MODEL AIRPLANE NEWS presents

PRICE $2.00

the BEST of WYLAM

THE STINSON STORY

THE CURTISS FAMILY

BOOK 4

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STINSON AT HOME—on Land, Sea or in the Air

FOREWORD

What is it that leads some of us to the "pack rat" habit of gathering up and saving every bit of aeronautica that we can lay our hands on?

It is said by some that anyone who constantly desires to look back to the "good old days" is neurotic and is being driven by an unnatural longing to return to the womb. Obviously whoever came up with this conjecture is a person who lives only in the present and will never understand or appreciate the feeling of having lived at another time in addition to his own existence. Through the media of gathering, compiling, and contemplating data out of the Golden Era, the age of classic machinery, we can at least in a small way, taste and feel some of what has gone on before us.

Having been an aeromodeler for the past 36 years, this back-to-the-wombist falls into a group known as the "Plan Savers." We salt away 3-views of rare designs so we can say, "You mean you've never heard of International Aviation's twin-tailed mid-wing pusher built in May of 1938? Here, let me show you . . . . " We carefully preserve and never cut apart construction plans as we build models from kits or plan services, some now long out of print. We beg, borrow, steal, and if forced, even buy plans for airplanes that "we're going to build someday for sure . . . just as soon as we get the time . . . "

Anyone who is a member of this collector group is almost sure to be a Wylam fan. Our earliest Wylam is a Model 220 Waco Taperwing, published in the December 1933 issue of Model Airplane News. As far as we know, Bill's drawings have been published exclusively in Model Airplane News ever since. In 22 out of the past 27 years, Bill has produced over 130 different airplane drawings, all published in M.A.N.

Wylam's drawings, along with those of only a few other specialists, such as Nye, Nieto, Matt and Karlstrom, are characterized by a profusion of details, dimensions, color schemes, model variations and performance figures. In recent years, as the hobby of radio control and control-line scale modeling has developed to a perfection that narrows the competitive field down to a few individuals, the search for presentation material for static judging has reached the point where criticisms have been directed towards some of these men concerning the accuracy of their drawings. However, no matter what else is said, we can be thankful that these draftsmen, artists if you will, had the desire to compile data and create these drawings, and that magazines such as Model Airplane News were willing to publish them.

Incidentally, it is interesting to note in looking back through all kinds of aviation magazines over the past years, that the model publications have been almost the only ones to record and thus preserve this aspect of aviation history.

This third book (one by Nye really makes it the fourth) in the current series of the BEST OF WYLAM concentrates on two famous airplane designers and manufacturers, Stinson and Curtiss.

Starting with the Stinson Junior SM-2, Wylam created a total of 31 Stinson drawings, depicting in detail the design of 13 models, finishing with the tri-motored Model U airliner. These were published off and on over a three year period, from 1958 to 1961.

Included in the series is the most famous of all Stinsons, and one of the most well-known non-military planes of all time, the Gull Wing Reliant; with its full size brother, the huge model Gull Wing produced by Cleveland Model Airplane Co., it was probably the best known and most desired model ever produced.

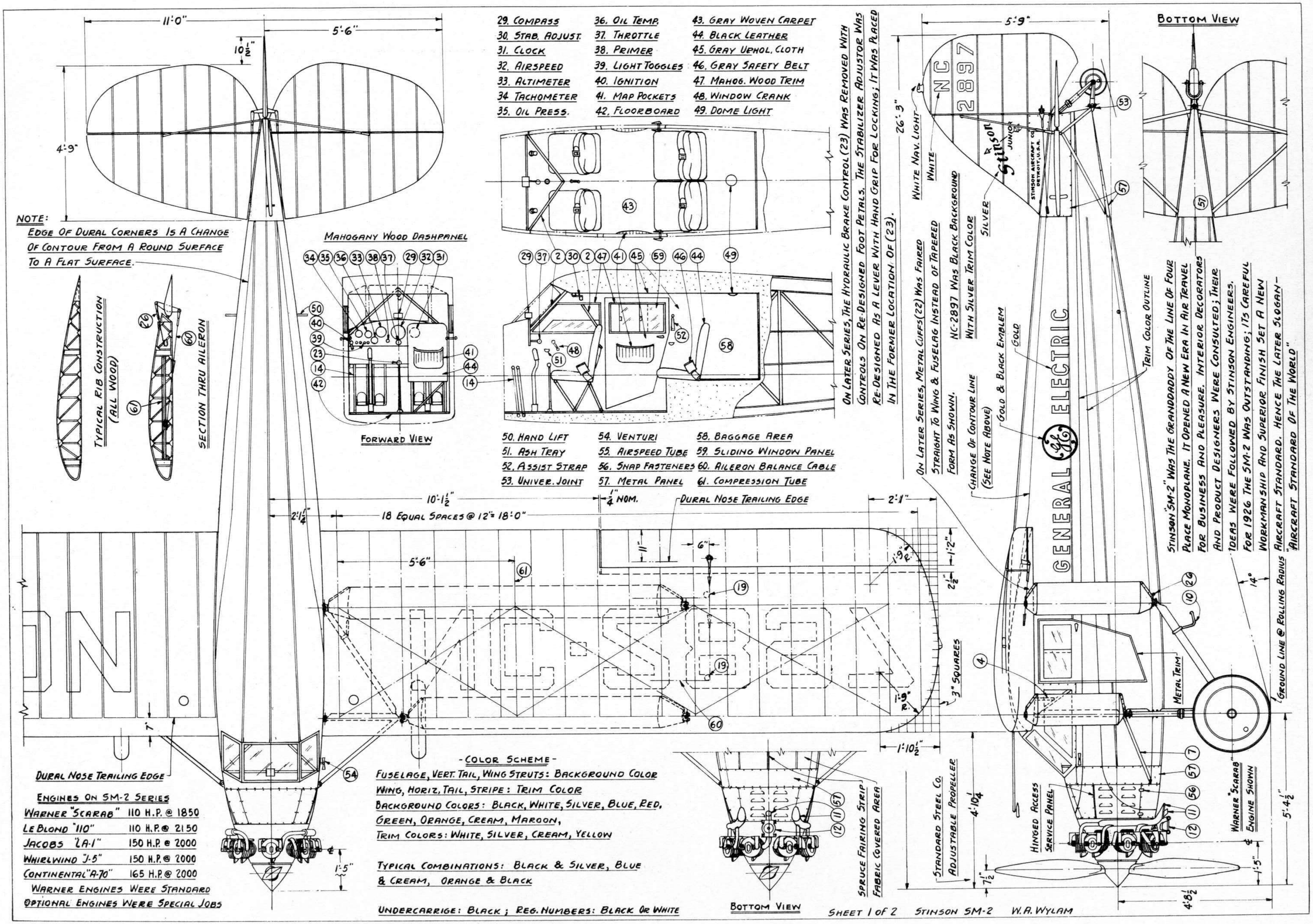
Obviously, it would take volumes to cover every design created by Stinson. On the other hand, nothing less than a small library could ever handle the many Curtiss designs. With Wylam's help, we offer some of the lesser known and unusual models along with one of the best known Curtiss designs, the first of many subsequent models to carry the same nickname, Helldiver.

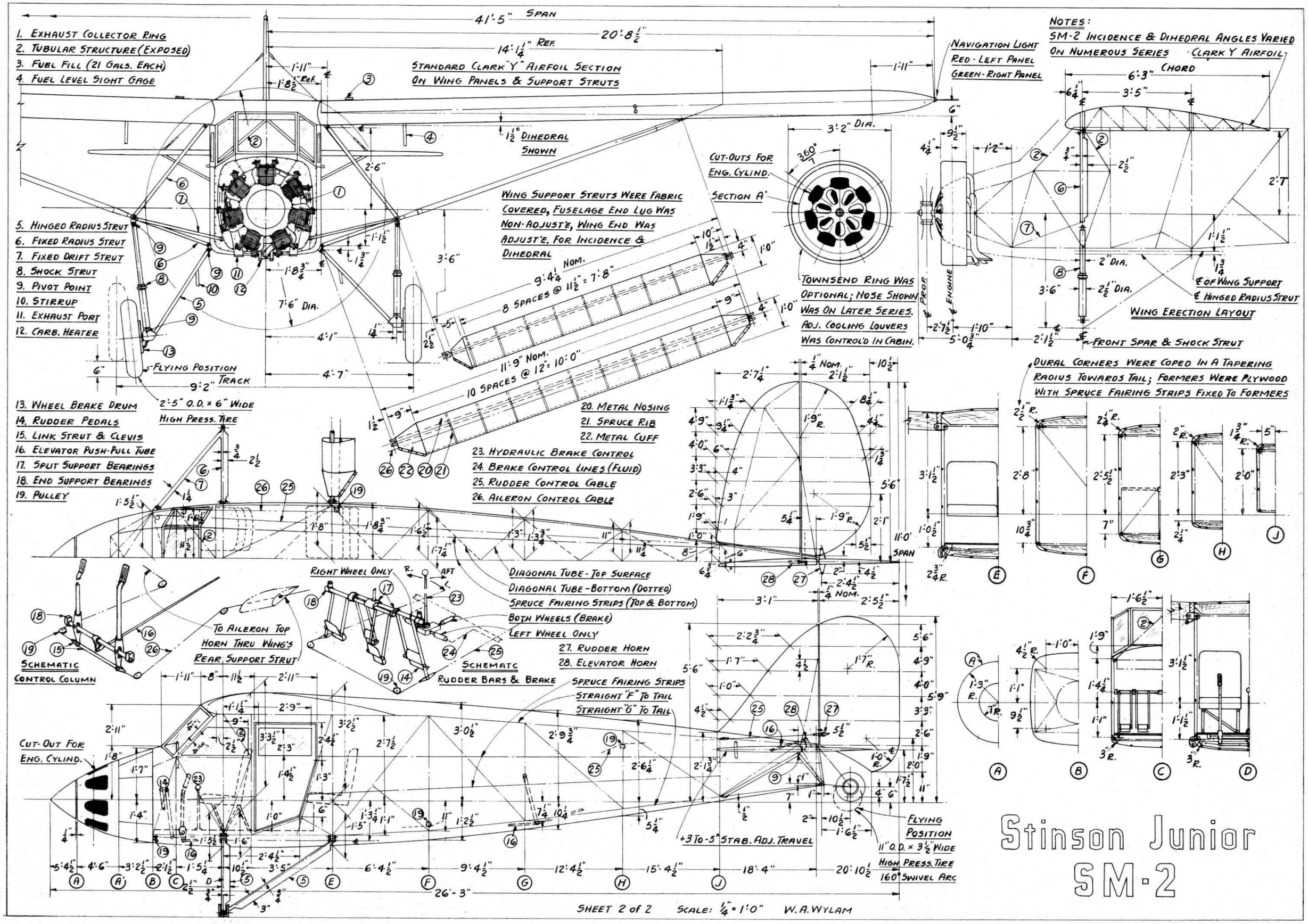
Our favorite in the group, however, is the stubby little Sparrowhawk F9C-2. Designed specifically for use aboard the Navy's airborne aircraft carriers such as the USS Macon, the little Sparrowhawks could hook on or detach themselves from the huge rigid LTA's while in flight . . . an era in aviation history that came and went in a very short time.

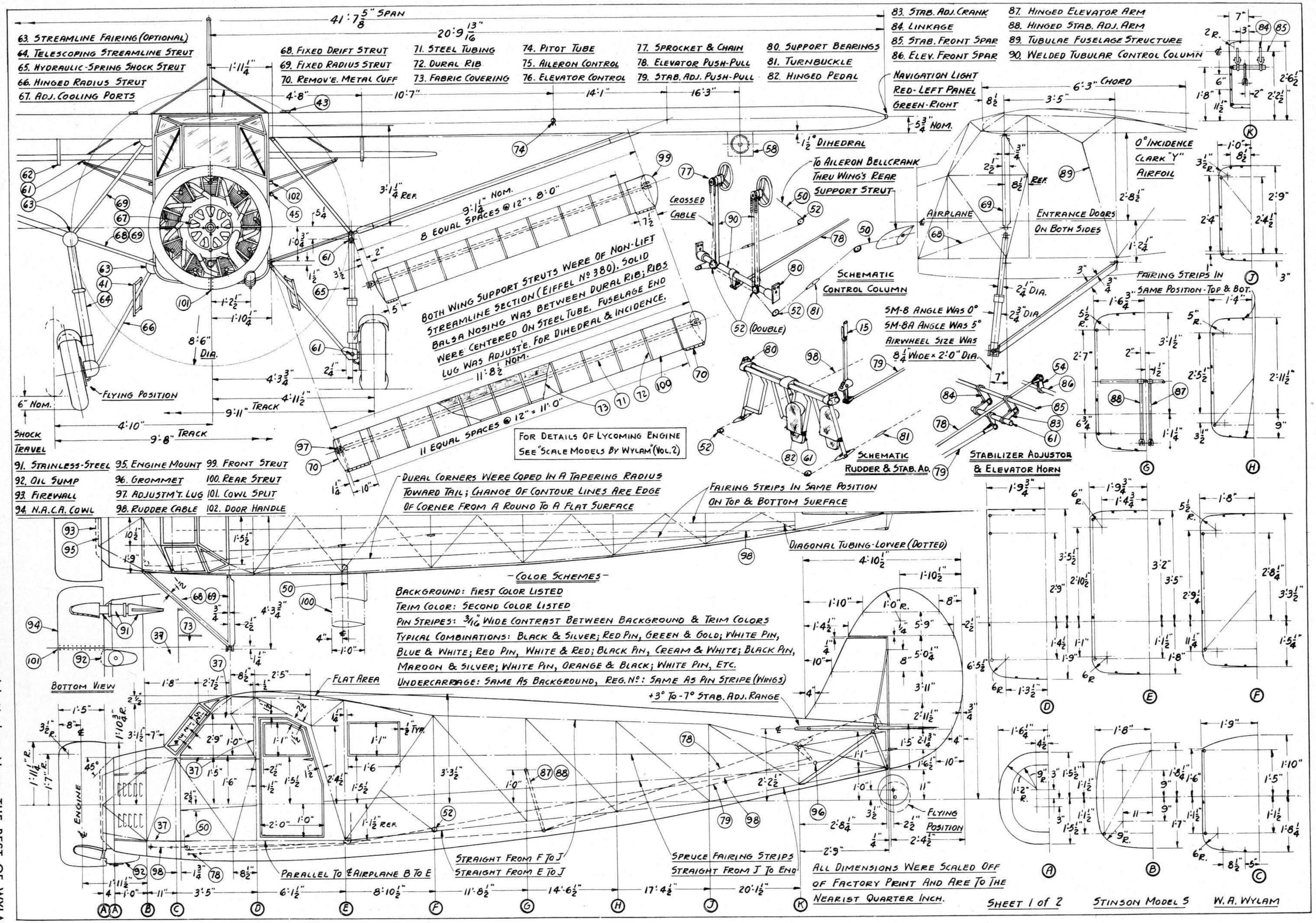
So, get out your mental slide rules and proportional dividers and daydream with us as we imagine ourselves recreating some of yesterday's airplanes in miniature.

Hmmm, just think, no cabane struts to fuss with on that cute F9C-2 . . . and it's a biplane, too . . .

—WM. C. NORTHROP, JR.


11'-0"
5'-6"
10½"
4'-9"
NOTE:
EDGE OF DURAL CORNERS IS A CHANGE OF CONTOUR FROM A ROUND SURFACE TO A FLAT SURFACE.
TYPICAL RIB CONSTRUCTION (ALL WOOD)
SECTION THRU AILERON
MAHOGANY WOOD DASHPANEL
FORWARD VIEW
29. COMPASS
30. STAB. ADJUST.
31. CLOCK
32. AIRSPEED
33. ALTIMETER
34 TACHOMETER
35. OIL PRESS.
36. OIL TEMP.
37. THROTTLE
38. PRIMER
39. LIGHT TOGGLES
40. IGNITION
41. MAP POCKETS
42. FLOORBOARD
43. GRAY WOVEN CARPET
44. BLACK LEATHER
45. GRAY UPHOL. CLOTH
46. GRAY SAFETY BELT
47. MAHOG. WOOD TRIM
48. WINDOW CRANK
49. DOME LIGHT
ON LATER SERIES, THE HYDRAULIC BRAKE CONTROL (23) WAS REMOVED WITH CONTROLS ON RE-DESIGNED FOOT PETALS. THE STABILIZER ADJUSTOR WAS RE-DESIGNED AS A LEVER WITH HAND GRIP FOR LOCKING; IT WAS PLACED IN THE FORMER LOCATION OF (23).
50. HAND LIFT
51. ASH TRAY
52. ASSIST STRAP
53. UNIVER. JOINT
54. VENTURI
55. AIRSPEED TUBE
56. SNAP FASTENERS
57. METAL PANEL
58. BAGGAGE AREA
59. SLIDING WINDOW PANEL
60. AILERON BALANCE CABLE
61. COMPRESSION TUBE
10'-1½"
¼" NOM.
DURAL NOSE TRAILING EDGE
2'-1"
2'-1¼"
18 EQUAL SPACES @ 12" = 18'-0"
5'-6"
6"
1'-9" R.
1'-2"
2½"
3" SQUARES
1'-10½"
7"
1'-5"
DURAL NOSE TRAILING EDGE
ENGINES ON SM-2 SERIES
WARNER "SCARAB" 110 H.P. @ 1850
LE BLOND "110" 110 H.P. @ 2150
JACOBS "LA-1" 150 H.P. @ 2000
WHIRLWIND "J-5" 150 H.P. @ 2000
CONTINENTAL "A-70" 165 H.P. @ 2000
WARNER ENGINES WERE STANDARD
OPTIONAL ENGINES WERE SPECIAL JOBS
-COLOR SCHEME-
FUSELAGE, VERT. TAIL, WING STRUTS: BACKGROUND COLOR
WING, HORIZ. TAIL, STRIPE: TRIM COLOR
BACKGROUND COLORS: BLACK, WHITE, SILVER, BLUE, RED, GREEN, ORANGE, CREAM, MAROON,
TRIM COLORS: WHITE, SILVER, CREAM, YELLOW
TYPICAL COMBINATIONS: BLACK & SILVER, BLUE & CREAM, ORANGE & BLACK
UNDERCARRIGE: BLACK; REG. NUMBERS: BLACK OR WHITE
BOTTOM VIEW
SPRUCE FAIRING STRIP
FABRIC COVERED AREA
5'-9"
26'-3"
WHITE NAV. LIGHT
WHITE
NC 2897
STINSON AIRCRAFT CO. DETROIT, U.S.A.
STINSON JUNIOR
NC-2897 WAS BLACK BACKGROUND WITH SILVER TRIM COLOR
SILVER
ON LATER SERIES, METAL CUFFS (22) WAS FAIRED STRAIGHT TO WING & FUSELAG INSTEAD OF TAPEERED FORM AS SHOWN.
CHANGE OF CONTOUR LINE (SEE NOTE ABOVE)
GOLD & BLACK EMBLEM
GOLD
GENERAL ELECTRIC
TRIM COLOR OUTLINE
STINSON "SM-2" WAS THE GRANDDADDY OF THE LINE OF FOUR PLACE MONOPLANE. IT OPENED A NEW ERA IN AIR TRAVEL FOR BUSINESS AND PLEASURE. INTERIOR DECORATORS AND PRODUCT DESIGNERS WERE CONSULTED; THEIR IDEAS WERE FOLLOWED BY STINSON ENGINEERS. FOR 1926 THE SM-2 WAS OUTSTANDING; ITS CAREFUL WORKMANSHIP AND SUPERIOR FINISH SET A NEW AIRCRAFT STANDARD. HENCE THE LATER SLOGAN- "AIRCRAFT STANDARD OF THE WORLD"
14°
GROUND LINE @ ROLLING RADIUS
METAL TRIM
STANDARD STEEL CO. ADJUSTABLE PROPELLER
HINGED ACCESS SERVICE PANEL
WARNER "SCARAB" ENGINE SHOWN
4'-10¼"
7½"
1'-5"
4'-8½"
5'-4½"
SHEET 1 of 2 STINSON SM-2 W.A. WYLAM


1. Exhaust Collector Ring
2. Tubular Structure (Exposed)
3. Fuel Fill (21 Gals. Each)
4. Fuel Level Sight Gage
5. Hinged Radius Strut
6. Fixed Radius Strut
7. Fixed Drift Strut
8. Shock Strut
9. Pivot Point
10. Stirrup
11. Exhaust Port
12. Carb. Heater
13. Wheel Brake Drum
14. Rudder Pedals
15. Link Strut & Clevis
16. Elevator Push-Pull Tube
17. Split Support Bearings
18. End Support Bearings
19. Pulley
20. Metal Nosing
21. Spruce Rib
22. Metal Cuff
23. Hydraulic Brake Control
24. Brake Control Lines (Fluid)
25. Rudder Control Cable
26. Aileron Control Cable
27. Rudder Horn
28. Elevator Horn
41'-5" Span
20'-8½"
14'-1¼" Ref.
Standard Clark "Y" Airfoil Section On Wing Panels & Support Struts
1½° Dihedral Shown
Navigation Light
Red - Left Panel
Green - Right Panel
Wing Support Struts Were Fabric Covered, Fuselage End Lug Was Non-Adjust'e, Wing End Was Adjust'e. For Incidence & Dihedral
9'-4¼" Nom.
8 Spaces @ 11½" = 7'-8"
11'-9" Nom.
10 Spaces @ 12" = 10'-0"
Flying Position
Track 9'-2"
2'-5" O.D. × 6" Wide High Press. Tire
7'-6" Dia.
3'-2" Dia.
Cut-Outs For Eng. Cylind.
Section A'
Townsend Ring Was Optional; Nose Shown Was On Later Series. Adj. Cooling Louvers Was Control'd In Cabin.
Prop.
Engine
Notes:
SM-2 Incidence & Dihedral Angles Varied On Numerous Series
Clark Y Airfoil
Chord 6'-3"
℄ of Wing Support & Hinged Radius Strut
Wing Erection Layout
Front Spar & Shock Strut
Dural Corners Were Coped In A Tapering Radius Towards Tail; Formers Were Plywood With Spruce Fairing Strips Fixed To Formers
Diagonal Tube - Top Surface
Diagonal Tube - Bottom (Dotted)
Spruce Fairing Strips (Top & Bottom)
Both Wheels (Brake)
Left Wheel Only
Right Wheel Only
Schematic Control Column
To Aileron Top Horn Thru Wing's Rear Support Strut
Schematc Rudder Bars & Brake
Spruce Fairing Strips
Straight "F" To Tail
Straight "G" To Tail
Cut-Out For Eng. Cylind.
+3 To -5° Stab. Adj. Travel
Flying Position
11" O.D. × 3½" Wide High Press. Tire
160° Swivel Arc
26'-3"
Stinson Junior
SM-2
Sheet 2 of 2 Scale: ¼" = 1'-0" W.A. Wylam



