IS BELIEVED THEY FORM THE ONLY RELIABLE MATERIAL TO USE AT THIS TIME.

SINCE THERE WERE SO MANY VARIANTS OF THE TAUBE, EVEN THE ETRICH DESIGN, THESE DRAWINGS CAN BE CONSIDERED ACCURATE BUT ONLY REPRESENTATIVE OF THE TYPE.



TO MR. JOHN UNDERWOOD AND COL. JOHN A. deVRIES, MY SINCERE APPRECIATION FOR PHOTOGRAPHS SUPPORTING THE DETAILING OF THESE DRAWINGS.

*Paul R. Matt*

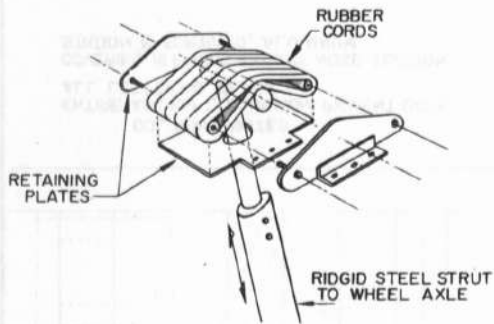
HISTORICAL AVIATION ALBUM

ETRICH 1913 "TAUBE"

SCALE - ORIGINAL 1:32  
REPRO. 1:64  
DRAWN BY - PAUL R. MATT

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**SHOCK STRUT MECHANISM**



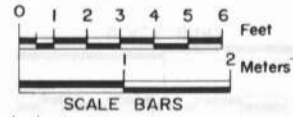
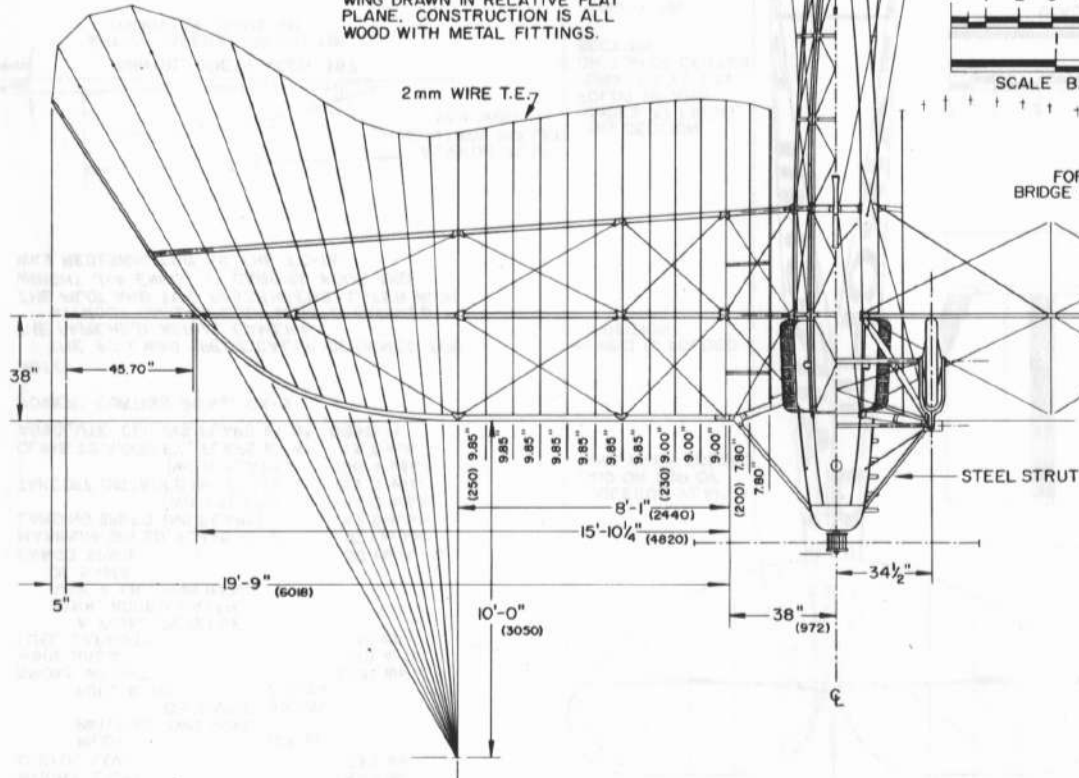
2mm WIRE T.E.

HORIZONTAL TAIL SURFACES OF WOOD CONSTRUCTION, METAL FITTINGS (MOST FEATURED BAMBOO THROUGHOUT WARPING AREA)

2mm WIRE L.E.

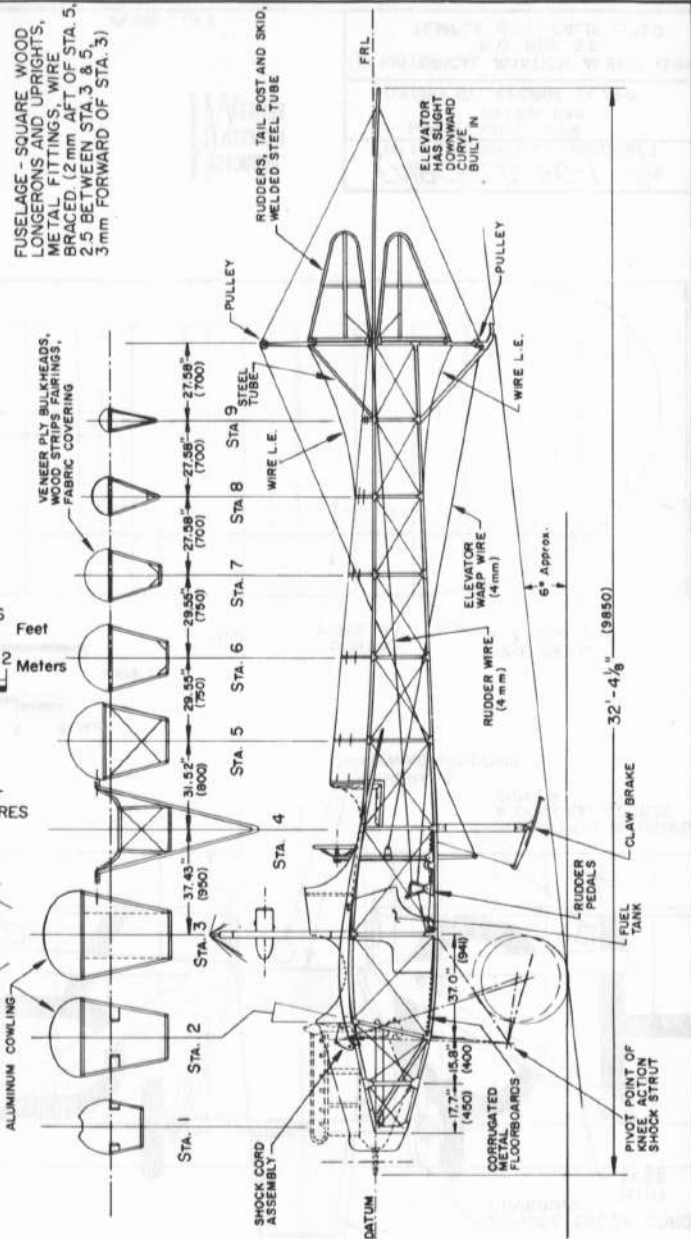
WING INTERNAL STRUCTURE (EXTERNAL BRACING WIRES DELETED) WING DRAWN IN RELATIVE FLAT PLANE. CONSTRUCTION IS ALL WOOD WITH METAL FITTINGS.

2mm WIRE T.E.



FUSELAGE - SQUARE WOOD LONGERONS AND UPRIGHTS, METAL FITTINGS, WIRE BRACED (2mm AFT OF STA. 5, 2.5 BETWEEN STA. 3 & 5, 3mm FORWARD OF STA. 3)

VENEER PLY BULKHEADS, WOOD STRIPS FAIRINGS, FABRIC COVERING



**ETRICH 1913 "TAUBE"**

SCALE - ORIGINAL 1:32  
REPRO. 1:64

DRAWN BY - PAUL R. MATT

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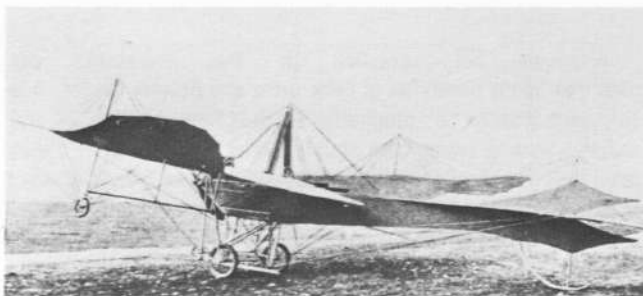
### Austrian Taubes:

Most Austrian Etrich Taubes were built by Lohner. The Lohnerwerke was located on Donaustrasse, Vienna. The factory consisted of a group of buildings that covered about ten acres. Not all of the buildings were suitable for the construction of aircraft. The most modern (for 1911) of these served as the erecting hall. It was capable of holding 40 aircraft at the same time. It had a gallery, running around its periphery, in which aircraft components were constructed. These components were then carried out into the hall for installation on specific airframes. It is important to note that, with the Taube-building efforts of the Flieger Arsenal excepted, Lohner built all Austrian Etrich Taubes following Etrich III (the **Mowe**).

Construction of 102 Austrian Taubes has been documented—92 military, one naval and nine "civilian" examples, in seven Series ("A" through "G"). Up to the 23rd example, the initial disposition of Lohner Taubes was recorded in MLFG and Lohner advertisements in the **Osterreichische Flug-Zeitschrift** of 1911 and 1912 and the Etrich catalog of 1912. Although these sources disagree, the following closely approximates this disposition:

- |                 |   |
|-----------------|---|
| Etrich I        | Experimental aircraft, with the Zanon wing-form.  |
| Etrich II       | First Taube, used by Illner at the Budapest Air Meeting.  |
| Etrich III      | The <b>Mowe</b> , damaged at Budapest. Repaired and used at the Wiener-Neustadt Meeting.  |
| Etrich IV       | Vienna-Horne aircraft. Aircraft Illner demonstrated at Doberitz. First Lohner-built Etrich.   |
| Etrich V        | Sold to Dr. Konstantin Frieheer (Baron) von Economo, President of the Austrian Flying Club.   |
| Etrich VI       | Sold to Herr Kaiserl. rat Joseph Flesch. Probably crashed by him.   |
| Etrich VII      | Three-seater, used by <b>Oblt.</b> Bier on the 1911 "Circuit of Britain".   |
| Etrich VIII*    | Sold to Russia.   |
| Etrich IX       | First Austrian military Taube. Purchaser listed as: k.u.k. Reichs-Kriegsministerium, Militaraeronautische Anstalt. k.u.k. = <b>Koniglich und Kaiserliche</b> , which means (approximately) "Royal and Imperial" |
| Etrich X        | Sold to Italy -- presumably one of the two Tripoli "bombing" aircraft.  |
| Etrich XI       | Sold to Herr Hermann Hold.  |
| Etrich XII      | Sold to Russia. Some sources list this Taube as a 120 Hp racing machine, acquired by Flesch as a replacement for Etrich VI.   |
| Etrich XIII-XIV | Sold to Russia.   |
| Etrich XV-XXIII | "For Sale" -- in 1912.  |

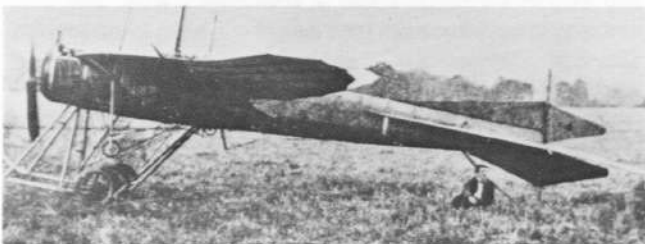
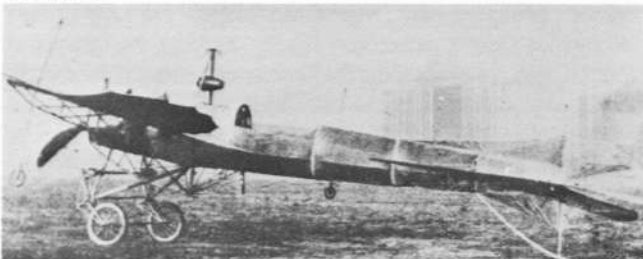
\* The greatest confusion concerns the disposition of Etrich VIII. In various references it is listed as: An Austrian military Taube, a Russian military machine, a Russian civil aircraft and a racing Taube for Flesch!



Lohner Etrichs: Etrich VI.



Etrich XII.



Racing Etrichs.

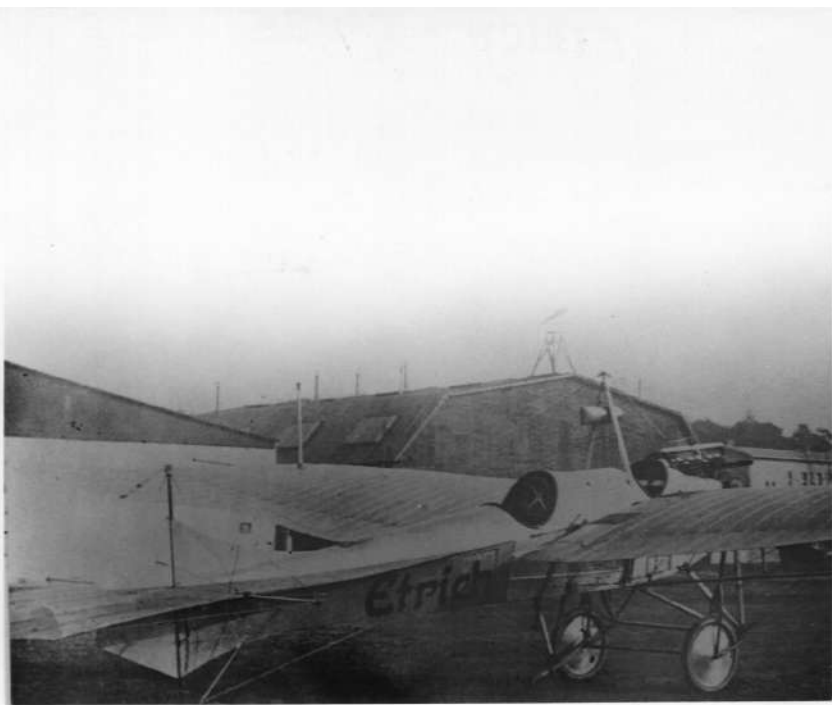


1912 Lohner Etrich.









GENERAL SPECIFICATIONS

WEIGHT, LIGHT	1596 lbs.
USEFUL LOAD	735 lbs.
PILOT	165 lbs.
PAYLOAD, TWO PASS. OR CARGO	330 lbs.
FUEL & OIL	240 lbs.
GROSS WEIGHT	2331 lbs.
WING AREA	275 sq. ft.
FUEL CAPACITY	35 gal.
A 7-GAL. RESERVE TANK, ADDED LATER, GAVE A CRUISING RANGE OF 5 HRS.	
CARGO SPACE	30 cu. ft.
MAXIMUM SPEED, FLAPS UP 2°	97.1 m.p.h.
LANDING SPEED (NO FLAPS)	42.5 m.p.h.
(WITH FLAPS)	40.0 m.p.h.
TAKEOFF DISTANCE (NO FLAPS)	159.5 yds.
(WITH FLAPS)	138.4 yds.
CLIMB TO 4,000 FT., FLAPS AT 4°	13.7 min.
ABSOLUTE CEILING, FLAPS AT 8°	9890 ft.
POWER: CURTISS 90 h.p. OX-5	

NOTE:

THE FC-1 WAS SPECIFICALLY DESIGNED FOR THE FAIRCHILD AERIAL CAMERA. WITHOUT CAMERA EQUIPMENT IT CARRIED THE PILOT AND TWO PASSENGERS. LATER WITH WRIGHT J-4 ENGINE IT CARRIED FOUR AND WAS REDESIGNATED AS THE FC-1A.



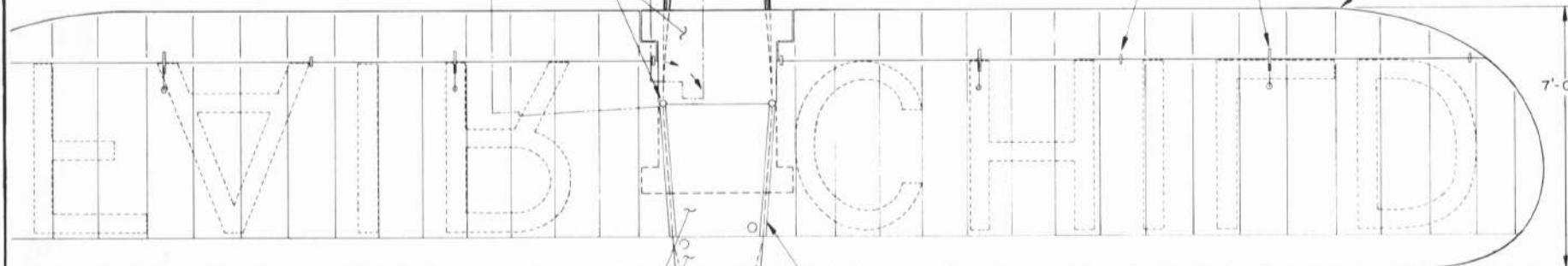
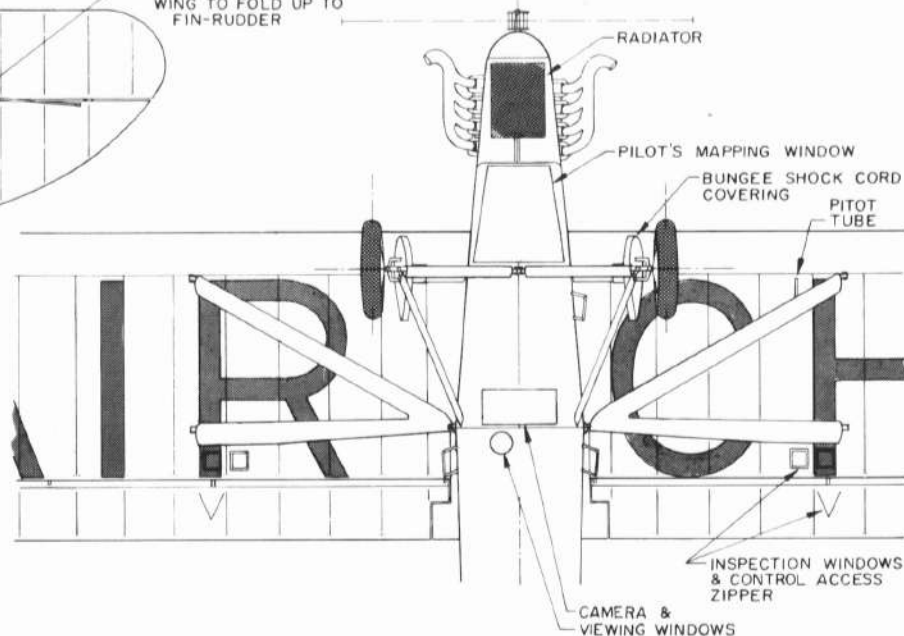
AILERON-FLAP LAID ON TOP OF WING WHEN FOLDED

WING IN FOLDED POSITION

THIS SECTION HINGES AT FRONT, FOLDS UP AND FORWARD TO LAY ON TOP OF CENTER SECTION

PIVOT PINS

BRACE WIRE DISCONNECTS AT THE STABILIZER TO ALLOW WING TO FOLD UP TO FIN-RUDDER



COLORING NOTES  
ENTIRE AIRCRAFT, ALUMINUM PIGMENT DOPE  
ALL LETTERING, BLACK  
COVERING IS FABRIC EXCEPT NOSE SECTION STATION B FORWARD, ALUMINUM

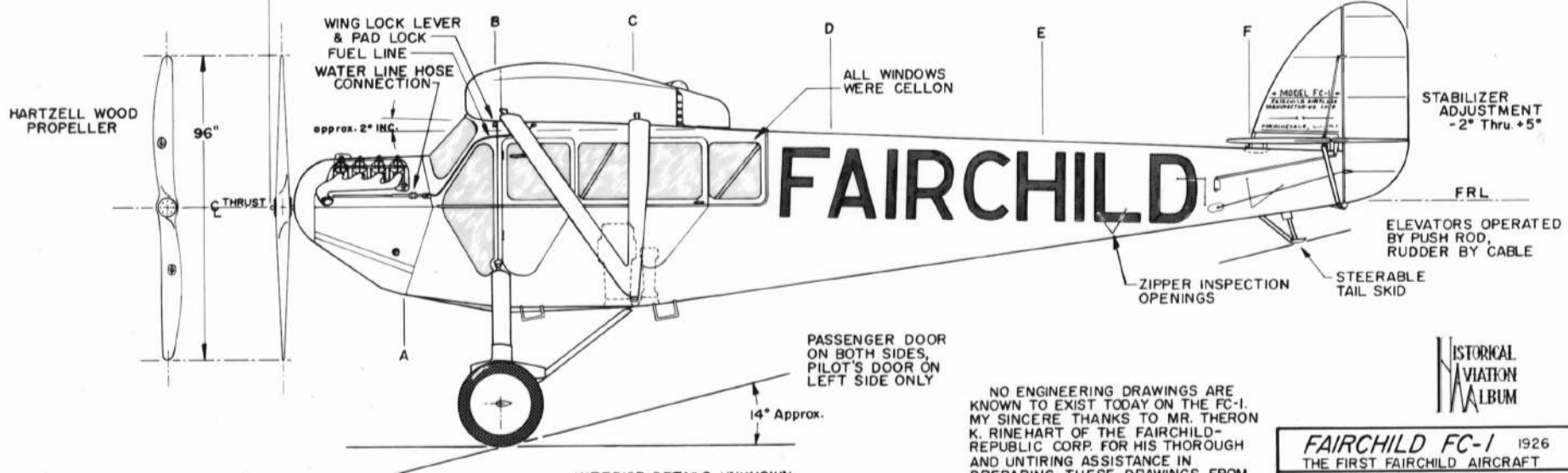
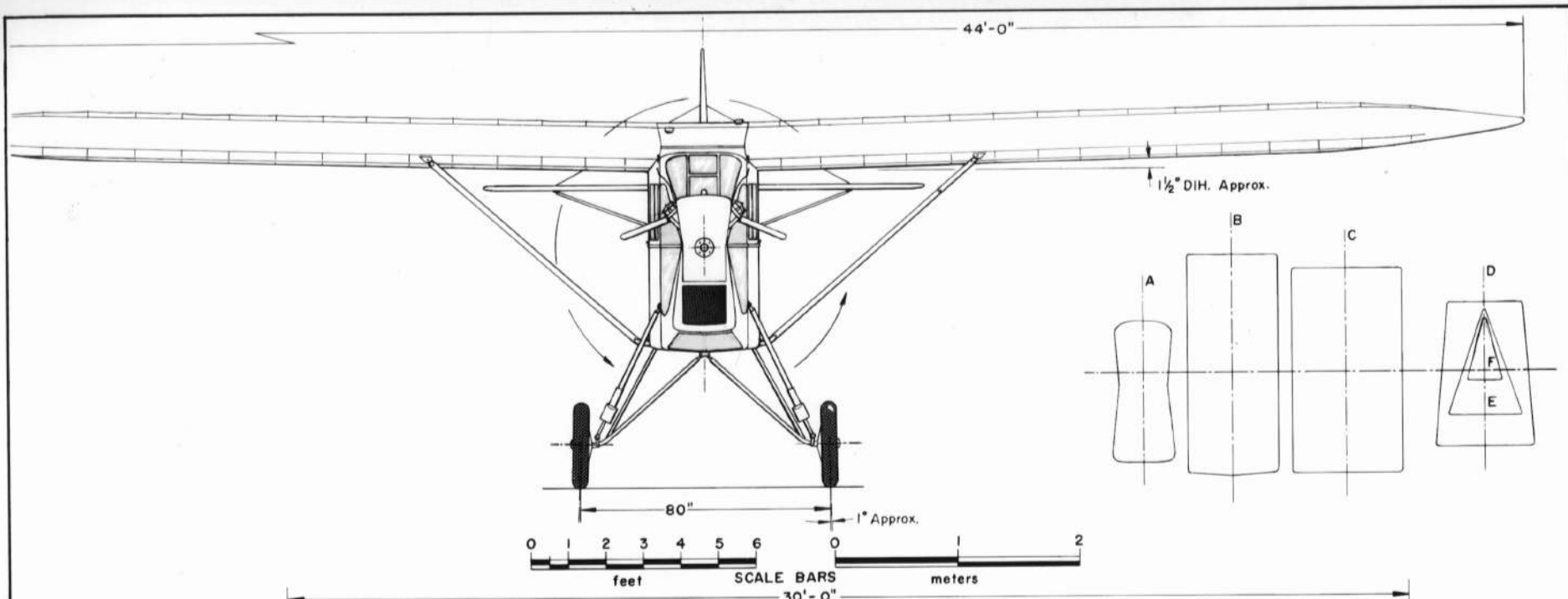
35 GAL. FUEL TANK  
7 GAL. RESERVE TANK