COLOR SCHEMES

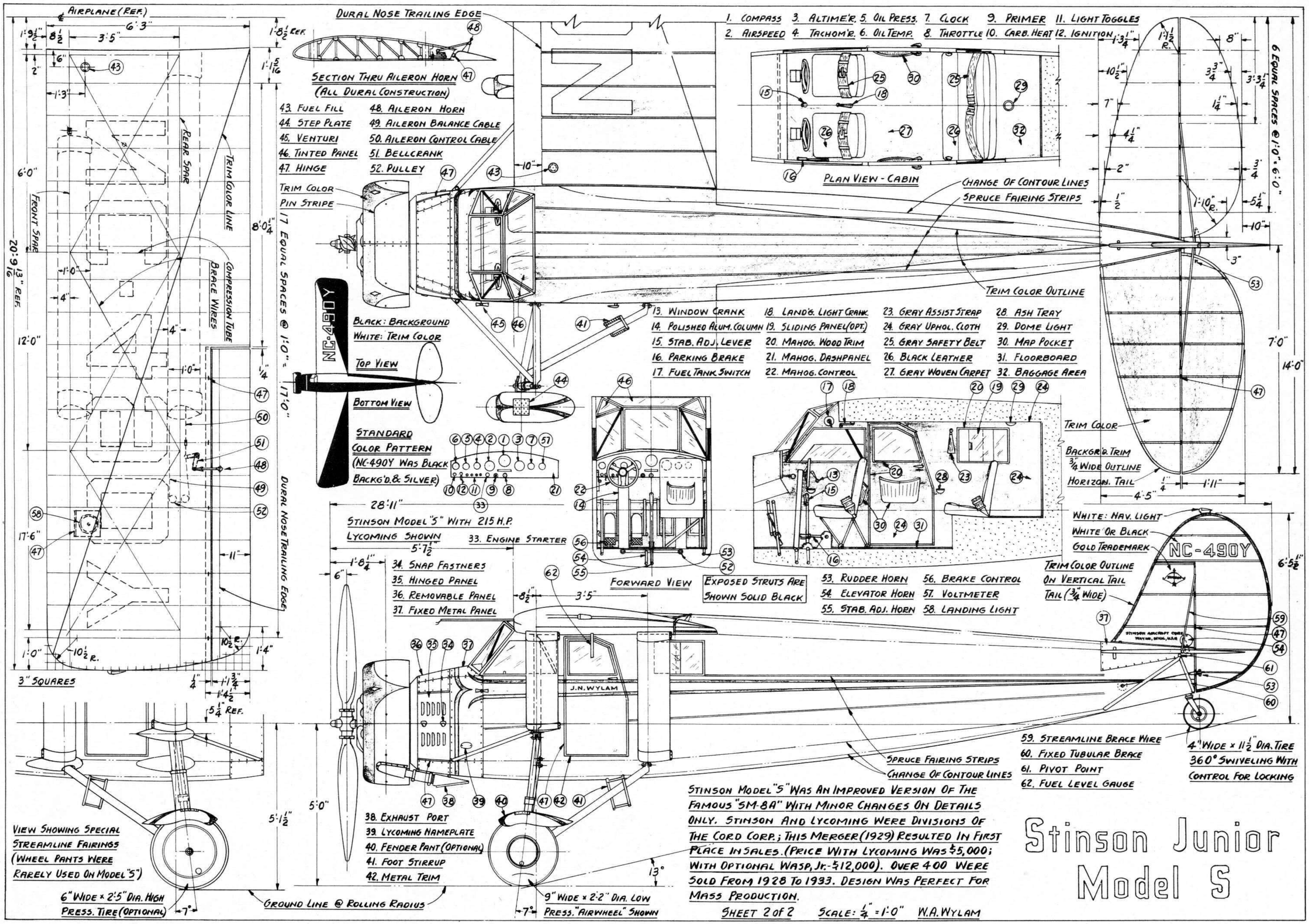
BACKGROUND: FIRST COLOR LISTED

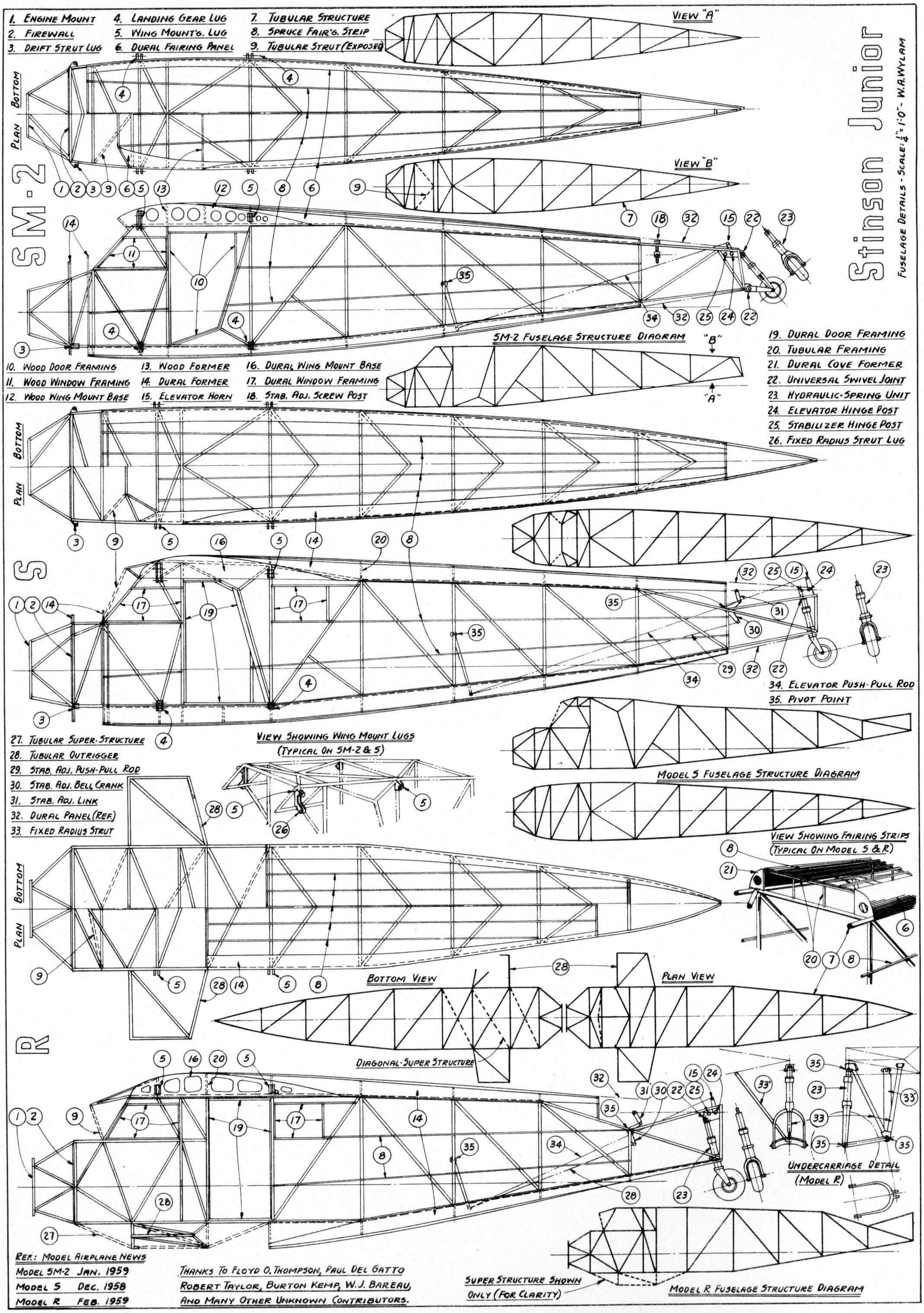
TRIM COLOR: SECOND COLOR LISTED

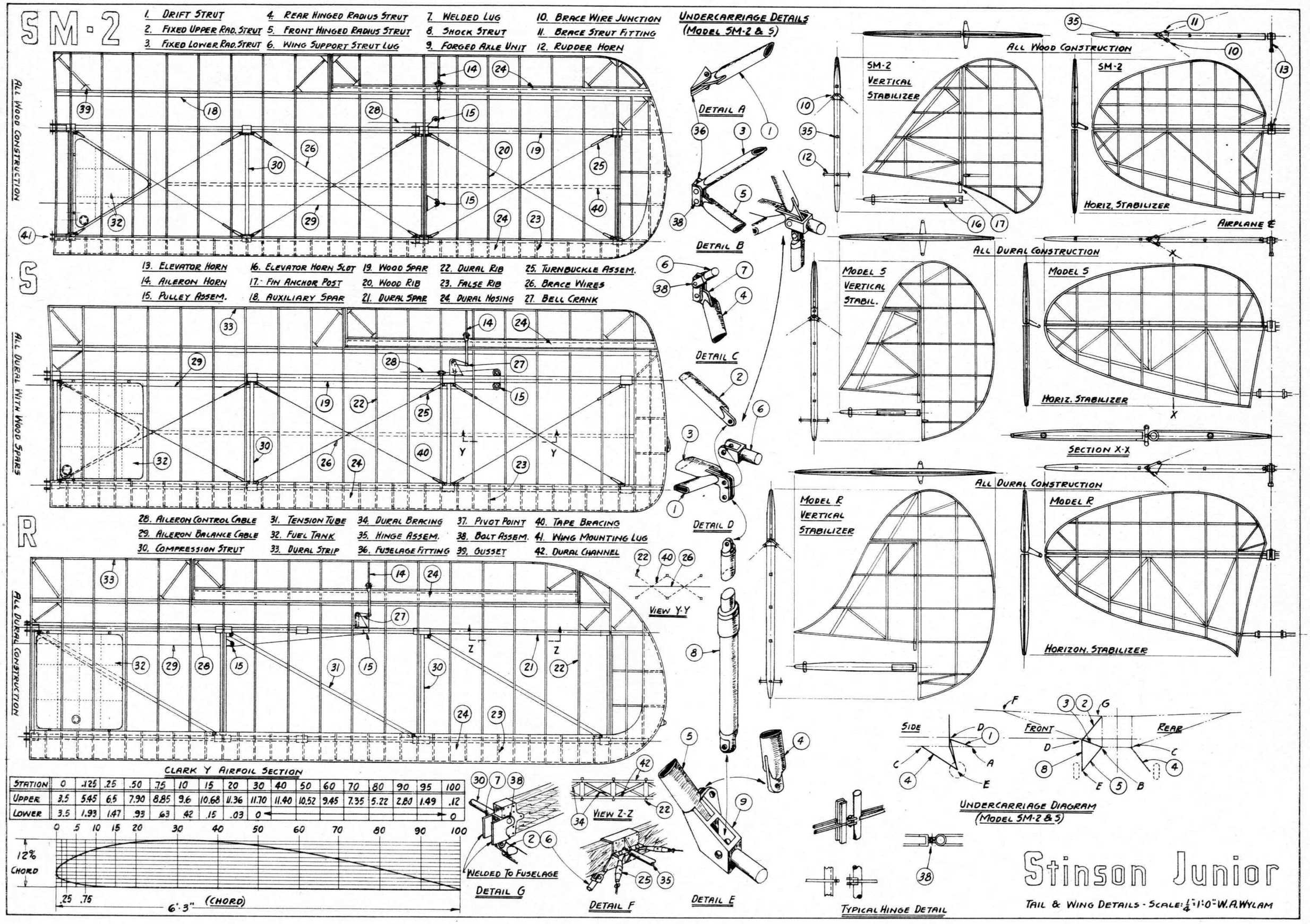
PIN STRIPES: 3/16" WIDE CONTRAST BETWEEN BACKGROUND & TRIM COLORS

TYPICAL COMBINATIONS: BLACK & SILVER; RED PIN, GREEN & GOLD; WHITE PIN, BLUE & WHITE; RED PIN, WHITE & RED; BLACK PIN, CREAM & WHITE; BLACK PIN, MAROON & SILVER; WHITE PIN, ORANGE & BLACK; WHITE PIN, ETC.

UNDERCARRIAGE: SAME AS BACKGROUND, REG. Nº: SAME AS PIN STRIPE (WINGS)


AIRPLANE (REF.)
6'-3"
3'-5"
8½"
1'-9½"
6"
2"
1'-3"
6'-0"
20'-9 13/16" REF.
12'-0"
17'-6"
1'-0"
4"
1'-0"
4"
1'-0"
10½" R.
1'-4"
3" SQUARES
¼"
1'-1¾"
1'-4½"
5¼" REF.
REAR SPAR
FRONT SPAR
TRIM COLOR LINE
COMPRESSION TUBE
BRACE WIRES
DURAL NOSE TRAILING EDGE
1'-8½" REF.
1'-1 5/16"
8'-0¼"
¼"
17 EQUAL SPACES @ 1'-0" = 17'-0"
DURAL NOSE TRAILING EDGE
SECTION THRU AILERON HORN
(ALL DURAL CONSTRUCTION)
43. FUEL FILL
44. STEP PLATE
45. VENTURI
46. TINTED PANEL
47. HINGE
48. AILERON HORN
49. AILERON BALANCE CABLE
50. AILERON CONTROL CABLE
51. BELLCRANK
52. PULLEY
TRIM COLOR
PIN STRIPE
10"
BLACK: BACKGROUND
WHITE: TRIM COLOR
NC-490Y
TOP VIEW
BOTTOM VIEW
STANDARD COLOR PATTERN
(NC-490Y WAS BLACK BACKG'D. & SILVER)
28'-11"
STINSON MODEL "S" WITH 215 H.P. LYCOMING SHOWN
5'-7½"
33. ENGINE STARTER
1'-8¼"
6"
34. SNAP FASTNERS
35. HINGED PANEL
36. REMOVABLE PANEL
37. FIXED METAL PANEL
8½"
3'-5"
J.N. WYLAM
5'-0"
5'-1½"
38. EXHAUST PORT
39. LYCOMING NAMEPLATE
40. FENDER PANT (OPTIONAL)
41. FOOT STIRRUP
42. METAL TRIM
13°
VIEW SHOWING SPECIAL STREAMLINE FAIRINGS (WHEEL PANTS WERE RARELY USED ON MODEL "S")
6" WIDE × 2'-5" DIA. HIGH PRESS. TIRE (OPTIONAL)
7°
GROUND LINE @ ROLLING RADIUS
9" WIDE × 2'-2" DIA. LOW PRESS. "AIRWHEEL" SHOWN
7°
1. COMPASS
2. AIRSPEED
3. ALTIME'R.
4. TACHOM'R.
5. OIL PRESS.
6. OIL TEMP.
7. CLOCK
8. THROTTLE
9. PRIMER
10. CARB. HEAT
11. LIGHT TOGGLES
12. IGNITION
PLAN VIEW - CABIN
CHANGE OF CONTOUR LINES
SPRUCE FAIRING STRIPS
TRIM COLOR OUTLINE
13. WINDOW CRANK
14. POLISHED ALUM. COLUMN
15. STAB. ADJ. LEVER
16. PARKING BRAKE
17. FUEL TANK SWITCH
18. LAND'G. LIGHT CRANK
19. SLIDING PANEL (OPT.)
20. MAHOG. WOOD TRIM
21. MAHOG. DASHPANEL
22. MAHOG. CONTROL
23. GRAY ASSIST STRAP
24. GRAY UPHOL. CLOTH
25. GRAY SAFETY BELT
26. BLACK LEATHER
27. GRAY WOVEN CARPET
28. ASH TRAY
29. DOME LIGHT
30. MAP POCKET
31. FLOORBOARD
32. BAGGAGE AREA
FORWARD VIEW
EXPOSED STRUTS ARE SHOWN SOLID BLACK
53. RUDDER HORN
54. ELEVATOR HORN
55. STAB. ADJ. HORN
56. BRAKE CONTROL
57. VOLTMETER
58. LANDING LIGHT
6 EQUAL SPACES @ 1'-0" = 6'-0"
1'-3¼"
1'-1½" R.
8"
10½"
3¾"
3'-3¼"
7"
1¼"
4¼"
2"
¾"
½"
1'-10" R.
5¼"
10"
3"
7'-0"
14'-0"
TRIM COLOR
BACKGR'D. TRIM ¾" WIDE OUTLINE HORIZON. TAIL
¼"
1'-11"
4'-5"
WHITE: NAV. LIGHT
WHITE OR BLACK
GOLD TRADEMARK
NC-490Y
TRIM COLOR OUTLINE ON VERTICAL TAIL (¾" WIDE)
6'-5½"
SPRUCE FAIRING STRIPS
CHANGE OF CONTOUR LINES
59. STREAMLINE BRACE WIRE
60. FIXED TUBULAR BRACE
61. PIVOT POINT
62. FUEL LEVEL GAUGE
4" WIDE × 11½" DIA. TIRE 360° SWIVELING WITH CONTROL FOR LOCKING
STINSON MODEL "S" WAS AN IMPROVED VERSION OF THE FAMOUS "SM-8A" WITH MINOR CHANGES ON DETAILS ONLY. STINSON AND LYCOMING WERE DIVISIONS OF THE CORD CORP.; THIS MERGER (1929) RESULTED IN FIRST PLACE IN SALES. (PRICE WITH LYCOMING WAS $5,000; WITH OPTIONAL WASP, Jr. - $12,000). OVER 400 WERE SOLD FROM 1928 TO 1933. DESIGN WAS PERFECT FOR MASS PRODUCTION.
SHEET 2 OF 2
SCALE: ¼" = 1'-0"
W.A. WYLAM
Stinson Junior
Model S


Stinson Junior
FUSELAGE DETAILS - SCALE: 1/4" = 1'-0" - W.A.WYLAM
1. ENGINE MOUNT
2. FIREWALL
3. DRIFT STRUT LUG
4. LANDING GEAR LUG
5. WING MOUNT'G. LUG
6. DURAL FAIRING PANEL
7. TUBULAR STRUCTURE
8. SPRUCE FAIR'G. STRIP
9. TUBULAR STRUT (EXPOSED)
VIEW "A"
VIEW "B"
SM-2
PLAN
BOTTOM
10. WOOD DOOR FRAMING
11. WOOD WINDOW FRAMING
12. WOOD WING MOUNT BASE
13. WOOD FORMER
14. DURAL FORMER
15. ELEVATOR HORN
16. DURAL WING MOUNT BASE
17. DURAL WINDOW FRAMING
18. STAB. ADJ. SCREW POST
SM-2 FUSELAGE STRUCTURE DIAGRAM
"B"
"A"
19. DURAL DOOR FRAMING
20. TUBULAR FRAMING
21. DURAL COVE FORMER
22. UNIVERSAL SWIVEL JOINT
23. HYDRAULIC-SPRING UNIT
24. ELEVATOR HINGE POST
25. STABILIZER HINGE POST
26. FIXED RADIUS STRUT LUG
S
34. ELEVATOR PUSH-PULL ROD
35. PIVOT POINT
27. TUBULAR SUPER-STRUCTURE
28. TUBULAR OUTRIGGER
29. STAB. ADJ. PUSH-PULL ROD
30. STAB. ADJ. BELL CRANK
31. STAB. ADJ. LINK
32. DURAL PANEL (REF.)
33. FIXED RADIUS STRUT
VIEW SHOWING WING MOUNT LUGS
(TYPICAL ON SM-2 & S)
MODEL S FUSELAGE STRUCTURE DIAGRAM
VIEW SHOWING FAIRING STRIPS
(TYPICAL ON MODEL S & R)
R
BOTTOM VIEW
PLAN VIEW
DIAGONAL-SUPER STRUCTURE
UNDERCARRIAGE DETAIL
(MODEL R)
SUPER STRUCTURE SHOWN ONLY (FOR CLARITY)
MODEL R FUSELAGE STRUCTURE DIAGRAM
REF.: MODEL AIRPLANE NEWS
MODEL SM-2 JAN. 1959
MODEL S DEC. 1958
MODEL R FEB. 1959
THANKS TO FLOYD O. THOMPSON, PAUL DEL GATTO
ROBERT TAYLOR, BURTON KEMP, W.J. BAREAU,
AND MANY OTHER UNKNOWN CONTRIBUTORS.


SM-2
1. Drift Strut
2. Fixed Upper Rad. Strut
3. Fixed Lower Rad. Strut
4. Rear Hinged Radius Strut
5. Front Hinged Radius Strut
6. Wing Support Strut Lug
7. Welded Lug
8. Shock Strut
9. Forged Axle Unit
10. Brace Wire Junction
11. Brace Strut Fitting
12. Rudder Horn
All Wood Construction
13. Elevator Horn
14. Aileron Horn
15. Pulley Assem.
16. Elevator Horn Slot
17. Fin Anchor Post
18. Auxiliary Spar
19. Wood Spar
20. Wood Rib
21. Dural Spar
22. Dural Rib
23. False Rib
24. Dural Nosing
25. Turnbuckle Assem.
26. Brace Wires
27. Bell Crank
S
All Dural With Wood Spars
28. Aileron Control Cable
29. Aileron Balance Cable
30. Compression Strut
31. Tension Tube
32. Fuel Tank
33. Dural Strip
34. Dural Bracing
35. Hinge Assem.
36. Fuselage Fitting
37. Pivot Point
38. Bolt Assem.
39. Gusset
40. Tape Bracing
41. Wing Mounting Lug
42. Dural Channel
R
All Dural Construction
Undercarriage Details
(Model SM-2 & S)
Detail A
Detail B
Detail C
Detail D
View Y-Y
View Z-Z
Detail E
Detail F
Welded To Fuselage
Detail G
Clark Y Airfoil Section
Station 0 .125 .25 .50 .75 10 15 20 30 40 50 60 70 80 90 95 100
Upper 3.5 5.45 6.5 7.90 8.85 9.6 10.68 11.36 11.70 11.40 10.52 9.45 7.35 5.22 2.80 1.49 .12
Lower 3.5 1.93 1.47 .93 .63 .42 .15 .03 0 0
12% Chord
6'-3" (Chord)
All Wood Construction
SM-2 Vertical Stabilizer
SM-2
Horiz. Stabilizer
Airplane E
All Dural Construction
Model S Vertical Stabil.
Model S
Horiz. Stabilizer
Section X-X
All Dural Construction
Model R Vertical Stabilizer
Model R
Horizon. Stabilizer
Side
Front
Rear
Undercarriage Diagram
(Model SM-2 & S)
Typical Hinge Detail
Stinson Junior
Tail & Wing Details - Scale: 1/4" = 1'-0" W.A. Wylam

STINSON JUNIOR 170 H.P.

Curtiss "Challenger"

1. Streamline Steel Tubing
2. Hamilton-Standard Adj. Propeller
3. Telescoping Streamline Fairing
4. Fixed Streamline Fairing
5. Fixed Streaml'd. Steel Brace
6. Foot Stirrup
7. Tinted Glass Panel
8. Fuel Tank Fill
9. Fixed Pivot Point
10. Shock Strut
11. Wheel Fork
12. Pitot Tube
13. Venturi
14. Door Handle
15. Cowl Split
16. Step Plate
17. Stab. Adj. Push-Pull Rod
18. Elevator Push-Pull Rod
19. Hanging Radius Arm
20. Stab. Adj. Crank Assem.
21. Pulley
22. Rudder Horn
23. Elevator Horn
24. Aileron Cable
25. Rudder Cable
26. Oil Sump
27. Landing Light

Navigation Light
Red - Left Panel
Green - Right Panel

Notes:
For Color Schemes & Control Data - See Stinson, Jr. Model "S" On Sheet 1.

No Data Can Be Found On Fixed & Retractable Undercarriage. It Is Assumed That Telescoping Streamlined Fairing (Item 3) Does Not Telescopes During Landing (Wheel Shock Unit Are Independ't Of Item 3)

Exposed Struts Are Shown Solid Black

9" Wide × 2'-2" Dia. Low Press. "Airwheel"

Shock Travel (Nominal)

8'-6" Dia.

Track

Inboard View

240 H.P. Lycoming Engine

Model	Engine	Remarks
R	215 H.P.	Fixed Undercarriage
R1	215 H.P.	Retract'e. Undercar'e.
R2	240 H.P.	Fixed Undercarriage
R3	240 H.P.	Retract'e Undercar'e.

Bottom View

Change Of Contour

Fairing Strips In Same Position - Top & Bottom

Diagonal Tubing - Bottom (Dotted)

Dural Corners Were Coped In A Tapering Radius Toward Tail; Change Of Contour Lines Are Edge Of Corner From A Round To A Flat Surface

Sharp Trailing Edge Entire Side Of Fuselage Is Flat

Parallel To ℄ Airplane C To F

+3° To -7° Stab. Adj. Range

Straight From G To Tail
Straight From G To J

Flat

Doors On Both Sides

Typical

Straight From G To Tail
Straight From H To Tail

Spruce Fairing Strips

Parallel To ℄ Airplane B To G

All Dimensions Were Scaled Off Of Factory Prints And Are To The Nearest Quarter Inch.

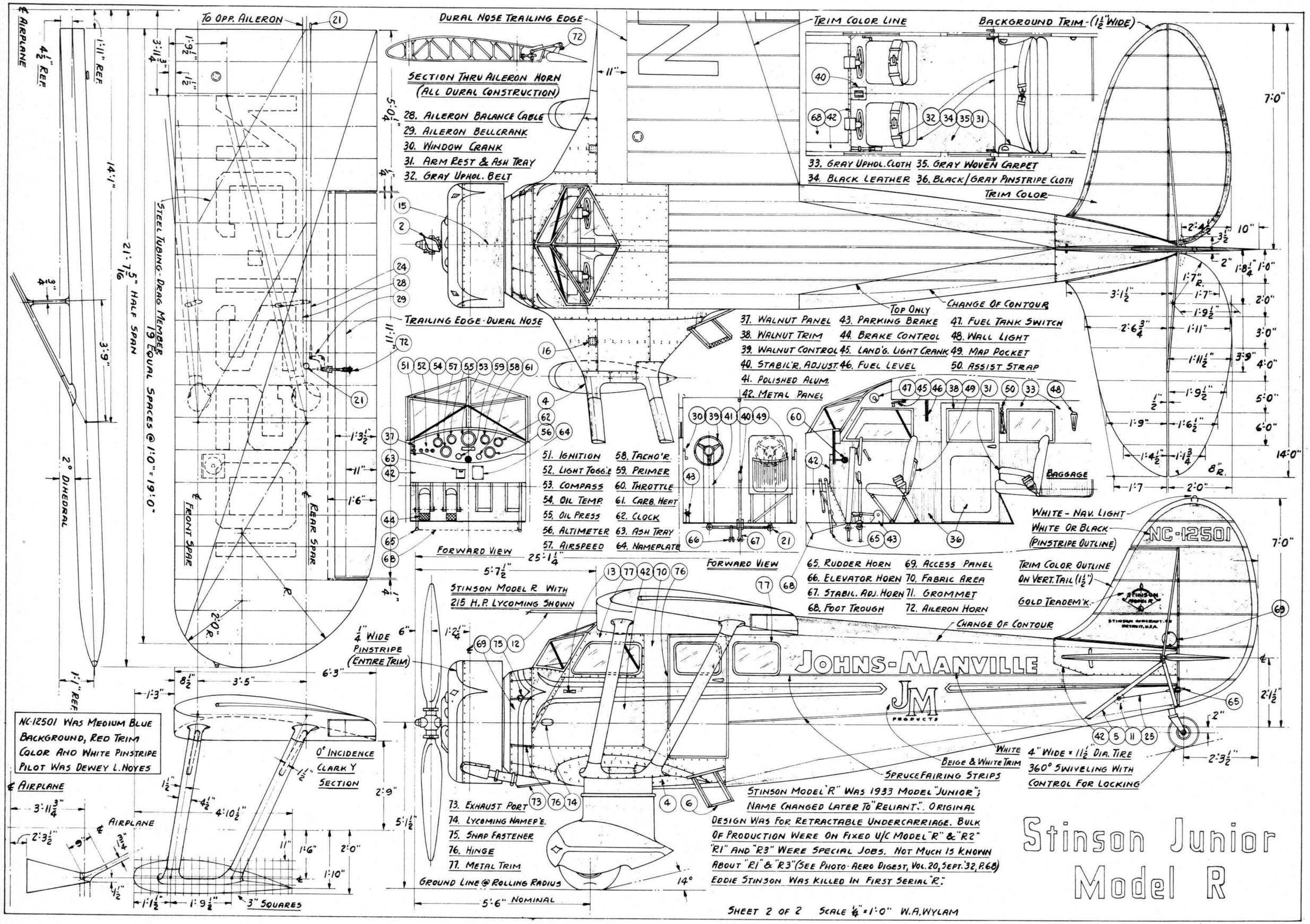
℄ Tubular Structure

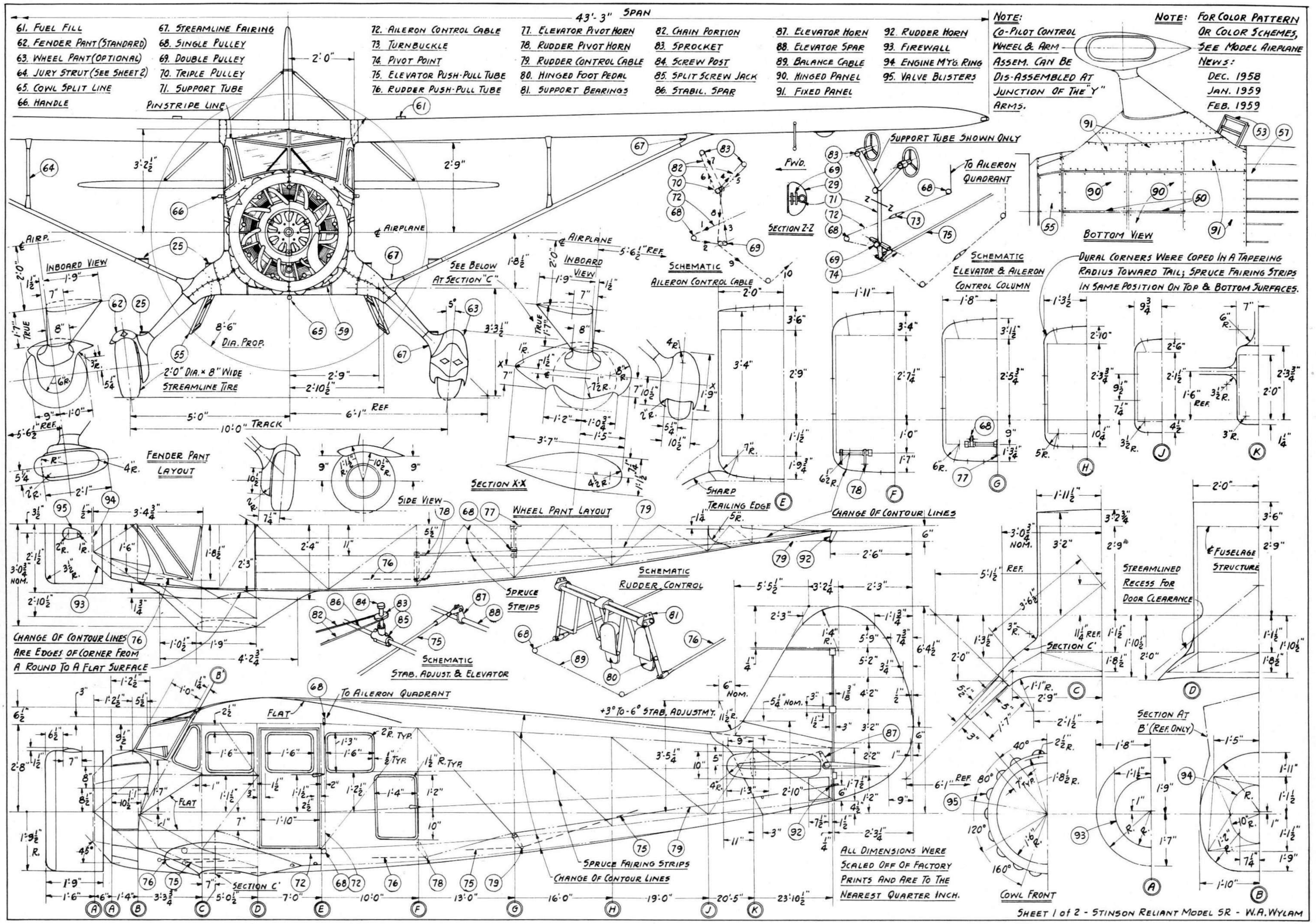
Trailing Edge (Ref.)