ALUMINUM FAIRING ATTACHED TO WING

HISTORICAL AVIATION ALBUM

FAIRCHILD FC-1 1926  
THE FIRST FAIRCHILD AIRCRAFT  
SCALE: ORIG. 1:24  
REPRO. 1:48  
DRAWN BY: GEORGE CLAPP

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ONLY KNOWN DIMENSIONS ARE SHOWN ON THESE DRAWINGS

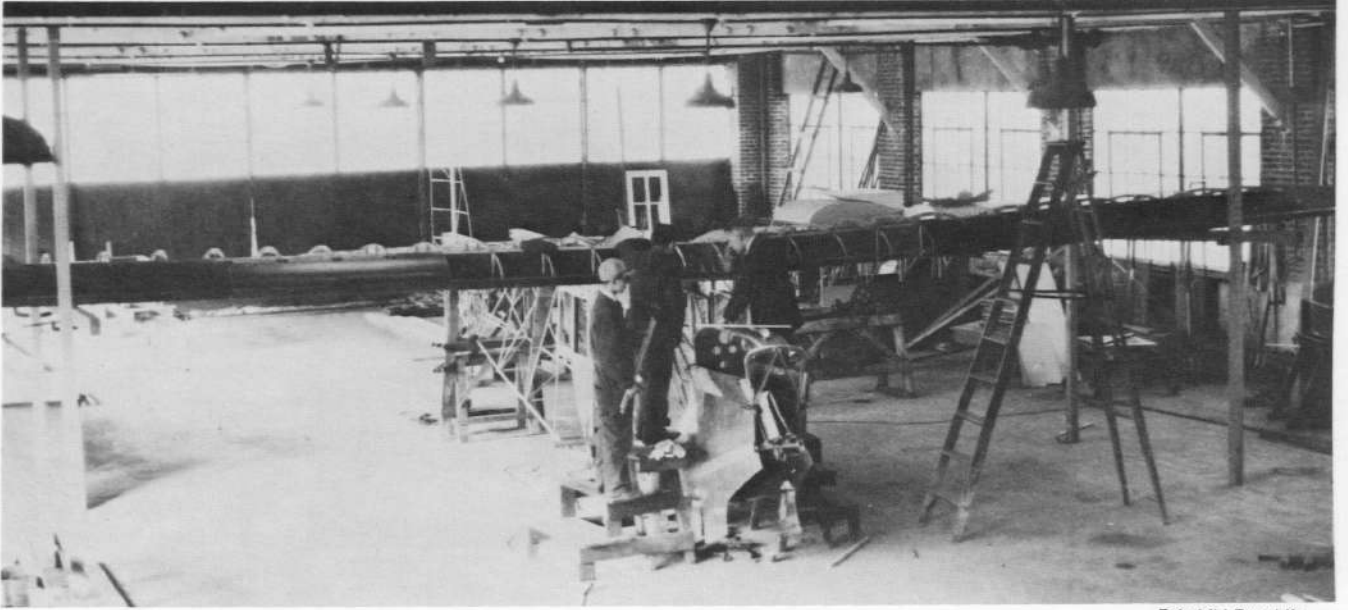
NO ENGINEERING DRAWINGS ARE KNOWN TO EXIST TODAY ON THE FC-1. MY SINCERE THANKS TO MR. THERON K. RINEHART OF THE FAIRCHILD-REPUBLIC CORP. FOR HIS THOROUGH AND UNTIRING ASSISTANCE IN PREPARING THESE DRAWINGS FROM REMAINING DOCUMENTATION  
 GEORGE CLAPP



<b>FAIRCHILD FC-1</b> 1926	
THE FIRST FAIRCHILD AIRCRAFT	
SCALE: ORIG. 1:24	REPRO. 1:48
DRAWN BY: GEORGE CLAPP	
© HISTORICAL AVIATION ALBUM 1984	
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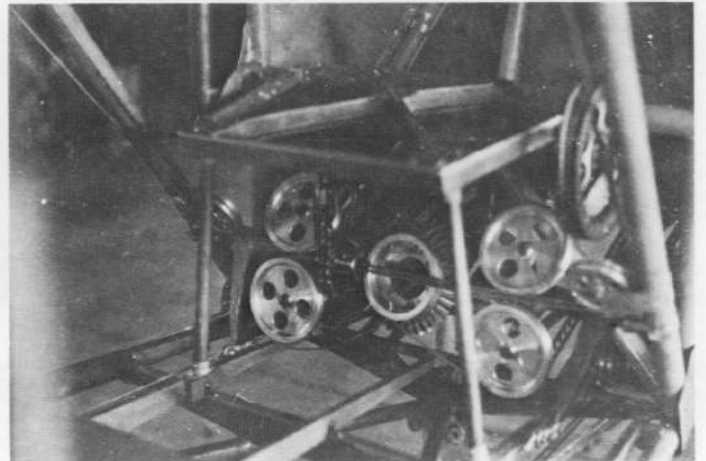
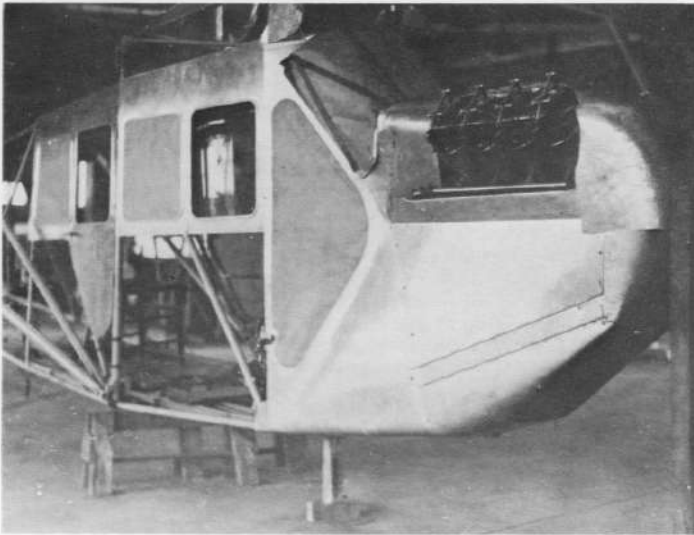
DRAWING No. 17-III-A

## The beginnings - the FC-1



Fairchild-Republic

The FC-1 under construction in the old Sperry factory, Farmingdale, L.I., N.Y. Wood and cardboard mockup behind left wing.



Left, nose cowling hammered to shape but not trimmed. Above, complex gearing and belt drives under pilot seat to operate aileron/flap automatic trim.

Fairchild-Republic



Below, with wings folded and detail of tail surfaces.

Fairchild-Republic





Above, OX-5 powered FC-1 with a golf sportsman about to "fly" to his favorite course. Aileron-flap pulleys on wing are prominent. Right, modified with a Wright J-4 engine, it became the FC-1A. Fred Weymouth by rear door. Ailerons and flaps are now operated separately.

Fairchild-Republic



The FC-1 with wings folded. All early Fairchilds' activity took place in this unpretentious hangar on Roosevelt Field, Long Island, NY.

Fairchild-Republic











U.S. ARMY  
FAIRCHILD YF-1  
AC 30-398

BY ORDER OF THE CHIEF  
OF AIR CORPS  
THIS AIRCRAFT IS  
TO BE USED FOR  
PHOTOGRAPHIC  
WORK ONLY







819

58.21)CS-5-30-100 FAIRCHILD TT-1 E, MICH





GENERAL SPECIFICATIONS

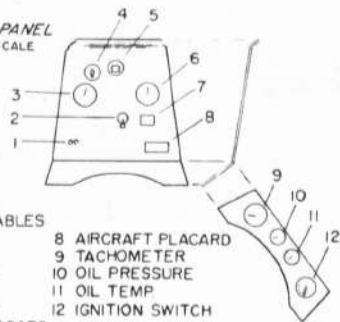
WEIGHT, EMPTY 1790 lbs.  
 WEIGHT, GROSS 3225 lbs.  
 FUEL CAPACITY 104 gals.  
 WING AREA 290 sq. ft.  
 HIGH SPEED 122 mph  
 CRUISING SPEED 103 mph  
 LANDING SPEED 53 mph  
 RATE OF CLIMB 580 f.p.m.  
 ABSOLUTE CEILING 14,750 feet

POWER: WRIGHT J-5, 220 H.P.

COLORING NOTES

FUSELAGE - BLACK  
 WING & TAIL GROUP - INTERNATIONAL ORANGE  
 MARKINGS - WING, FIN & RUDDER - BLACK

TYPICAL PANEL  
 DOUBLE SCALE



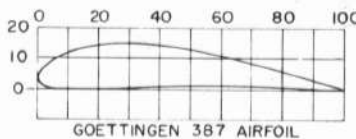
- 1 CONTROL CABLES
- 2 PRIMER
- 3 AIRSPEED
- 4 FUEL VALVE
- 5 COMPASS
- 6 ALTIMETER
- 7 ENGINE PLACARD
- 8 AIRCRAFT PLACARD
- 9 TACHOMETER
- 10 OIL PRESSURE
- 11 OIL TEMP
- 12 IGNITION SWITCH

AILERONS INTERNALLY OPERATED

PIVOT PINS

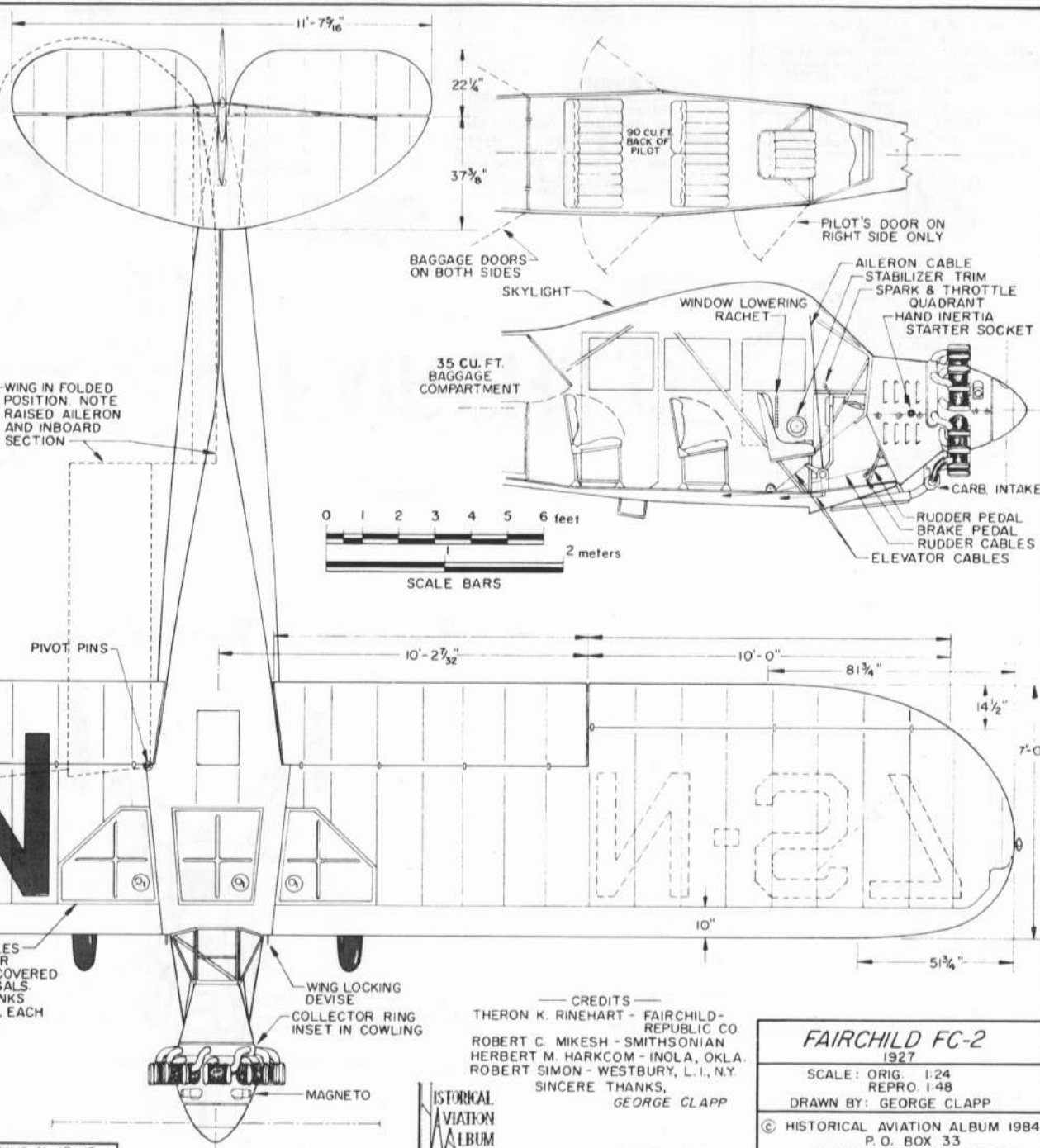
**LS-N**

HAT SECTIONS OVER TANK Baffles RIVETED & WELDED OVER AFTER TANK ASSEMBLY. ALL FLANGES COVERED WITH FABRIC. CENTER TANK 30 GALS. WING TANKS 37 GALS. EACH



GOETTINGEN 387 AIRFOIL

DRAWING No. 17-112-A

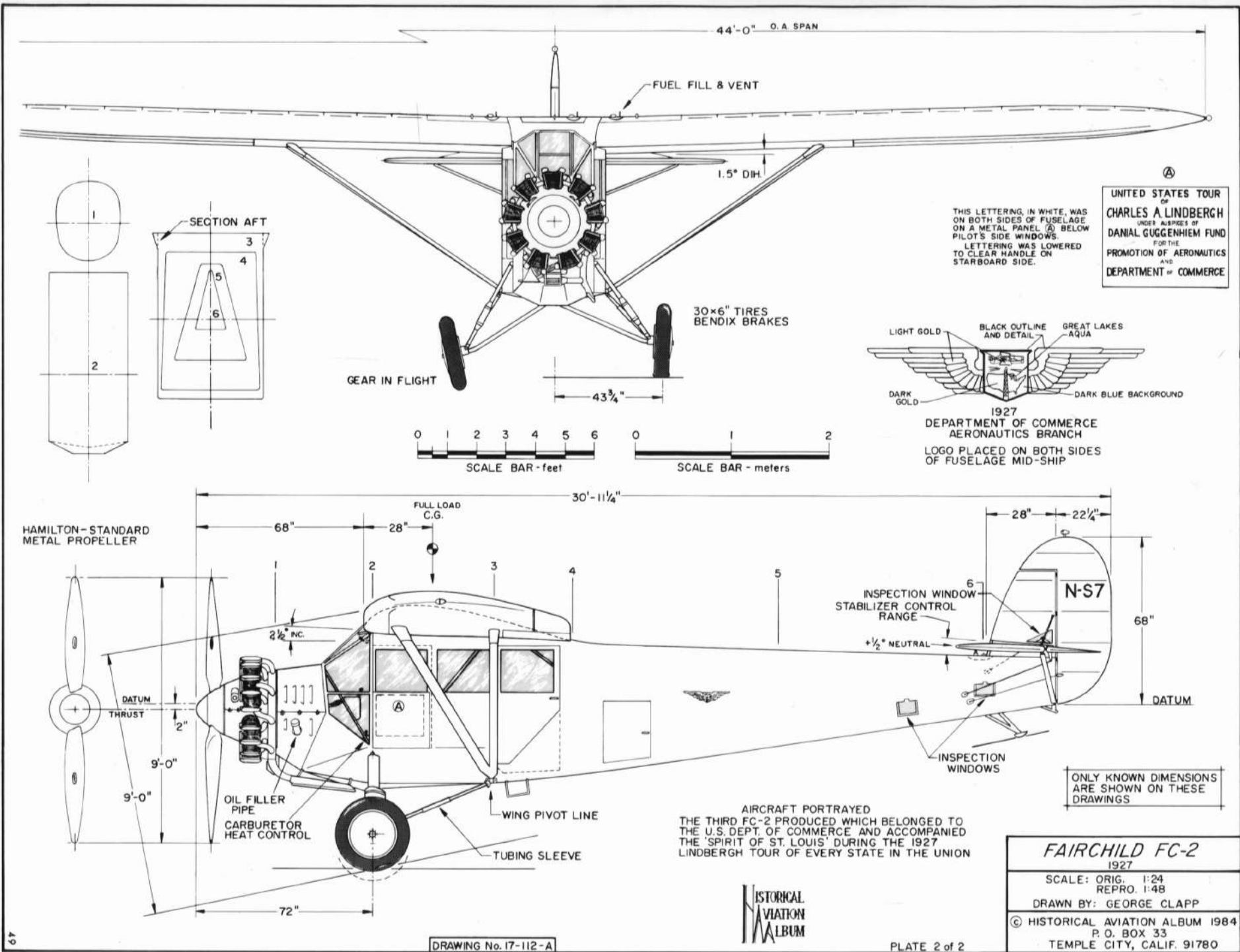


— CREDITS —  
 THERON K. RINEHART - FAIRCHILD-REPUBLIC CO.  
 ROBERT C. MIKESH - SMITHSONIAN  
 HERBERT M. HARKCOM - INOLA, OKLA.  
 ROBERT SIMON - WESTBURY, L. I., N.Y.  
 SINCERE THANKS,  
 GEORGE CLAPP

HISTORICAL AVIATION ALBUM

PLATE 1 of 2

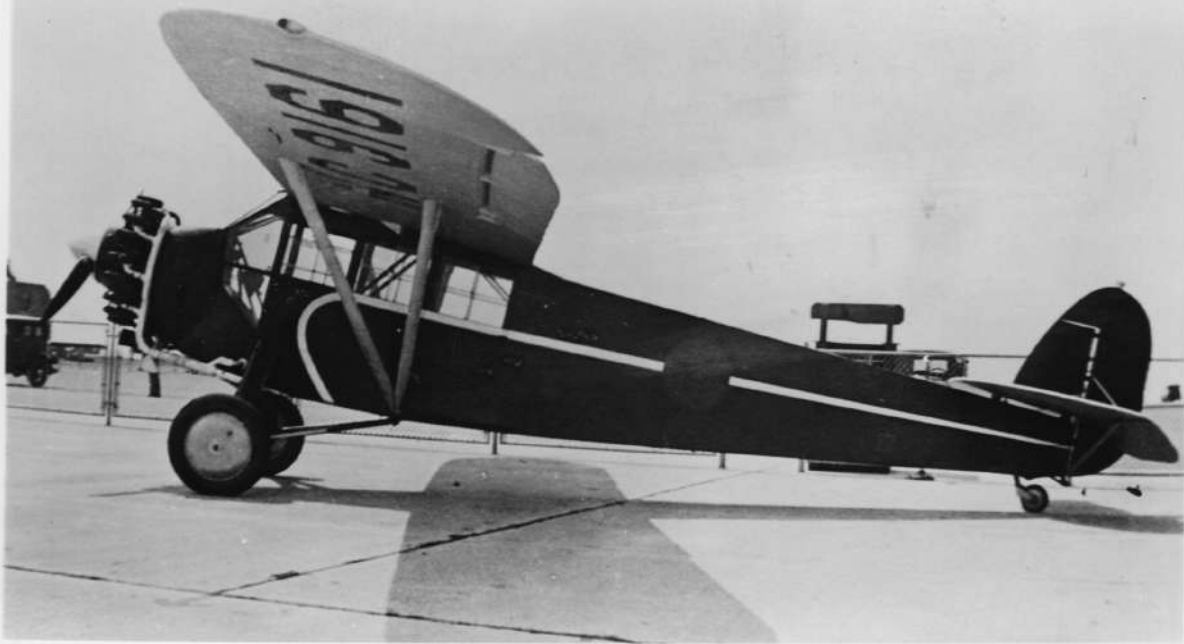
<b>FAIRCHILD FC-2</b> 1927	
SCALE: ORIG. 1:24	REPRO. 1:48
DRAWN BY: GEORGE CLAPP	
© HISTORICAL AVIATION ALBUM 1984 P. O. BOX 33 TEMPLE CITY, CALIF. 91780	



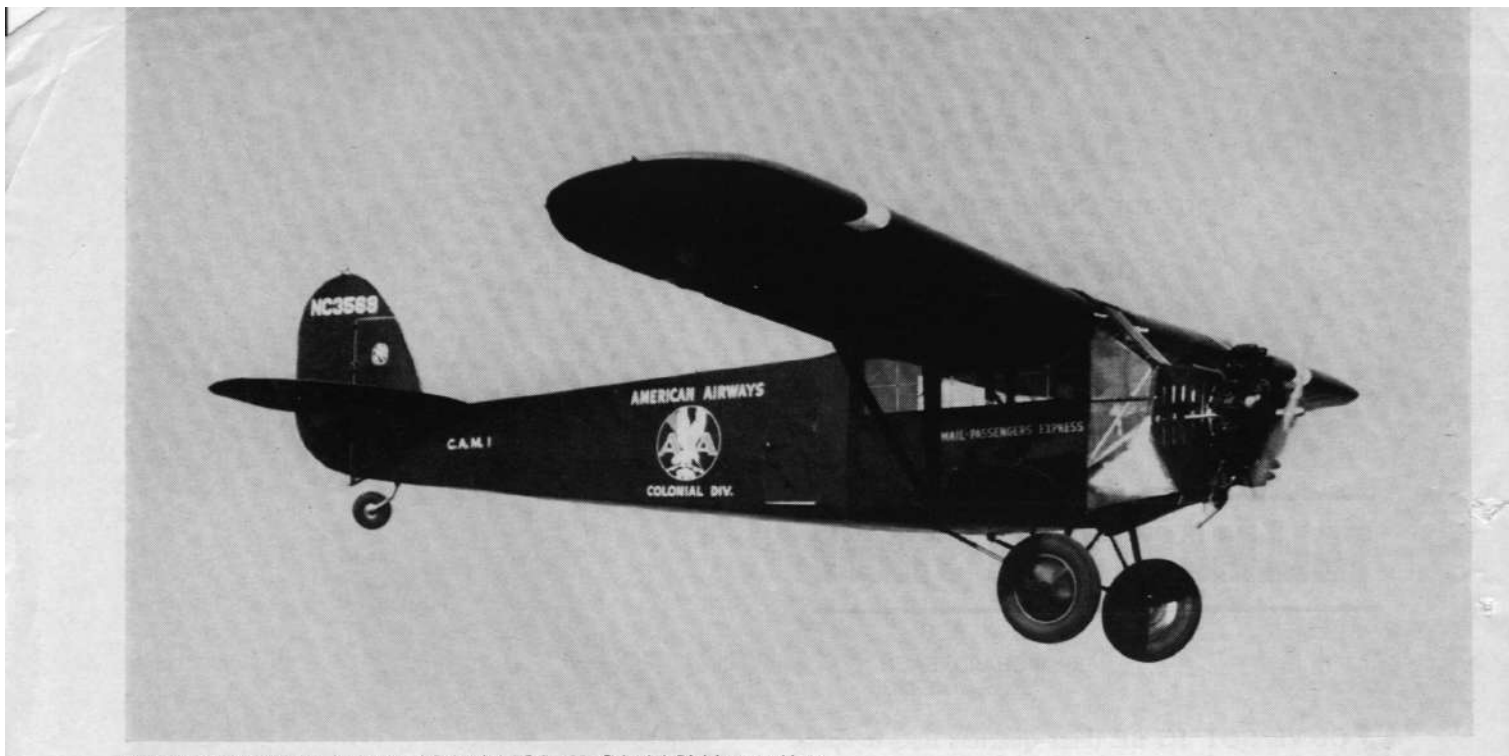












Herb Harkcom's Wright J5-powered Fairchild FC-2 with Colonial Division markings.