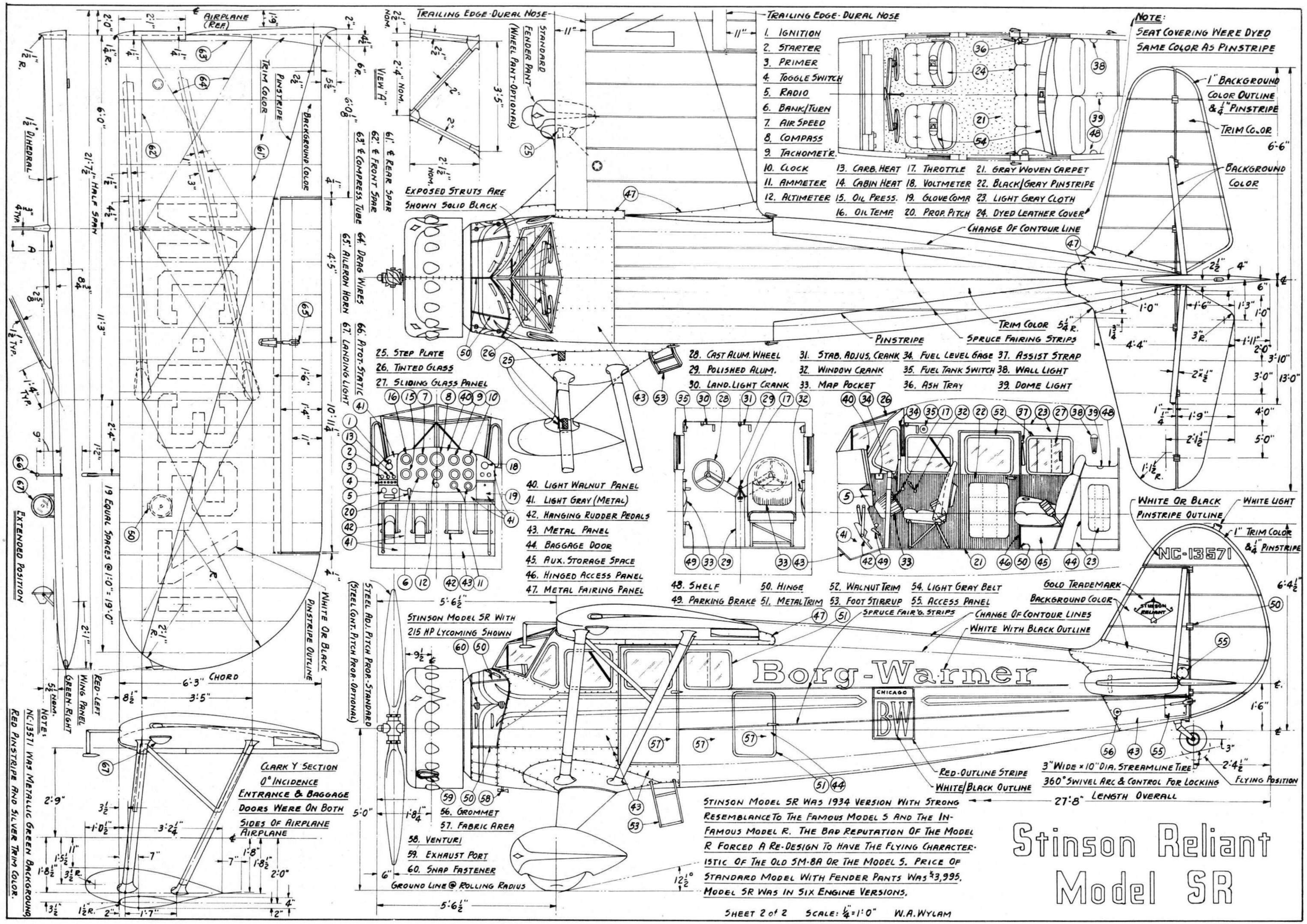
Stabilizer Elevator

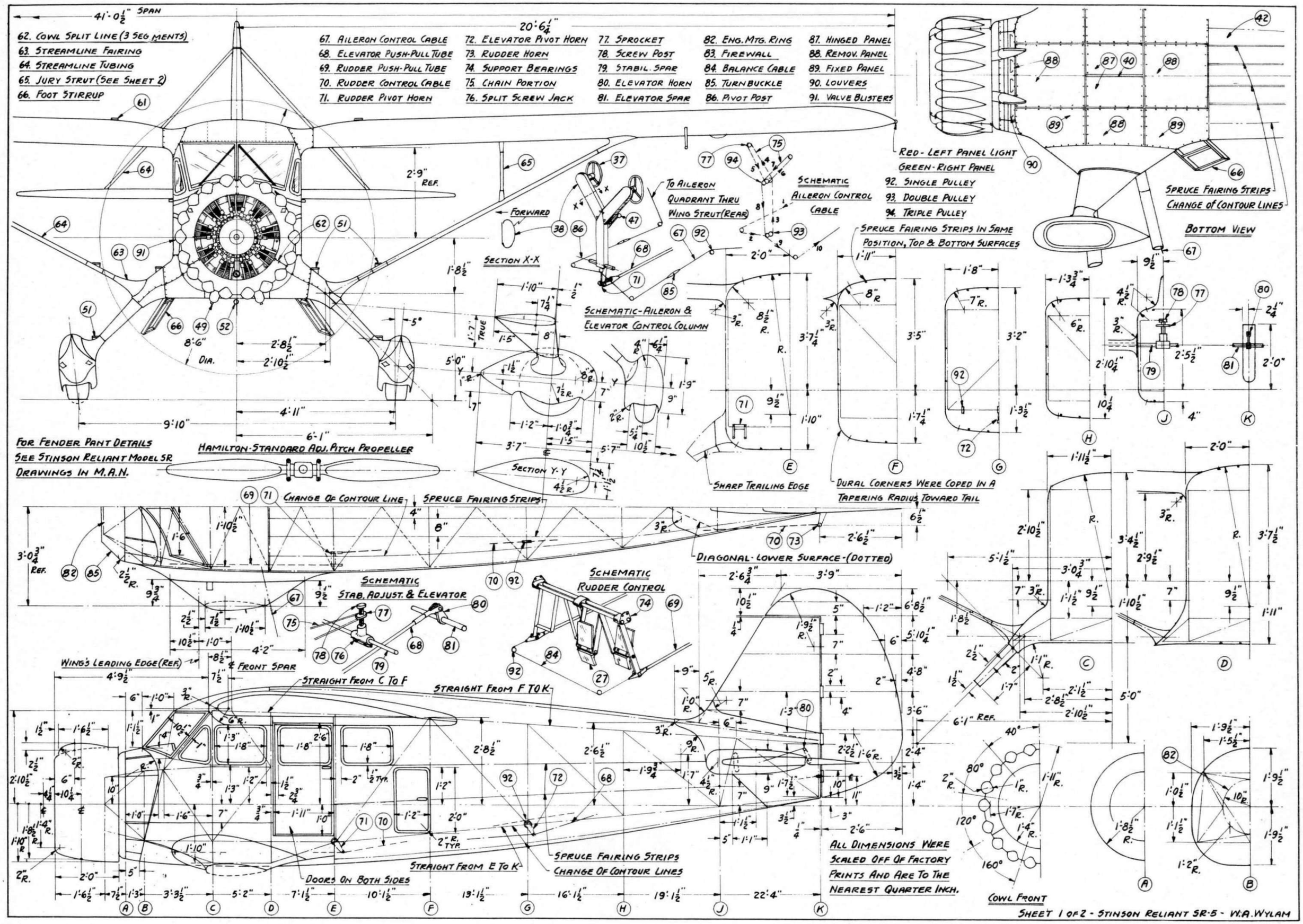
Engine Mount

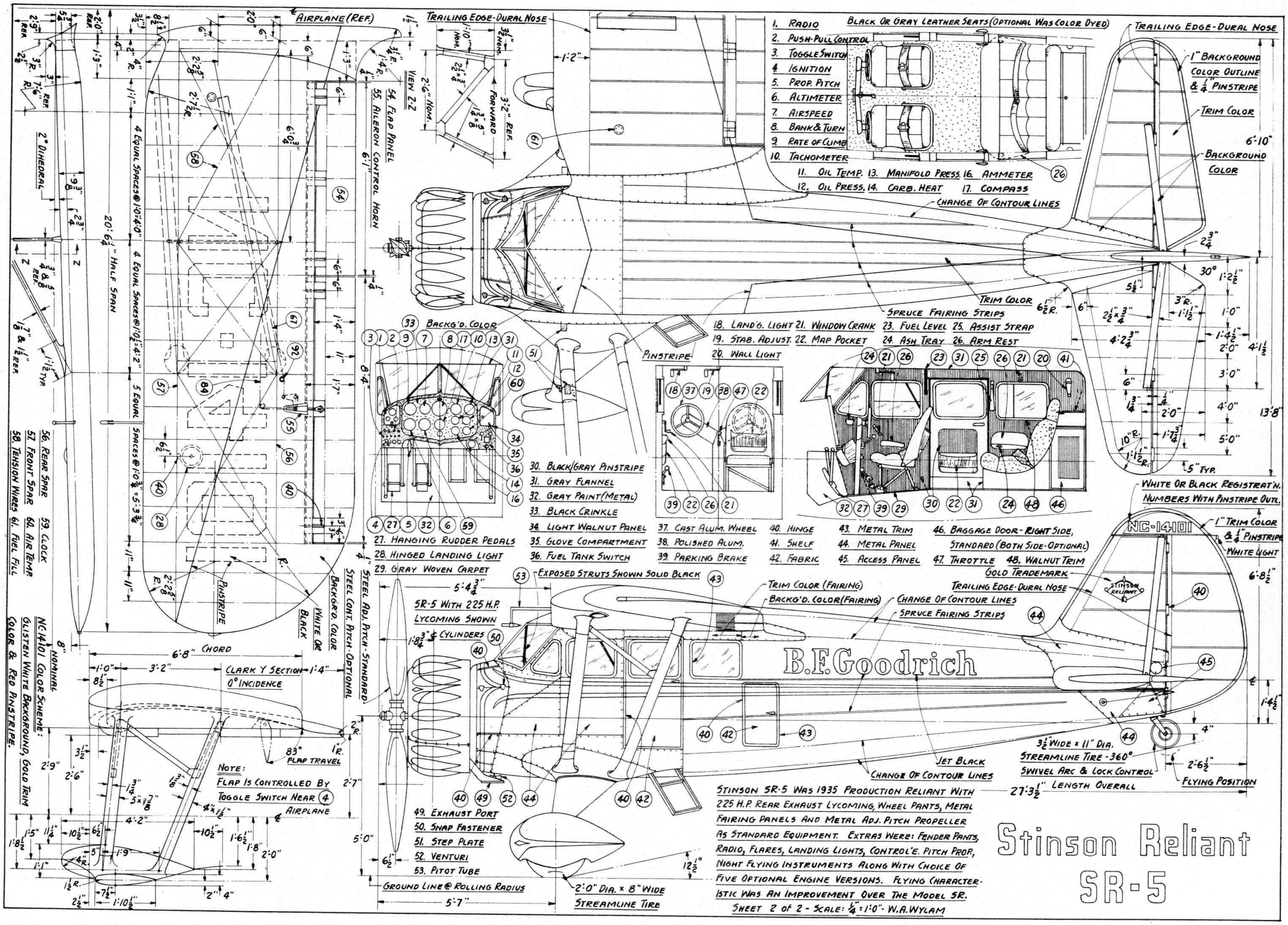
Sheet 1 of 2 Stinson Model R W.A. Wylam


Stinson Junior
Model R
Sheet 2 of 2 Scale ¼" = 1'0" W.A.Wylam
Johns-Manville
JM
Products
NC-12501
Stinson Model R
Stinson Aircraft Co. Detroit, U.S.A.
Airplane
21' 7 5/16" Half Span
19' 0" Equal Spaces @ 1'0" = 19'0"
Steel Tubing Drag Member
Front Spar
Rear Spar
2° Dihedral
0° Incidence Clark Y Section
To Opp. Aileron
Dural Nose Trailing Edge
Section Thru Aileron Horn (All Dural Construction)
28. Aileron Balance Cable
29. Aileron Bellcrank
30. Window Crank
31. Arm Rest & Ash Tray
32. Gray Uphol. Belt
Trailing Edge - Dural Nose
Trim Color Line
Background Trim - (1½" Wide)
33. Gray Uphol. Cloth
34. Black Leather
35. Gray Woven Carpet
36. Black/Gray Pinstripe Cloth
Trim Color
Top Only
Change Of Contour
37. Walnut Panel
38. Walnut Trim
39. Walnut Control
40. Stabil'r. Adjust.
41. Polished Alum.
42. Metal Panel
43. Parking Brake
44. Brake Control
45. Land'g. Light Crank
46. Fuel Level
47. Fuel Tank Switch
48. Wall Light
49. Map Pocket
50. Assist Strap
51. Ignition
52. Light Togg'e
53. Compass
54. Oil Temp.
55. Oil Press
56. Altimeter
57. Airspeed
58. Tacho'r.
59. Primer
60. Throttle
61. Carb. Heat
62. Clock
63. Ash Tray
64. Nameplate
Forward View
Baggage
65. Rudder Horn
66. Elevator Horn
67. Stabil. Adj. Horn
68. Foot Trough
69. Access Panel
70. Fabric Area
71. Grommet
72. Aileron Horn
Stinson Model R With 215 H.P. Lycoming Shown
¼" Wide Pinstripe (Entire Trim)
73. Exhaust Port
74. Lycoming Namep'e.
75. Snap Fastener
76. Hinge
77. Metal Trim
Ground Line @ Rolling Radius
5'6" Nominal
3" Squares
White - Nav. Light
White Or Black (Pinstripe Outline)
Trim Color Outline On Vert. Tail (1½")
Gold Tradem'k.
Beige & White Trim
Spruce Fairing Strips
White
4" Wide × 1½" Dia. Tire
360° Swiveling With Control For Locking
Stinson Model "R" Was 1933 Model "Junior"; Name Changed Later To "Reliant". Original Design Was For Retractable Undercarriage. Bulk Of Production Were On Fixed U/C Model "R" & "R2" "R1" And "R3" Were Special Jobs. Not Much Is Known About "R1" & "R3" (See Photo - Aero Digest, Vol. 20, Sept. '32, P.68) Eddie Stinson Was Killed In First Serial "R".
NC-12501 Was Medium Blue Background, Red Trim Color And White Pinstripe Pilot Was Dewey L. Noyes

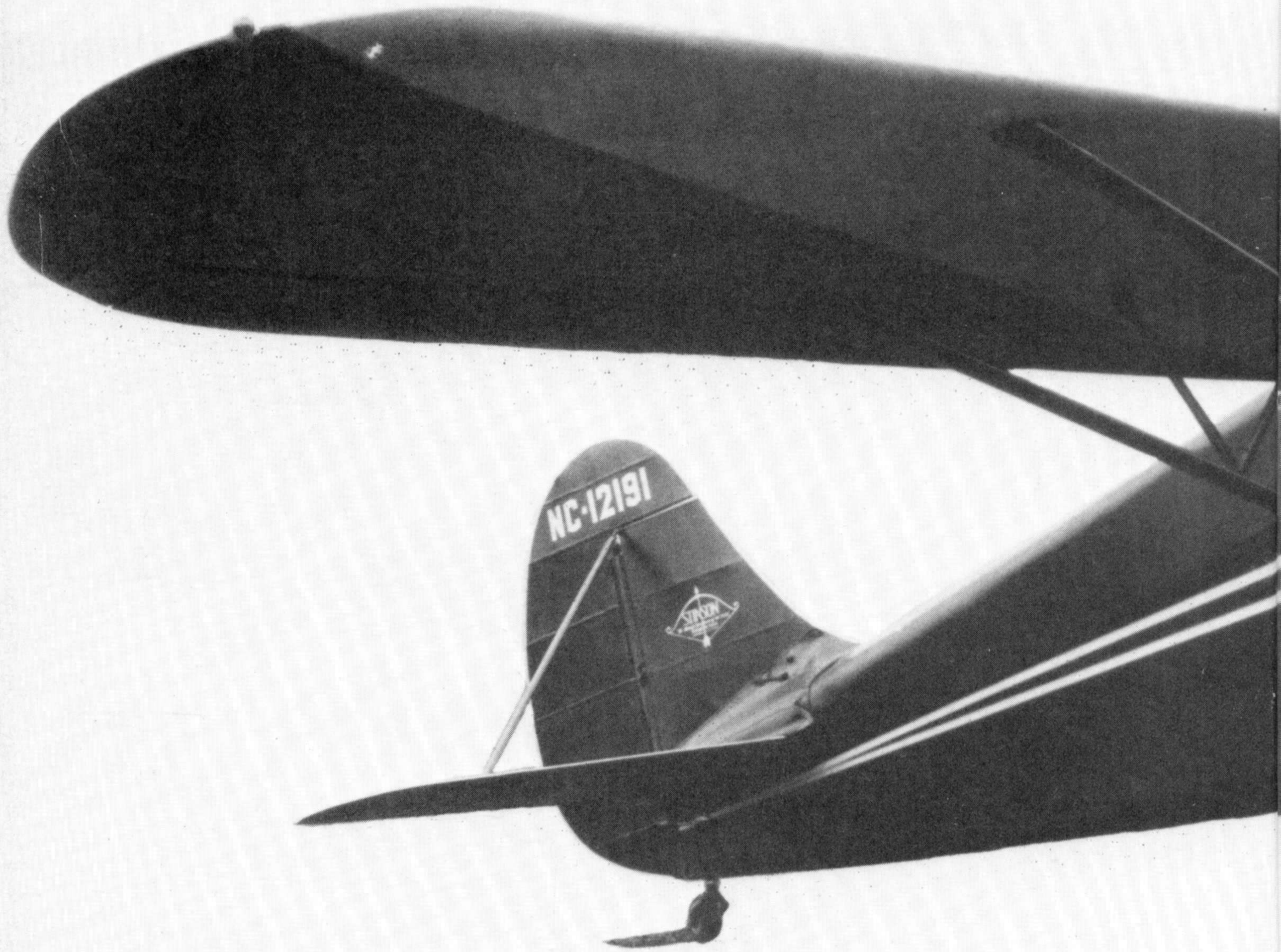

43'-3" SPAN
61. Fuel Fill
62. Fender Pant (Standard)
63. Wheel Pant (Optional)
64. Jury Strut (See Sheet 2)
65. Cowl Split Line
66. Handle
67. Streamline Fairing
68. Single Pulley
69. Double Pulley
70. Triple Pulley
71. Support Tube
72. Aileron Control Cable
73. Turnbuckle
74. Pivot Point
75. Elevator Push-Pull Tube
76. Rudder Push-Pull Tube
77. Elevator Pivot Horn
78. Rudder Pivot Horn
79. Rudder Control Cable
80. Hinged Foot Pedal
81. Support Bearings
82. Chain Portion
83. Sprocket
84. Screw Post
85. Split Screw Jack
86. Stabil. Spar
87. Elevator Horn
88. Elevator Spar
89. Balance Cable
90. Hinged Panel
91. Fixed Panel
92. Rudder Horn
93. Firewall
94. Engine Mt'g. Ring
95. Valve Blisters
NOTE: Co-Pilot Control Wheel & Arm Assem. Can Be Dis-Assembled At Junction Of The "Y" Arms.
NOTE: For Color Pattern Or Color Schemes, See Model Airplane News: Dec. 1958 Jan. 1959 Feb. 1959
Pinstripe Line
Airplane
Inboard View
Dia. Prop.
2'-0" Dia. × 8" Wide Streamline Tire
10'-0" Track
Fender Pant Layout
Side View
Section X-X
Wheel Pant Layout
Schematic Aileron Control Cable
Section Z-Z
Support Tube Shown Only
To Aileron Quadrant
Schematic Elevator & Aileron Control Column
Bottom View
Dural Corners Were Coped In A Tapering Radius Toward Tail; Spruce Fairing Strips In Same Position On Top & Bottom Surfaces.
Sharp Trailing Edge
Change Of Contour Lines
Schematic Rudder Control
Spruce Strips
Schematic Stab. Adjust. & Elevator
Change Of Contour Lines Are Edges Of Corner From A Round To A Flat Surface
+3° To -6° Stab. Adjustmt.
Streamlined Recess For Door Clearance
Fuselage Structure
Section C'
Section At B' (Ref. Only)
Cowl Front
Spruce Fairing Strips
All Dimensions Were Scaled Off Of Factory Prints And Are To The Nearest Quarter Inch.
Sheet 1 of 2 - Stinson Reliant Model SR - W.A. Wylam

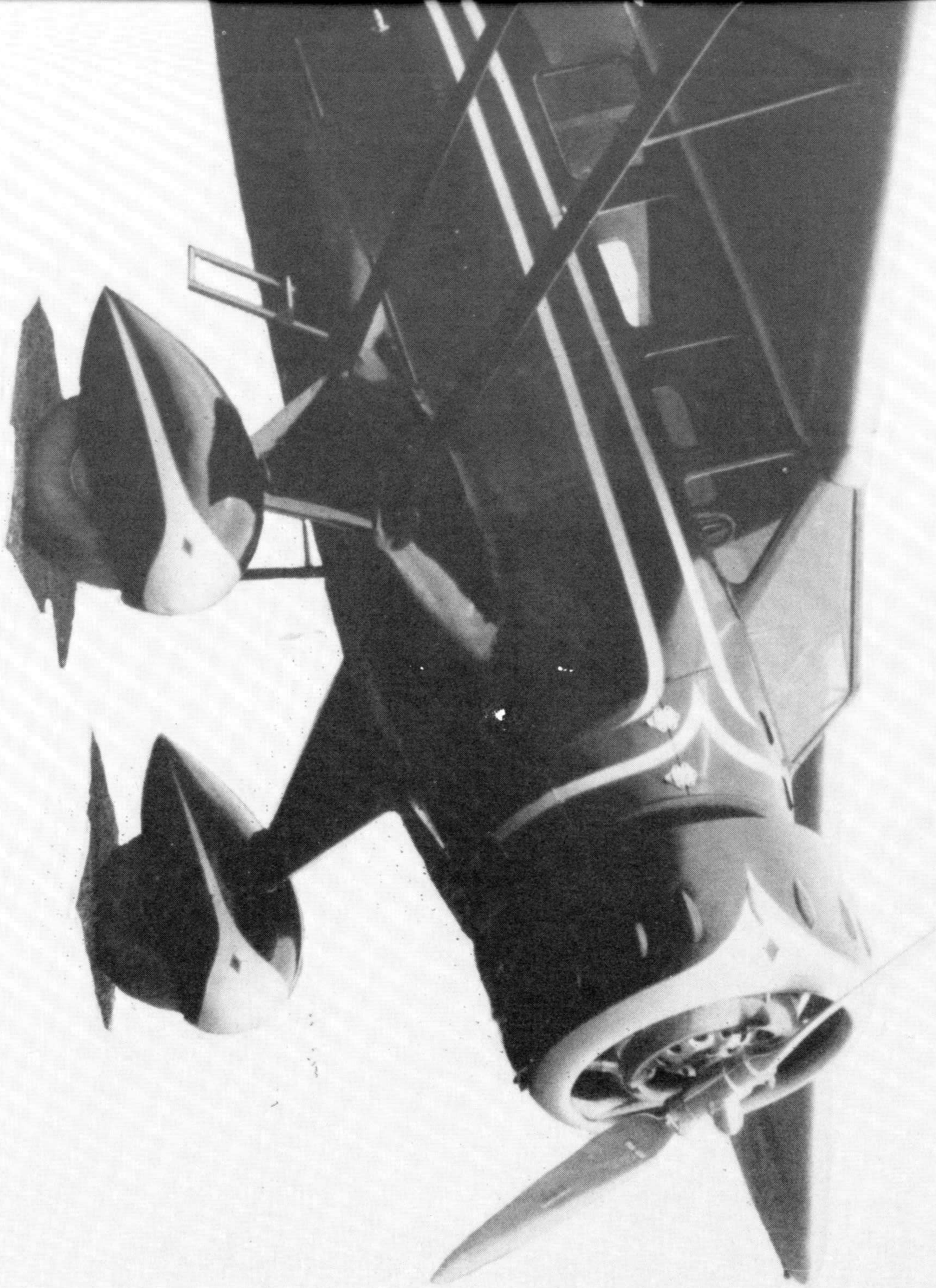

Stinson Reliant
Model SR
Sheet 2 of 2 Scale: 1/4"=1'0" W.A.Wylam
Stinson Model SR was 1934 version with strong resemblance to the famous Model S and the infamous Model R. The bad reputation of the Model R forced a re-design to have the flying characteristic of the old SM-8A or the Model S. Price of standard model with fender pants was $3,995. Model SR was in six engine versions.
27'-8" Length Overall
Note: Seat covering were dyed same color as pinstripe
Trailing Edge-Dural Nose
1. Ignition
2. Starter
3. Primer
4. Toggle Switch
5. Radio
6. Bank/Turn
7. Air Speed
8. Compass
9. Tachometer
10. Clock
11. Ammeter
12. Altimeter
13. Carb. Heat
14. Cabin Heat
15. Oil Press.
16. Oil Temp.
17. Throttle
18. Voltmeter
19. Glove Comp.
20. Prop. Pitch
21. Gray Woven Carpet
22. Black/Gray Pinstripe
23. Light Gray Cloth
24. Dyed Leather Cover
25. Step Plate
26. Tinted Glass
27. Sliding Glass Panel
28. Cast Alum. Wheel
29. Polished Alum.
30. Land. Light Crank
31. Stab. Adjus. Crank
32. Window Crank
33. Map Pocket
34. Fuel Level Gage
35. Fuel Tank Switch
36. Ash Tray
37. Assist Strap
38. Wall Light
39. Dome Light
40. Light Walnut Panel
41. Light Gray (Metal)
42. Hanging Rudder Pedals
43. Metal Panel
44. Baggage Door
45. Aux. Storage Space
46. Hinged Access Panel
47. Metal Fairing Panel
48. Shelf
49. Parking Brake
50. Hinge
51. Metal Trim
52. Walnut Trim
53. Foot Stirrup
54. Light Gray Belt
55. Access Panel
56. Grommet
57. Fabric Area
58. Venturi
59. Exhaust Port
60. Snap Fastener
61. ℄ Rear Spar
62. ℄ Front Spar
63. ℄ Compress. Tube
64. Drag Wires
65. Aileron Horn
66. Pitot-Static
67. Landing Light
Trailing Edge-Dural Nose
View "A"
Standard Fender Pant (Wheel Pant-Optional)
Exposed Struts Are Shown Solid Black
Change Of Contour Line
Pinstripe
Trim Color
Spruce Fairing Strips
1" Background Color Outline & 1/4" Pinstripe
Trim Color
Background Color
White Or Black Pinstripe Outline
White Light
1" Trim Color & 1/4" Pinstripe
NC-13571
Gold Trademark
Background Color
Change Of Contour Lines
White With Black Outline
Red-Outline Stripe
White/Black Outline
Stinson Model SR With 215 HP Lycoming Shown
Steel Adj. Pitch Prop.-Standard (Steel Cont. Pitch Prop.-Optional)
Ground Line @ Rolling Radius
Airplane (Ref.)
Trim Color
Pinstripe
Background Color
White Or Black Pinstripe Outline
19 Equal Spaces @ 1'0" = 19'0"
Half Span
Dihedral
Extended Position
Flying Position
Chord
Wing Panel
Red-Left
Green-Right
Note: NC-13571 was metallic green background, red pinstripe and silver trim color.
Clark Y Section
0° Incidence
Entrance & Baggage Doors Were On Both Sides Of Airplane
Airplane
3" Wide × 10" Dia. Streamline Tire
360° Swivel Arc & Control For Locking
Borg-Warner
Chicago
BW

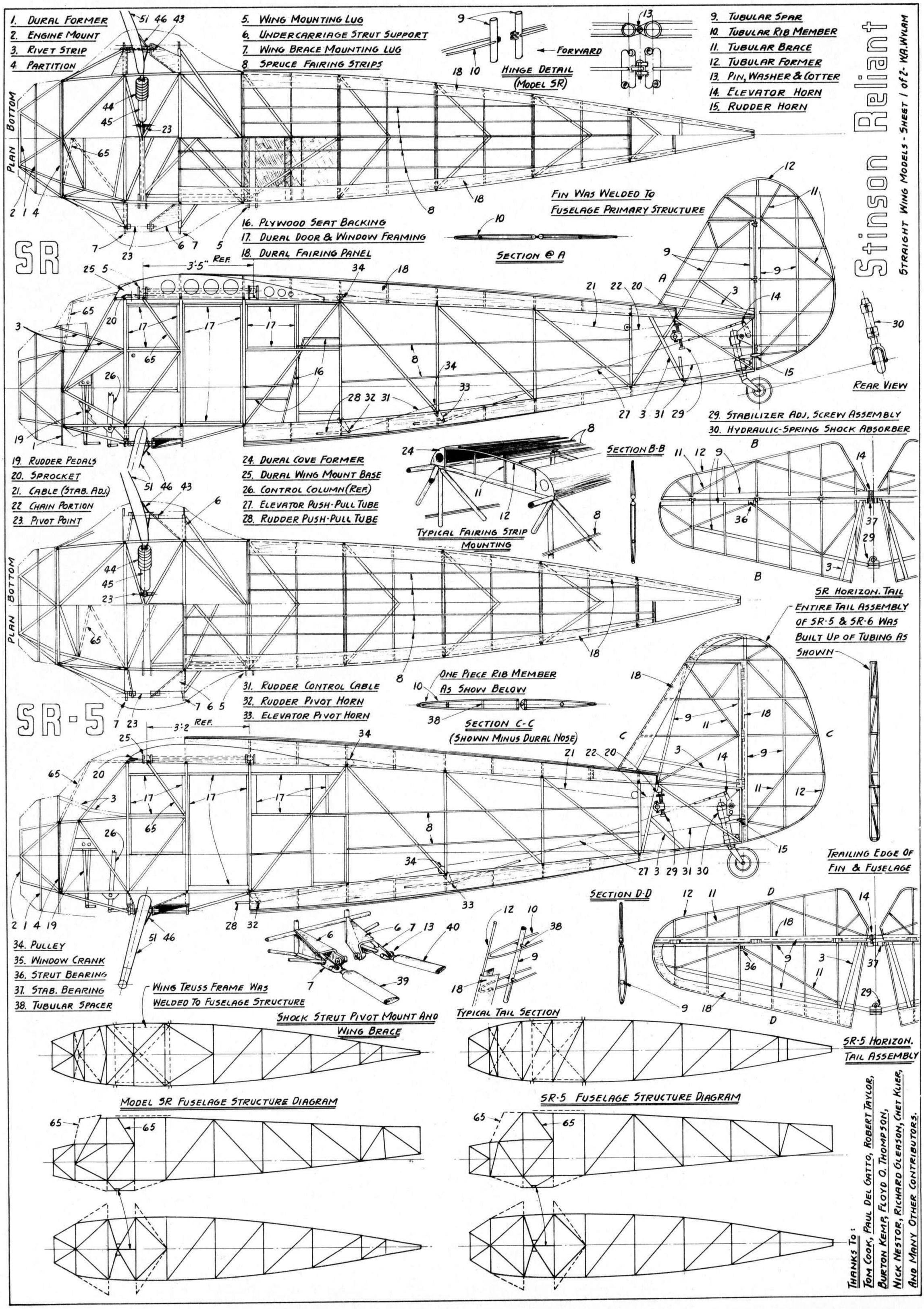

41'-0½" SPAN
20'-6¼"
62. Cowl Split Line (3 Segments)
63. Streamline Fairing
64. Streamline Tubing
65. Jury Strut (See Sheet 2)
66. Foot Stirrup
67. Aileron Control Cable
68. Elevator Push-Pull Tube
69. Rudder Push-Pull Tube
70. Rudder Control Cable
71. Rudder Pivot Horn
72. Elevator Pivot Horn
73. Rudder Horn
74. Support Bearings
75. Chain Portion
76. Split Screw Jack
77. Sprocket
78. Screw Post
79. Stabil. Spar
80. Elevator Horn
81. Elevator Spar
82. Eng. Mtg. Ring
83. Firewall
84. Balance Cable
85. Turnbuckle
86. Pivot Post
87. Hinged Panel
88. Remov. Panel
89. Fixed Panel
90. Louvers
91. Valve Blisters
Red - Left Panel Light
Green - Right Panel
92. Single Pulley
93. Double Pulley
94. Triple Pulley
Schematic Aileron Control Cable
To Aileron Quadrant Thru Wing Strut (Rear)
Spruce Fairing Strips In Same Position, Top & Bottom Surfaces
Spruce Fairing Strips Change of Contour Lines
Bottom View
Forward
Section X-X
Schematic - Aileron & Elevator Control Column
Section Y-Y
2'-9" Ref.
8'-6" Dia.
2'-8½"
2'-10½"
9'-10"
4'-11"
6'-1"
Hamilton-Standard Adj. Pitch Propeller
For Fender Pant Details See Stinson Reliant Model SR Drawings In M.A.N.
Sharp Trailing Edge
Dural Corners Were Coped In A Tapering Radius Toward Tail
Change Of Contour Line
Spruce Fairing Strips
Diagonal - Lower Surface - (Dotted)
Schematic Stab. Adjust. & Elevator
Schematic Rudder Control
Wing's Leading Edge (Ref.)
Front Spar
Straight From C To F
Straight From F To K
Straight From E To K
Doors On Both Sides
Spruce Fairing Strips Change Of Contour Lines
All Dimensions Were Scaled Off Of Factory Prints And Are To The Nearest Quarter Inch.
Cowl Front
Sheet 1 of 2 - Stinson Reliant SR-5 - W.A. Wylam