10076







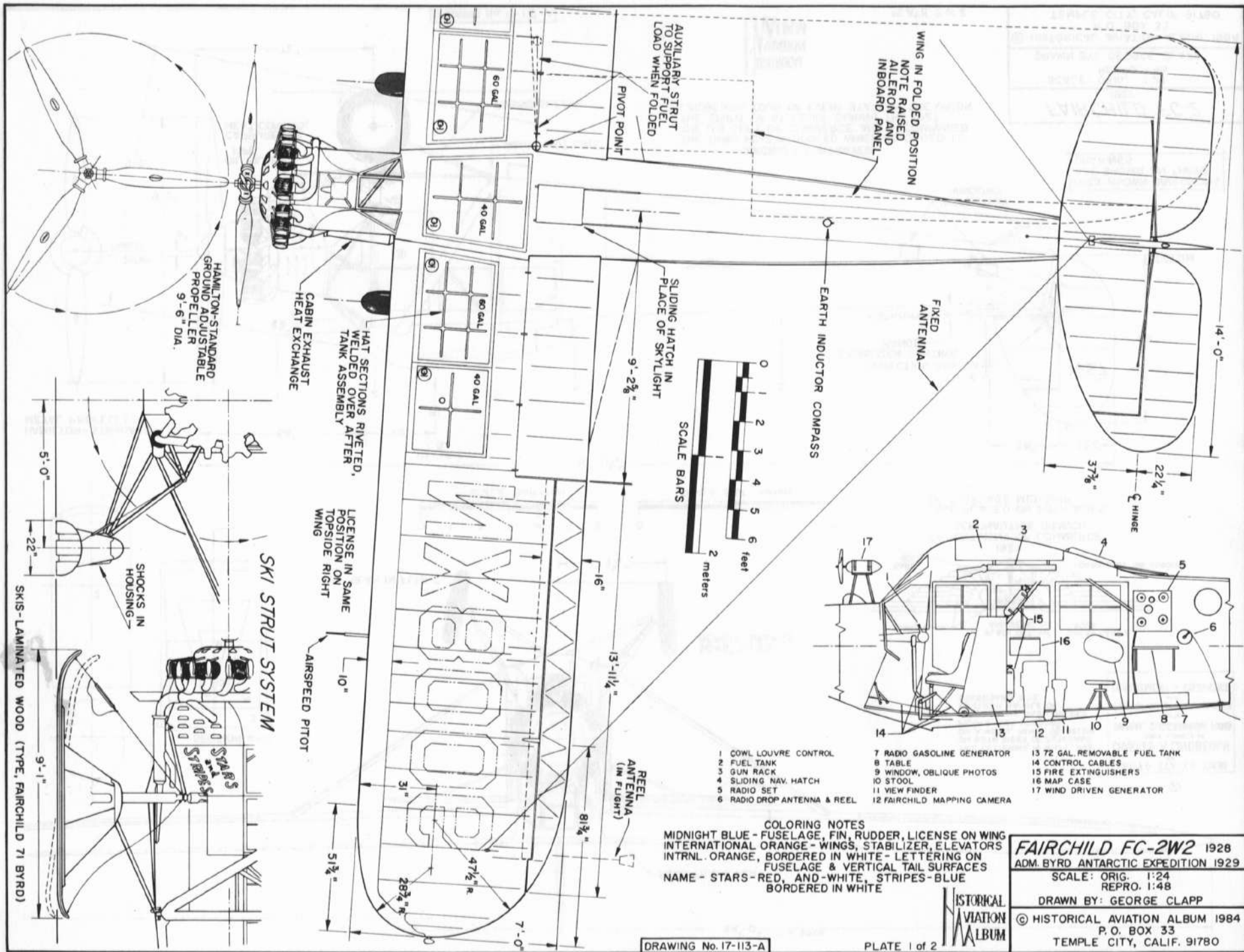












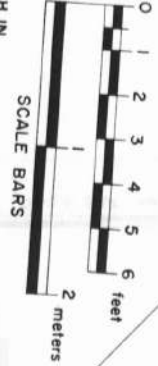
WING IN FOLDED POSITION  
NOTE RAISED  
AILERON AND  
INBOARD PANEL

AUXILIARY STRUT  
TO SUPPORT FUEL  
LOAD WHEN FOLDED

PIVOT POINT

FIXED  
ANTENNA

EARTH INDUCTOR COMPASS



SLIDING HATCH IN  
PLACE OF SKYLIGHT

HAT SECTIONS RIVETED,  
WELDED OVER AFTER  
TANK ASSEMBLY

CABIN EXHAUST  
HEAT EXCHANGE

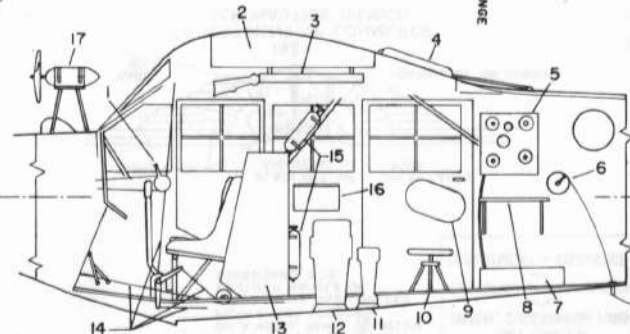
HAMILTON-STANDARD  
GROUND ADJUSTABLE  
PROPELLER  
9'-6" DIA.

LICENSE IN SAME  
POSITION ON  
TOPSIDE RIGHT  
WING

SKI STRUT SYSTEM

SHOCKS IN  
HOUSING

SKIS - LAMINATED WOOD (TYPE, FAIRCHILD 71 BYRD)

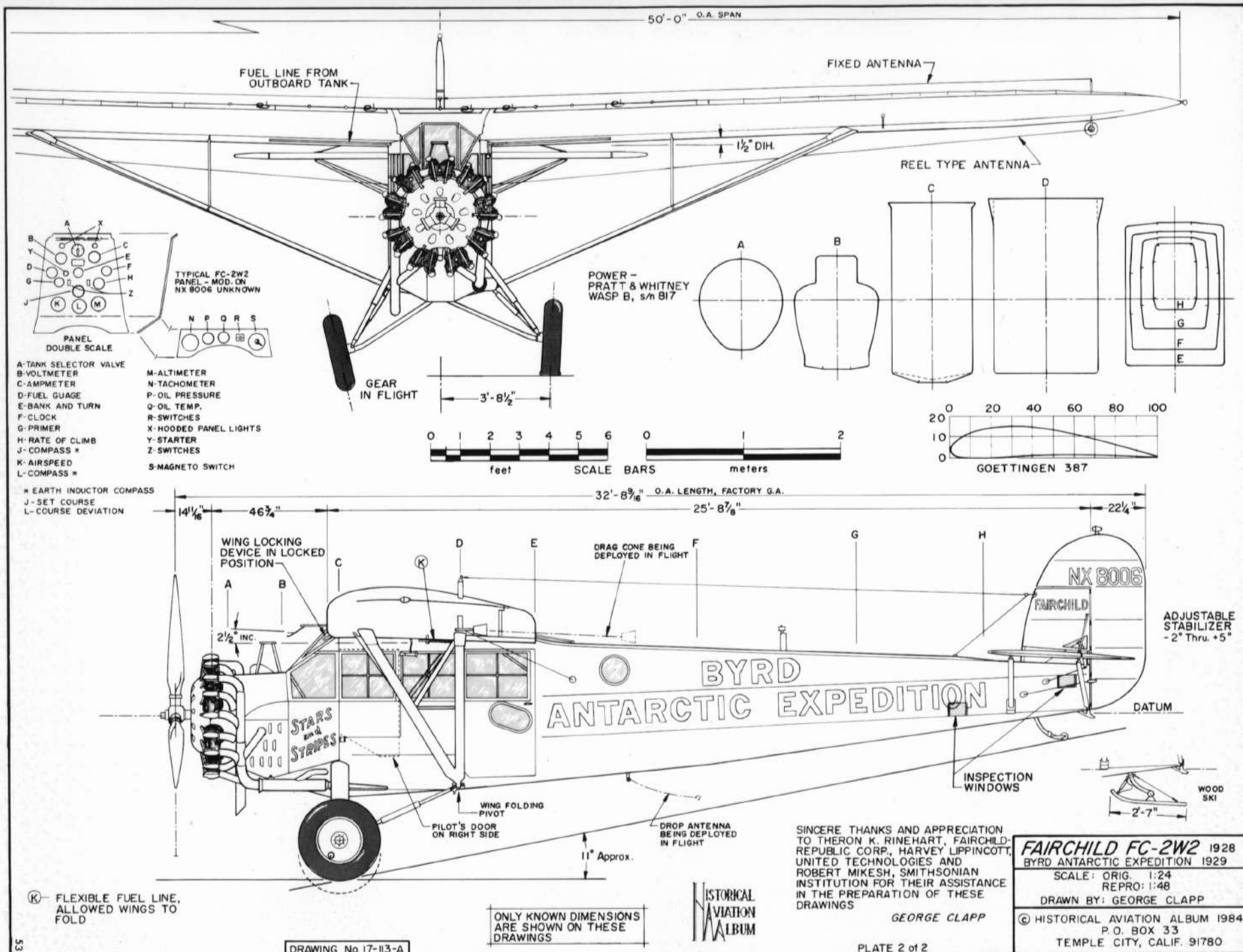


- 1 COWL LOUVRE CONTROL
- 2 FUEL TANK
- 3 GUN RACK
- 4 SLIDING NAV. HATCH
- 5 RADIO SET
- 6 RADIO DROP ANTENNA & REEL
- 7 RADIO GASOLINE GENERATOR
- 8 TABLE
- 9 WINDOW, OBLIQUE PHOTOS
- 10 STOOL
- 11 VIEW FINDER
- 12 FAIRCHILD MAPPING CAMERA
- 13 72 GAL. REMOVABLE FUEL TANK
- 14 CONTROL CABLES
- 15 FIRE EXTINGUISHERS
- 16 MAP CASE
- 17 WIND DRIVEN GENERATOR

COLORING NOTES  
MIDNIGHT BLUE - FUSELAGE, FIN, RUDDER, LICENSE ON WING  
INTERNATIONAL ORANGE - WINGS, STABILIZER, ELEVATORS  
INTRNL. ORANGE, BORDERED IN WHITE - LETTERING ON  
FUSELAGE & VERTICAL TAIL SURFACES  
NAME - STARS - RED, AND - WHITE, STRIPES - BLUE  
BORDERED IN WHITE

**FAIRCHILD FC-2W2** 1928  
ADM. BYRD ANTARCTIC EXPEDITION 1929  
SCALE: ORIG. 1:24  
REPRO. 1:48  
DRAWN BY: GEORGE CLAPP  
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## The FC-2W and Model 71



"Stars and Stripes" after return from "Little America" and being rebuilt to 71 standards for Alton Walker. He went on a barnstorming trek across the United States taking passengers up for a 15 min. flight at 50¢ a head. "Stars and Stripes" is now in the refurbishing plans of the National Air and Space Museum, Wash., D.C.

Fairchild-Republic



The Cleveland News model 71. Several newspapers used Fairchilds for their natural stability and reliability as aerial platforms for news photos... prized scoops in the 1930 news business.

Fairchild-Republic

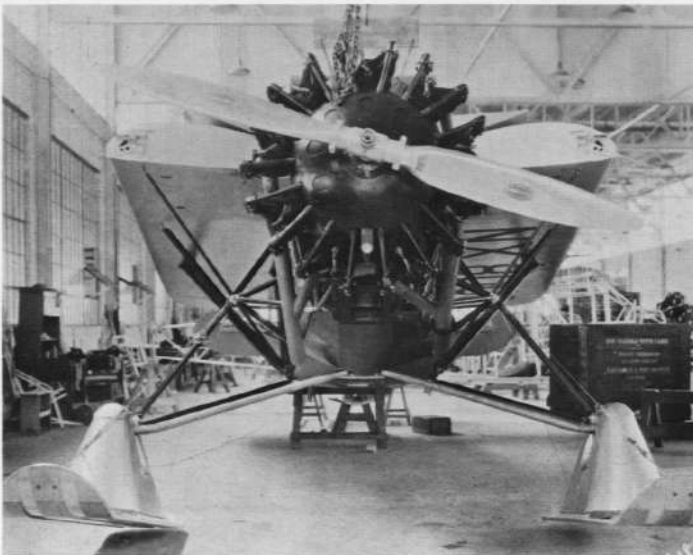


Fairchild 71, CF-BXF of B.C. Air Lines, Ltd., British Columbia, Canada. Edo floats.

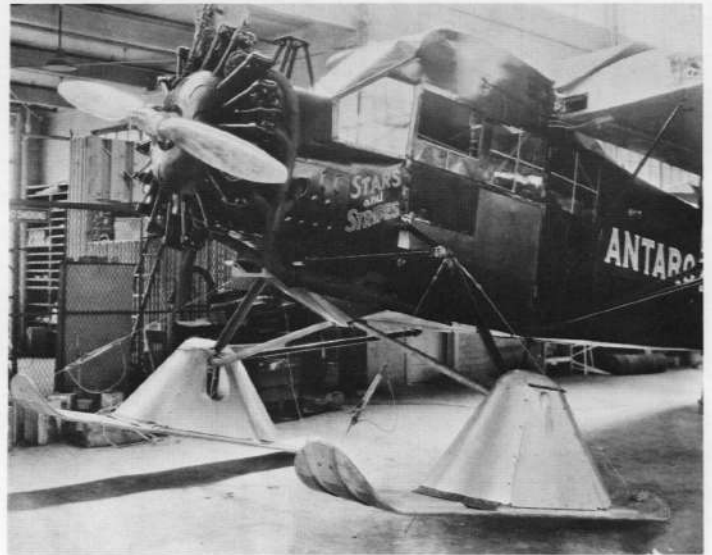
Peter M. Bowers.



Canadian CF-OAL Model 71, had spill-plate fairings on outer wing struts.



Fairchild-Republic



Fairchild-Republic

"Stars and Stripes" during final assembly at the Fairchild factory. Note wing support strut for wing in folded position.

FC-2W "Stars and Stripes" in factory during final assembly and weight and balance check. Fuselage and vertical tail - Midnight blue, wings and horizontal tail surfaces - Orange. Similar to color scheme used by American Airlines.

Fairchild-Republic



Harold June, pilot of "Stars and Stipes". He is holding an antenna wire that leads to drag cone under the wing. Mechanics check cockpit and tail skid.

Fairchild-Republic















GENERAL SPECIFICATIONS

WEIGHT EMPTY 1820 lbs.  
 USEFUL LOAD 700 lbs.  
 GROSS WEIGHT 2520 lbs.  
 WING AREA (incl ailerons) 184.14 sq. ft.  
 TOP SPEED 124 m.p.h.  
 CRUISING SPEED 106/116 m.p.h.  
 TAKEOFF SPEED 60 m.p.h.  
 LANDING SPEED 70 m.p.h.  
 CLIMB SPEED, IDEAL 80 m.p.h.  
 CLIMB, INITIAL, S.L. 700 ft./min.  
 SERVICE CEILING 12,000 feet  
 RANGE AT CRUISE 265/350 miles  
 FUEL CAPACITY, NORMAL 45 gals., 73 Octane  
 OIL CAPACITY 4.1 gals.

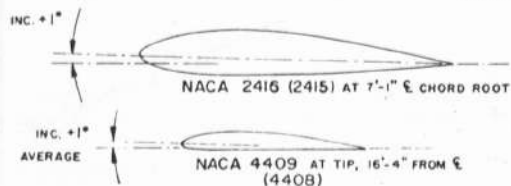
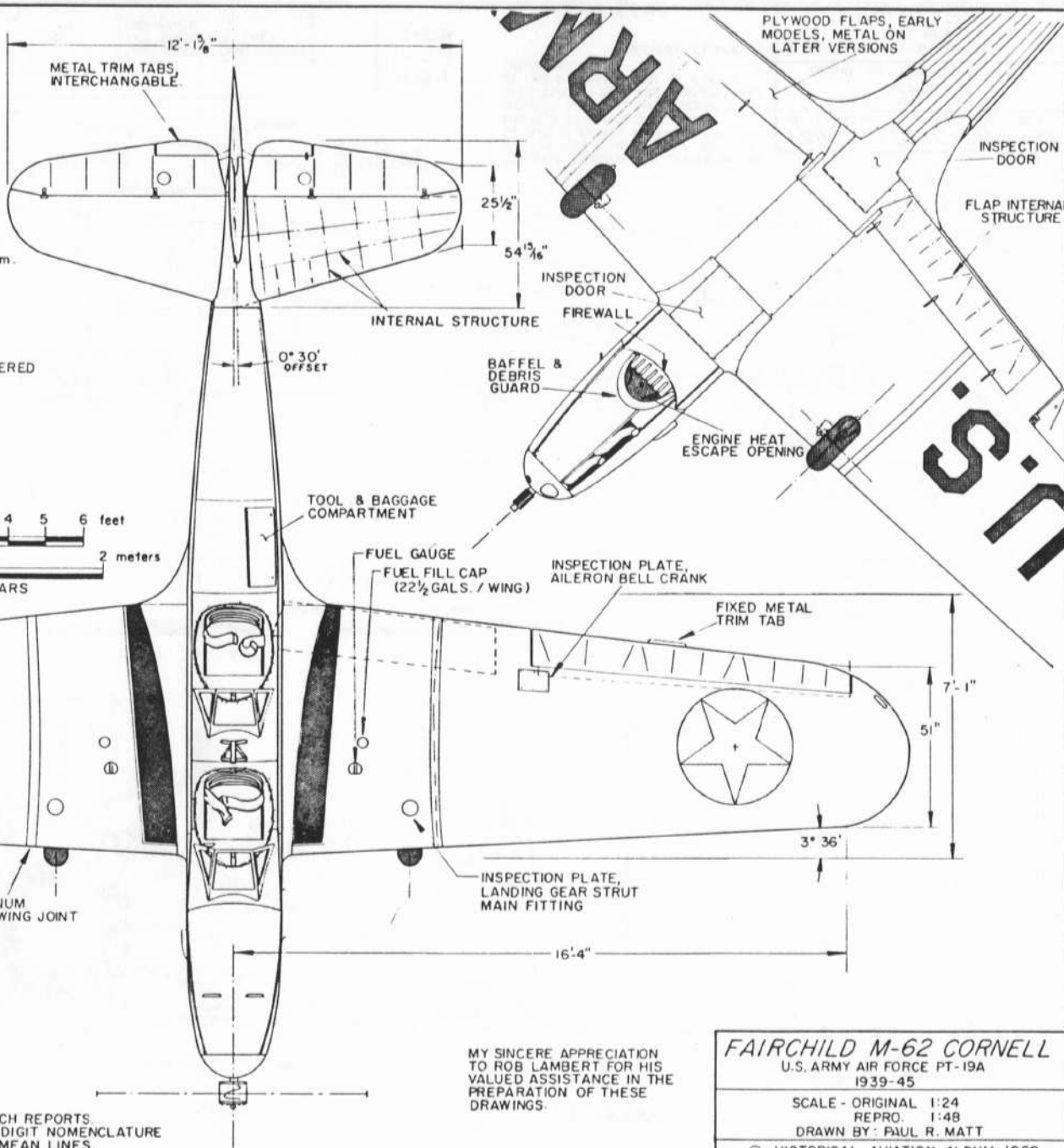
POWER - RANGER 6 Cyl. A.C. INLINE L-440-1, 175 h.p. at 2450 rpm.

CONSTRUCTION NOTES

FUSELAGE - FABRIC COVERED WELDED STEEL TUBE, ALUMINUM  
 TURTLE DECKING & ENGINE AREA & FILLETING  
 WINGS, FIXED STABILIZER & FIN - WOOD CONSTRUCTION,  
 PLYWOOD COVERED  
 METAL FRAME AILERONS, RUDDER & ELEVATORS - FABRIC COVERED

COLORING NOTES

ENTIRE AIRCRAFT - SILVER  
 LETTERING, TRIM, DETAILS - BLACK  
 NATIONAL INSIGNIA - DRK. BLUE DISC, WHITE STAR



NOTE:  
 NEITHER NACA 2415 OR 4409 ARE NORMALLY LISTED IN TECH REPORTS.  
 BOTH ARE ACQUIRED BY PERCENTAGE REDUCTIONS OF FOUR DIGIT NOMENCLATURE  
 AND ARRIVED AT BY STRAIGHT INTERPOLATION BETWEEN MEAN LINES.

(SEE NACA REPORT No. 460, CIRCA 1933)

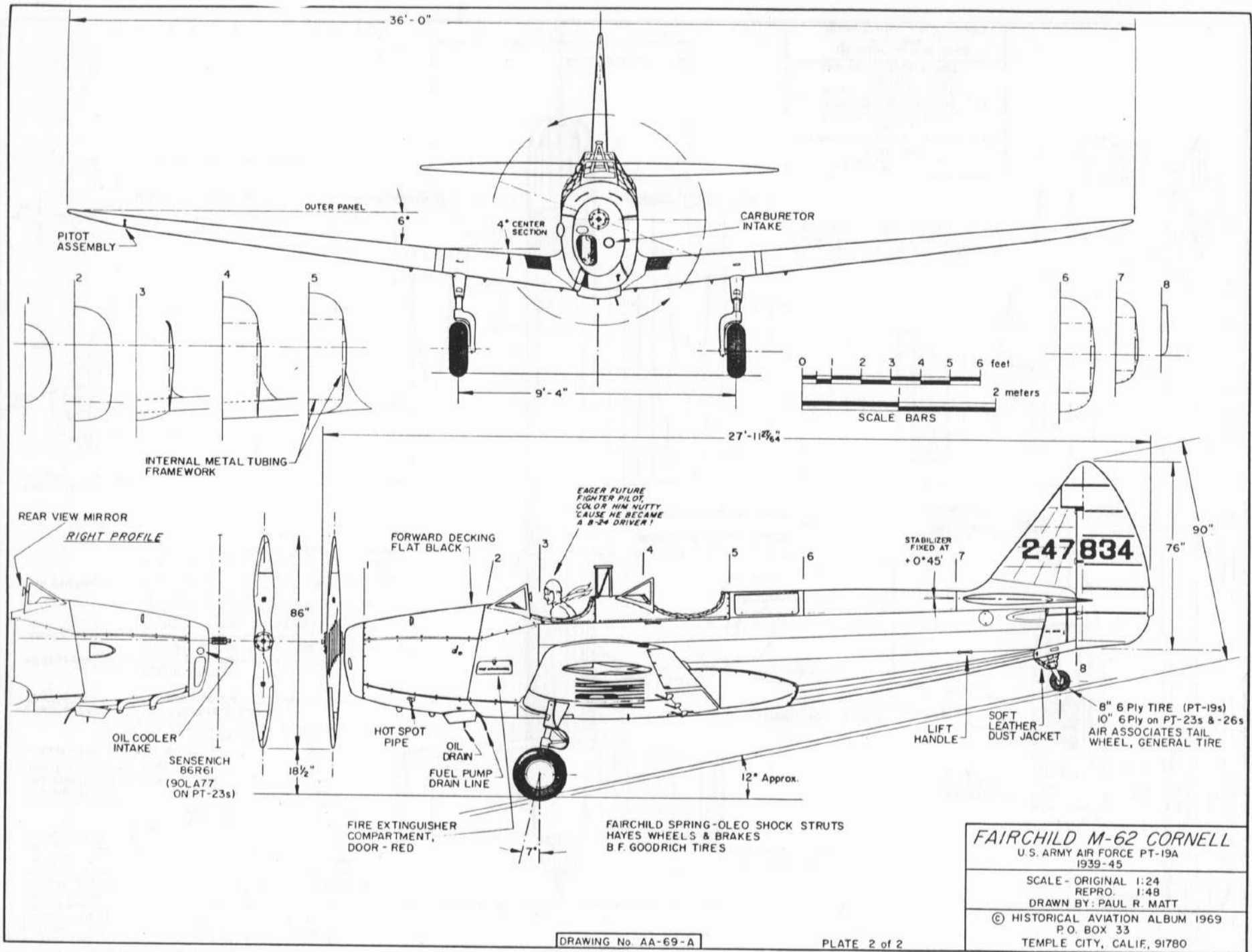
MY SINCERE APPRECIATION  
 TO ROB LAMBERT FOR HIS  
 VALUED ASSISTANCE IN THE  
 PREPARATION OF THESE  
 DRAWINGS.