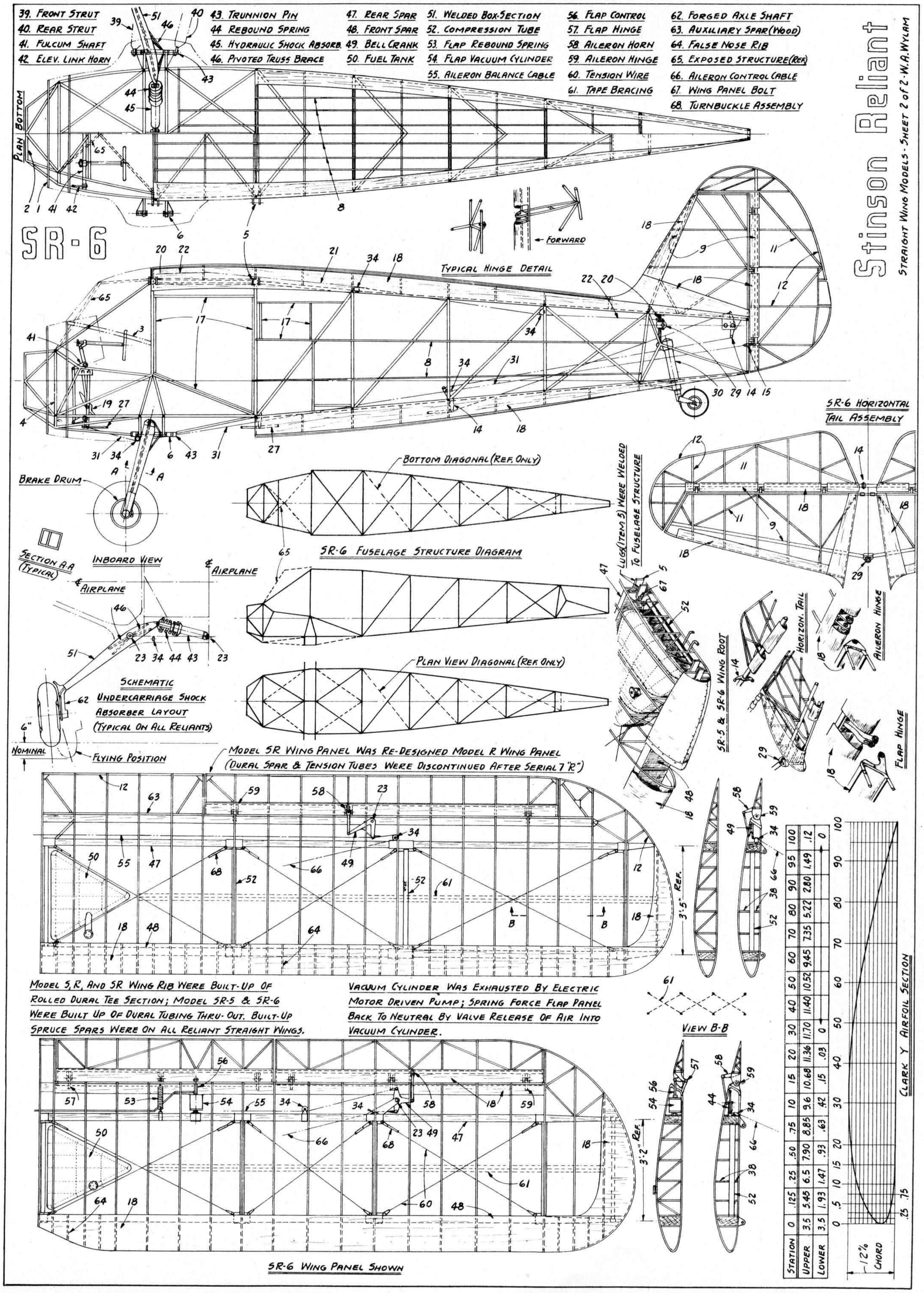

Stinson Reliant
SR-5
1. Radio
2. Push-Pull Control
3. Toggle Switch
4. Ignition
5. Prop. Pitch
6. Altimeter
7. Airspeed
8. Bank & Turn
9. Rate of Climb
10. Tachometer
11. Oil Temp.
12. Oil Press.
13. Manifold Press.
14. Carb. Heat
16. Ammeter
17. Compass
18. Land'g. Light
19. Stab. Adjust.
20. Wall Light
21. Window Crank
22. Map Pocket
23. Fuel Level
24. Ash Tray
25. Assist Strap
26. Arm Rest
27. Hanging Rudder Pedals
28. Hinged Landing Light
29. Gray Woven Carpet
30. Black/Gray Pinstripe
31. Gray Flannel
32. Gray Paint (Metal)
33. Black Crinkle
34. Light Walnut Panel
35. Glove Compartment
36. Fuel Tank Switch
37. Cast Alum. Wheel
38. Polished Alum.
39. Parking Brake
40. Hinge
41. Shelf
42. Fabric
43. Metal Trim
44. Metal Panel
45. Access Panel
46. Baggage Door - Right Side, Standard (Both Side - Optional)
47. Throttle
48. Walnut Trim
49. Exhaust Port
50. Snap Fastener
51. Step Plate
52. Venturi
53. Pitot Tube
54. Flap Panel
55. Aileron Control Horn
56. Rear Spar
57. Front Spar
58. Tension Wires
59. Clock
60. Air Temp.
61. Fuel Fill.
Black Or Gray Leather Seats (Optional Was Color Dyed)
Trailing Edge - Dural Nose
1" Background Color Outline & 1/4" Pinstripe
Trim Color
Background Color
Change Of Contour Lines
Spruce Fairing Strips
Backg'd. Color
Pinstripe
White Or Black Registrat'n. Numbers With Pinstripe Outl.
1" Trim Color & 1/4" Pinstripe
White Light
Gold Trademark
Trailing Edge - Dural Nose
Trim Color (Fairing)
Backg'd. Color (Fairing)
Change Of Contour Lines
Spruce Fairing Strips
Jet Black
Change Of Contour Lines
Exposed Struts Shown Solid Black
SR-5 With 225 H.P. Lycoming Shown
Cylinders
Airplane (Ref.)
Trailing Edge - Dural Nose
View Z-Z
Forward
Flap Panel
Aileron Control Horn
4 Equal Spaces @ 1'0" = 4'0"
4 Equal Spaces @ 1'0½" = 4'2"
5 Equal Spaces @ 1'0¾" = 5'3¾"
20'6¼" Half Span
2° Dihedral
Clark Y Section
0° Incidence
6'8" Chord
Pinstripe
White Or Black
Backg'd. Color
Steel Adj. Pitch - Standard
Steel Cont. Pitch - Optional
83° Flap Travel
Note: Flap Is Controlled By Toggle Switch Near (4)
Airplane
Ground Line @ Rolling Radius
2'0" Dia. x 8" Wide Streamline Tire
3½" Wide x 11" Dia. Streamline Tire - 360° Swivel Arc & Lock Control
Flying Position
27'3½" Length Overall
Nominal
NC-14101 Color Scheme: Glisten White Background, Gold Trim Color & Red Pinstripe.
Stinson SR-5 Was 1935 Production Reliant With 225 H.P. Rear Exhaust Lycoming, Wheel Pants, Metal Fairing Panels And Metal Adj. Pitch Propeller As Standard Equipment. Extras Were: Fender Pants, Radio, Flares, Landing Lights, Control'e. Pitch Prop., Night Flying Instruments Along With Choice Of Five Optional Engine Versions. Flying Characteristic Was An Improvement Over The Model SR.
Sheet 2 of 2 - Scale: 1/4" = 1'0" - W.A. Wylam
B.F.Goodrich

STINSON RELIANT Model SR
215 H.P. Lycoming $3,995 in 1934

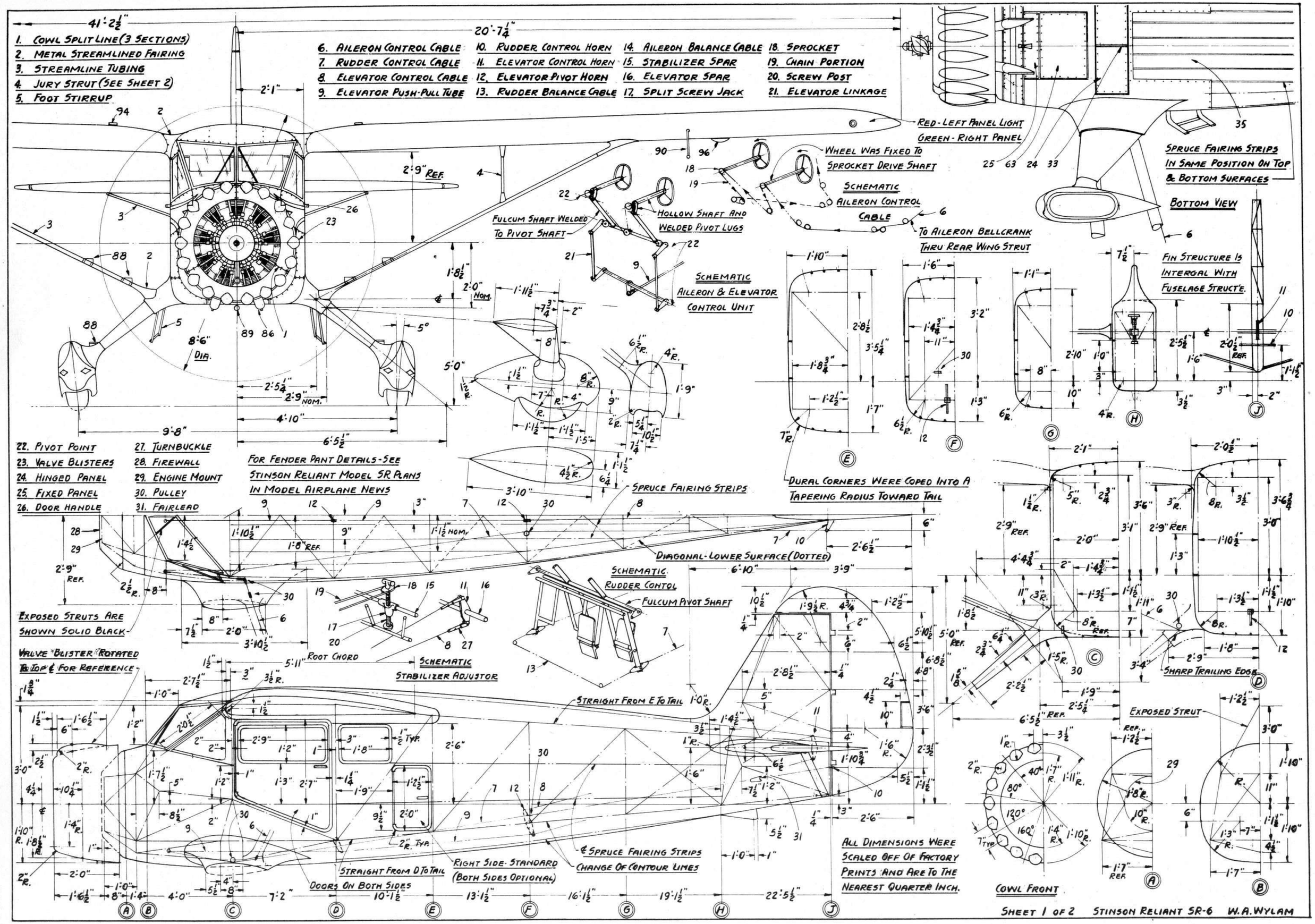


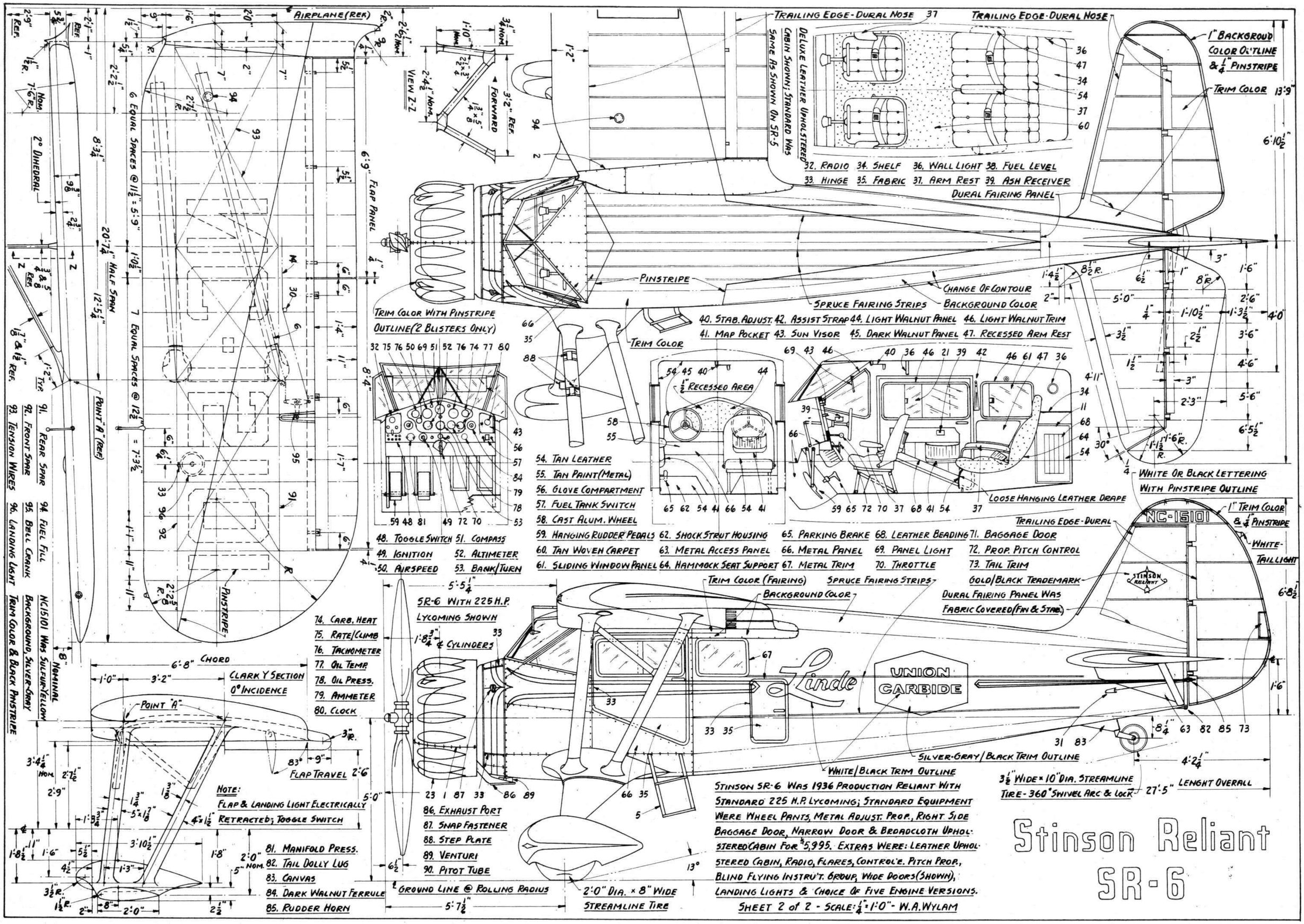



Stinson Reliant
Straight Wing Models - Sheet 1 of 2 - W.A. Wylam
SR
SR-5
1. Dural Former
2. Engine Mount
3. Rivet Strip
4. Partition
5. Wing Mounting Lug
6. Undercarriage Strut Support
7. Wing Brace Mounting Lug
8. Spruce Fairing Strips
9. Tubular Spar
10. Tubular Rib Member
11. Tubular Brace
12. Tubular Former
13. Pin, Washer & Cotter
14. Elevator Horn
15. Rudder Horn
16. Plywood Seat Backing
17. Dural Door & Window Framing
18. Dural Fairing Panel
19. Rudder Pedals
20. Sprocket
21. Cable (Stab. Adj.)
22. Chain Portion
23. Pivot Point
24. Dural Cove Former
25. Dural Wing Mount Base
26. Control Column (Ref.)
27. Elevator Push-Pull Tube
28. Rudder Push-Pull Tube
29. Stabilizer Adj. Screw Assembly
30. Hydraulic-Spring Shock Absorber
31. Rudder Control Cable
32. Rudder Pivot Horn
33. Elevator Pivot Horn
34. Pulley
35. Window Crank
36. Strut Bearing
37. Stab. Bearing
38. Tubular Spacer
Plan Bottom
Forward
Hinge Detail (Model SR)
Fin Was Welded To Fuselage Primary Structure
Section @ A
Rear View
Section B-B
Typical Fairing Strip Mounting
SR Horizon. Tail
Entire Tail Assembly of SR-5 & SR-6 Was Built Up of Tubing As Shown
One Piece Rib Member As Show Below
Section C-C (Shown Minus Dural Nose)
Trailing Edge Of Fin & Fuselage
Section D-D
Wing Truss Frame Was Welded To Fuselage Structure
Shock Strut Pivot Mount And Wing Brace
Typical Tail Section
SR-5 Horizon. Tail Assembly
Model SR Fuselage Structure Diagram
SR-5 Fuselage Structure Diagram
Ref.
3'-5"
3'-2"
Thanks To:
Tom Cook, Paul Del Gatto, Robert Taylor,
Burton Kemp, Floyd O. Thompson,
Nick Nestor, Richard Gleason, Chet Klier,
And Many Other Contributors.



Station	0	.125	.25	.50	.75	10	15	20	30	40	50	60	70	80	90	95	100
Upper	3.5	5.45	6.5	7.90	8.85	9.6	10.68	11.36	11.70	11.40	10.52	9.45	7.35	5.22	2.80	1.49	.12
Lower	3.5	1.93	1.47	.93	.63	.42	.15	.03	0								0


1. Cowl Split Line (3 Sections)
2. Metal Streamlined Fairing
3. Streamline Tubing
4. Jury Strut (See Sheet 2)
5. Foot Stirrup
6. Aileron Control Cable
7. Rudder Control Cable
8. Elevator Control Cable
9. Elevator Push-Pull Tube
10. Rudder Control Horn
11. Elevator Control Horn
12. Elevator Pivot Horn
13. Rudder Balance Cable
14. Aileron Balance Cable
15. Stabilizer Spar
16. Elevator Spar
17. Split Screw Jack
18. Sprocket
19. Chain Portion
20. Screw Post
21. Elevator Linkage
22. Pivot Point
23. Valve Blisters
24. Hinged Panel
25. Fixed Panel
26. Door Handle
27. Turnbuckle
28. Firewall
29. Engine Mount
30. Pulley
31. Fairlead
41'-2½"
20'-7¼"
2'-1"
2'-9" Ref.
1'-8½"
2'-0" Nom.
5'-0"
8'-6" Dia.
2'-5¼"
2'-9" Nom.
4'-10"
9'-8"
6'-5½"
5°
Red - Left Panel Light
Green - Right Panel
Wheel Was Fixed To Sprocket Drive Shaft
Schematic Aileron Control Cable
To Aileron Bellcrank Thru Rear Wing Strut
Fulcum Shaft Welded To Pivot Shaft
Hollow Shaft And Welded Pivot Lugs
Schematic Aileron & Elevator Control Unit
Spruce Fairing Strips In Same Position On Top & Bottom Surfaces
Bottom View
Fin Structure Is Intergal With Fuselage Struct'e.
For Fender Pant Details - See Stinson Reliant Model SR Plans In Model Airplane News
Spruce Fairing Strips
Dural Corners Were Coped Into A Tapering Radius Toward Tail
Diagonal - Lower Surface (Dotted)
Schematic Rudder Contol
Fulcum Pivot Shaft
Exposed Struts Are Shown Solid Black
Valve "Blister" Rotated To Top ℄ For Reference
Root Chord
Schematic Stabilizer Adjustor
Straight From E To Tail
Sharp Trailing Edge
Exposed Strut
Straight From D To Tail
Right Side - Standard (Both Sides Optional)
Doors On Both Sides
℄ Spruce Fairing Strips Change Of Contour Lines
All Dimensions Were Scaled Off Of Factory Prints And Are To The Nearest Quarter Inch.
Cowl Front
Sheet 1 of 2 Stinson Reliant SR-6 W.A. Wylam


Stinson Reliant
SR-6
Linde
UNION CARBIDE
NC-15101
Airplane (Ref.)
Trailing Edge-Dural Nose
Deluxe Leather Upholstered Cabin Shown; Standard Was Same As Shown On SR-5
32. Radio 34. Shelf 36. Wall Light 38. Fuel Level
33. Hinge 35. Fabric 37. Arm Rest 39. Ash Receiver
Dural Fairing Panel
1" Background Color Outline & 1/4" Pinstripe
Trim Color
Pinstripe
Spruce Fairing Strips
Change Of Contour
Background Color
40. Stab. Adjust. 42. Assist Strap 44. Light Walnut Panel 46. Light Walnut Trim
41. Map Pocket 43. Sun Visor 45. Dark Walnut Panel 47. Recessed Arm Rest
Trim Color With Pinstripe Outline (2 Blisters Only)
1/2" Recessed Area
54. Tan Leather
55. Tan Paint (Metal)
56. Glove Compartment
57. Fuel Tank Switch
58. Cast Alum. Wheel
59. Hanging Rudder Pedals
60. Tan Woven Carpet
61. Sliding Window Panel
62. Shock Strut Housing
63. Metal Access Panel
64. Hammock Seat Support
65. Parking Brake
66. Metal Panel
67. Metal Trim
68. Leather Beading
69. Panel Light
70. Throttle
71. Baggage Door
72. Prop. Pitch Control
73. Tail Trim
48. Toggle Switch 51. Compass
49. Ignition 52. Altimeter
50. Airspeed 53. Bank/Turn
74. Carb. Heat
75. Rate/Climb
76. Tachometer
77. Oil Temp.
78. Oil Press.
79. Ammeter
80. Clock
81. Manifold Press.
82. Tail Dolly Lug
83. Canvas
84. Dark Walnut Ferrule
85. Rudder Horn
86. Exhaust Port
87. Snap Fastener
88. Step Plate
89. Venturi
90. Pitot Tube
91. Rear Spar
92. Front Spar
93. Tension Wires
94. Fuel Fill
95. Bell Crank
96. Landing Light
NC15101 Was Sulfur-Yellow Background, Silver-Gray Trim Color & Black Pinstripe
2° Dihedral
Point "A" (Ref.)
Half Span 20'-7 1/4"
6 Equal Spaces @ 11 1/2" = 5'-9"
7 Equal Spaces @ 12 1/2" = 7'-3 1/2"
Flap Panel 6'-9"
Pinstripe
Clark Y Section 0° Incidence
Chord 6'-8"
Point "A"
Flap Travel 83° 9"
Note: Flap & Landing Light Electrically Retracted; Toggle Switch
5SR-6 With 225 H.P. Lycoming Shown
Cylinders
Ground Line @ Rolling Radius
2'-0" Dia. × 8" Wide Streamline Tire
White/Black Trim Outline
Silver-Gray/Black Trim Outline
White-Taillight
Trailing Edge-Dural
Dural Fairing Panel Was Fabric Covered (Fin & Stab.)
Gold/Black Trademark
White Or Black Lettering With Pinstripe Outline
Loose Hanging Leather Drape
3 1/2" Wide × 10" Dia. Streamline Tire - 360° Swivel Arc & Lock
Lenght Overall 27'-5"
Stinson SR-6 Was 1936 Production Reliant With Standard 225 H.P. Lycoming; Standard Equipment Were Wheel Pants, Metal Adjust. Prop., Right Side Baggage Door, Narrow Door & Broadcloth Upholstered Cabin For $5,995. Extras Were: Leather Upholstered Cabin, Radio, Flares, Control'e. Pitch Prop., Blind Flying Instru't. Group, Wide Doors (Shown), Landing Lights & Choice Of Five Engine Versions.
Sheet 2 of 2 - Scale: 1/4" = 1'-0" - W.A. Wylam

SHEET ONE

NC-16131 WAS ORANGE BACKGROUND, SILVER-GREY TRIM COLOR & BLACK PINSTRIPE
WING SPAN-OVERALL 41'-7¼"
HORIZ. TAIL SPAN 13'-9"

6'-7⅝"
1'-11⅝"
℄ WING ROOT
STEP
1'-8½"
STEP
+5°
VENTURI
8'-6" DIA.
2'-4"
9'-10"
4'-11"
6'-6½" REF.

6'-1"
MODEL SR-7A WITH 225 H.P. LYCOMING ENGINE SHOWN
1'-0"
℄ CYLINDERS
1'-2¼"
2'-0"
3'-1"
5'-0"
COWL SPLIT
EXHAUST PORT
HINGE
VENTURI
6½"
GROUND LINE @ ROLLING RADIUS
1'-5¼"
3'-10"
6'-7"
METAL PANEL
13½°

SNAP FASTENER
HINGE
PINSTRIPE
FABRIC AREA
"SPEED ARRESTOR" FLAP
CHANGE OF CONTOUR LINES
BLACK
HINGE
FABRIC AREA
RIGHT SIDE STANDARD BAGGAGE DOOR-LEFT OR BOTH SIDES WAS SPECIAL—ALL MODELS

RUDDER HORN
WHITE OR BLACK REG. Nº WITH PINSTRIPE OUTLINE
NC-16131
TRAILING EDGE-DURAL NOSE
DURAL FAIRING PANEL WAS FABRIC COVERED (FIN & HORIZ. STAB.)
STINSON RELIANT
6'-8½"
General Mills
1'-9"
1'-0"
8½"
METAL ACCESS PANEL
3½" WIDE × 10" DIA. STREAMLINE TIRE
360° SWIVEL ARC WITH LOCK
4'-2½"
27'-5" LEN. OVERALL

FIRST PRODUCTION (1936) GULL-WING WITH RE-WORKED SR-6'S FUSELAGE STRUCTURE, TAIL, & NOSE; RE-DESIGNED UNDERCARRIAGE & WING STRUCTURE MOUNT. WITH STANDARD EQUIPMENT, PRICE WAS $9,000. EXTRAS WERE: CHOICE OF ENGINE & PROP., FENDER PANTS, RADIO, INSTRUMENTS, DELUXE INTERIOR, FLARES, LANDING LIGHTS, PONTOON FITTINGS, ECT.

MODEL	ENGINE & H.P.		PROPELLER & DIA.	
SR-7B	LYCOMING	245 H.P.	LYCOM.-SMITH CONT. PITCH	8'-3"
SR-7C	" "	260 H.P.	" " " " " "	8'-6"
SR-7D	" "	285 H.P.	HAM. STD. CONS. SPEED	8'-6"
SR-7E	WRIGHT	300 H.P.	" " " "	8'-6"

FIFTH LETTER DESIGNATION "D" INDICATES DELUXE LEATHER UPHOL. & HARDWARE (I.E., SR-7BD).

SR-7

NC-17501 WAS YELLOW-BRONZE BACKGROUND, WHITE TRIM COLOR AND BLACK PINSTRIPE
WING SPAN-OVERALL 41'-10"
HORIZ. TAIL SPAN 13'-9"

EXPOSED STRUTS ARE SHOWN SOLID BLACK
6'-9"
2'-1"
℄ WING ROOT
SUN VISOR
1'-8½"
EXHAUST
2'-4½"
8'-6" DIA.
CABIN AIR INTAKE SR-7 & SR-8 ONLY
9'-8"
4'-10"
6'-6" REF.

MODEL SR-8A WITH 225 H.P. LYCOMING ENGINE SHOWN
6'-2½"
HAMILTON-STANDARD ADJ. PITCH STEEL PROP. SHOWN
1'-3¾"
1'-2¼"
2'-4"
℄ CYLINDERS
3'-1"
5'-3½"
6½"
GROUND LINE @ ROLLING RADIUS
1'-7"
4'-1½"
6'-8½"
14°

PINSTRIPE
BACKGROUND COLOR
TRIM COLOR
PINSTRIPE
SPRUCE FAIRING STRIPS
METAL FAIRING PANEL
TRAILING EDGE-NOSE
BACKGROUND COLOR
BLACK/WHITE OUTLINE
BACKGROUND COLOR
PINSTRIPE OUTLINE
TRIM COLOR
METAL TRIM
METAL PANEL
FABRIC AREA
CHANGE OF CONTOUR LINES

TRIM COLOR
NC-17501
WHITE TAILLIGHT
1" BACKGROUND COLOR & ¼" PINSTRIPE OUTLINE
1" TRIM COLOR & ¼" PINSTRIPE OUTLINE
7'-1"
STINSON RELIANT
MUELLER BRASS CO.
PORT HURON, MICHIGAN
1'-9"
1'-3"
8½"
TAIL DOLLY LUG
SPRUCE FAIRING STRIPS
BLACK
4'-1½"
SAME AS SR-7 TAIL WHEEL
28'-0" LEN. OVERALL

SECOND PRODUCTION (1937) RELIANT WITH NEW FUSELAGE AND VERTICAL TAIL DESIGN. CABIN INTERIOR DIMENSIONS BECAME DESIGN STANDARD OF AIRCRAFT INDUSTRY FOR NON-CROWDING ARRANGEMENT - "MOTOR CAR WIDTH" WAS ADVERTISING SLOGAN. SR-8 INTERIOR & EXTERIOR WAS CONSIDERED BY DESIGN EXPERTS AS EXCELLENT. FREIGHT VERSION HAD METAL LINED CABIN WITH SPECIAL HINGED PANELS AFT OF DOOR FOR LARGER CABIN ACCESS.

SR-8B	LYCOMING	245 H.P.	LYCOM.-SMITH CONT. PITCH	8'-3"
SR-8C	" "	260 H.P.	" " " " "	8'-6"
SR-8D	WRIGHT	285 H.P.	HAM. STD. CONS. SPEED	8'-6"
SR-8E	" "	320 H.P.	" " " "	8'-9"

SR-8

Stinson Reliant

GULL-WING SERIES SCALE: ¼" = 1'-0" W.A. WYLAM

SHEET TWO

NC-17301 WAS METALLIC RUBY RED BACKGROUND, BLACK PIN STRIPE AND DIANA CREAM TRIM COLOR.
WING SPAN-OVERALL 41'-11"
HORIZ. TAIL SPAN 14'-2"

PREFORMED PLEXIGLASS WINDSHIELD (FRONT ONLY)
6'-9½"
2'-1½"
WING ROOT
CABIN AIR INTAKE
TRIM COLOR
1'-8½" PIN STRIPE
GREASE ACCESS (ALL MODELS)
VENTURI
8'-3" DIA.
2'-4½"
SAME UNDERCARRIAGE AS SR-8's MODEL
9'-8"
4'-10"
6'-6" REF.

HINGE
ACCESS PANEL
5'-10½"
MODEL SR-9B WITH 245 H.P. LYCOMING ENGINE SHOWN
1'-3"
3'-2½"
℄ CYLINDERS
5'-3½"
BACKGROUND COLOR
LYCOMING-SMITH PROPELLER
7"
SR-9
GROUND LINE @ ROLLING RADIUS
6'-4½"
2'-2" DIA. × 10" WIDE "AIRWHEEL" SR-8,-9,-10
14°

PINSTRIPE
TRIM COLOR
BACKGROUND COLOR
FABRIC COVERED WING ROOT FAIRING (TOP ONLY)
METAL FAIRING STRIP
FABRIC AREA
1" BACKGROUND COLOR & ¼" PINSTRIPE OUTLINE
1" TRIM COLOR & ¼" PINSTRIPE OUTLINE
GOLD TRADEMARK
HANDLE
NC-17601
BACKGROUND COLOR
TRIM COLOR
7'-1"
1'-9"
1'-0½"
8½"
RUDDER HORN
CANVAS SHROUD (ALL MODELS)
4'-1½"
SAME AS SR-7 TAILWHEEL
27'-8" LEN. OVERALL

TYPICAL STRIPE PATTERN ON SR-8 AND SR-9
THIRD PRODUCTION (1938) RELIANT WITH RE-DESIGNED WINDSHIELD, NOSE, AND HORIZONTAL STABILIZER. BALANCE OF DESIGN WAS SIMILAR TO SR-8 EXCEPT FOR INTERIOR. NEW WINDSHIELD IMPROVED AIR FLAP HANDLING CHARACTERISTIC. STANDARD MODEL HAD LAIDLAW UPHOL. WHILE DELUXE MODEL HAD TAN PIGSKIN INTERIOR. FREIGHT VERSION HAD MODEL DESIGNATION OF SR-9ES OR SR-9FS.

MODEL	ENGINE & H.P.		PROPELLER & DIA.	
SR-9A	LYCOMING	225 H.P.	HAM.-STAND. ADJ. PITCH	8'-6"
SR-9C	" "	285 H.P.	HAM.-ST'D. CONS. SPEED	8'-6"
SR-9D	WRIGHT	285 H.P.	" " " "	8'-6"
SR-9E	" "	300 H.P.	" " " "	8'-9"
SR-9F	WASP, JR.	445 H.P.	" " " "	8'-9"

NC-18371 WAS SEA GREEN BACKGROUND COLOR, GOLDEN BEIGE TRIM COLOR AND GREEN PINSTRIPE
WING SPAN-OVERALL 41'-10½"
HORIZ. TAIL SPAN 14'-2"

STAMPED BLISTERS ON RIVETED SECTIONS
6'-9¼"
2'-1¼"
FUEL FILL
WING ROOT
FLAT GLASS PANELS
HINGED ENGINE COWL-BOTH UPPER SIDES
1'-8½"
STEP
8'-3" DIA.
2'-1"
9'-3½"
4'-7¾"
6'-4¾" REF.
GROUND LINE @ ROLLING RADIUS

HINGE
27'-7½" LENGTH OVERALL
5'-10½"
MODEL SR-10B WITH 245 H.P. LYCOMING ENGINE SHOWN
1'-3"
3'-2½"
℄ CYLINDERS
5'-3½"
SNAP FASTENERS
LYCOMING-SMITH ELECTROMATIC CONTROL'E. PITCH PROPELLER
7"
SR-10
6'-5"
14½°

PINSTRIPE
CHANGE OF CONTOUR
TRAILING EDGE-DURAL NOSE FAIRING
METAL TRIM
BACKGROUND COLOR
TRIM COLOR
BLACK OR WHITE REGIS'N. NUMBERS WITH PIN-STRIPE OUTLINE
ACCESS PANEL
PIN STRIPE
TAIL LIGHT
NC-18371
7'-1"
1'-9"
1'-0½"
8½"
DURAL PANEL
8½" DIA. × 3" WIDE TIRE
RUDDER CABLE
4'-1½"

UNIVERSAL
LANDERS, FRARY & CLARK, NEW BRITAIN, CONN.

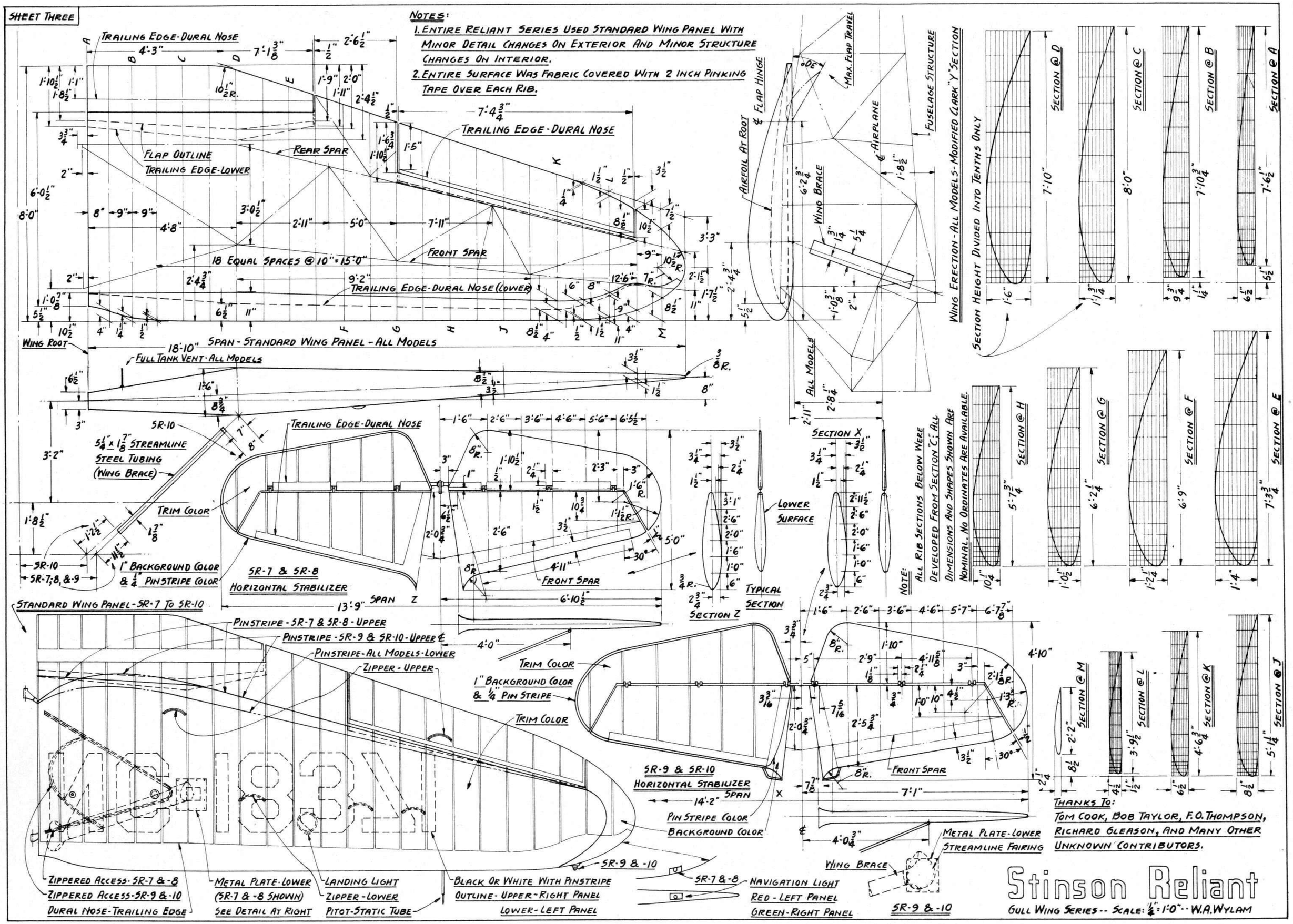
BAGGAGE DOOR WAS LOCKED BY INTERNAL LATCH (IN CABIN)
FOURTH PRODUCTION (1939) RELIANT WITH RE-DESIGNED WINDSHIELD, NOSE, UNDERCARRIAGE, AND TOP DECK. STANDARD WAS SINGLE RIGHT SIDE DOOR (LEFT SIDE SHOWN). EXTRAS WERE: DOUBLE ENTRANCE & BAGGAGE DOORS; FENDER PANTS, ALONG WITH WIDE CHOICE OF EQUIPMENT, INSTRUMENTS AND ENGINE-PROP. COMBIN'S.

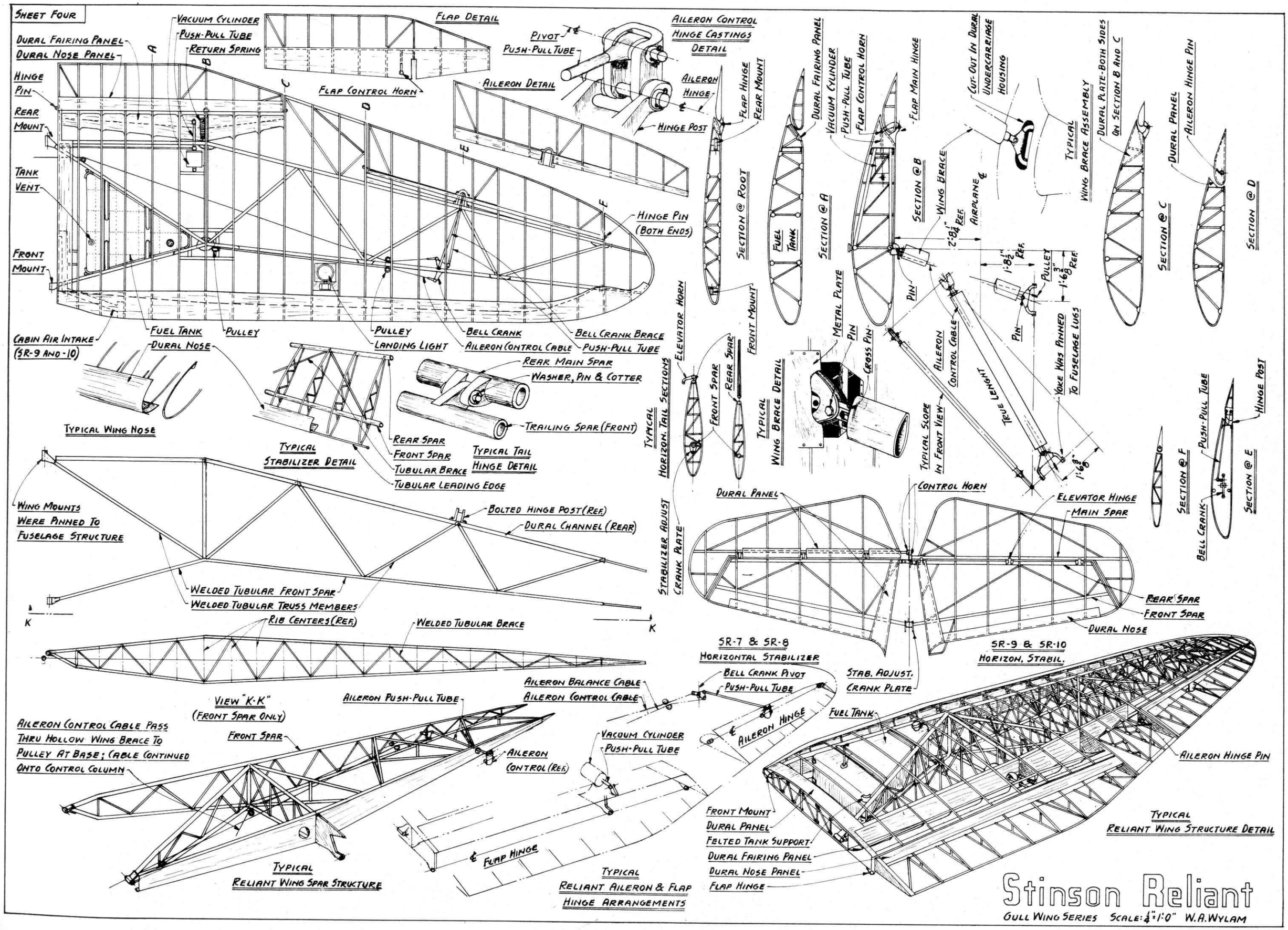
SR-10A	LYCOMING	225 H.P.	HAM. STAND. ADJ. PITCH	8'-6"
SR-10C	" "	260 H.P.	LYCOMING-SMITH	8'-3"
SR-10D	" "	285 H.P.	HAM. STAND. CONS. SPEED	8'-6"
SR-10E	WRIGHT	320 H.P.	" " " "	8'-9"
SR-10F	WASP, Jr.	445 H.P.	" " " "	8'-9"

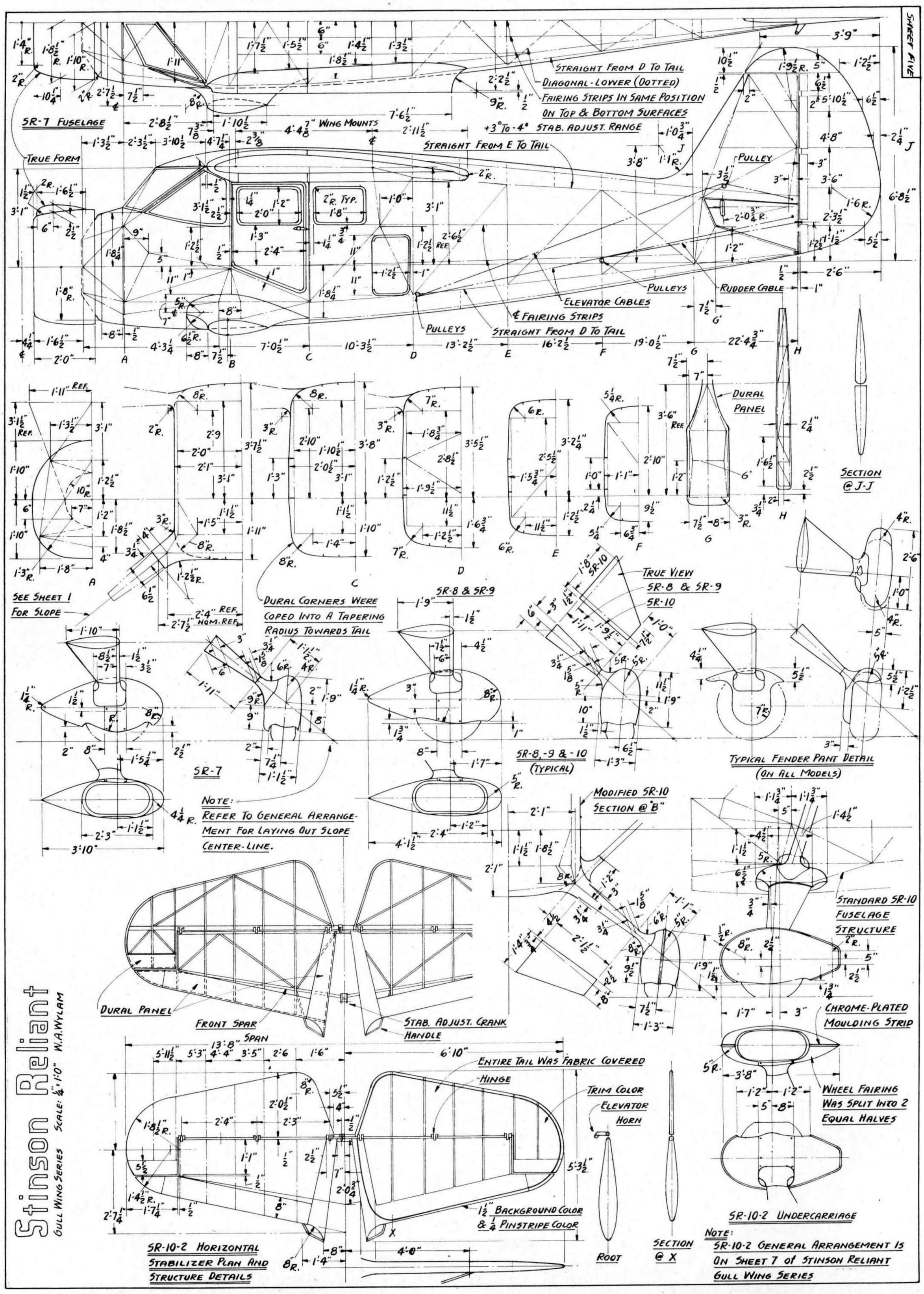
Stinson Reliant

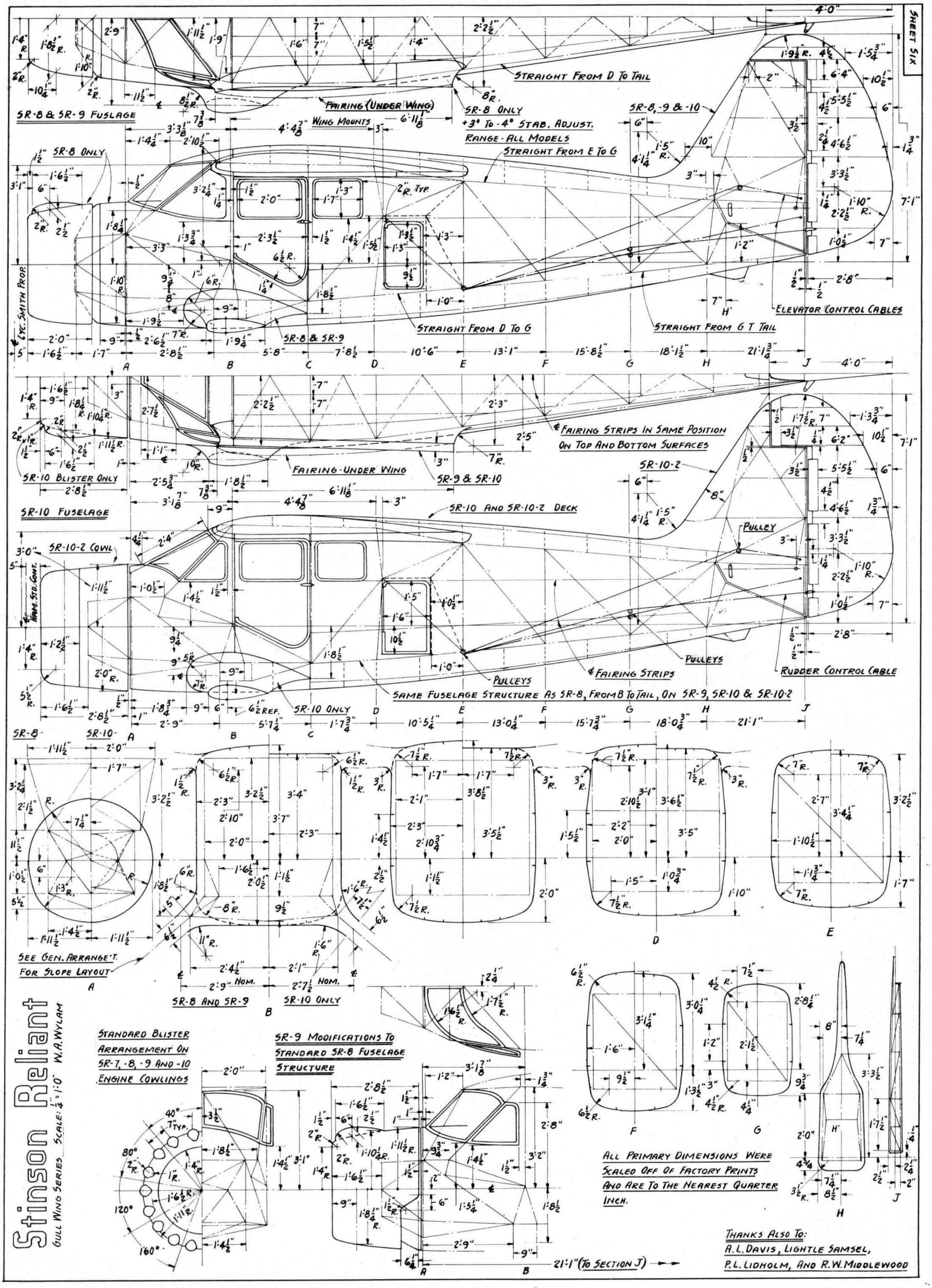
GULL WING SERIES SCALE: ¼" = 1'-0" W.A. WYLAM

STINSON RELIANT SR-8 Gull Wing—best known of all


SHEET THREE
NOTES:
1. ENTIRE RELIANT SERIES USED STANDARD WING PANEL WITH MINOR DETAIL CHANGES ON EXTERIOR AND MINOR STRUCTURE CHANGES ON INTERIOR.
2. ENTIRE SURFACE WAS FABRIC COVERED WITH 2 INCH PINKING TAPE OVER EACH RIB.
TRAILING EDGE-DURAL NOSE
FLAP OUTLINE
TRAILING EDGE-LOWER
REAR SPAR
FRONT SPAR
18 EQUAL SPACES @ 10" = 15'-0"
TRAILING EDGE-DURAL NOSE (LOWER)
WING ROOT
SPAN - STANDARD WING PANEL - ALL MODELS
FULL TANK VENT - ALL MODELS
5/4" x 1 7/8" STREAMLINE STEEL TUBING (WING BRACE)
TRIM COLOR
1" BACKGROUND COLOR & 1/4" PINSTRIPE COLOR
SR-7 & SR-8 HORIZONTAL STABILIZER
SPAN
STANDARD WING PANEL - SR-7 TO SR-10
PINSTRIPE - SR-7 & SR-8 - UPPER
PINSTRIPE - SR-9 & SR-10 - UPPER
PINSTRIPE - ALL MODELS - LOWER
ZIPPER - UPPER
1" BACKGROUND COLOR & 1/4" PIN STRIPE
SR-9 & SR-10 HORIZONTAL STABILIZER
PIN STRIPE COLOR
BACKGROUND COLOR
ZIPPERED ACCESS - SR-7 & -8
ZIPPERED ACCESS - SR-9 & -10
DURAL NOSE-TRAILING EDGE
METAL PLATE - LOWER (SR-7 & -8 SHOWN) SEE DETAIL AT RIGHT
LANDING LIGHT
ZIPPER - LOWER
PITOT-STATIC TUBE
BLACK OR WHITE WITH PINSTRIPE
OUTLINE - UPPER - RIGHT PANEL
LOWER - LEFT PANEL
NAVIGATION LIGHT
RED - LEFT PANEL
GREEN - RIGHT PANEL
METAL PLATE - LOWER
STREAMLINE FAIRING
WING BRACE
SR-9 & -10
AIRFOIL AT ROOT ℄ FLAP HINGE
MAX. FLAP TRAVEL
℄ AIRPLANE
FUSELAGE STRUCTURE
WING BRACE
ALL MODELS
SECTION X
LOWER SURFACE
TYPICAL SECTION
SECTION Z
WING ERECTION - ALL MODELS - MODIFIED CLARK "Y" SECTION
SECTION HEIGHT DIVIDED INTO TENTHS ONLY
SECTION @ A
SECTION @ B
SECTION @ C
SECTION @ D
SECTION @ E
SECTION @ F
SECTION @ G
SECTION @ H
SECTION @ J
SECTION @ K
SECTION @ L
SECTION @ M
NOTE: ALL RIB SECTIONS BELOW WERE DEVELOPED FROM SECTION "C"; ALL DIMENSIONS AND SHAPES SHOWN ARE NOMINAL. NO ORDINATES ARE AVAILABLE.
THANKS TO:
TOM COOK, BOB TAYLOR, F.O. THOMPSON, RICHARD GLEASON, AND MANY OTHER UNKNOWN CONTRIBUTORS.
Stinson Reliant
GULL WING SERIES -- SCALE: 1/4" = 1'-0" -- W.A. WYLAM


SHEET FOUR
DURAL FAIRING PANEL
DURAL NOSE PANEL
HINGE PIN
REAR MOUNT
TANK VENT
FRONT MOUNT
VACUUM CYLINDER
PUSH-PULL TUBE
RETURN SPRING
FLAP DETAIL
FLAP CONTROL HORN
AILERON DETAIL
PIVOT
PUSH-PULL TUBE
AILERON CONTROL HINGE CASTINGS DETAIL
AILERON HINGE
HINGE POST
FLAP HINGE
REAR MOUNT
HINGE PIN (BOTH ENDS)
CABIN AIR INTAKE (SR-9 AND -10)
FUEL TANK
DURAL NOSE
PULLEY
PULLEY
LANDING LIGHT
BELL CRANK
AILERON CONTROL CABLE
BELL CRANK BRACE
PUSH-PULL TUBE
REAR MAIN SPAR
WASHER, PIN & COTTER
TRAILING SPAR (FRONT)
TYPICAL WING NOSE
TYPICAL STABILIZER DETAIL
REAR SPAR
FRONT SPAR
TUBULAR BRACE
TUBULAR LEADING EDGE
TYPICAL TAIL HINGE DETAIL
TYPICAL HORIZON. TAIL SECTIONS
ELEVATOR HORN
FRONT SPAR
REAR SPAR
FRONT MOUNT
TYPICAL WING BRACE DETAIL
METAL PLATE
PIN
CROSS PIN
SECTION @ ROOT
FUEL TANK
SECTION @ A
DURAL FAIRING PANEL
VACUUM CYLINDER
PUSH-PULL TUBE
FLAP CONTROL HORN
FLAP MAIN HINGE
SECTION @ B
WING BRACE
PIN
AILERON CONTROL CABLE
TYPICAL SLOPE IN FRONT VIEW
TRUE LENGHT
CUT-OUT IN DURAL UNDERCARRIAGE HOUSING
TYPICAL WING BRACE ASSEMBLY
DURAL PLATE-BOTH SIDES ON SECTION B AND C
AIRPLANE ℄
2'-8¼" REF.
1'-8½" REF.
1'-6⅜" REF.
PULLEY
PIN
YOKE WAS PINNED TO FUSELAGE LUGS
1'-6⅜"
SECTION @ C
DURAL PANEL
AILERON HINGE PIN
SECTION @ D
SECTION @ F
PUSH-PULL TUBE
HINGE POST
SECTION @ E
BELL CRANK
WING MOUNTS WERE PINNED TO FUSELAGE STRUCTURE
BOLTED HINGE POST (REF.)
DURAL CHANNEL (REAR)
WELDED TUBULAR FRONT SPAR
WELDED TUBULAR TRUSS MEMBERS
RIB CENTERS (REF.)
WELDED TUBULAR BRACE
K
K
VIEW "K-K" (FRONT SPAR ONLY)
DURAL PANEL
CONTROL HORN
ELEVATOR HINGE
MAIN SPAR
STABILIZER ADJUST CRANK PLATE
REAR SPAR
FRONT SPAR
DURAL NOSE
SR-7 & SR-8 HORIZONTAL STABILIZER
SR-9 & SR-10 HORIZON. STABIL.
STAB. ADJUST. CRANK PLATE
BELL CRANK PIVOT
PUSH-PULL TUBE
AILERON BALANCE CABLE
AILERON CONTROL CABLE
AILERON PUSH-PULL TUBE
AILERON HINGE
FUEL TANK
AILERON HINGE PIN
AILERON CONTROL CABLE PASS THRU HOLLOW WING BRACE TO PULLEY AT BASE; CABLE CONTINUED ONTO CONTROL COLUMN
FRONT SPAR
AILERON CONTROL (REF.)
VACUUM CYLINDER
PUSH-PULL TUBE
FLAP HINGE
FRONT MOUNT
DURAL PANEL
FELTED TANK SUPPORT
DURAL FAIRING PANEL
DURAL NOSE PANEL
FLAP HINGE
TYPICAL RELIANT WING SPAR STRUCTURE
TYPICAL RELIANT AILERON & FLAP HINGE ARRANGEMENTS
TYPICAL RELIANT WING STRUCTURE DETAIL
Stinson Reliant
GULL WING SERIES SCALE: ¼"=1'-0" W.A.WYLAM