**FAIRCHILD M-62 CORNELL**

U.S. ARMY AIR FORCE PT-19A  
 1939-45

SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY: PAUL R. MATT

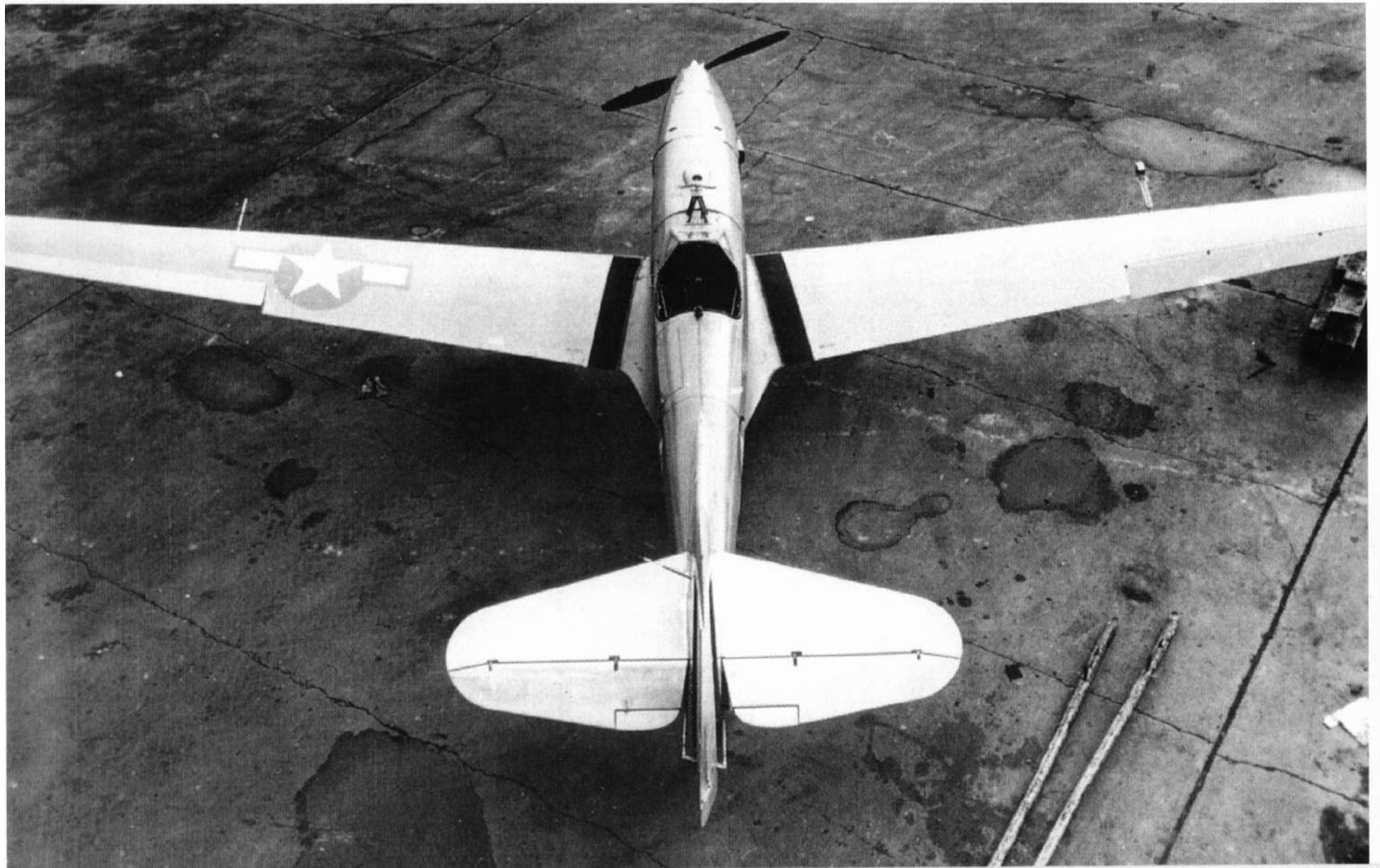
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**FAIRCHILD M-62 CORNELL**  
 U.S. ARMY AIR FORCE PT-19A  
 1939-45

SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY: PAUL R. MATT

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**GENERAL SPECIFICATIONS**

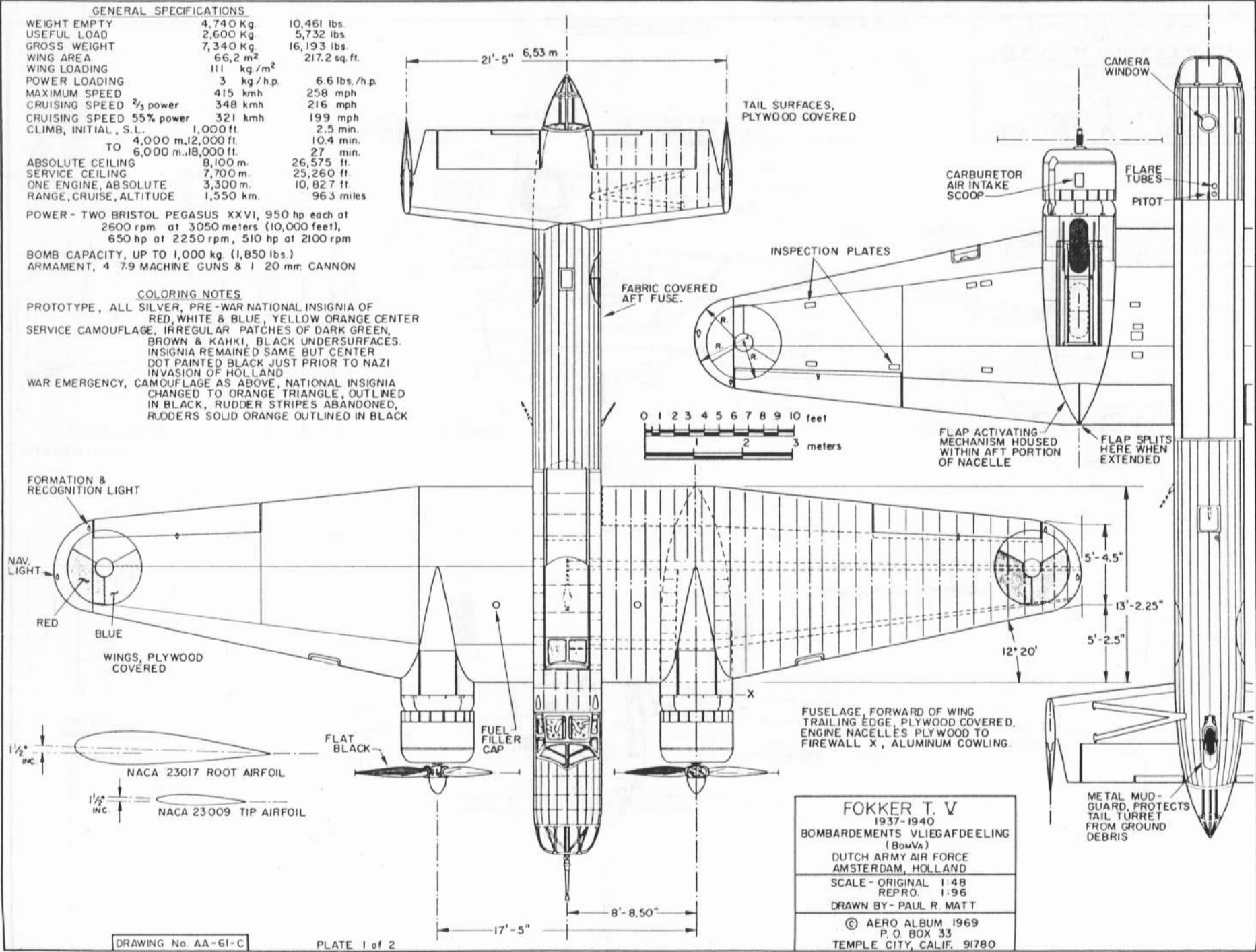
WEIGHT EMPTY	4,740 Kg.	10,461 lbs.
USEFUL LOAD	2,600 Kg.	5,732 lbs.
GROSS WEIGHT	7,340 Kg.	16,193 lbs.
WING AREA	66,2 m <sup>2</sup>	217.2 sq. ft.
WING LOADING	111 kg./m <sup>2</sup>	
POWER LOADING	3 kg./h.p.	6.6 lbs./h.p.
MAXIMUM SPEED	415 kmh	258 mph
CRUISING SPEED <sup>2/3</sup> power	348 kmh	216 mph
CRUISING SPEED 55% power	321 kmh	199 mph
CLIMB, INITIAL, S. L.	1,000 ft.	2.5 min.
	TO 4,000 m., 12,000 ft.	10.4 min.
	TO 6,000 m., 18,000 ft.	27 min.
ABSOLUTE CEILING	8,100 m.	26,575 ft.
SERVICE CEILING	7,700 m.	25,260 ft.
ONE ENGINE, ABSOLUTE	3,300 m.	10,827 ft.
RANGE, CRUISE, ALTITUDE	1,550 km.	963 miles

POWER - TWO BRISTOL PEGASUS XXVI, 950 hp each at 2600 rpm at 3050 meters (10,000 feet), 650 hp at 2250 rpm, 510 hp at 2100 rpm

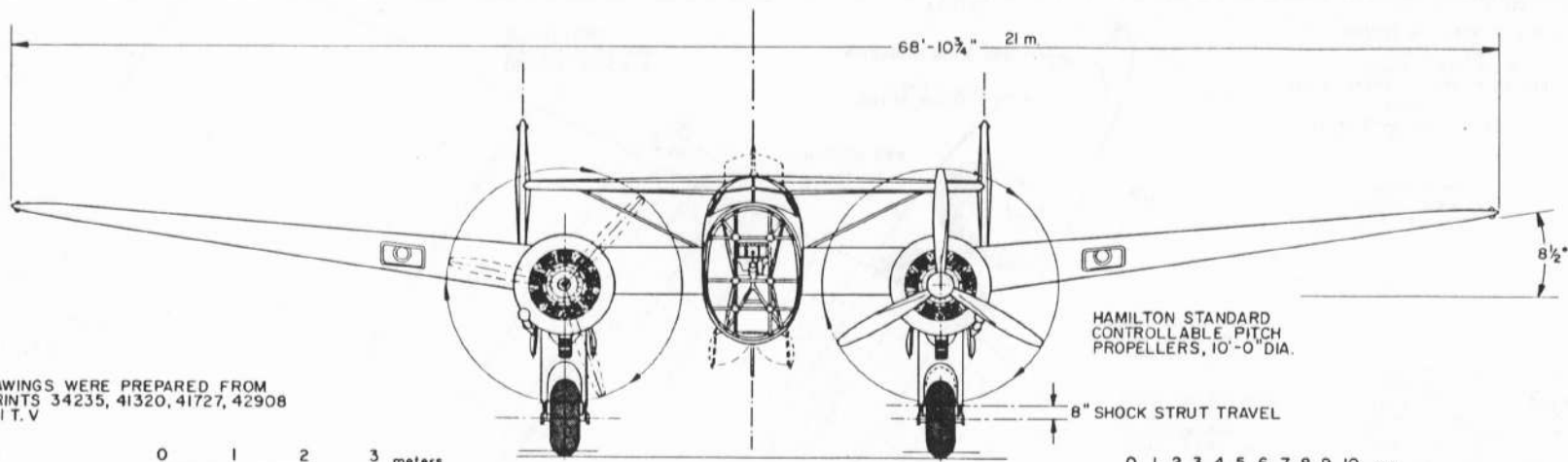
BOMB CAPACITY, UP TO 1,000 kg (1,850 lbs.)  
 ARMAMENT, 4 7.9 MACHINE GUNS & 1 20 mm. CANNON

**COLORING NOTES**

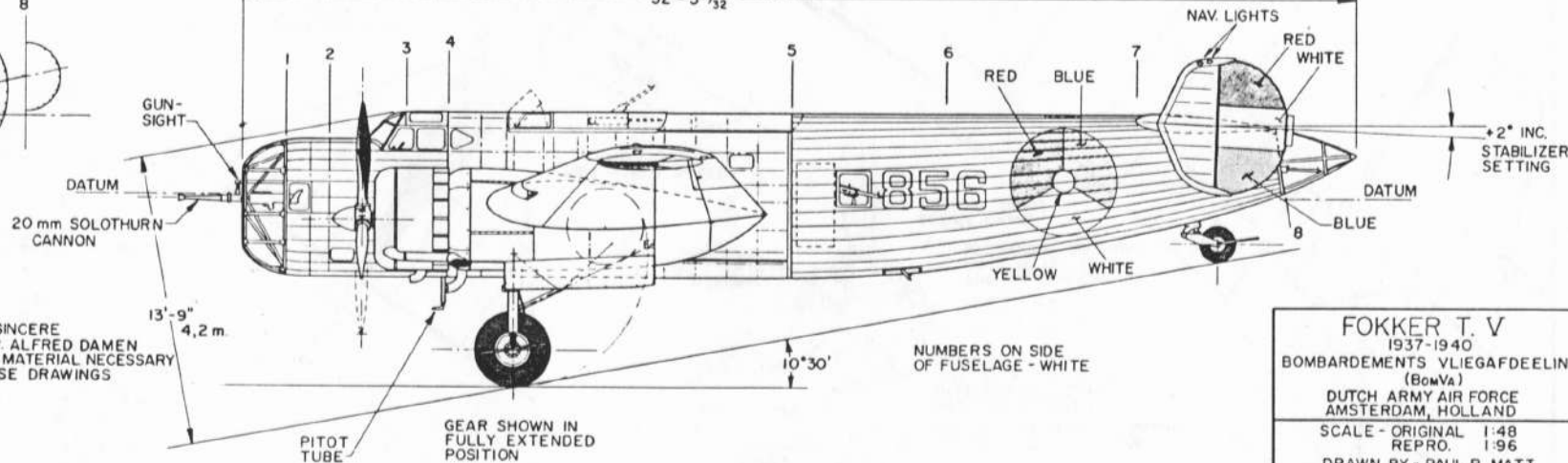
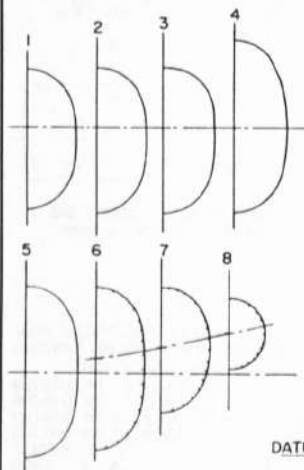
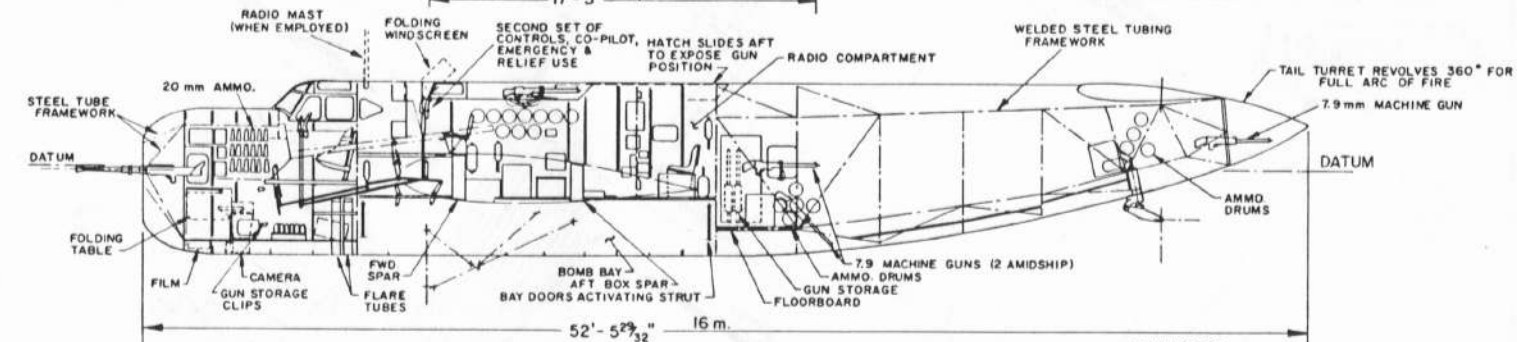
PROTOTYPE, ALL SILVER, PRE -WAR NATIONAL INSIGNIA OF RED, WHITE & BLUE, YELLOW ORANGE CENTER  
 SERVICE CAMOUFLAGE, IRREGULAR PATCHES OF DARK GREEN, BROWN & KAKHI, BLACK UNDERSURFACES.  
 INSIGNIA REMAINED SAME BUT CENTER DOT PAINTED BLACK JUST PRIOR TO NAZI INVASION OF HOLLAND  
 WAR EMERGENCY, CAMOUFLAGE AS ABOVE, NATIONAL INSIGNIA CHANGED TO ORANGE TRIANGLE, OUTLINED IN BLACK, RUDDER STRIPES ABANDONED, RUDDERS SOLID ORANGE OUTLINED IN BLACK



**FOKKER T.V**  
 1937-1940  
 BOMBARDEMENTS VLIEGAFDEELING  
 (BomVa)  
 DUTCH ARMY AIR FORCE  
 AMSTERDAM, HOLLAND  
 SCALE - ORIGINAL 1:48  
 REPRO. 1:96  
 DRAWN BY - PAUL R. MATT  
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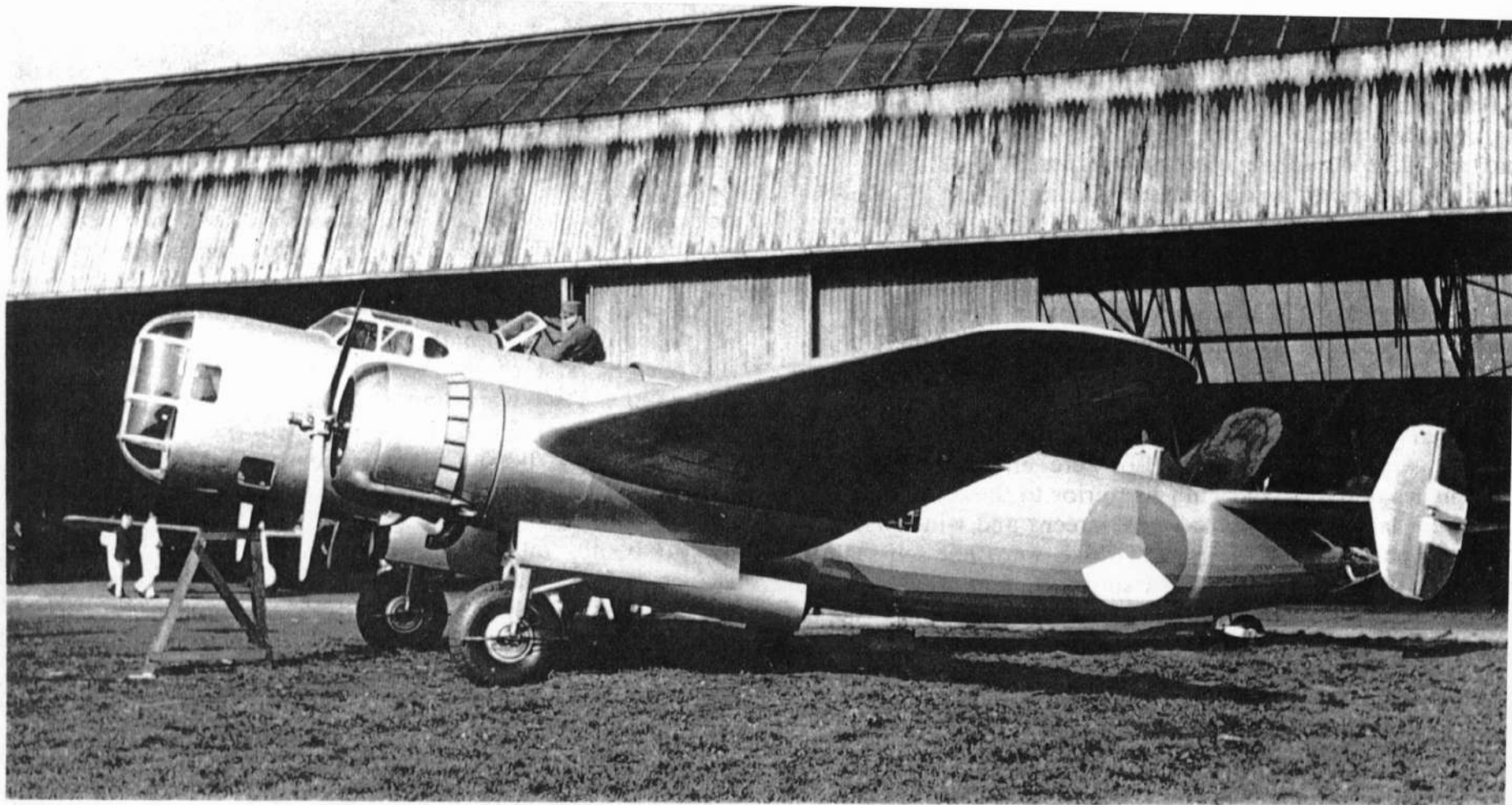


THESE DRAWINGS WERE PREPARED FROM FOKKER PRINTS 34235, 41320, 41727, 42908 AND 43001 T.V



WE EXPRESS OUR SINCERE APPRECIATION TO MR. ALFRED DAMEN FOR SUPPLYING THE MATERIAL NECESSARY TO ACCOMPLISH THESE DRAWINGS

**FOKKER T.V**  
 1937-1940  
 BOMBARDEMENTS VLIEGAFDEELING (BomVa)  
 DUTCH ARMY AIR FORCE  
 AMSTERDAM, HOLLAND  
 SCALE - ORIGINAL 1:48  
 REPRO. 1:96  
 DRAWN BY - PAUL R. MATT  
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The first Fokker T.V, number 850, undergoing maintenance on Schiphol Airport about late 1937.

(Royal Dutch Air Force)



Lineup of T.Vs at Schiphol in 1939 with pre-war markings. All but two have their rudders removed. From foreground, planes are 851, 854, 856, 857, 858, unknown, 853.

(Postma Collection)



Aircraft 863 was one of the T.Vs that was destroyed in the Fokker hangars during the bombing of Schiphol. (Postma)



T.V No. 856 at Schiphol before the war. It was to be the last operational T.V of the Dutch Army Air Force. (Postma)



Peacetime markings as applied to the T.V are seen on No. 859. Camouflage was three colors of green, brown and khaki with black undersurfaces. Same finish was retained in wartime markings but triangular orange national insignia and orange rudder were used.