SHEET FIVE
SR-7 FUSELAGE
TRUE FORM
STRAIGHT FROM D TO TAIL
DIAGONAL-LOWER (DOTTED)
FAIRING STRIPS IN SAME POSITION ON TOP & BOTTOM SURFACES
+3° TO -4° STAB. ADJUST. RANGE
WING MOUNTS
STRAIGHT FROM E TO TAIL
PULLEY
PULLEYS
RUDDER CABLE
ELEVATOR CABLES
℄ FAIRING STRIPS
STRAIGHT FROM D TO TAIL
DURAL PANEL
SECTION @ J-J
SEE SHEET 1 FOR SLOPE
DURAL CORNERS WERE COPED INTO A TAPERING RADIUS TOWARDS TAIL
SR-7
NOTE: REFER TO GENERAL ARRANGEMENT FOR LAYING OUT SLOPE CENTER-LINE.
SR-8 & SR-9
TRUE VIEW SR-8 & SR-9 SR-10
SR-8, -9 & -10 (TYPICAL)
TYPICAL FENDER PANT DETAIL (ON ALL MODELS)
MODIFIED SR-10 SECTION @ "B"
STANDARD SR-10 FUSELAGE STRUCTURE
DURAL PANEL
FRONT SPAR
STAB. ADJUST. CRANK HANDLE
CHROME-PLATED MOULDING STRIP
WHEEL FAIRING WAS SPLIT INTO 2 EQUAL HALVES
SR-10-2 UNDERCARRIAGE
ENTIRE TAIL WAS FABRIC COVERED
HINGE
TRIM COLOR
ELEVATOR HORN
1½" BACKGROUND COLOR & ¼ PINSTRIPE COLOR
SR-10-2 HORIZONTAL STABILIZER PLAN AND STRUCTURE DETAILS
ROOT
SECTION @ X
NOTE: SR-10-2 GENERAL ARRANGEMENT IS ON SHEET 7 of STINSON RELIANT GULL WING SERIES
Stinson Reliant
GULL WING SERIES SCALE: ¼" = 1'-0" W.A.WYLAM


SHEET SIX
SR-8 & SR-9 FUSLAGE
FAIRING (UNDER WING)
WING MOUNTS
SR-8 ONLY
+3° TO -4° STAB. ADJUST. RANGE - ALL MODELS
STRAIGHT FROM D TO TAIL
SR-8, -9 & -10
STRAIGHT FROM E TO G
SR-8 ONLY
TYP.
STRAIGHT FROM D TO G
STRAIGHT FROM G T TAIL
ELEVATOR CONTROL CABLES
SR-8 & SR-9
FAIRING STRIPS IN SAME POSITION ON TOP AND BOTTOM SURFACES
SR-10 BLISTER ONLY
FAIRING-UNDER WING
SR-9 & SR-10
SR-10-2
SR-10 FUSELAGE
SR-10 AND SR-10-2 DECK
SR-10-2 COWL
PULLEY
PULLEYS
FAIRING STRIPS
RUDDER CONTROL CABLE
SAME FUSELAGE STRUCTURE AS SR-8, FROM B TO TAIL, ON SR-9, SR-10 & SR-10-2
SR-10 ONLY
SEE GEN. ARRANGE'T. FOR SLOPE LAYOUT
SR-8 AND SR-9
SR-10 ONLY
STANDARD BLISTER ARRANGEMENT ON SR-7, -8, -9 AND -10 ENGINE COWLINGS
SR-9 MODIFICATIONS TO STANDARD SR-8 FUSELAGE STRUCTURE
21'-1" (TO SECTION J)
ALL PRIMARY DIMENSIONS WERE SCALED OFF OF FACTORY PRINTS AND ARE TO THE NEAREST QUARTER INCH.
THANKS ALSO TO:
A.L. DAVIS, LIGHTLE SAMSEL,
P.L. LIDHOLM, AND R.W. MIDDLEWOOD
Stinson Reliant
GULL WING SERIES SCALE: 1/4" = 1'-0" W.A. WYLAM

SHEET SEVEN

NC-21131 WAS METALLIC EVERGREEN BACKGROUND, GOLDEN YELLOW TRIM COLOR & BLACK PINSTRIPE.
WING SPAN - OVERALL 41'-10½"
HORIZ. TAIL SPAN 14'-2"

HINGED ENGINE COWL (BOTH UPPER PANELS)
6'-9¼"
2'-1¼"
WING ROOT
FUEL VENT
CABIN AIR INTAKE
STAINL'S. STEEL NAMEPLATE
1'-8½"
PINSTRIPE TRIM COLOR
5'-3½"
STAINLESS STEEL MOULDING STRIP
EXHAUST PORT
8'-9" DIA.
2'-1"
GROUND LINE @ ROLLING RADIUS
4'-7¾"
6'-4¾" REF.
9'-3½"

HINGE
27'-10¾" LENGHT OVERALL
6'-1¾"
MODEL SR-10G WITH 290 H.P. LYCOMING AND HAMIL.-STAN'D. CONSTANT SPEED PROP. SHOWN
5"
2'-8½"
1'-3" ℄ CYLINDERS
SNAP FASTENERS
STAINLESS STEEL LOUVERS
6'-8¼"
2'-2" DIA. × 10" WIDE
14°

PIN STRIPE
TRIM COLOR
BACKGROUND COLOR
SPRUCE FAIRING STRIPS
METAL FAIRING PANEL
NOTE
SEE SHEET 3, 4, 5 & 6 FOR FUSELAGE & WING LAYOUT
+3 TO -4 STAB. ADJ. RANGE
BACKGROUND COLOR
TRIM COLOR
1" TRIM COLOR & ¼" PINSTRIPE OUTLINE
NC-21131
STINSON RELIANT
7'-1"
1'-9"
11¾"
8½"
METAL TRIM TAB (GROUND ADJ.-ALL MODELS)
SAME TAILWHEEL AS SR-10
4'-1¼"
RETRACTABLE FOOT STIRRUP
RIGHT SIDE STANDARD (INTERNAL LATCH DOOR)

FIFTH PRODUCTION (1939) SR-10G, H, J & K. SIXTH AND FINAL CUSTOM RELIANT PRODUCTION (1940) SR-10-2A TO SR-10-2E. (ALL MODELS LISTED ARE SAME DESIGN). CONSIDERED MOST BEAUTIFUL RELIANT MODEL BUILT BUT ITS SALES WAS POOR DUED TO MARKET SATURATION AND HIGH PRICE TAG ($20,000 FOR BASIC SR-10G; PRICE TAG ON SR-7 WAS $9,000).

MODEL	ENGINE & H.P.		PROPELLER & DIAMETER	
SR-10H	P & W WASP -	450 H.P.	HAM. STAN. CONS. SPEED	8'-9"
SR-10J	LYCOMING	300 H.P.	" " " "	8'-9"
SR-10K	WRIGHT	450 H.P.	" " " "	8'-9"
SR-10-2A	LYCOMING	225 H.P.	" " ADJ. PITCH	8'-6"
SR-10-2B	" "	245 H.P.	LYCOMING-SMITH	8'-6"
SR-10-2C	" "	260 H.P.	" "	8'-6"
SR-10-2D	WRIGHT	300 H.P.	HAM. STAN. CONS. SPEED	8'-9"
SR-10-2E	WRIGHT	350 H.P.	" " " "	8'-9"

SR-10-2

TO AILERON TIPS
POST "A"
POST "B"
LEAD IN
POST "C"
2'-1½"
MAST
POST "D"
6'-9½"
1'-7¼"
EXHAUST PORT
OIL COOLER
8'-9 DIA.
2'-0"
5'-4½"
LIGHT BLUE COLORLINE
9'-2½"
4'-7¾"
4¾" REF.

STANDARD SPINACH HAZE AND SAND COLORS WITH LIGHT BLUE ON ALL LOWER SURFACES FOR UK AF; SOLID DRAB FOR U.S., CHINA & USSR
WING SPAN - OVERALL 41'-11"
HORIZ. TAIL SPAN 14'-1"

28'-3" LENGTH OVERALL
6'-6"
RELIANT MK II WITH STANDARD 300 H.P. LYCOMING & HAMILTON-STANDARD CONS. SPEED PROP. SHOWN
1'-3"
3'-5"
℄ CYLINDERS
SAND
4
5"
10¼"
LIGHT BLUE COLORLINE
SPINACH HAZE
6'-2½"
2'-0" DIA. × 9" WIDE TIRE
13¾°

POST "C"
MAST
POST "D" & LEAD IN
AILERON TIP (BOTH SIDES)
WHITE
BLUE
SAND
YELLOW
RED
LOOP ON LOWER OR UPPER SURFACE

DURAL FAIRING STRIPS
METAL FAIRING
NO WING ROOT FAIRING AFT OF DOOR
POST "A"
LEAD IN
TO AILERON TIPS
POST "B"
TO POST "C" & "D" AND LEAD IN
SAND
7'-3"
SPINACH HAZE COLOR
FIXED STABILIZER
BLACK
WHITE
ROYAL NAVY
FK724
1'-9"
9"
1'-8¼"
ON MK III GASPE COAST PATROL
9" DIA. × 4" WIDE TIRE
LIGHT BLUE COLORLINE
4'-2½"

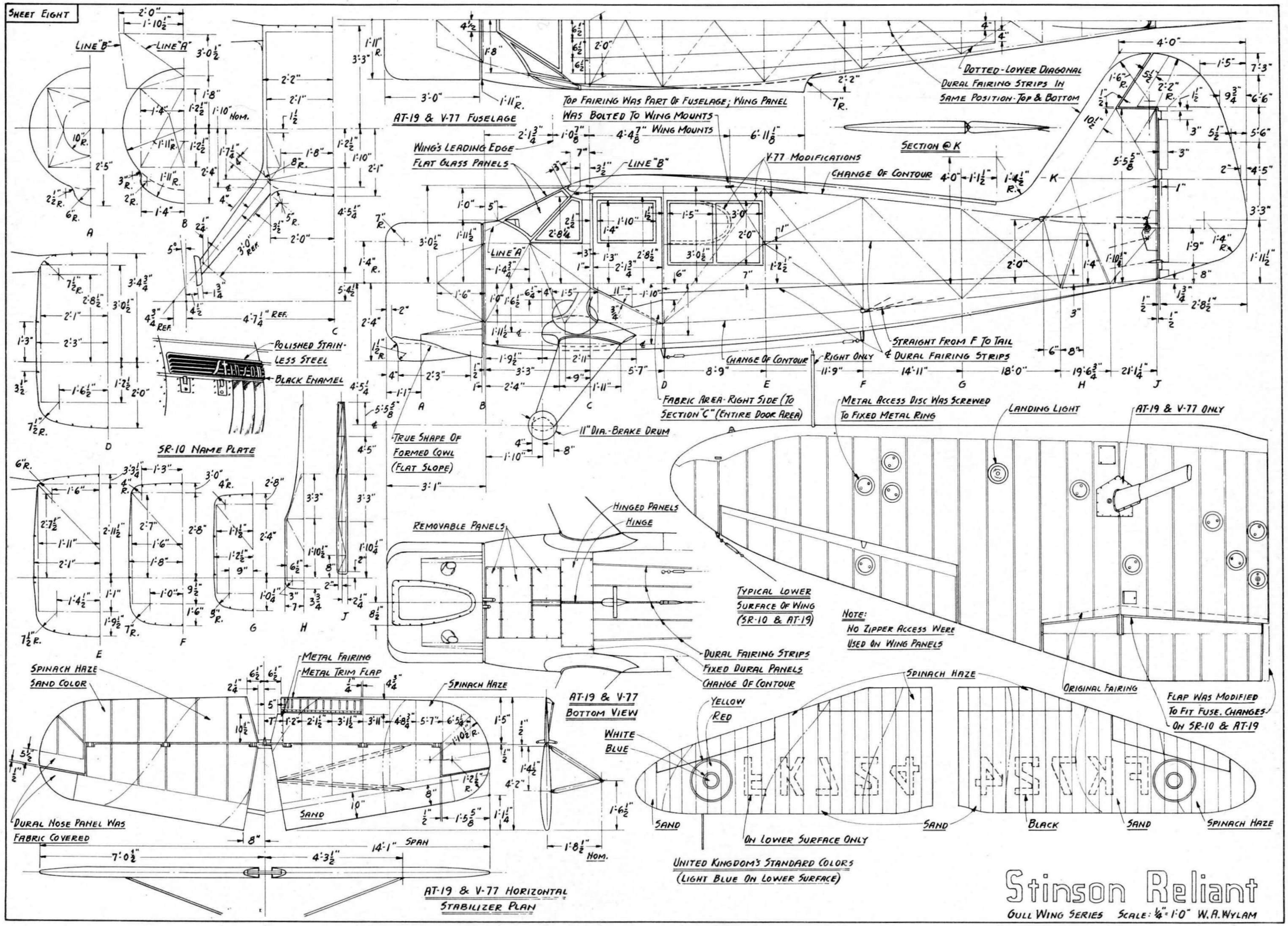
LAST PRODUCTION RELIANT (1941 TO 1944) BUILT TO U.S. ARMY RIGID AT-19 MILITARY SPECIFICATIONS. BUILT IN MASS PRODUCTION FOR U.S., UNITED KINGDOM, RUSSIA AND CHINA. AFTER 1945, FACTORY RE-WORKED SHIPS FOR PRIVATE OWNERS WERE DESIGNATED V-77. NON-FACTORY CONVERTED SHIPS WERE LICENSED AS MODIFIED AT-19. ORIGINAL HEAVY CONSTRUCTION IMPOSED STRICT LIMITATIONS ON PAYLOADS (V-77).

MODEL DESIGNATION		REMARKS	
AT-19	RELIANT I	NAV.-INSTRU.-TRAINER	2 DOORS
AT-19A	RELIANT II	NAV.-RADIO TRAINER	1 DOOR
AT-19B	RELIANT III	OBSERVA.-AIR MAP-PHOTO.	1 DOOR
AT-19C	RELIANT V	TRANSP.-CARGO-UTILITY	2 DOORS

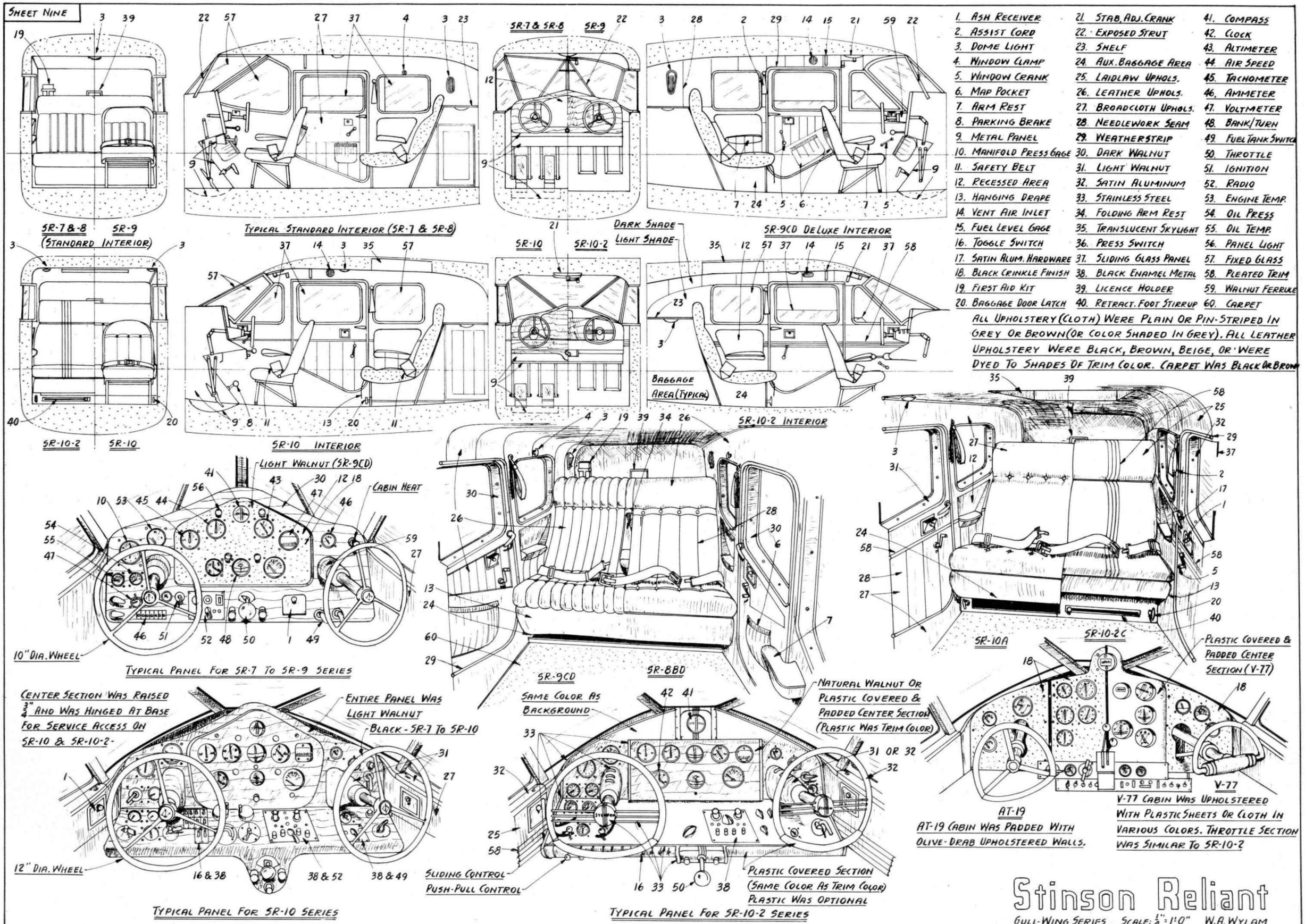
AT-19

Stinson Reliant

GULL WING SERIES SCALE: ¼" = 1'-0" W.A. WYLAM


SHEET EIGHT
LINE "B"
LINE "A"
AT-19 & V-77 FUSELAGE
TOP FAIRING WAS PART OF FUSELAGE; WING PANEL WAS BOLTED TO WING MOUNTS
WING MOUNTS
WING'S LEADING EDGE FLAT GLASS PANELS
V-77 MODIFICATIONS
CHANGE OF CONTOUR
SECTION @ K
DOTTED-LOWER DIAGONAL DURAL FAIRING STRIPS IN SAME POSITION-TOP & BOTTOM
POLISHED STAINLESS STEEL
BLACK ENAMEL
SR-10 NAME PLATE
TRUE SHAPE OF FORMED COWL (FLAT SLOPE)
11" DIA.-BRAKE DRUM
FABRIC AREA-RIGHT SIDE (TO SECTION "C" (ENTIRE DOOR AREA)
CHANGE OF CONTOUR
RIGHT ONLY
STRAIGHT FROM F TO TAIL & DURAL FAIRING STRIPS
METAL ACCESS DISC WAS SCREWED TO FIXED METAL RING
LANDING LIGHT
AT-19 & V-77 ONLY
REMOVABLE PANELS
HINGED PANELS
HINGE
TYPICAL LOWER SURFACE OF WING (SR-10 & AT-19)
NOTE: NO ZIPPER ACCESS WERE USED ON WING PANELS
DURAL FAIRING STRIPS
FIXED DURAL PANELS
CHANGE OF CONTOUR
AT-19 & V-77 BOTTOM VIEW
SPINACH HAZE
SAND COLOR
METAL FAIRING
METAL TRIM FLAP
SPINACH HAZE
DURAL NOSE PANEL WAS FABRIC COVERED
SAND
14'-1" SPAN
AT-19 & V-77 HORIZONTAL STABILIZER PLAN
YELLOW
RED
WHITE
BLUE
SAND
ON LOWER SURFACE ONLY
UNITED KINGDOM'S STANDARD COLORS (LIGHT BLUE ON LOWER SURFACE)
SPINACH HAZE
ORIGINAL FAIRING
FLAP WAS MODIFIED TO FIT FUSE. CHANGES ON SR-10 & AT-19
SAND
BLACK
SAND
SPINACH HAZE
Stinson Reliant
GULL WING SERIES SCALE: 1/4" = 1'-0" W.A. WYLAM

SHEET NINE

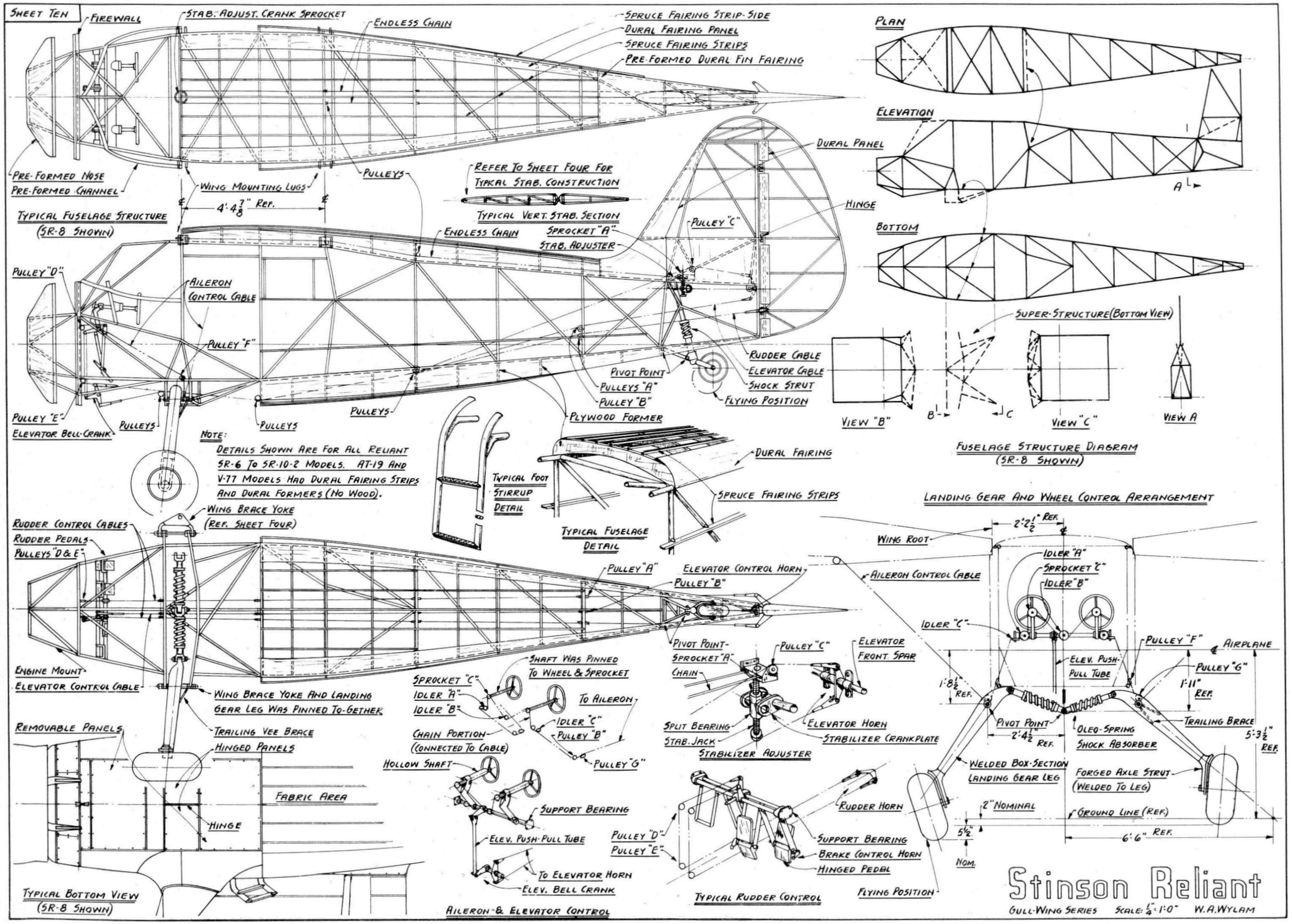


1. ASH RECEIVER
2. ASSIST CORD
3. DOME LIGHT
4. WINDOW CLAMP
5. WINDOW CRANK
6. MAP POCKET
7. ARM REST
8. PARKING BRAKE
9. METAL PANEL
10. MANIFOLD PRESS GAGE
11. SAFETY BELT
12. RECESSED AREA
13. HANGING DRAPE
14. VENT AIR INLET
15. FUEL LEVEL GAGE
16. TOGGLE SWITCH
17. SATIN ALUM. HARDWARE
18. BLACK CRINKLE FINISH
19. FIRST AID KIT
20. BAGGAGE DOOR LATCH
21. STAB. ADJ. CRANK
22. EXPOSED STRUT
23. SHELF
24. AUX. BAGGAGE AREA
25. LAIDLAW UPHOLS.
26. LEATHER UPHOLS.
27. BROADCLOTH UPHOLS.
28. NEEDLEWORK SEAM
29. WEATHERSTRIP
30. DARK WALNUT
31. LIGHT WALNUT
32. SATIN ALUMINUM
33. STAINLESS STEEL
34. FOLDING ARM REST
35. TRANSLUCENT SKYLIGHT
36. PRESS SWITCH
37. SLIDING GLASS PANEL
38. BLACK ENAMEL METAL
39. LICENCE HOLDER
40. RETRACT. FOOT STIRRUP
41. COMPASS
42. CLOCK
43. ALTIMETER
44. AIR SPEED
45. TACHOMETER
46. AMMETER
47. VOLTMETER
48. BANK/TURN
49. FUEL TANK SWITCH
50. THROTTLE
51. IGNITION
52. RADIO
53. ENGINE TEMP.
54. OIL PRESS
55. OIL TEMP.
56. PANEL LIGHT
57. FIXED GLASS
58. PLEATED TRIM
59. WALNUT FERRULE
60. CARPET

ALL UPHOLSTERY (CLOTH) WERE PLAIN OR PIN-STRIPED IN GREY OR BROWN (OR COLOR SHADED IN GREY). ALL LEATHER UPHOLSTERY WERE BLACK, BROWN, BEIGE, OR WERE DYED TO SHADES OF TRIM COLOR. CARPET WAS BLACK OR BROWN