(Postma Collection)



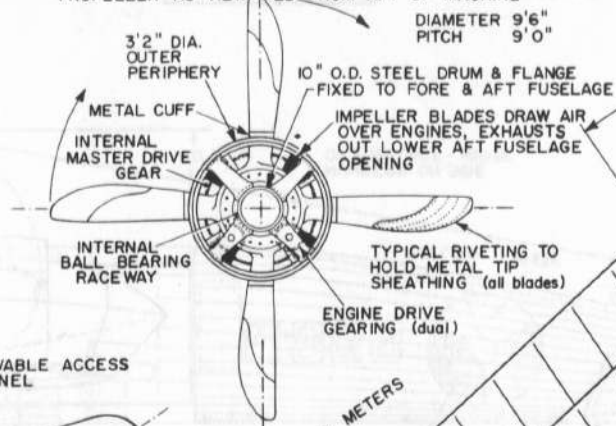
**GENERAL SPECIFICATIONS**

WEIGHT EMPTY 3600 lbs.  
 USEFUL LOAD 1004 lbs.  
 GROSS WEIGHT 4604 lbs.  
 TOP SPEED, ESTIMATED 80-90 m.p.h.  
 CRUISING SPEED 72 m.p.h.  
 LANDING SPEED 45-65 m.p.h.  
 CLIMB TO 5,000 ft. (est.) 5 min. 32 sec.  
 FUEL CAPACITY 75 gals.  
 RANGE AT CRUISE, duration 4 hours  
 WING AREA (incl. ailerons) 658 sq. ft.  
 WING AREA (less ailerons) 602 " "

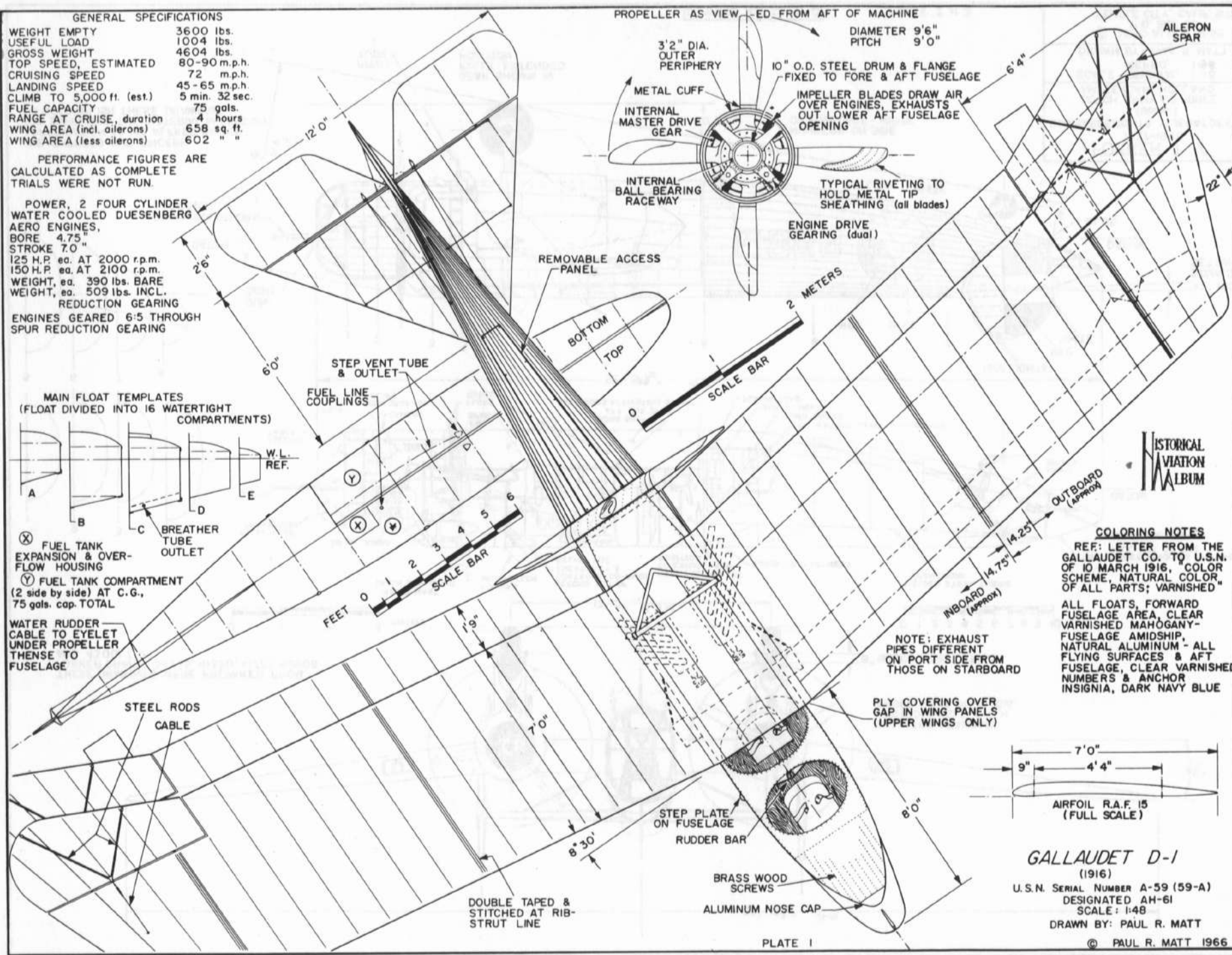
PERFORMANCE FIGURES ARE CALCULATED AS COMPLETE TRIALS WERE NOT RUN.

POWER, 2 FOUR CYLINDER WATER COOLED DUESENBERG AERO ENGINES,  
 BORE 4.75"  
 STROKE 7.0"  
 125 H.P. ea. AT 2000 r.p.m.  
 150 H.P. ea. AT 2100 r.p.m.  
 WEIGHT, ea. 390 lbs. BARE  
 WEIGHT, ea. 509 lbs. INCL.  
 REDUCTION GEARING  
 ENGINES GEARED 6:5 THROUGH SPUR REDUCTION GEARING

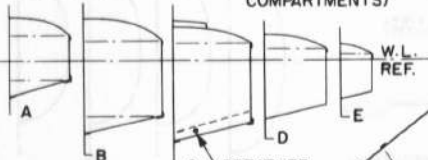
**PROPELLER AS VIEWED FROM AFT OF MACHINE**



**AILERON SPAR**



**MAIN FLOAT TEMPLATES (FLOAT DIVIDED INTO 16 WATERTIGHT COMPARTMENTS)**



⊗ FUEL TANK EXPANSION & OVER-FLOW HOUSING  
 ⊙ FUEL TANK COMPARTMENT (2 side by side) AT C.G., 75 gals. cap. TOTAL

WATER RUDDER CABLE TO EYELET UNDER PROPELLER THENSE TO FUSELAGE

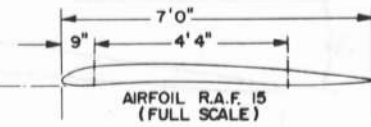


**COLORING NOTES**

REF: LETTER FROM THE GALLAUDET CO. TO U.S.N. OF 10 MARCH 1916. "COLOR SCHEME, NATURAL COLOR, OF ALL PARTS; VARNISHED"  
 ALL FLOATS, FORWARD FUSELAGE AREA, CLEAR VARNISHED MAHOAGNY-FUSELAGE AMIDSHIP, NATURAL ALUMINUM - ALL FLYING SURFACES & AFT FUSELAGE, CLEAR VARNISHED NUMBERS & ANCHOR INSIGNIA, DARK NAVY BLUE

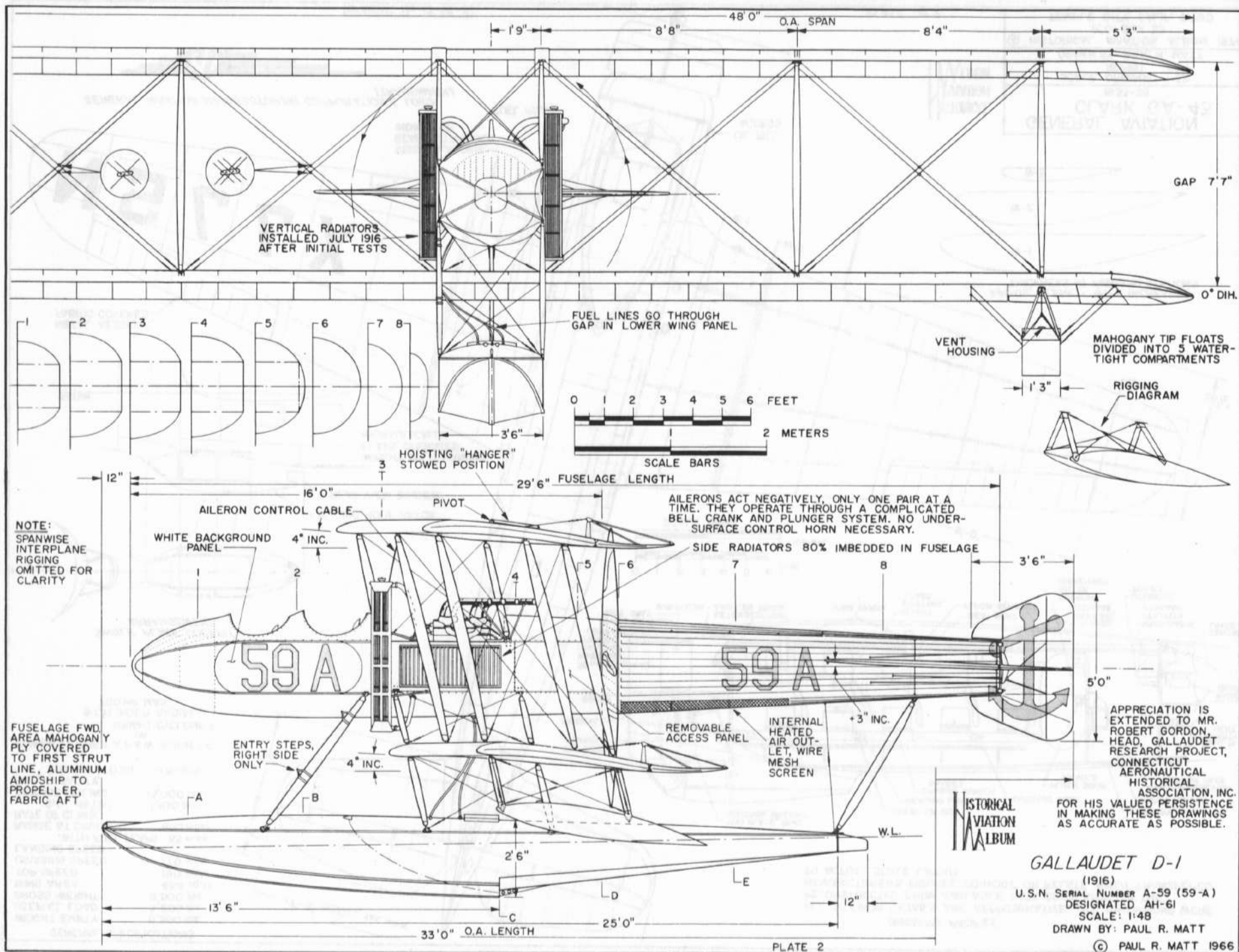
NOTE: EXHAUST PIPES DIFFERENT ON PORT SIDE FROM THOSE ON STARBOARD

PLY COVERING OVER GAP IN WING PANELS (UPPER WINGS ONLY)



**GALLAUDET D-1**

(1916)  
 U.S.N. SERIAL NUMBER A-59 (59-A)  
 DESIGNATED AH-61  
 SCALE: 1:48  
 DRAWN BY: PAUL R. MATT



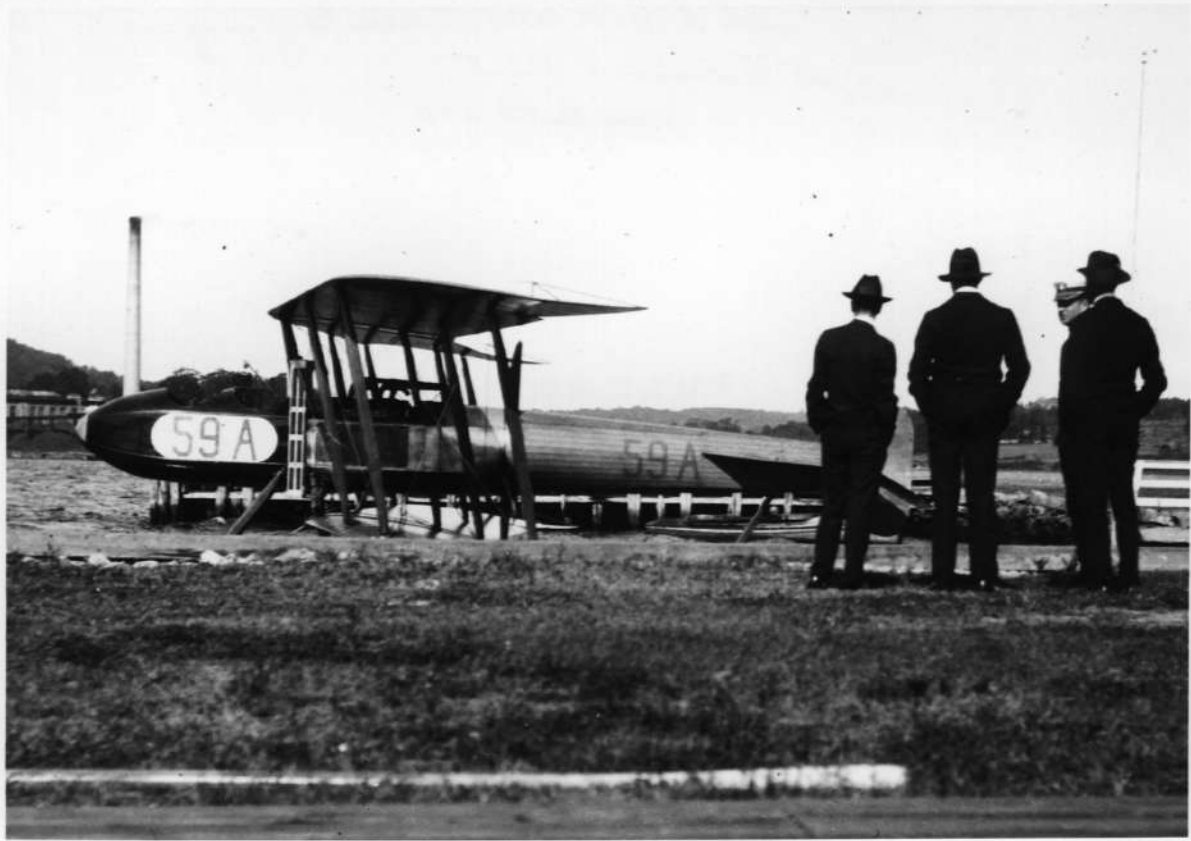
HISTORICAL AVIATION ALBUM

GALLAUDET D-1  
 (1916)  
 U.S.N. SERIAL NUMBER A-59 (59-A)  
 DESIGNATED AH-61  
 SCALE: 1:48  
 DRAWN BY: PAUL R. MATT  
 © PAUL R. MATT 1966