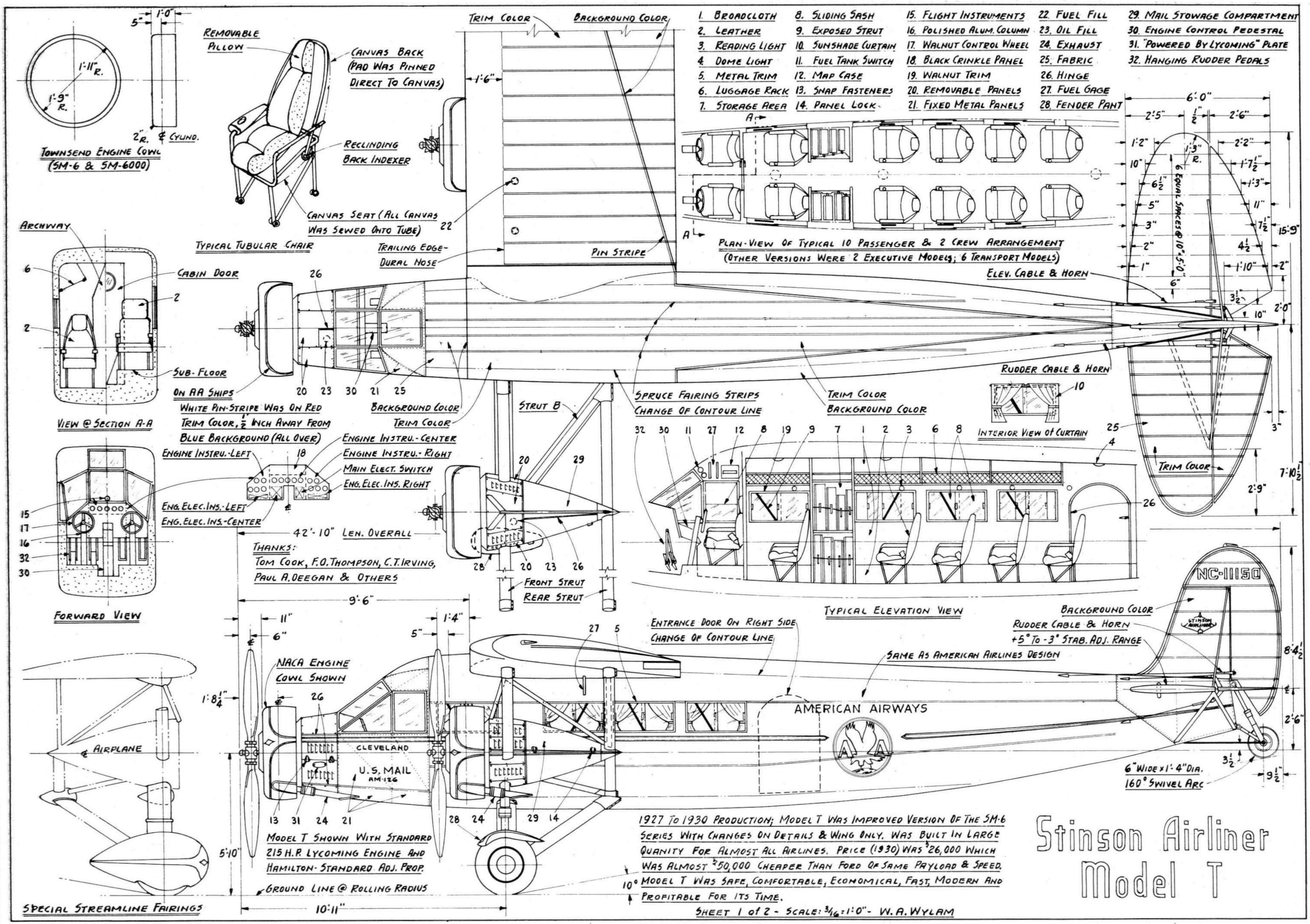
Stinson Reliant

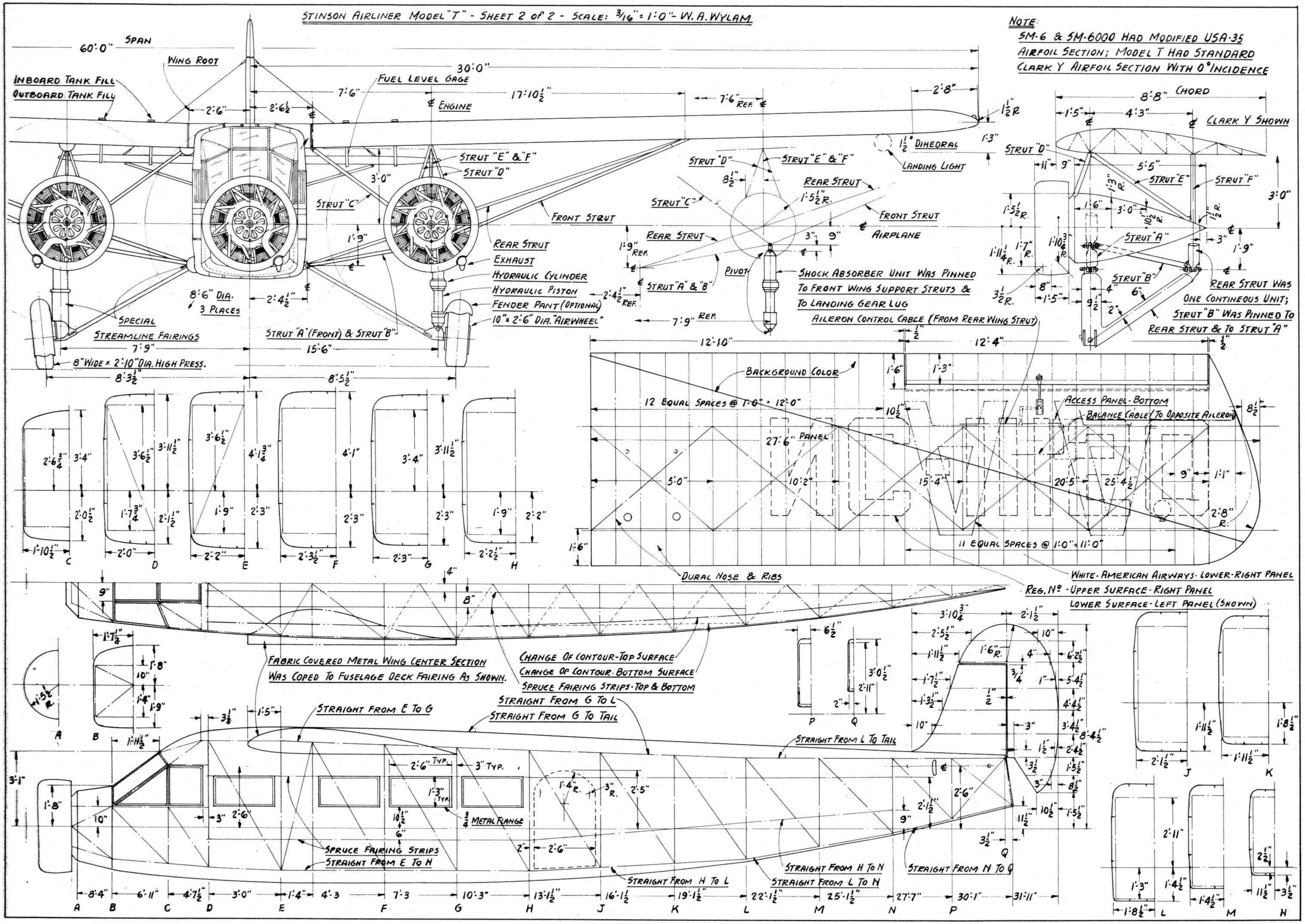
GULL-WING SERIES SCALE: 1/4" = 1'0" W.A. WYLAM

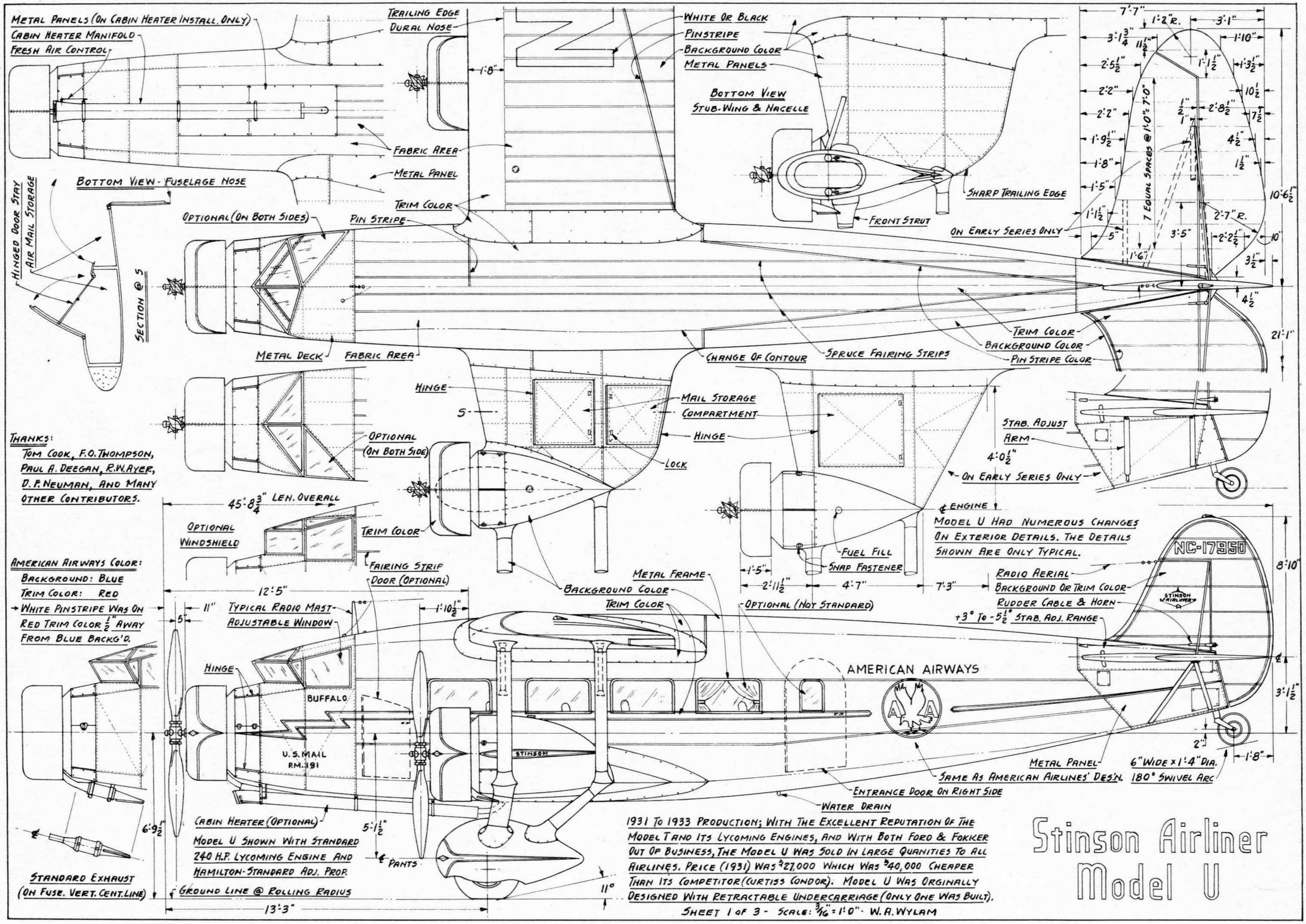

SHEET TEN
FIREWALL
STAB. ADJUST. CRANK SPROCKET
ENDLESS CHAIN
SPRUCE FAIRING STRIP-SIDE
DURAL FAIRING PANEL
SPRUCE FAIRING STRIPS
PRE-FORMED DURAL FIN FAIRING
PLAN
ELEVATION
BOTTOM
PRE-FORMED NOSE
PRE-FORMED CHANNEL
WING MOUNTING LUGS
PULLEYS
4'-4 7/8" REF.
TYPICAL FUSELAGE STRUCTURE (SR-8 SHOWN)
REFER TO SHEET FOUR FOR TYPICAL STAB. CONSTRUCTION
TYPICAL VERT. STAB. SECTION
DURAL PANEL
HINGE
PULLEY "C"
SPROCKET "A"
STAB. ADJUSTER
PULLEY "D"
AILERON CONTROL CABLE
PULLEY "F"
SUPER-STRUCTURE (BOTTOM VIEW)
RUDDER CABLE
ELEVATOR CABLE
SHOCK STRUT
FLYING POSITION
PIVOT POINT
PULLEYS "A"
PULLEY "B"
PULLEY "E"
ELEVATOR BELL-CRANK
PULLEYS
PLYWOOD FORMER
VIEW "B"
VIEW "C"
VIEW A
FUSELAGE STRUCTURE DIAGRAM (SR-8 SHOWN)
NOTE:
DETAILS SHOWN ARE FOR ALL RELIANT SR-6 TO SR-10-2 MODELS. AT-19 AND V-77 MODELS HAD DURAL FAIRING STRIPS AND DURAL FORMERS (NO WOOD).
DURAL FAIRING
TYPICAL FOOT STIRRUP DETAIL
SPRUCE FAIRING STRIPS
TYPICAL FUSELAGE DETAIL
LANDING GEAR AND WHEEL CONTROL ARRANGEMENT
WING BRACE YOKE (REF. SHEET FOUR)
RUDDER CONTROL CABLES
RUDDER PEDALS
PULLEYS "D & E"
PULLEY "A"
PULLEY "B"
ELEVATOR CONTROL HORN
AILERON CONTROL CABLE
WING ROOT
2'-2 1/2" REF.
IDLER "A"
SPROCKET "C"
IDLER "B"
IDLER "C"
PULLEY "F"
AIRPLANE
ELEV. PUSH-PULL TUBE
PULLEY "G"
1'-8 1/2" REF.
1'-11" REF.
ENGINE MOUNT
ELEVATOR CONTROL CABLE
WING BRACE YOKE AND LANDING GEAR LEG WAS PINNED TO-GETHER
SHAFT WAS PINNED TO WHEEL & SPROCKET
SPROCKET "C"
IDLER "A"
IDLER "B"
TO AILERON
IDLER "C"
PULLEY "B"
PULLEY "G"
CHAIN PORTION (CONNECTED TO CABLE)
PIVOT POINT-SPROCKET "A"
CHAIN
PULLEY "C"
ELEVATOR FRONT SPAR
SPLIT BEARING
STAB. JACK
ELEVATOR HORN
STABILIZER CRANKPLATE
STABILIZER ADJUSTER
PIVOT POINT
2'-4 1/2" REF.
OLEO-SPRING SHOCK ABSORBER
TRAILING BRACE
5'-3 1/2" REF.
REMOVABLE PANELS
TRAILING VEE BRACE
HINGED PANELS
HOLLOW SHAFT
FABRIC AREA
SUPPORT BEARING
HINGE
ELEV. PUSH-PULL TUBE
TO ELEVATOR HORN
ELEV. BELL CRANK
AILERON & ELEVATOR CONTROL
PULLEY "D"
PULLEY "E"
RUDDER HORN
SUPPORT BEARING
BRAKE CONTROL HORN
HINGED PEDAL
TYPICAL RUDDER CONTROL
WELDED BOX-SECTION LANDING GEAR LEG
FORGED AXLE STRUT (WELDED TO LEG)
2" NOMINAL
5 1/2"
NOM.
GROUND LINE (REF.)
6'-6" REF.
FLYING POSITION
TYPICAL BOTTOM VIEW (SR-8 SHOWN)
Stinson Reliant
GULL-WING SERIES
SCALE: 1/4" = 1'-0"
W. A. WYLAM

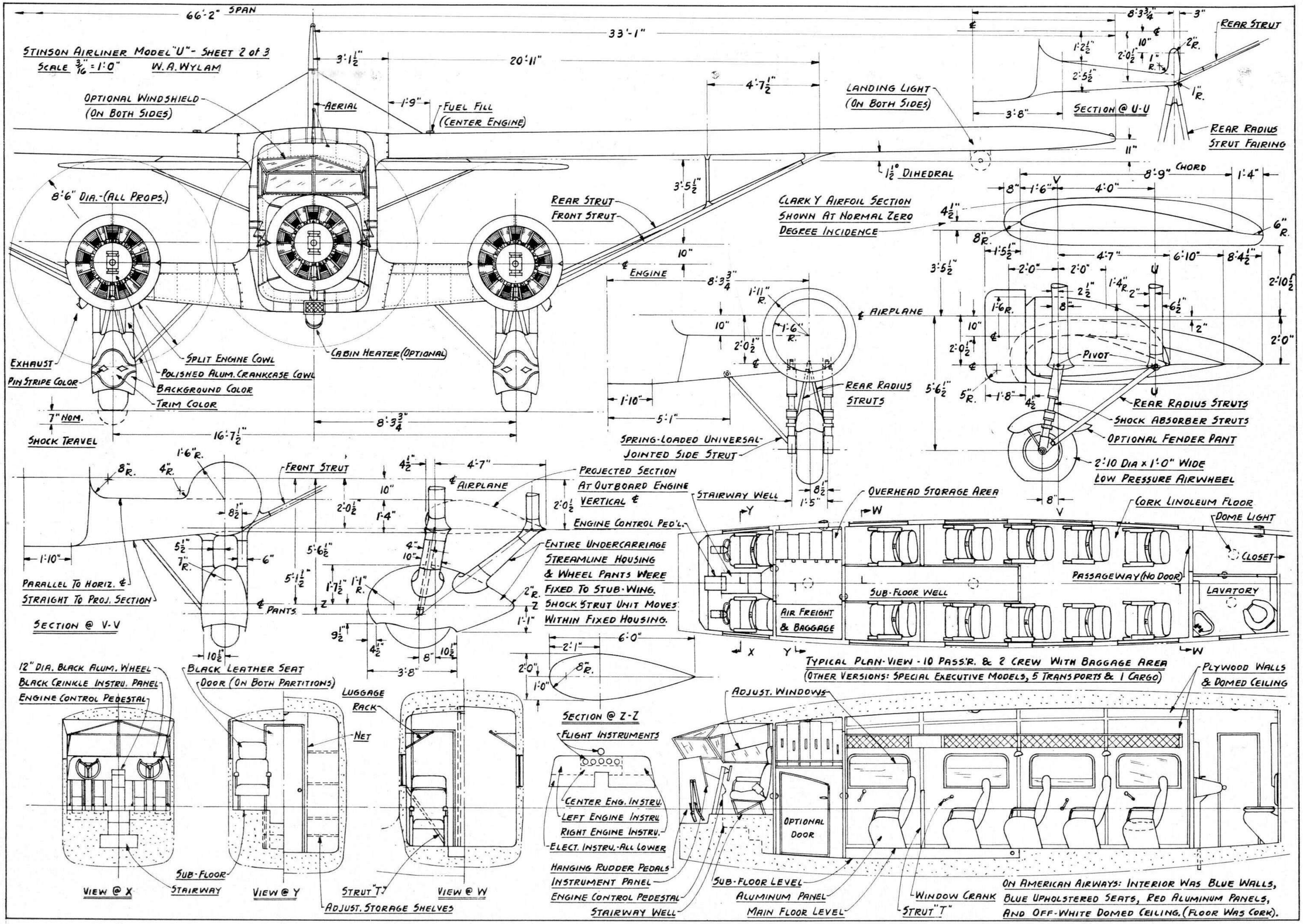
STINSON SR-10-2 or U.S. Army AT-19 these for export to Royal Navy

ROYAL NAVY
F8724

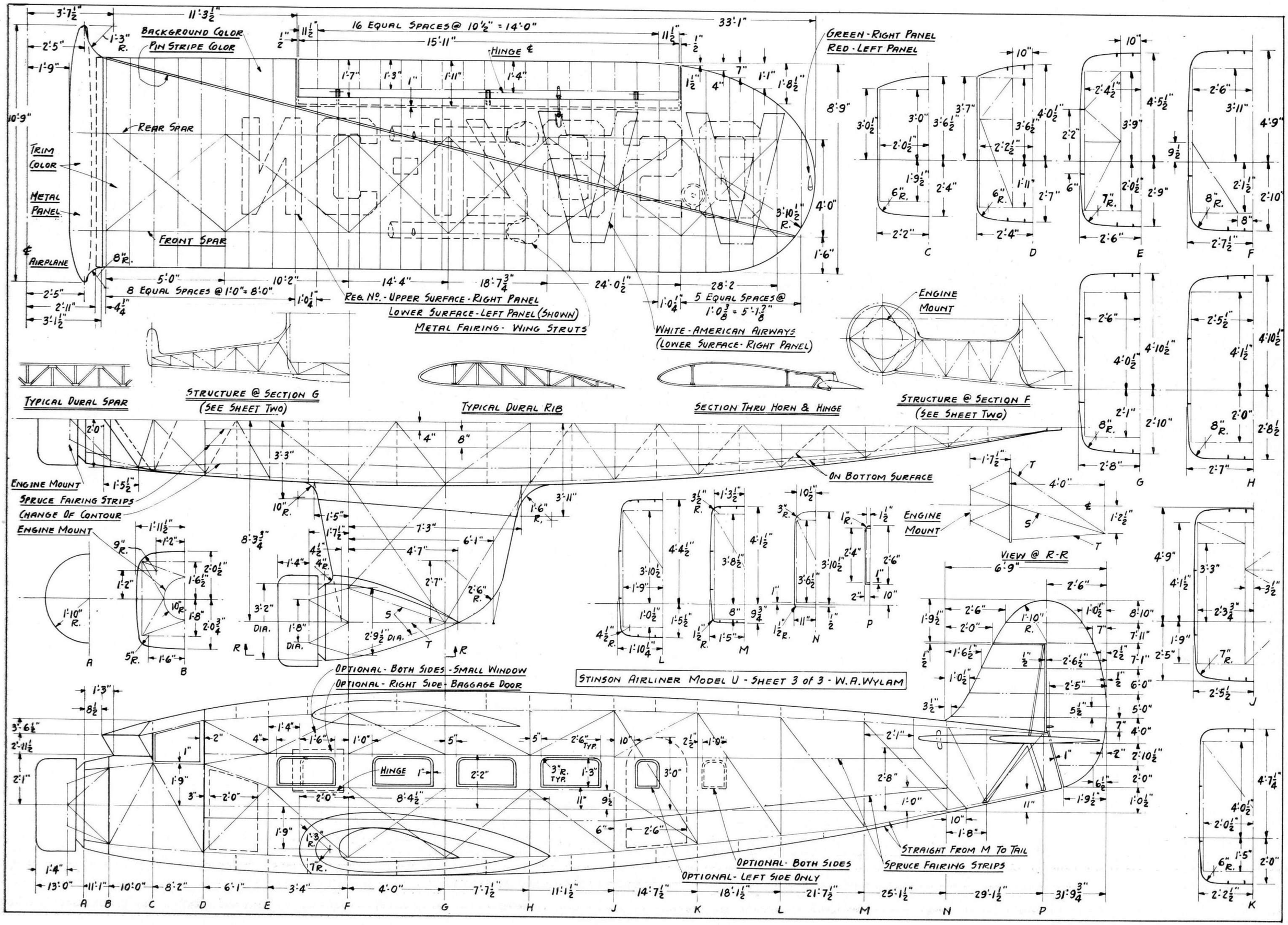

1. Broadcloth
2. Leather
3. Reading Light
4. Dome Light
5. Metal Trim
6. Luggage Rack
7. Storage Area
8. Sliding Sash
9. Exposed Strut
10. Sunshade Curtain
11. Fuel Tank Switch
12. Map Case
13. Snap Fasteners
14. Panel Lock
15. Flight Instruments
16. Polished Alum. Column
17. Walnut Control Wheel
18. Black Crinkle Panel
19. Walnut Trim
20. Removable Panels
21. Fixed Metal Panels
22. Fuel Fill
23. Oil Fill
24. Exhaust
25. Fabric
26. Hinge
27. Fuel Gage
28. Fender Pant
29. Mail Stowage Compartment
30. Engine Control Pedestal
31. "Powered By Lycoming" Plate
32. Hanging Rudder Pedals
Townsend Engine Cowl (SM-6 & SM-6000)
Removable Pillow
Canvas Back (Pad Was Pinned Direct To Canvas)
Reclinding Back Indexer
Canvas Seat (All Canvas Was Sewed Onto Tube)
Typical Tubular Chair
Trim Color
Background Color
Trailing Edge-Dural Nose
Pin Stripe
Plan-View Of Typical 10 Passenger & 2 Crew Arrangement
(Other Versions Were 2 Executive Models; 6 Transport Models)
Archway
Cabin Door
Sub-Floor
View @ Section A-A
On AA Ships
White Pin-Stripe Was On Red Trim Color, 1/2" Inch Away From Blue Background (All Over)
Background Color
Trim Color
Strut B
Spruce Fairing Strips
Change Of Contour Line
Trim Color
Background Color
Elev. Cable & Horn
Rudder Cable & Horn
Interior View Of Curtain
Trim Color
Engine Instru.-Center
Engine Instru.-Right
Main Elect. Switch
Eng. Elec. Ins. Right
Engine Instru.-Left
Eng. Elec. Ins.-Left
Eng. Elec. Ins.-Center
Forward View
42'-10" Len. Overall
Thanks:
Tom Cook, F.O. Thompson, C.T. Irving, Paul A. Deegan & Others
Front Strut
Rear Strut
Typical Elevation View
Entrance Door On Right Side
Change Of Contour Line
Same As American Airlines Design
Background Color
Rudder Cable & Horn
+5° To -3° Stab. Adj. Range
NC-11150
NACA Engine Cowl Shown
Airplane
Cleveland
U.S. Mail
AM-126
American Airways
6" Wide x 1'-4" Dia.
160° Swivel Arc
Model T Shown With Standard 215 H.P. Lycoming Engine And Hamilton-Standard Adj. Prop.
Ground Line @ Rolling Radius
Special Streamline Fairings
1927 To 1930 Production; Model T Was Improved Version Of The SM-6 Series With Changes On Details & Wing Only. Was Built In Large Quanity For Almost All Airlines. Price (1930) Was $26,000 Which Was Almost $50,000 Cheaper Than Ford Of Same Payload & Speed. Model T Was Safe, Comfortable, Economical, Fast, Modern And Profitable For Its Time.
Sheet 1 of 2 - Scale: 3/16=1'-0" - W. A. Wylam
Stinson Airliner
Model T


STINSON AIRLINER MODEL "T" - SHEET 2 of 2 - SCALE: 3/16" = 1'-0" - W. A. WYLAM
NOTE:
SM-6 & SM-6000 HAD MODIFIED USA-35 AIRFOIL SECTION; MODEL T HAD STANDARD CLARK Y AIRFOIL SECTION WITH 0° INCIDENCE
60'-0" SPAN
30'-0"
WING ROOT
INBOARD TANK FILL
OUTBOARD TANK FILL
FUEL LEVEL GAGE
ENGINE
17'-10½"
7'-6" REF.
2'-8"
1½" R.
1½° DIHEDRAL
LANDING LIGHT
8'-8" CHORD
CLARK Y SHOWN
STRUT "E" & "F"
STRUT "D"
STRUT "C"
FRONT STRUT
REAR STRUT
EXHAUST
HYDRAULIC CYLINDER
HYDRAULIC PISTON
FENDER PANT (OPTIONAL)
10" x 2'-6" DIA. AIRWHEEL
8'-6" DIA. 3 PLACES
SPECIAL STREAMLINE FAIRINGS
STRUT "A" (FRONT) & STRUT "B"
8" WIDE x 2'-10" DIA. HIGH PRESS.
STRUT "A" & "B"
PIVOT
AIRPLANE
SHOCK ABSORBER UNIT WAS PINNED TO FRONT WING SUPPORT STRUTS & TO LANDING GEAR LUG
AILERON CONTROL CABLE (FROM REAR WING STRUT)
REAR STRUT WAS ONE CONTINEOUS UNIT; STRUT "B" WAS PINNED TO REAR STRUT & TO STRUT "A"
BACKGROUND COLOR
12 EQUAL SPACES @ 1'-0" = 12'-0"
27'-6" PANEL
ACCESS PANEL - BOTTOM
BALANCE CABLE (TO OPPOSITE AILERON)
11 EQUAL SPACES @ 1'-0" = 11'-0"
DURAL NOSE & RIBS
WHITE - AMERICAN AIRWAYS - LOWER - RIGHT PANEL
REG. Nº - UPPER SURFACE - RIGHT PANEL
LOWER SURFACE - LEFT PANEL (SHOWN)
FABRIC COVERED METAL WING CENTER SECTION WAS COPED TO FUSELAGE DECK FAIRING AS SHOWN.
CHANGE OF CONTOUR - TOP SURFACE
CHANGE OF CONTOUR - BOTTOM SURFACE
SPRUCE FAIRING STRIPS - TOP & BOTTOM
STRAIGHT FROM E TO G
STRAIGHT FROM G TO L
STRAIGHT FROM G TO TAIL
STRAIGHT FROM L TO TAIL
2'-6" TYP.
3" TYP.
1'-3" TYP.
¾ METAL FLANGE
SPRUCE FAIRING STRIPS STRAIGHT FROM E TO H
STRAIGHT FROM H TO L
STRAIGHT FROM H TO N
STRAIGHT FROM L TO N
STRAIGHT FROM N TO Q
A B C D E F G H J K L M N P Q