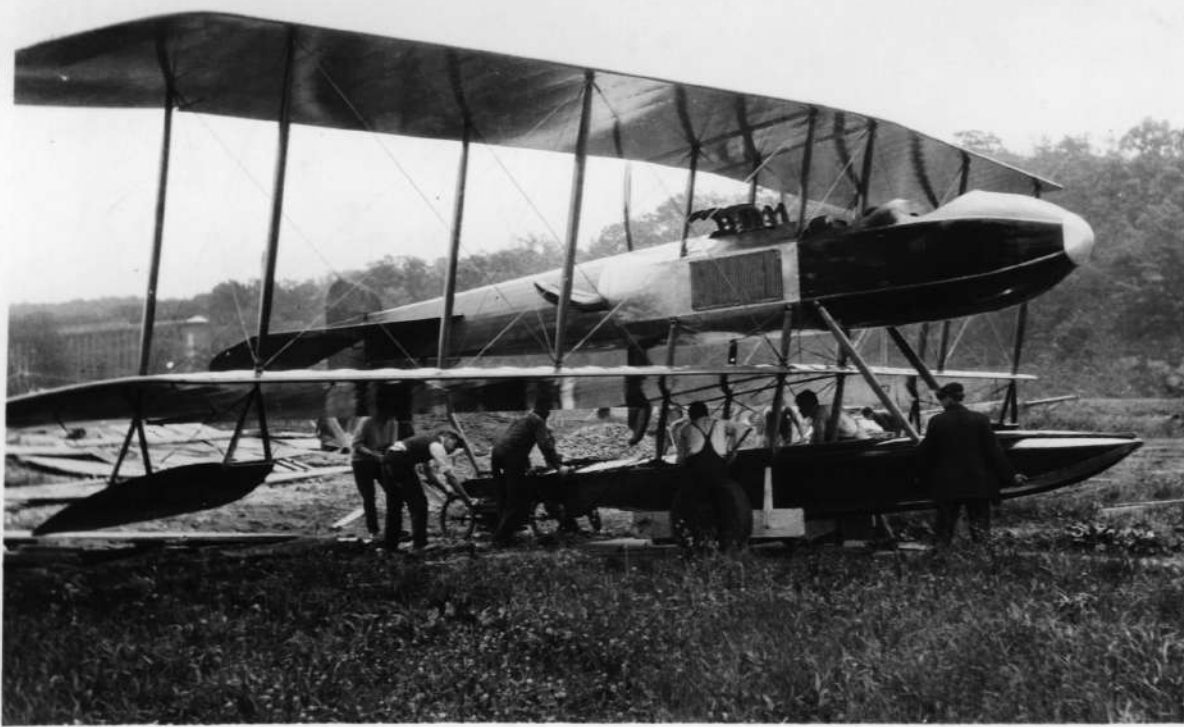


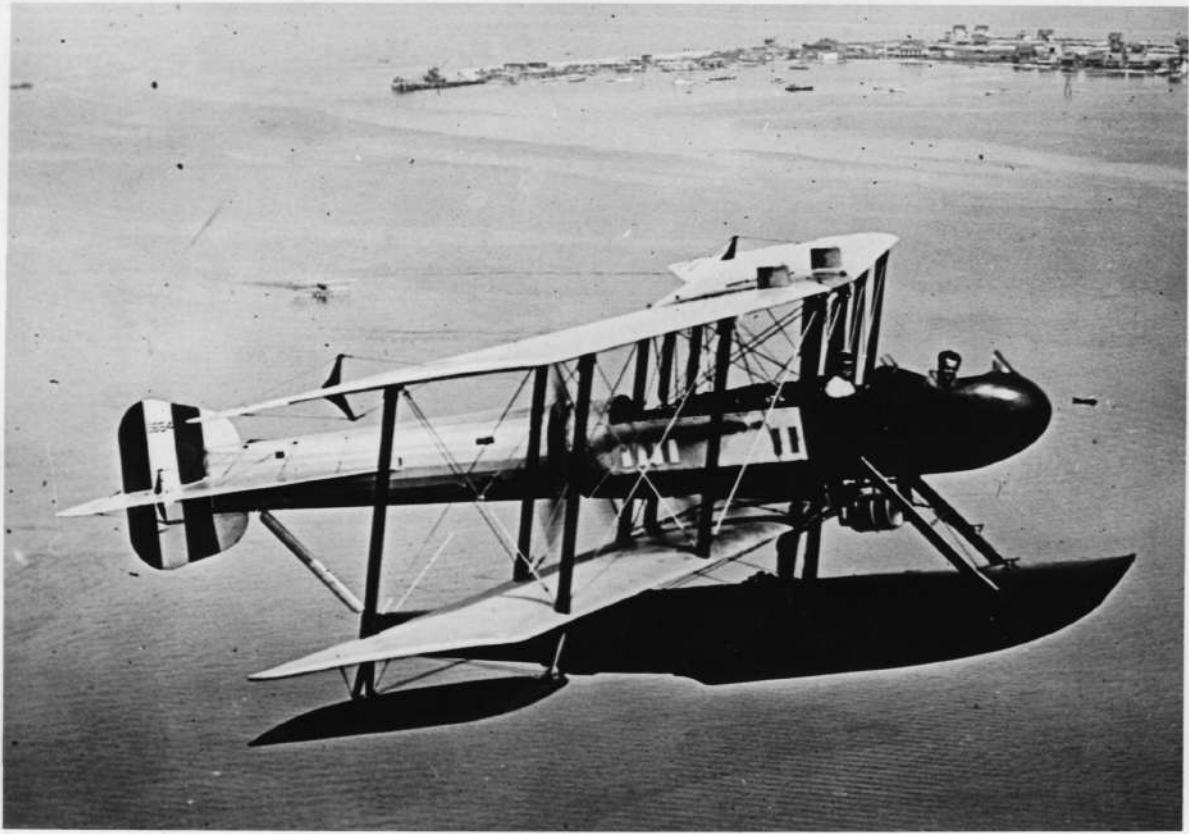


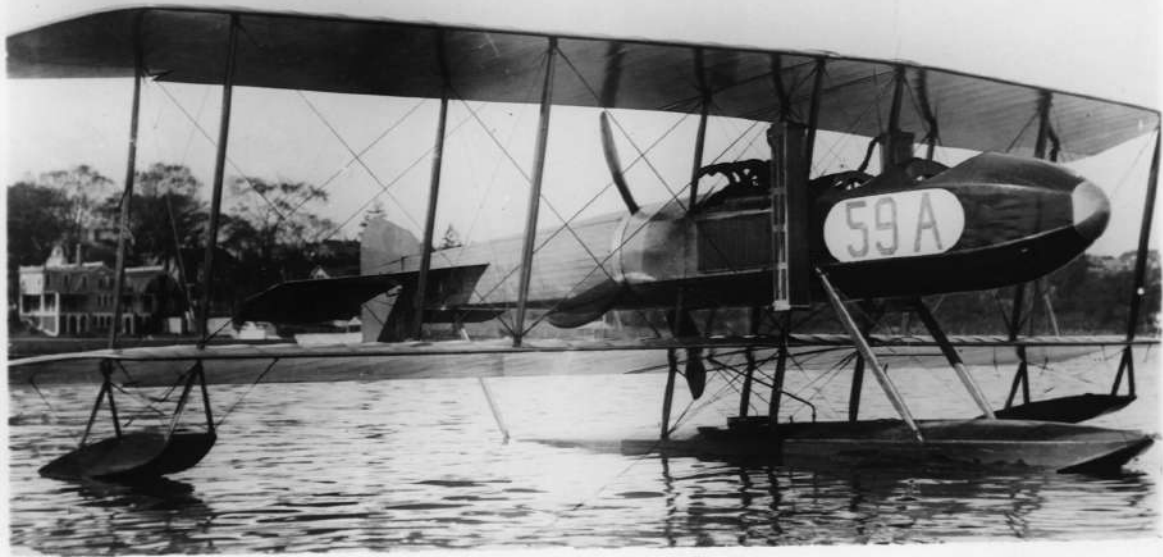


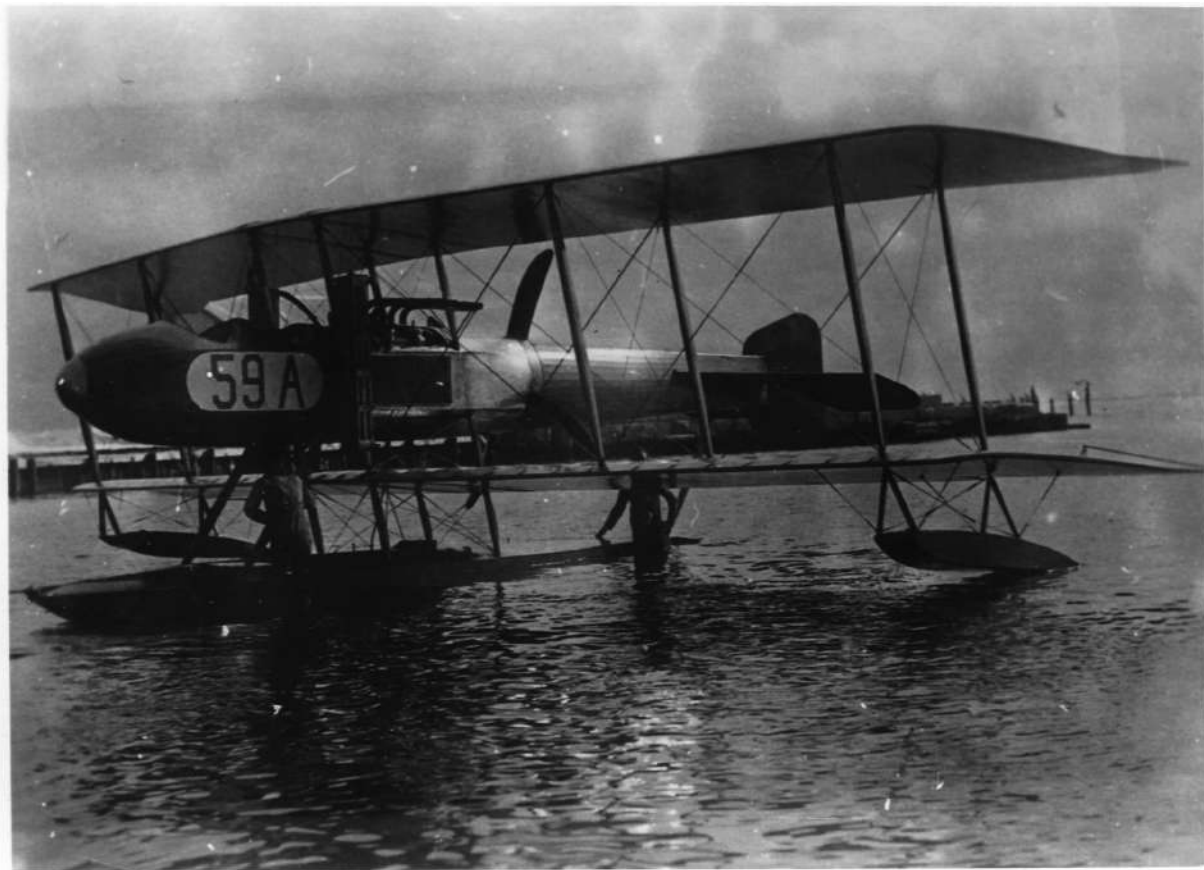






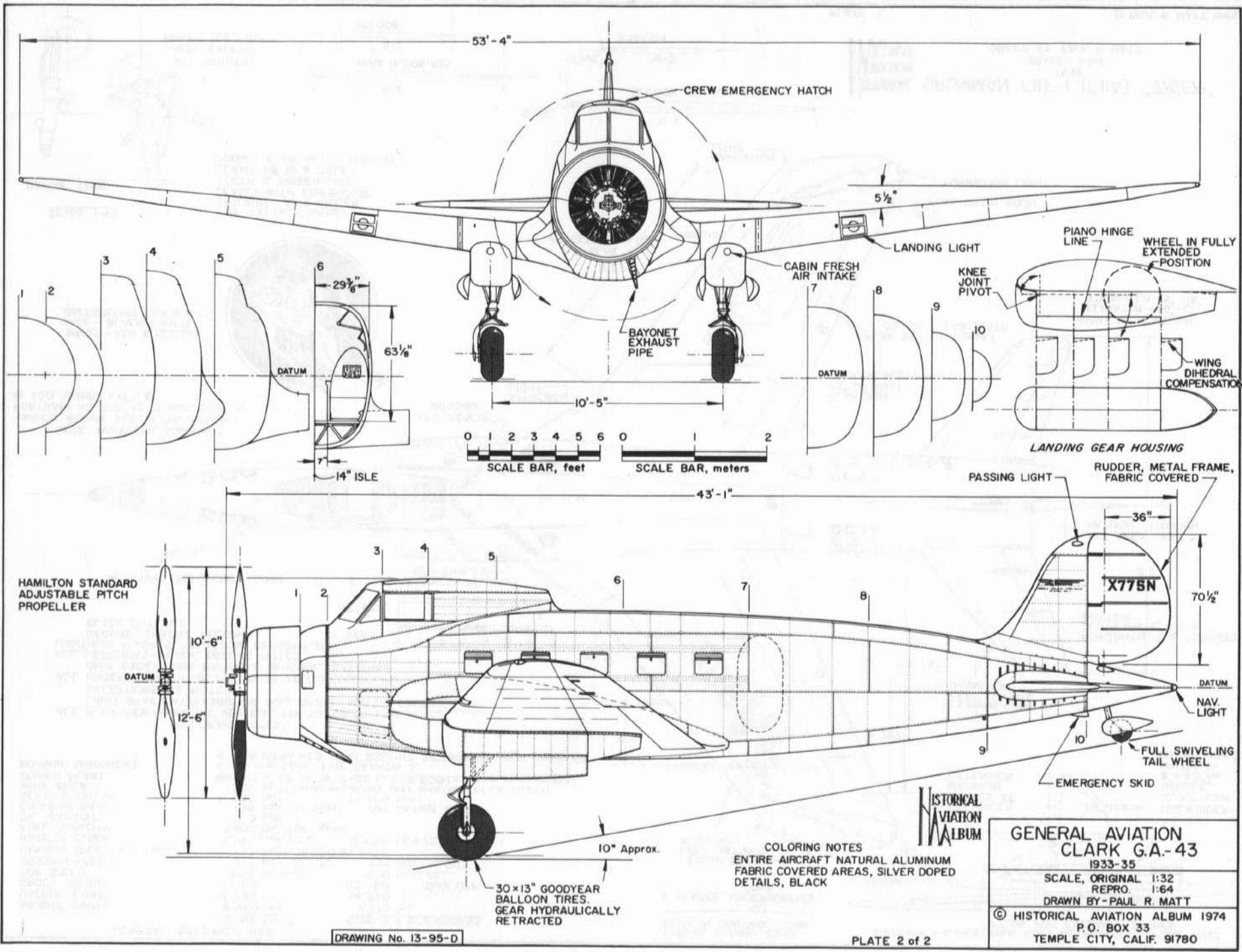






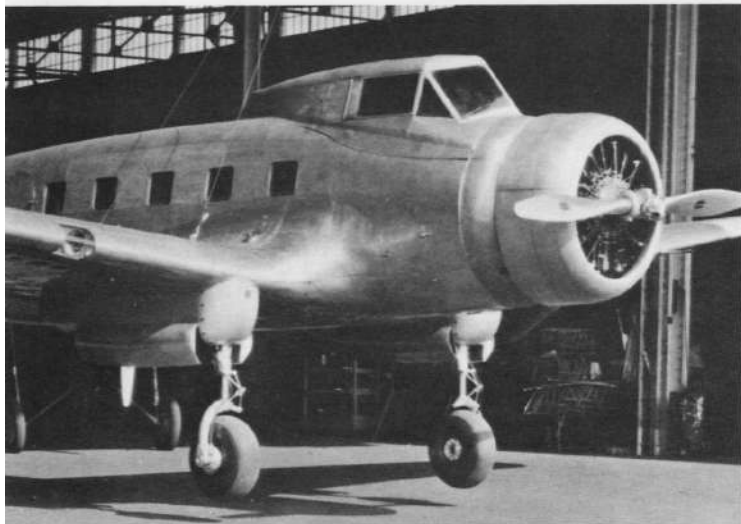




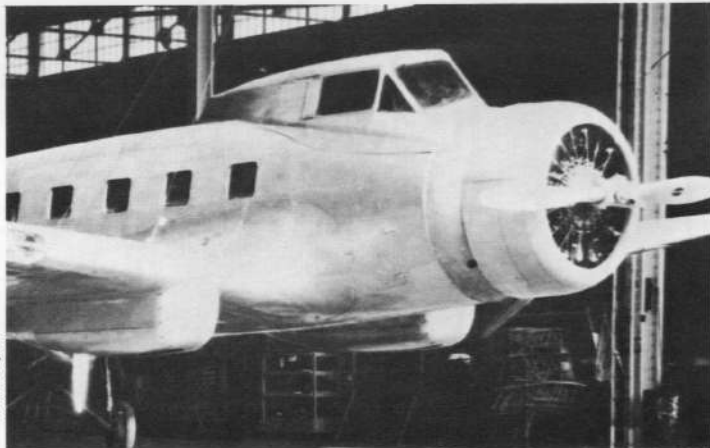


DRAWING No. 13-95-D

PLATE 2 of 2



Stephen Hudek



Walt Boyne

Suspended prototype GA-43, shortly after modification with retractable landing gear, undergoing mechanical checkout on Oct. 11, 1933. Below is instrument panel and cockpit layout of GA-43A, c/n 2204, NC 13903. To right, landing gear detail. Note cabin fresh air intake tube.



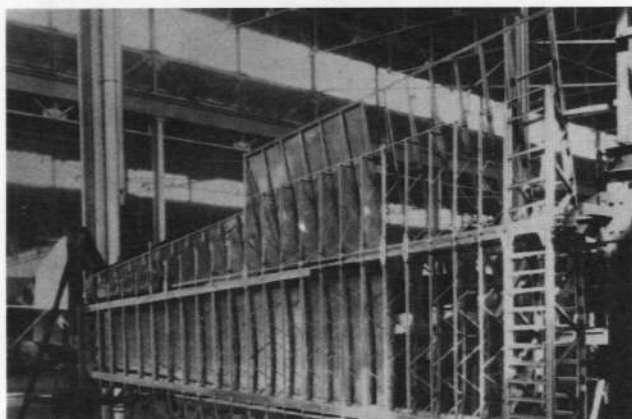
Walt Boyne

Below, abundant ribs used in wing panel.

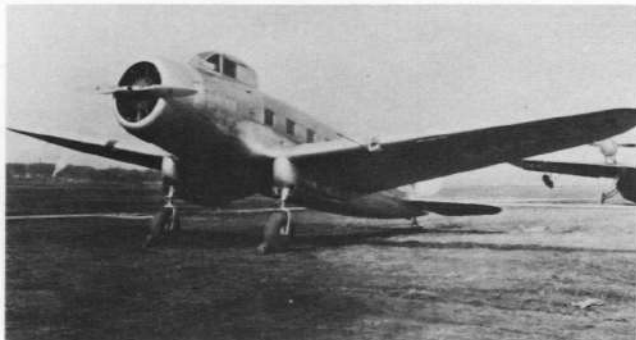


Walt Boyne

Below, passenger cabin before furnishings were fitted.



## INDEX TO SERVICE LIFE OF THE FIVE GENERAL AVIATION CLARK GA-43 AIRCRAFT



Stephen Hudek

**Type & Model:** Pilgrim 150, Clark GA-43, GA-43 11PCLM c/n 7500  
**Registration:** X 775N, J-BAEP (Japan), M-701 (Manchukuo)  
**Mfg. Date:** 5/20/32  
**Engine:** Wright Cyclone "F" 650 hp. c/n 17532  
**ATC:** None

The prototype aircraft, developed and manufactured by the **American Airplane & Engine Corp.**, Farmingdale, N.Y. as the "Pilgrim 150." Since the design engineer was Virginius E. Clark, the aircraft was also known as the "Clark" or "Clark GA-43." Originally built with fixed l/g and wheel pants, and with portions of wing and tail surfaces fabric-covered. The prototype, together with designs, patents and rights sold and registered 9/12/32 to **General Aviation Manufacturing Corp.**, Dundalk, Md. Used as a test model and demonstrator, with re-design and modifications by a new engineering staff. These included retractable l/g, and hatch pods for both one and two-seat cockpits. Title as of 12/31/34 to **North American Aviation, Inc.**, Dundalk, Md. Aircraft previously sold and delivered during 1934 to **Mitsui Bussan**, a Japanese importing firm. On arrival in Japan, assigned to **Nakajima Aircraft Company** for analysis of construction techniques. Re-assembled and used as a civil airliner by **Manchurian Airlines**. Broken in two in a landing accident (date unknown). Engine removed and aircraft scrapped.



Stephen Hudek

**Type & Model:** GA-43A 12PCLM c/n 2202  
**Registration:** X 82Y, CH-169 (Switz.), HB-LAM (Switz.)  
**Mfg. Date:** 10/14/33  
**Engine:** Wright Cyclone R-1820 F1 715 hp. c/n 21200  
**ATC:** None

Manufactured and registered to **General Aviation Manufacturing Corp.**, Dundalk, Md. Underwent tests for A.T.C. in 1933. Sold 2/20/34 to **Swiss Air Traffic Co., Ltd.**, Zurich, Switzerland. Price: \$37,000. Export Lic. E-943. Ferried to New York under Swiss reg. and shipped to Cherbourg, France. Assembled and flown to Dubendorf, 3/16/34. Flown on Zurich-Frankfort mail routes, etc., and reported to have carried radio for the first time on Swissair routes. Sold 10/21/36 to **Maklerfirma**, French agents for the **Spanish Republican Air Force**. Reported used in Spain as a transport during Spanish Civil War (1936-39). Final disposition or fate unknown.

### PHOTO NOT AVAILABLE

**Type & model:** GA-43A 12PCLM c/n 2203  
**Registration:** X-13901  
**Mfg. Date:** 11/20/33  
**Engine:** Wright Cyclone R-1820 F1, 715 hp.  
**ATC:** None  
Manufactured and registered to **General Aviation Manufacturing Corp.**, Dundalk, Md. 175-gal. fuel capacity. Used for demonstration and experimental purposes. Mfg. advised as of 4/4/35 that ship was grounded and would not be flown. Actual disposition unknown.



North American Rockwell

**Type & Model:** GA-43A 12 PCLM c/n 2204  
**Registration:** X-13903, NC 13903, HB-ITU (Switz.)  
**Mfg. Date:** 1/10/34  
**Engine:** Wright Cyclone SR-1820 F3 710 hp. c/n 21344  
**ATC:** 527

Manufactured and registered to **General Aviation Manufacturing Corp.**, Dundalk, Md. Approved for commercial use 3/24/34. Used by Western Air Express (Mid-Continent Div., General Airlines) during 1934. Flown on Cheyenne, Wyo-Albuquerque, N.M. route. Gross Wt. 8750 lb. Title on 12/31/34 to **North American Aviation, Inc.**, Dundalk, Md. Sold 2/8/35 to **Swiss Air Traffic Co., Ltd.**, Zurich, Switz. Export Lic. E-1350, with Wright Cyclone SR-1820 F2 715 hp. c/n 21412. Registered in Switzerland on 3/19/35, and flown on mail and passenger routes to Frankfort, Vienna, Basle and Geneva. Destroyed in accident 4/30/36 on Mount Rigi, Switzerland, due to failure of direction-finding equipment. Pilot Ernst Gerber and R/O Arthur Mueller killed.



Smithsonian Institution

**Type & Model:** GA-43J 11PCSM c/n 2205  
**Registration:** X 13904, NC 13904  
**Mfg. Date:** 1/15/34  
**Engine:** Pratt & Whitney Hornet R-T2D1 1690 660 hp c/n 1959  
**ATC:** Approved 6/21/34 w/ Hornet T1D1 (700 hp.)  
Manufactured and registered to **General Aviation Manufacturing Corp.**, Dundalk, Md. Fitted with Edo 36-9225 floats and controllable pitch propeller. Gross Wt. 9000 lb. Reported as "first U.S.-built seaplane to be fitted with wing flaps." Sold and delivered 11/19/34 to **Pan American Aviation Supply Corp.**, New York. Price \$42,000. Title to **Pan American Airways, Inc.** Miami, Fla. as of 12/31/34, and to **Sociedad Colombo-Allemania de Transportes Aereos (SCADTA)**, Baranquilla, Columbia on 1/14/35, under Export Lic. E-1286. Flown by SCADTA on Magdalena River routes in Columbia. Named: "Bolivar". Reported "sold to Brazil." Disposition unknown.





NORTH AMERICAN AVIATION

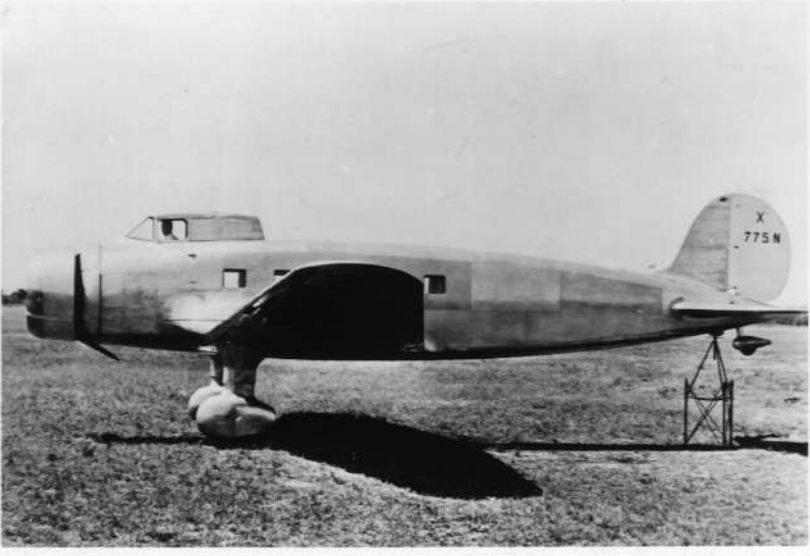
GA-43

LANDPLANE

645272



FEB 63





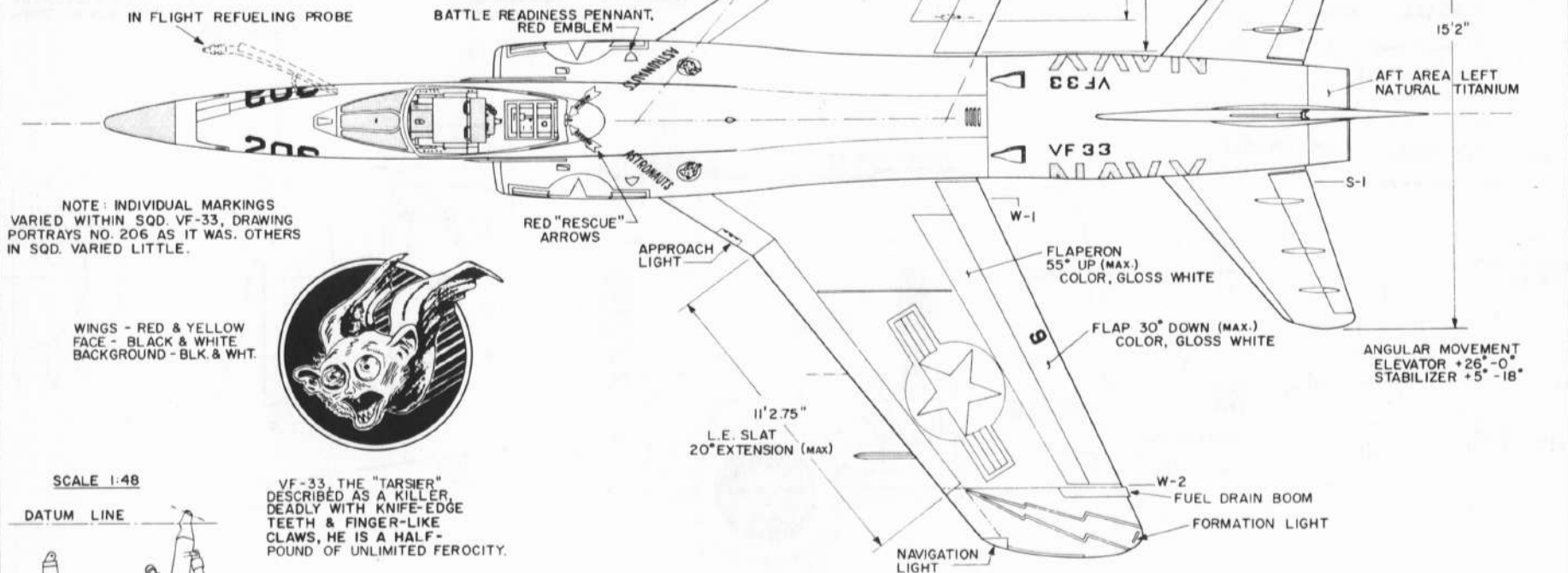
JAN 60



**GENERAL SPECIFICATIONS**

	<u>GUNS ONLY</u>	<u>GUNS &amp; 4 SIDEWINDERS</u>
WEIGHT EMPTY	6,950 lbs.	7,570 lbs.
USEFUL LOAD	14,330 "	14,590 "
GROSS WEIGHT	21,280	22,160
TOP SPEED	654 knots /S.L.	630 knots /S.L.
CRUISING SPEED	502 knts /38,000'	454 knts /30,000'
LANDING SPEED, with flaps	130 knots /15,500 lbs. gross	
RATE OF CLIMB	5,130 f.p.m. /S.L.	4,050 f.p.m. /S.L. gross wght.
FUEL CAPACITY	6,650 lbs. (1049 gals.)	
OIL CAPACITY	3 gals.	
CRUISING RANGE	1,108 nautical miles	784 nautical miles
SERVICE CEILING	41,900 feet	37,700 feet
WING AREA	250 sq. ft. (BASIC PROJECTED AREA WITH/WITHOUT L.E. FILLET)	
POWER PLANT	WRIGHT J-65-W-1B	7,450 i.s.t. (10,500 i.s.t. WITH AFTERBURNER)
NORMAL ARMAMENT	4 20 mm RAPID FIRE CANNON & 4 AAM INFRA RED HEAT SEEKING SIDEWINDER IA, IC MISSILES	

**COLORING NOTES:**  
 ALL PLAN VIEW SURFACES, VERTICAL FIN TO COLOR LINE  
 LIGHT GRAY (BATTLESHIP OR GULL GRAY) - MATTE FINISH -  
 EXCEPTIONS AS NOTED  
 ALL UNDERSURFACES - GLOSS WHITE BELOW COLOR LINE  
 ONLY EXCEPTIONS, NATIONAL INSIGNIA, LETTERING  
 ALL LETTERING - BLACK, DECORE NOTED  
 LIGHTNING FLASHES, SQUADRON PERSONALITY  
 DECORE, CHROME YELLOW -  
 BLACK OUTLINED



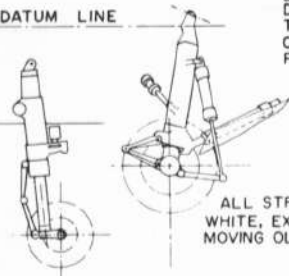
**NOTE: INDIVIDUAL MARKINGS**  
 VARIED WITHIN SQD. VF-33, DRAWING  
 PORTRAYS NO. 206 AS IT WAS. OTHERS  
 IN SQD. VARIED LITTLE.

WINGS - RED & YELLOW  
 FACE - BLACK & WHITE  
 BACKGROUND - BLK. & WHT.

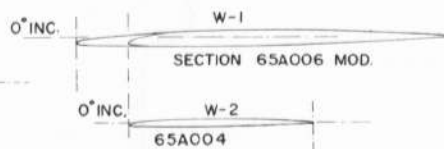
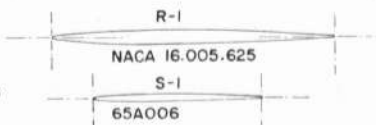


SCALE 1:48

DATUM LINE

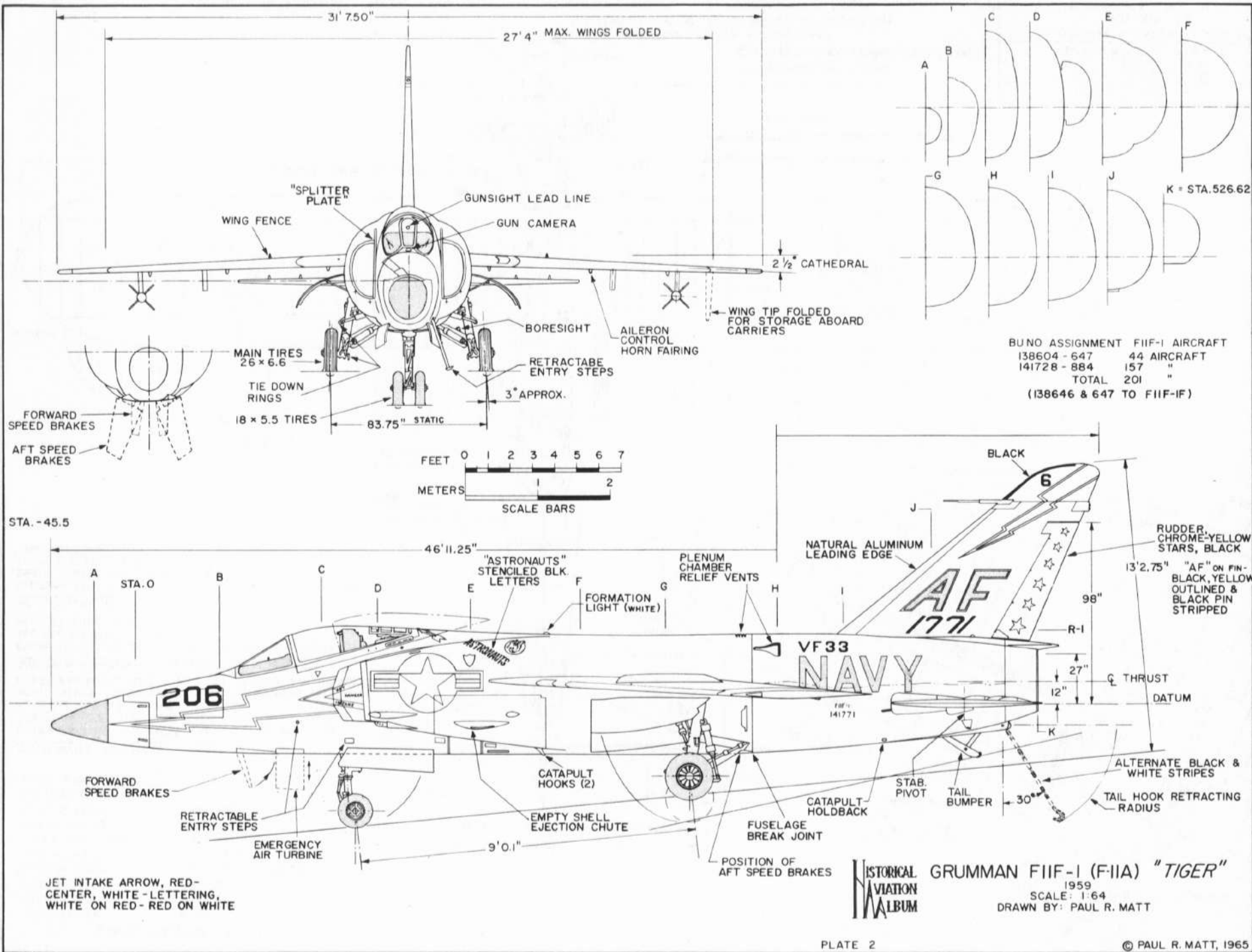


VF-33, THE "TARSIER"  
 DESCRIBED AS A KILLER,  
 DEADLY WITH KNIFE-EDGE  
 TEETH & FINGER-LIKE  
 CLAWS, HE IS A HALF-  
 POUND OF UNLIMITED FEROCITY.



GRUMMAN F11F-1 (F-11A) "TIGER"

1959  
 SCALE: 1:64  
 DRAWN BY: PAUL R. MATT

































P-92658











GENERAL SPECIFICATIONS

WEIGHT EMPTY 3,221 lbs  
 USEFUL LOAD 1,579 lbs  
 GROSS WEIGHT 4,800 lbs  
 MAXIMUM SPEED 207 mph @ 5,300 feet  
 CRUISING SPEED 180 mph @ 7,000 feet  
 CLIMB AT SEA LEVEL 1,600 ft./min.  
 SERVICE CEILING 22,000 feet  
 RANGE AT CRUISE 647 miles  
 WING AREA (TOTAL) 295 sq. ft.  
 POWER: WRIGHT R-1B20-7B CYCLONE OF 700/750 H.P.

COLOR NOTES - AIRCRAFT PORTRAYED

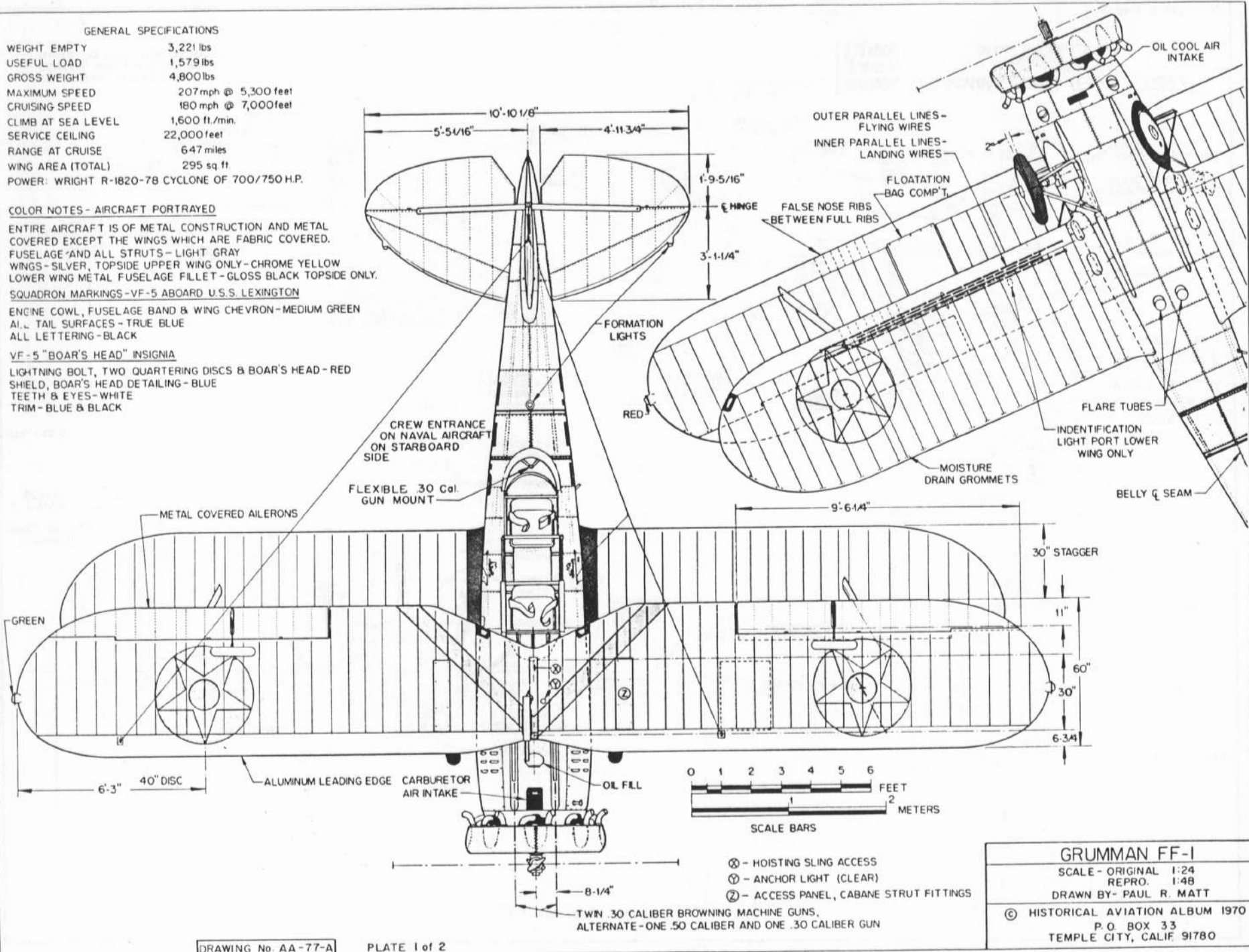
ENTIRE AIRCRAFT IS OF METAL CONSTRUCTION AND METAL COVERED EXCEPT THE WINGS WHICH ARE FABRIC COVERED. FUSELAGE AND ALL STRUTS - LIGHT GRAY  
 WINGS - SILVER, TOPSIDE UPPER WING ONLY - CHROME YELLOW  
 LOWER WING METAL FUSELAGE FILLET - GLOSS BLACK TOPSIDE ONLY.

SQUADRON MARKINGS - VF-5 ABOARD U.S.S. LEXINGTON

ENGINE COWL, FUSELAGE BAND & WING CHEVRON - MEDIUM GREEN  
 ALL TAIL SURFACES - TRUE BLUE  
 ALL LETTERING - BLACK

VF-5 "BOAR'S HEAD" INSIGNIA

LIGHTNING BOLT, TWO QUARTERING DISCS & BOAR'S HEAD - RED  
 SHIELD, BOAR'S HEAD DETAILING - BLUE  
 TEETH & EYES - WHITE  
 TRIM - BLUE & BLACK



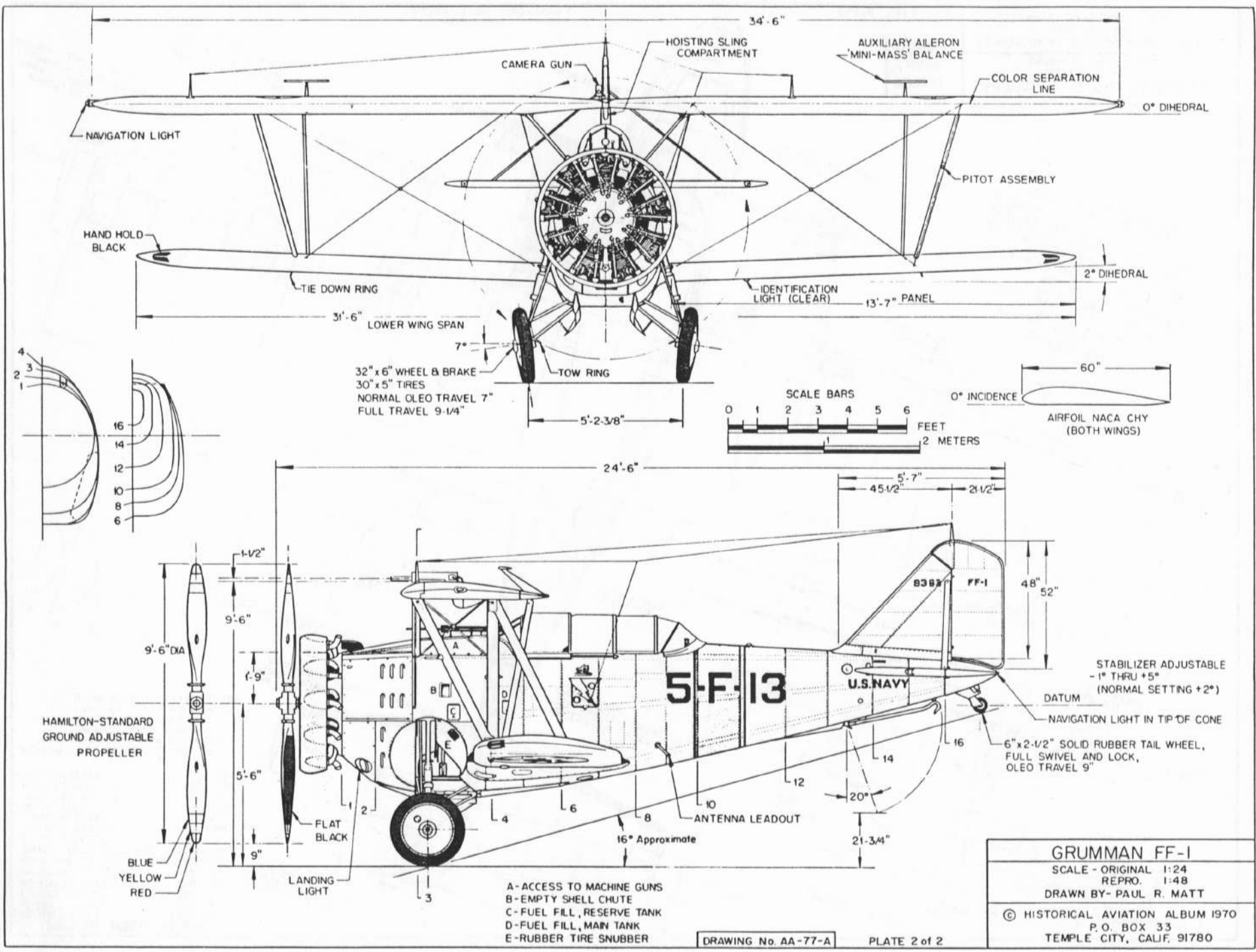
- ⊗ - HOISTING SLING ACCESS
- ⊙ - ANCHOR LIGHT (CLEAR)
- ⊚ - ACCESS PANEL, CABANE STRUT FITTINGS

GRUMMAN FF-1

SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT

© HISTORICAL AVIATION ALBUM 1970  
 P.O. BOX 33  
 TEMPLE CITY, CALIF 91780





**GRUMMAN FF-1**  
 SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT  
 © HISTORICAL AVIATION ALBUM 1970  
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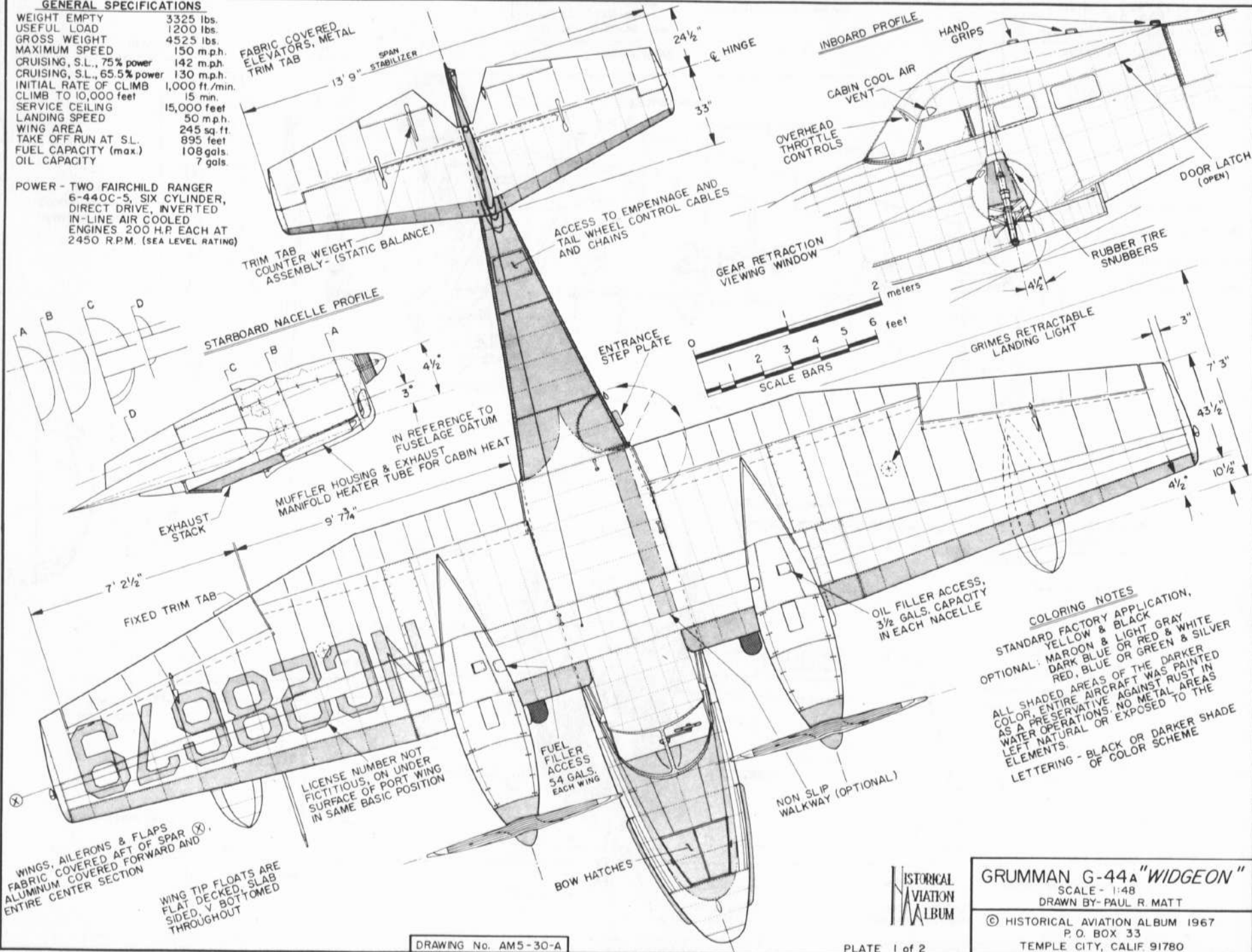




**GENERAL SPECIFICATIONS**

WEIGHT EMPTY 3325 lbs.  
 USEFUL LOAD 1200 lbs.  
 GROSS WEIGHT 4525 lbs.  
 MAXIMUM SPEED 150 m.p.h.  
 CRUISING, S.L., 75% power 142 m.p.h.  
 CRUISING, S.L., 65.5% power 130 m.p.h.  
 INITIAL RATE OF CLIMB 1,000 ft./min.  
 CLIMB TO 10,000 feet 15 min.  
 SERVICE CEILING 15,000 feet  
 LANDING SPEED 50 m.p.h.  
 WING AREA 245 sq. ft.  
 TAKE OFF RUN AT S.L. 895 feet  
 FUEL CAPACITY (max.) 108 gals.  
 OIL CAPACITY 7 gals.

POWER - TWO FAIRCHILD RANGER  
 6-440C-5, SIX CYLINDER,  
 DIRECT DRIVE, INVERTED  
 IN-LINE AIR COOLED  
 ENGINES 200 H.P. EACH AT  
 2450 R.P.M. (SEA LEVEL RATING)



**COLORING NOTES**  
 STANDARD FACTORY APPLICATION,  
 YELLOW & BLACK  
 MAROON & LIGHT GRAY  
 DARK BLUE OR RED & WHITE  
 RED, BLUE OR GREEN & SILVER  
 ALL SHADED AREAS OF THE DARKER  
 COLOR, ENTIRE AIRCRAFT WAS PAINTED  
 AS A PRESERVATIVE AGAINST RUST IN  
 WATER OPERATIONS. NO METAL AREAS  
 LEFT NATURAL OR EXPOSED TO THE  
 ELEMENTS.  
 LETTERING - BLACK OR DARKER SHADE  
 OF COLOR SCHEME

**GRUMMAN G-44 "WIDGEON"**  
 SCALE - 1:48  
 DRAWN BY - PAUL R. MATT  
 © HISTORICAL AVIATION ALBUM 1967  
 P. O. BOX 33  
 TEMPLE CITY, CALIF 91780



WINGS, AILERONS & FLAPS  
 FABRIC COVERED AFT OF SPAR (X)  
 ALUMINUM COVERED FORWARD AND  
 ENTIRE CENTER SECTION

WING TIP FLOATS ARE  
 FLAT DECKED, SLAB  
 SIDED, V BOTTOMED  
 THROUGHOUT

LICENSE NUMBER NOT  
 FICTITIOUS, ON UNDER  
 SURFACE OF PORT WING  
 IN SAME BASIC POSITION

FUEL  
 FILLER  
 ACCESS  
 54 GALS.  
 EACH WING

BOW HATCHES

NON SLIP  
 WALKWAY (OPTIONAL)

OIL FILLER ACCESS,  
 3 1/2 GALS. CAPACITY  
 IN EACH NACELLE

GRIMES RETRACTABLE  
 LANDING LIGHT

SCALE BARS  
 0 1 2 3 4 5 6 feet

ENTRANCE  
 STEP PLATE

MUFFLER HOUSING & EXHAUST  
 MANIFOLD HEATER TUBE FOR CABIN HEAT

EXHAUST  
 STACK

STARBOARD NACELLE PROFILE

TRIM TAB  
 COUNTER WEIGHT  
 ASSEMBLY - (STATIC BALANCE)

ACCESS TO EMPENNAGE AND  
 TAIL WHEEL CONTROL CABLES  
 AND CHAINS

GEAR RETRACTION  
 VIEWING WINDOW

OVERHEAD  
 THROTTLE  
 CONTROLS

CABIN COOL AIR  
 VENT

HAND GRIPS

DOOR LATCH  
 (OPEN)

RUBBER TIRE  
 SNUBBERS

FABRIC COVERED  
 ELEVATORS, METAL  
 TRIM TAB

SPAN  
 STABILIZER

24 1/2"  
 HINGE

13' 9"

33"

2 meters

4 1/2"

3"

7' 3"

43 1/2"

10 1/2"

4 1/2"

7' 2 1/2"

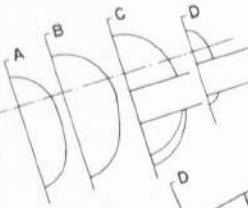
FIXED TRIM TAB

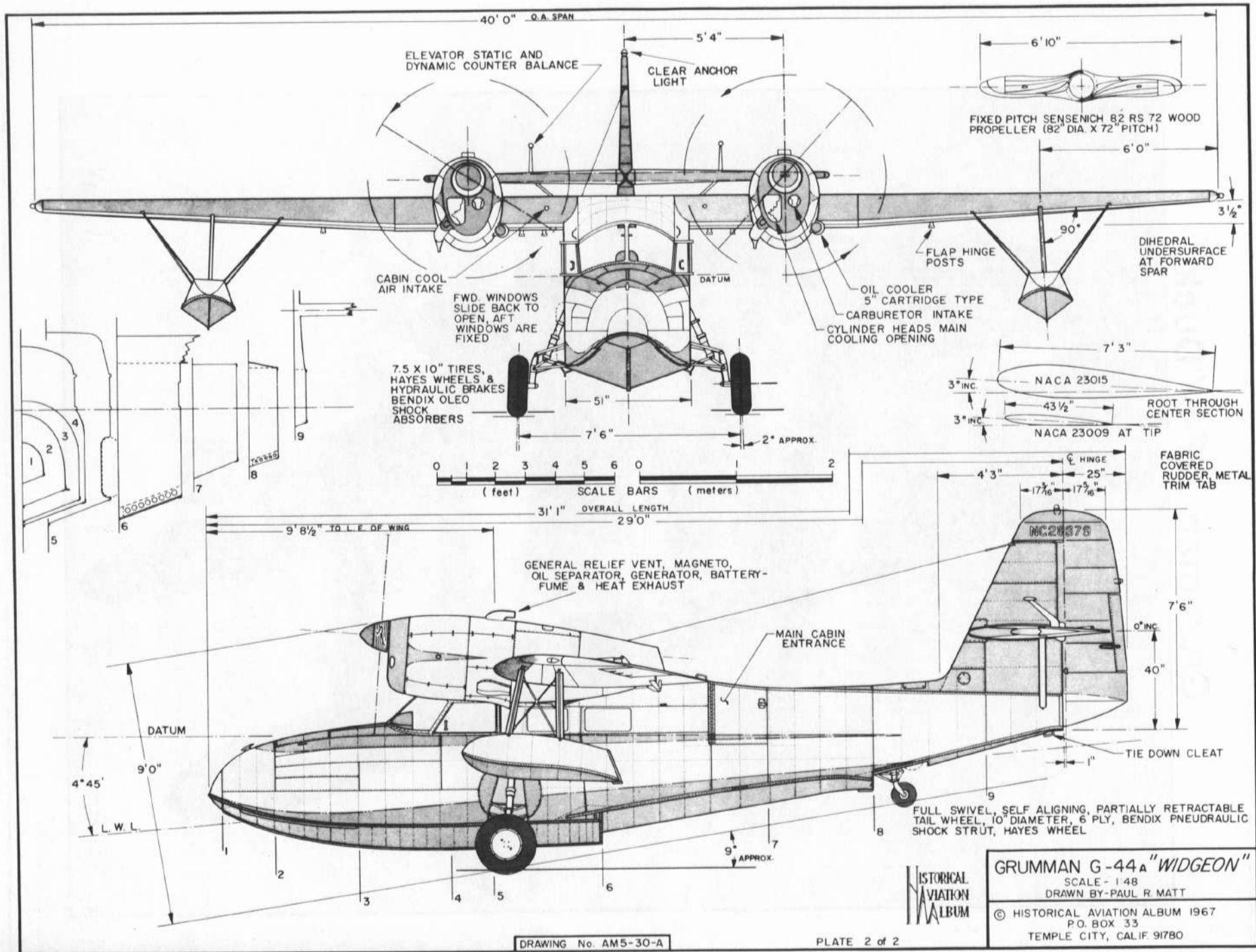
9' 7 1/4"

IN REFERENCE TO  
 FUSELAGE DATUM

4 1/2"

3"





DRAWING No. AM5-30-A

PLATE 2 of 2

HISTORICAL AVIATION ALBUM

GRUMMAN G-44 "WIDGEON"  
SCALE - 1:48  
DRAWN BY-PAUL R. MATT  
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GRUMMAN G-44 WIDGEON #5



GRUMMAN G44 WIDGEON #3







1403







1402



1404



1405



















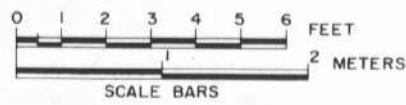
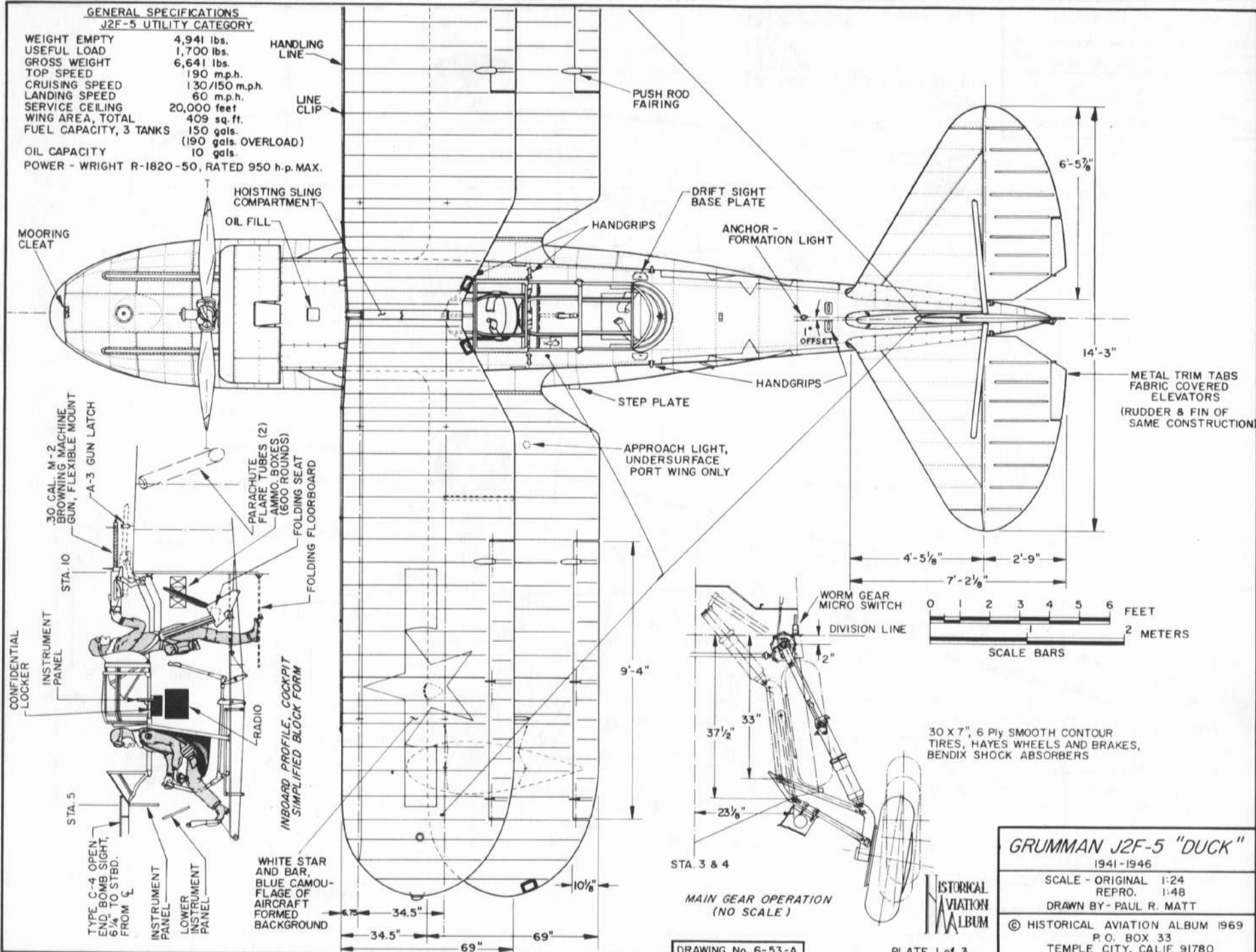






**GENERAL SPECIFICATIONS**  
J2F-5 UTILITY CATEGORY

WEIGHT EMPTY 4,941 lbs.  
 USEFUL LOAD 1,700 lbs.  
 GROSS WEIGHT 6,641 lbs.  
 TOP SPEED 190 m.p.h.  
 CRUISING SPEED 130/150 m.p.h.  
 LANDING SPEED 60 m.p.h.  
 SERVICE CEILING 20,000 feet  
 WING AREA, TOTAL 409 sq. ft.  
 FUEL CAPACITY, 3 TANKS 150 gals.  
 (190 gals. OVERLOAD)  
 OIL CAPACITY 10 gals.  
 POWER - WRIGHT R-1820-50, RATED 950 h.p. MAX.



30 x 7", 6 Ply SMOOTH CONTOUR  
 TIRES, HAYES WHEELS AND BRAKES,  
 BENDIX SHOCK ABSORBERS

**GRUMMAN J2F-5 "DUCK"**  
1941-1946

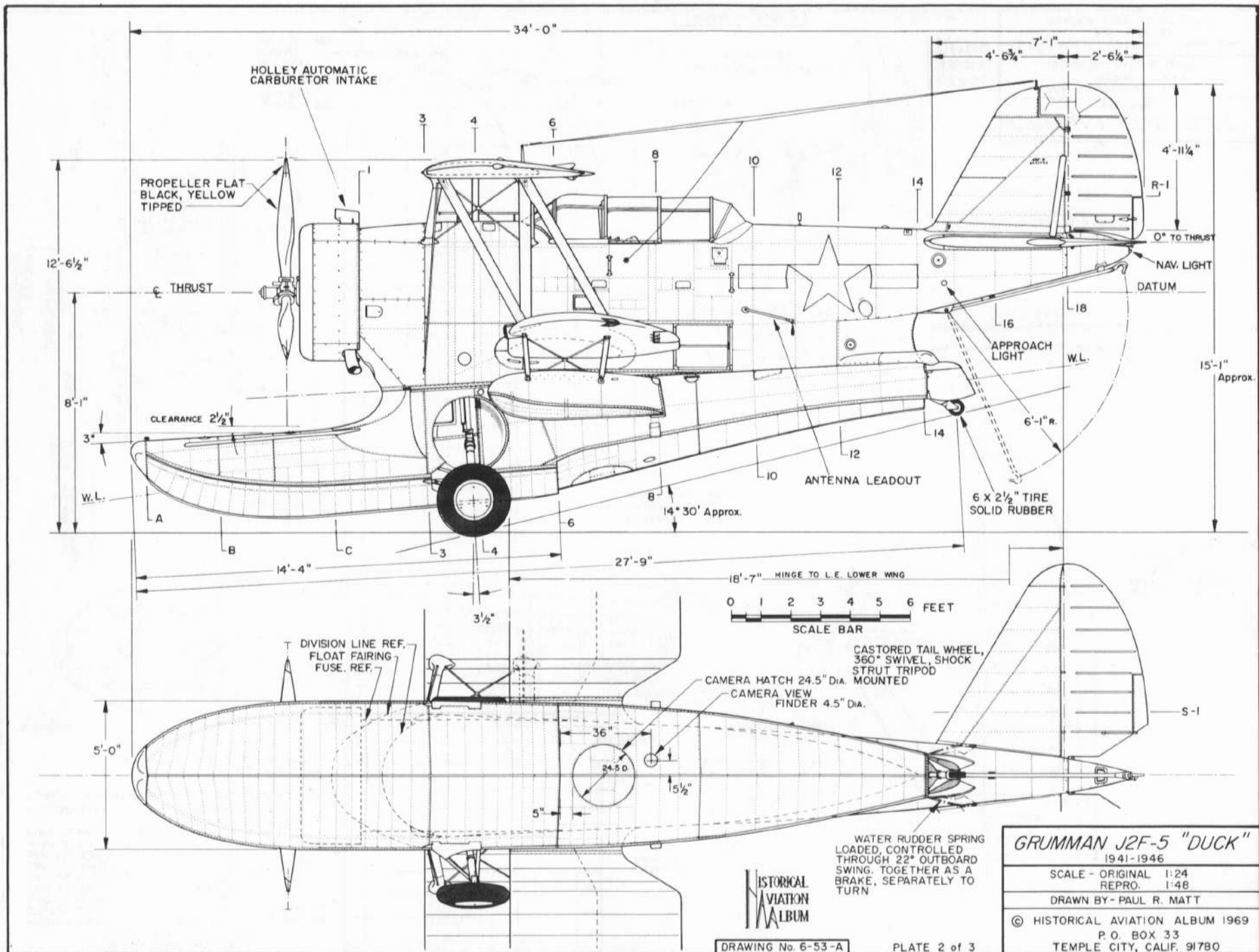
SCALE - ORIGINAL 1:24  
 REPRO. 1:48  
 DRAWN BY - PAUL R. MATT

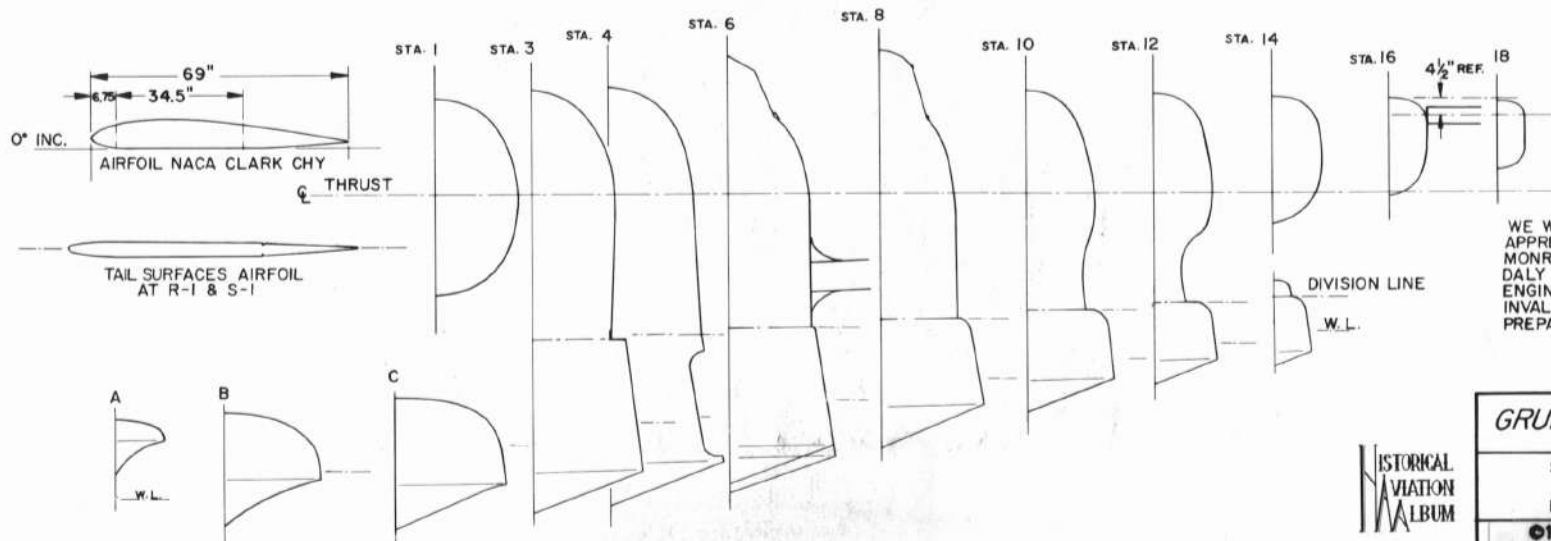
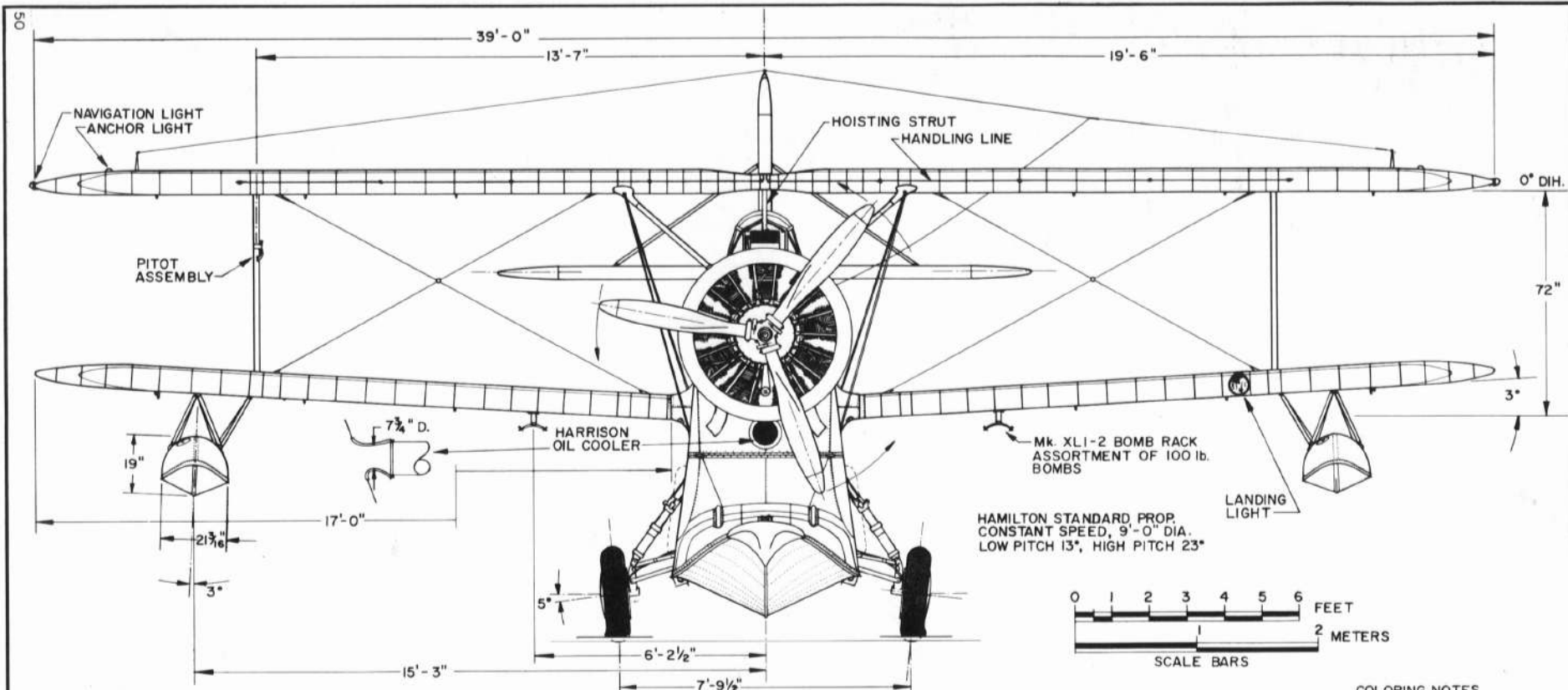
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DRAWING No. 6-53-A

PLATE 1 of 3







**COLORING NOTES**  
 W.W. II J2Fs  
 ALL PLANVIEW SURFACES &  
 SIDES - DARK NON - SPECULAR  
 BLUE, LIGHT GRAY UNDER  
 SURFACES. SOME J2Fs WERE  
 OVERALL FLAT BLACK WHEN  
 OPERATING DURING NIGHT  
 RESCUE AND INFILTRATION  
 MISSIONS IN THE SOUTH PACIFIC.

WE WISH TO EXPRESS OUR SINCERE  
 APPRECIATION TO MESSRS. ROBERT  
 MONROE, GIL PERLROTH AND GRANT  
 DALY OF THE GRUMMAN AIRCRAFT  
 ENGINEERING CORP. FOR THEIR  
 INVALUABLE ASSISTANCE IN THE  
 PREPARATION OF THESE DRAWINGS

**GRUMMAN J2F-5 "DUCK"**  
 1941 - 1946

SCALE - ORIGINAL 1:24  
 REPRO. 1:48

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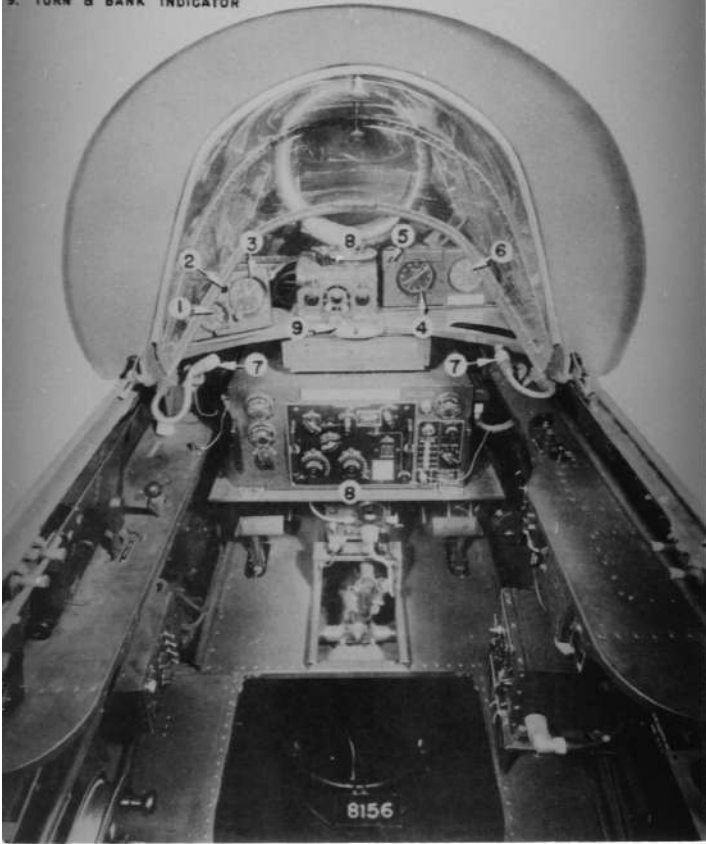








- 2. CAMERA SIGNAL LIGHT
- 3. ALTIMETER
- 4. COMPASS
- 5. COMPASS LIGHT
- 6. AIRSPEED INDICATOR
- 7. PROJECTION LIGHTS
- 8. RADIO EQUIPMENT
- 9. TURN & BANK INDICATOR



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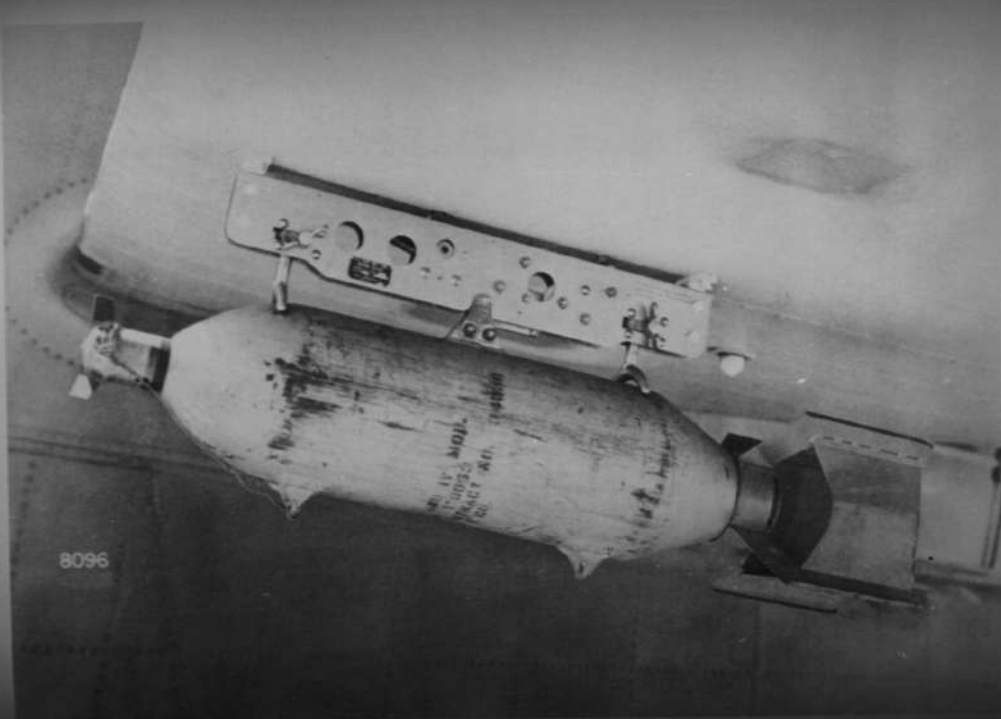
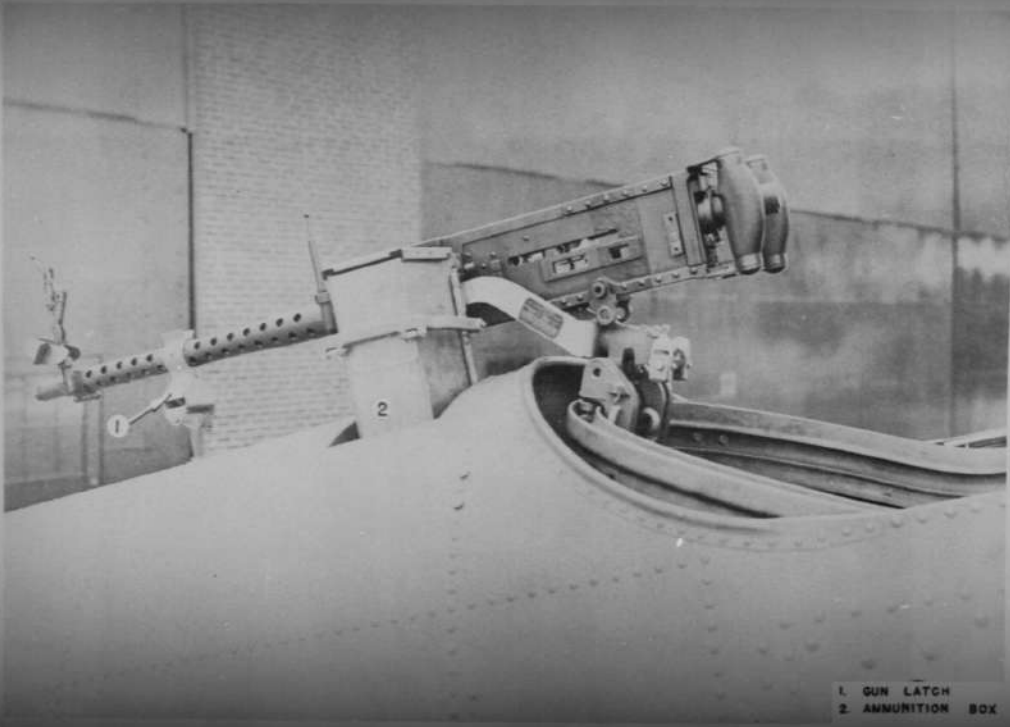


FIG. 45 BOMB BACK - 100<sup>th</sup> BOMB



1. GUN LATCH  
2. AMMUNITION BOX

FIG. 43 - GUN INSTALLATION