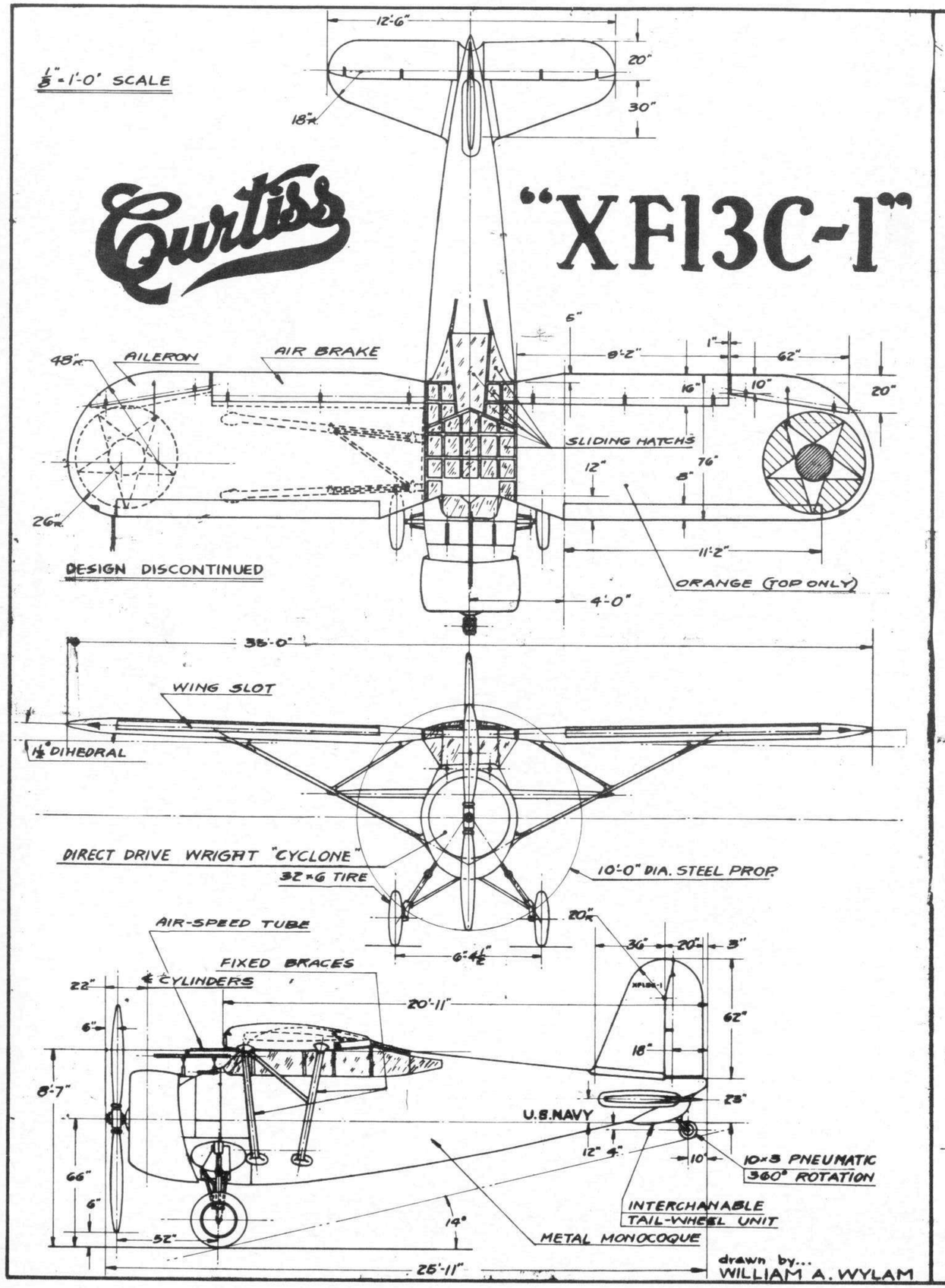

METAL PANELS (ON CABIN HEATER INSTALL. ONLY)
CABIN HEATER MANIFOLD
FRESH AIR CONTROL
TRAILING EDGE
DURAL NOSE
1'-8"
WHITE OR BLACK
PINSTRIPE
BACKGROUND COLOR
METAL PANELS
BOTTOM VIEW
STUB-WING & NACELLE
FABRIC AREA
METAL PANEL
BOTTOM VIEW - FUSELAGE NOSE
TRIM COLOR
OPTIONAL (ON BOTH SIDES)
PIN STRIPE
FRONT STRUT
SHARP TRAILING EDGE
ON EARLY SERIES ONLY
7 EQUAL SPACES @ 1'-0" = 7'-0"
7'-7"
1'-2" R.
3'-1"
2'-7" R.
10'-6½"
21'-1"
HINGED DOOR STAY
AIR MAIL STORAGE
SECTION @ S
METAL DECK
FABRIC AREA
CHANGE OF CONTOUR
SPRUCE FAIRING STRIPS
TRIM COLOR
BACKGROUND COLOR
PIN STRIPE COLOR
HINGE
MAIL STORAGE
COMPARTMENT
HINGE
LOCK
OPTIONAL
(ON BOTH SIDE)
STAB. ADJUST
ARM
4'-0½"
ON EARLY SERIES ONLY
THANKS:
TOM COOK, F.O. THOMPSON,
PAUL A. DEEGAN, R.W. AYER,
D.F. NEUMAN, AND MANY
OTHER CONTRIBUTORS.
45'-8¾" LEN. OVERALL
OPTIONAL
WINDSHIELD
TRIM COLOR
FAIRING STRIP
DOOR (OPTIONAL)
℄ ENGINE
MODEL U HAD NUMEROUS CHANGES
ON EXTERIOR DETAILS. THE DETAILS
SHOWN ARE ONLY TYPICAL.
FUEL FILL
SNAP FASTENER
AMERICAN AIRWAYS COLOR:
BACKGROUND: BLUE
TRIM COLOR: RED
WHITE PINSTRIPE WAS ON
RED TRIM COLOR ½" AWAY
FROM BLUE BACKG'D.
12'-5"
11"
5"
TYPICAL RADIO MAST
ADJUSTABLE WINDOW
1'-10½"
METAL FRAME
BACKGROUND COLOR
TRIM COLOR
OPTIONAL (NOT STANDARD)
1'-5"
2'-11½"
4'-7"
7'-3"
RADIO AERIAL
BACKGROUND OR TRIM COLOR
RUDDER CABLE & HORN
+3° TO -5½° STAB. ADJ. RANGE
NC-17950
STINSON AIRLINER
8'-10"
HINGE
BUFFALO
U.S. MAIL
P.M. 191
STINSON
AMERICAN AIRWAYS
AYA
℄
3'-1½"
2"
1'-8"
METAL PANEL
SAME AS AMERICAN AIRLINES' DES'N.
6" WIDE x 1'-4" DIA.
180° SWIVEL ARC
ENTRANCE DOOR ON RIGHT SIDE
WATER DRAIN
6'-9½"
CABIN HEATER (OPTIONAL)
MODEL U SHOWN WITH STANDARD
240 H.P. LYCOMING ENGINE AND
HAMILTON-STANDARD ADJ. PROP.
5'-1½"
℄ PANTS
STANDARD EXHAUST
(ON FUSE. VERT. CENT. LINE)
GROUND LINE @ ROLLING RADIUS
11°
13'-3"
1931 TO 1933 PRODUCTION; WITH THE EXCELLENT REPUTATION OF THE
MODEL T AND ITS LYCOMING ENGINES, AND WITH BOTH FORD & FOKKER
OUT OF BUSINESS, THE MODEL U WAS SOLD IN LARGE QUANITIES TO ALL
AIRLINES. PRICE (1931) WAS $27,000 WHICH WAS $40,000 CHEAPER
THAN ITS COMPETITOR (CURTISS CONDOR). MODEL U WAS ORGINALLY
DESIGNED WITH RETRACTABLE UNDERCARRIAGE (ONLY ONE WAS BUILT).
SHEET 1 OF 3 - SCALE: 3/16" = 1'-0" - W.A. WYLAM
Stinson Airliner
Model U

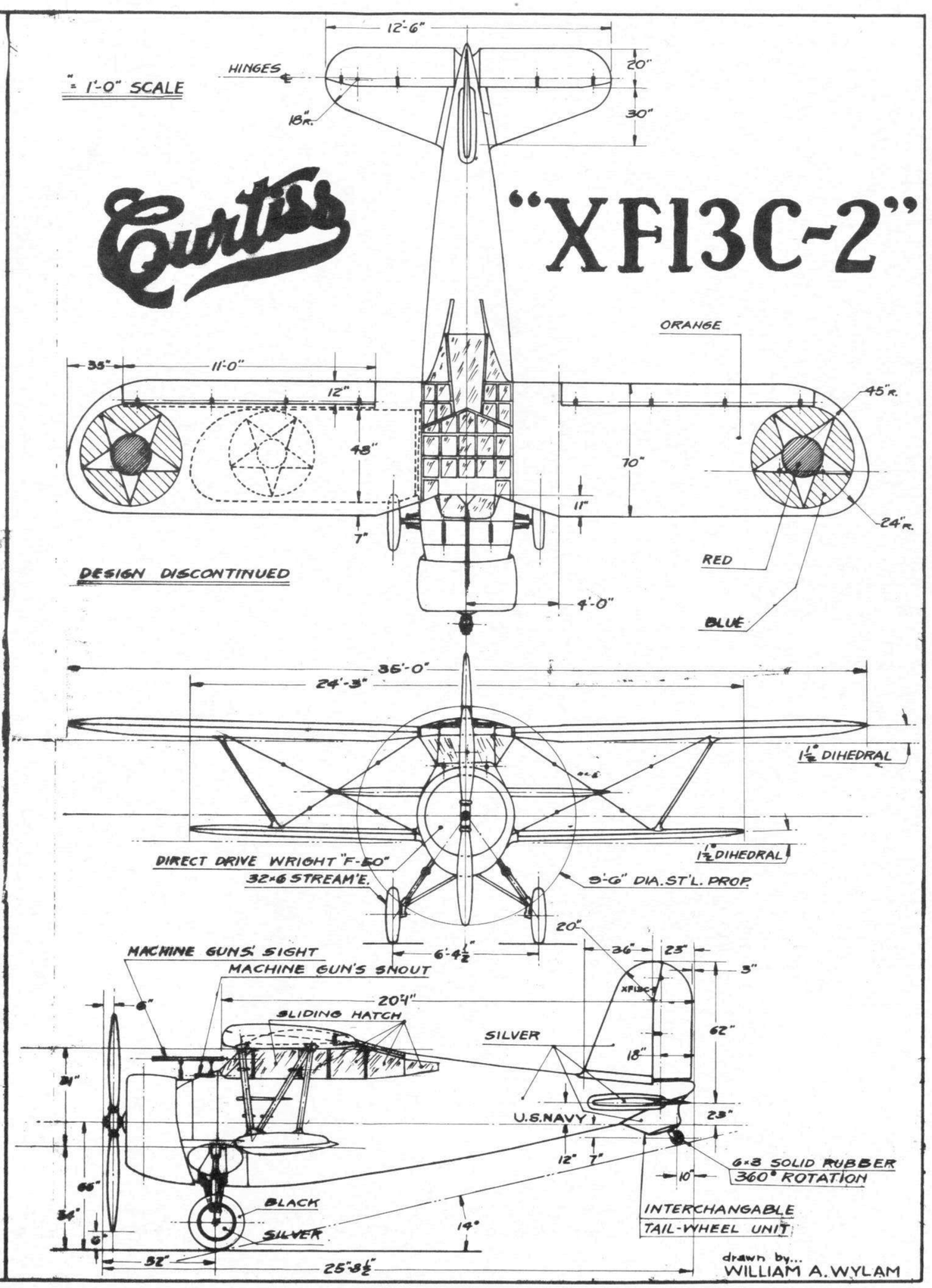

STINSON AIRLINER MODEL "U" - SHEET 2 of 3
SCALE 3/16" = 1'-0"
W. A. WYLAM
66'-2" SPAN
33'-1"
20'-11"
3'-1½"
4'-7½"
1'-9"
OPTIONAL WINDSHIELD (ON BOTH SIDES)
AERIAL
FUEL FILL (CENTER ENGINE)
LANDING LIGHT (ON BOTH SIDES)
1½° DIHEDRAL
8'-6" DIA.-(ALL PROPS.)
REAR STRUT
FRONT STRUT
3'-5½"
10"
CLARK Y AIRFOIL SECTION SHOWN AT NORMAL ZERO DEGREE INCIDENCE
8'-9" CHORD
1'-4"
4'-0"
1'-6"
8"
4½"
6" R.
8" R.
1'-5½"
4'-7"
6'-10"
8'-4½"
2'-10½"
2'-0"
EXHAUST
PIN STRIPE COLOR
SPLIT ENGINE COWL
POLISHED ALUM. CRANKCASE COWL
BACKGROUND COLOR
TRIM COLOR
CABIN HEATER (OPTIONAL)
7" NOM.
SHOCK TRAVEL
16'-7½"
8'-3¾"
℄ ENGINE
℄ AIRPLANE
1'-11" R.
1'-6" R.
2'-0½"
1'-10"
5'-1"
REAR RADIUS STRUTS
SPRING-LOADED UNIVERSAL-JOINTED SIDE STRUT
PIVOT
5'-6½"
5" R.
1'-8"
4½"
REAR RADIUS STRUTS
SHOCK ABSORBER STRUTS
OPTIONAL FENDER PANT
2'-10 DIA x 1'-0" WIDE LOW PRESSURE AIRWHEEL
8½"
1'-5"
8"
REAR STRUT
2" R.
1" R.
1'-2½"
2'-5½"
3'-8"
SECTION @ U-U
REAR RADIUS STRUT FAIRING
11"
8" R.
4" R.
1'-6" R.
FRONT STRUT
4½"
4'-7"
℄ AIRPLANE
PROJECTED SECTION AT OUTBOARD ENGINE VERTICAL ℄
ENGINE CONTROL PED'L.
ENTIRE UNDERCARRIAGE STREAMLINE HOUSING & WHEEL PANTS WERE FIXED TO STUB-WING. SHOCK STRUT UNIT MOVES WITHIN FIXED HOUSING.
1'-4"
5½"
7" R.
6"
5'-6½"
5'-1½"
1'-7½"
1'-1" R.
2" R.
1'-1"
℄ PANTS
9½"
4½"
8"
10½"
3'-8"
1'-10"
PARALLEL TO HORIZ. ℄
STRAIGHT TO PROJ. SECTION
SECTION @ V-V
6'-0"
2'-1"
2'-0"
1'-0"
8" R.
SECTION @ Z-Z
STAIRWAY WELL
OVERHEAD STORAGE AREA
CORK LINOLEUM FLOOR
DOME LIGHT
CLOSET
PASSAGEWAY (NO DOOR)
LAVATORY
SUB-FLOOR WELL
AIR FREIGHT & BAGGAGE
TYPICAL PLAN-VIEW - 10 PASS'R. & 2 CREW WITH BAGGAGE AREA
(OTHER VERSIONS: SPECIAL EXECUTIVE MODELS, 5 TRANSPORTS & 1 CARGO)
12" DIA. BLACK ALUM. WHEEL
BLACK CRINKLE INSTRU. PANEL
ENGINE CONTROL PEDESTAL
BLACK LEATHER SEAT
DOOR (ON BOTH PARTITIONS)
LUGGAGE RACK
NET
FLIGHT INSTRUMENTS
CENTER ENG. INSTRU.
LEFT ENGINE INSTRU.
RIGHT ENGINE INSTRU.
ELECT. INSTRU.-ALL LOWER
HANGING RUDDER PEDALS
INSTRUMENT PANEL
ENGINE CONTROL PEDESTAL
STAIRWAY WELL
ADJUST. WINDOWS
PLYWOOD WALLS & DOMED CEILING
OPTIONAL DOOR
SUB-FLOOR LEVEL
ALUMINUM PANEL
MAIN FLOOR LEVEL
WINDOW CRANK
STRUT "T"
SUB-FLOOR STAIRWAY
STRUT "T"
ADJUST. STORAGE SHELVES
VIEW @ X
VIEW @ Y
VIEW @ W
ON AMERICAN AIRWAYS: INTERIOR WAS BLUE WALLS, BLUE UPHOLSTERED SEATS, RED ALUMINUM PANELS, AND OFF-WHITE DOMED CEILING. (FLOOR WAS CORK).

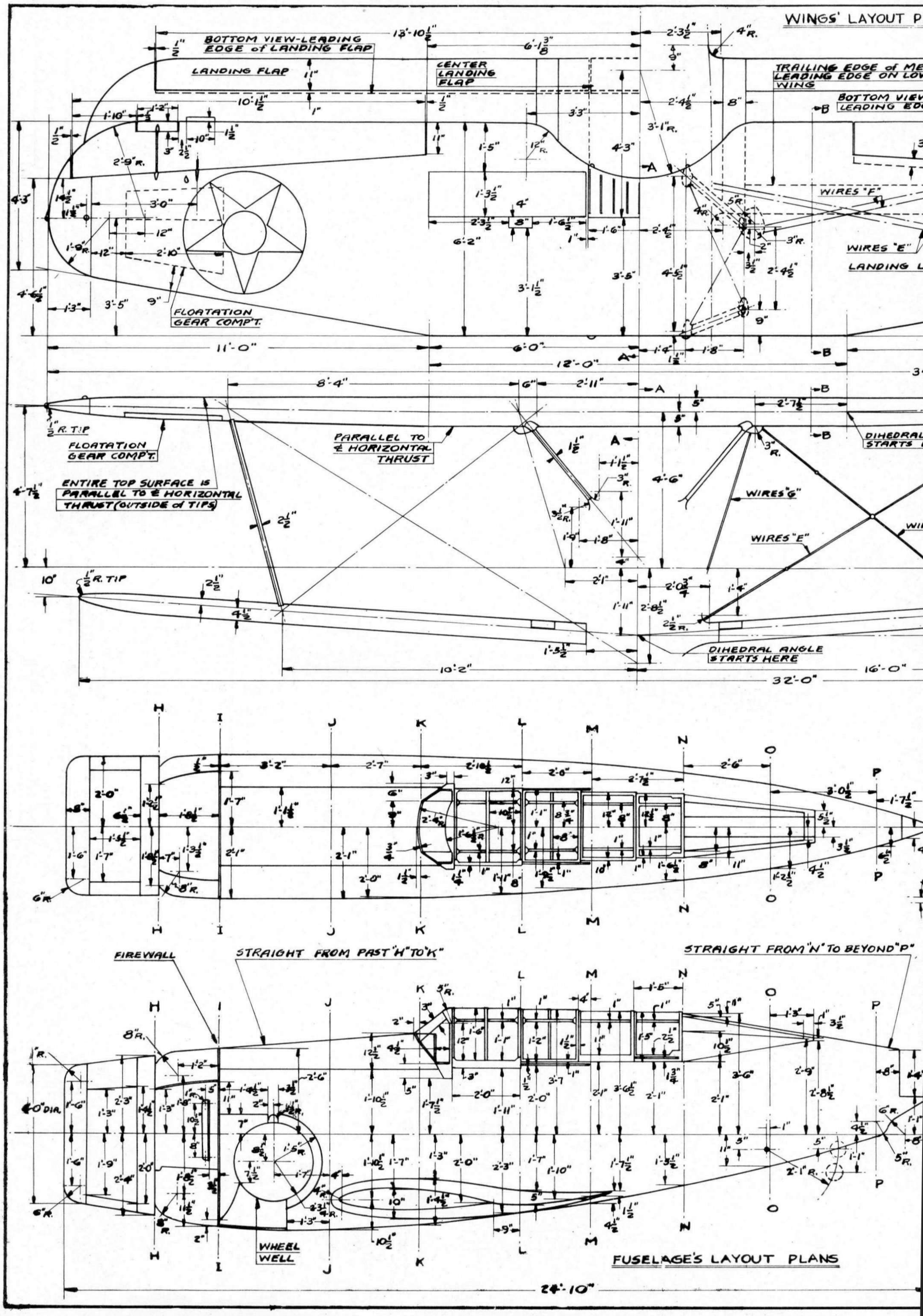
STINSON AIRLINER, Model "T"

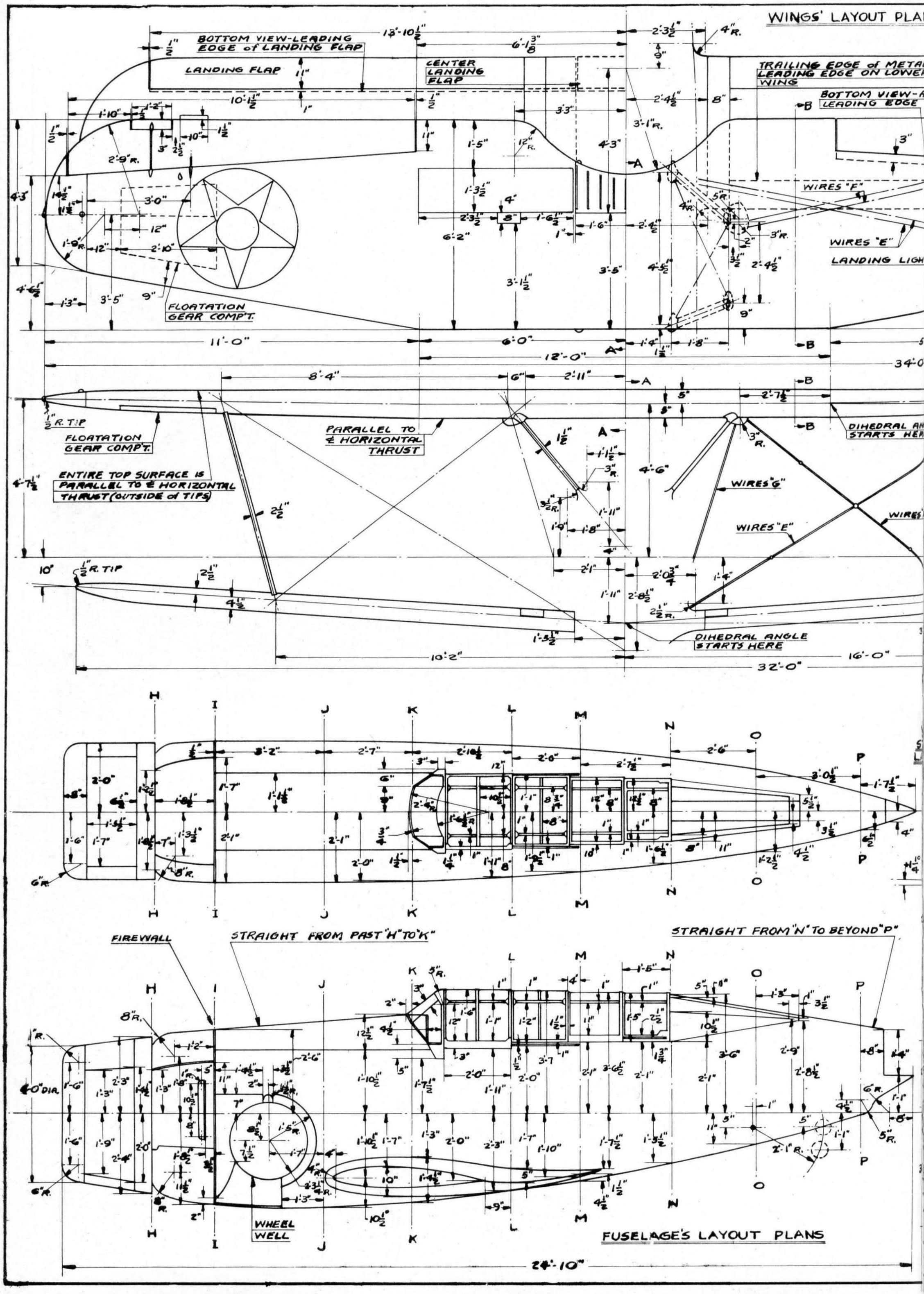

BACKGROUND COLOR
PIN STRIPE COLOR
16 EQUAL SPACES @ 10½" = 14'-0"
33'-1"
15'-11"
HINGE ℄
GREEN - RIGHT PANEL
RED - LEFT PANEL
REAR SPAR
TRIM COLOR
METAL PANEL
FRONT SPAR
℄ AIRPLANE
8 EQUAL SPACES @ 1'-0" = 8'-0"
REG. No. - UPPER SURFACE - RIGHT PANEL
LOWER SURFACE - LEFT PANEL (SHOWN)
METAL FAIRING - WING STRUTS
5 EQUAL SPACES @ 1'-0 3/8" = 5'-1 7/8"
WHITE - AMERICAN AIRWAYS
(LOWER SURFACE - RIGHT PANEL)
ENGINE MOUNT
TYPICAL DURAL SPAR
STRUCTURE @ SECTION G
(SEE SHEET TWO)
TYPICAL DURAL RIB
SECTION THRU HORN & HINGE
STRUCTURE @ SECTION F
(SEE SHEET TWO)
ON BOTTOM SURFACE
ENGINE MOUNT
SPRUCE FAIRING STRIPS
CHANGE OF CONTOUR
ENGINE MOUNT
VIEW @ R-R
OPTIONAL - BOTH SIDES - SMALL WINDOW
OPTIONAL - RIGHT SIDE - BAGGAGE DOOR
STINSON AIRLINER MODEL U - SHEET 3 of 3 - W.A. WYLAM
HINGE
OPTIONAL - BOTH SIDES
OPTIONAL - LEFT SIDE ONLY
STRAIGHT FROM M TO TAIL
SPRUCE FAIRING STRIPS

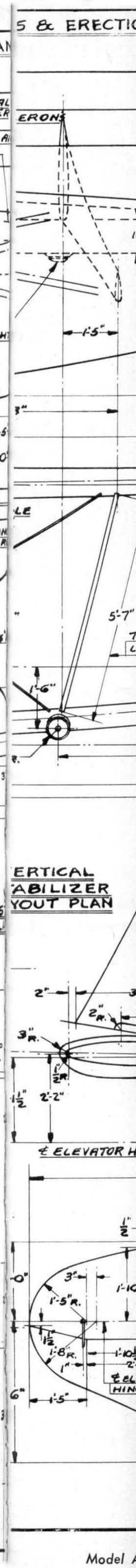
CURTISS XF13C-2, Dec. 1933–
Note Model 1 designation still on Rudder

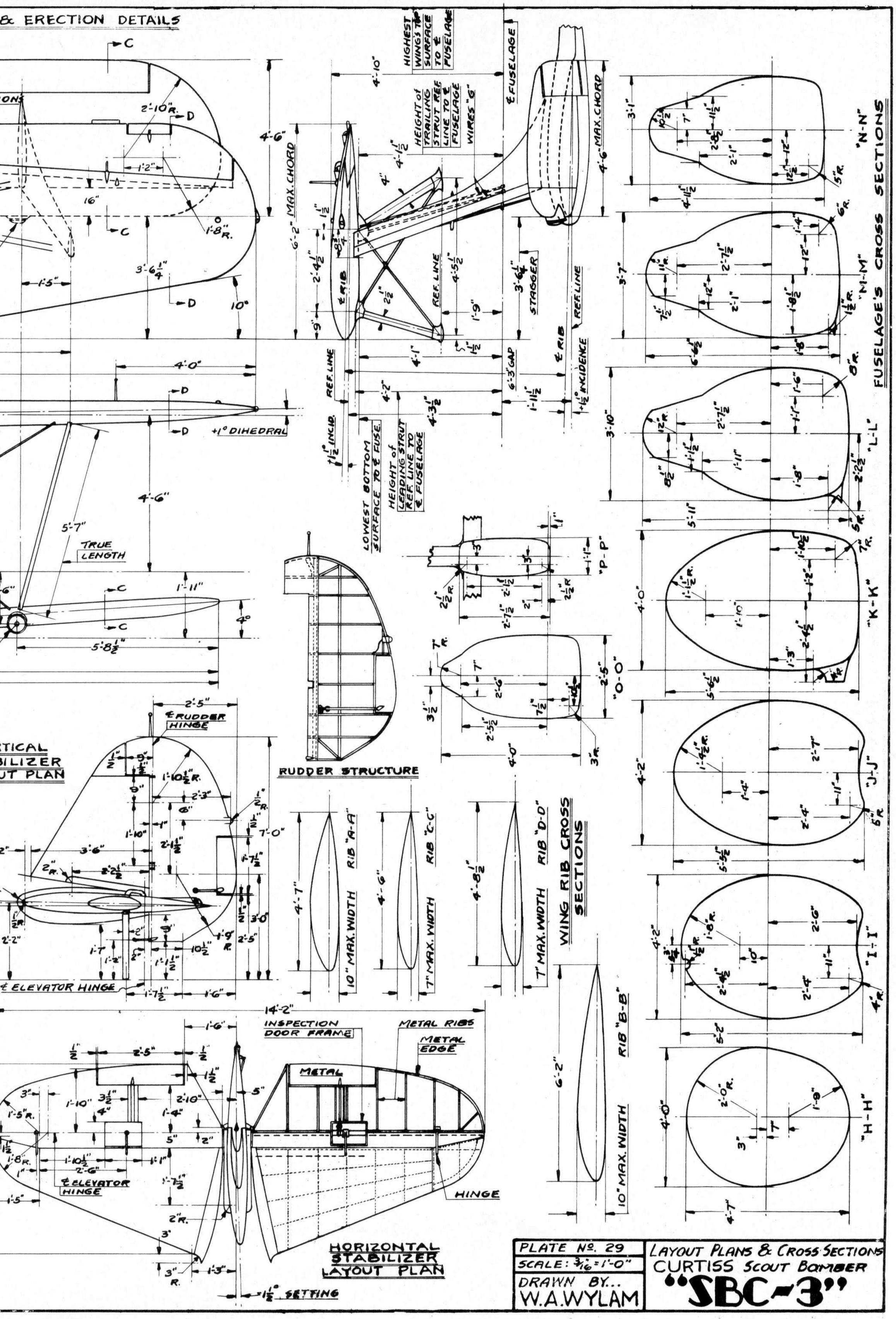

1/8" = 1'-0" SCALE
Curtiss
"XF13C-1"
12'-6"
20"
30"
18"R.
48"R.
AILERON
AIR BRAKE
5"
8'-2"
1"
62"
16"
10"
20"
SLIDING HATCHS
12"
76"
8"
26"R.
DESIGN DISCONTINUED
11'-2"
ORANGE (TOP ONLY)
4'-0"
36'-0"
WING SLOT
1½" DIHEDRAL
DIRECT DRIVE WRIGHT "CYCLONE"
32"×6 TIRE
10'-0" DIA. STEEL PROP.
AIR-SPEED TUBE
FIXED BRACES
22"
℄ CYLINDERS
20'-11"
6"
8'-7"
66"
6"
52"
6'-4½"
20"R.
36"
20"
3"
62"
18"
28"
U.S.NAVY
12"
4"
10"
10×3 PNEUMATIC
360° ROTATION
INTERCHANABLE
TAIL-WHEEL UNIT
14°
METAL MONOCOQUE
26'-11"
drawn by...
WILLIAM A. WYLAM

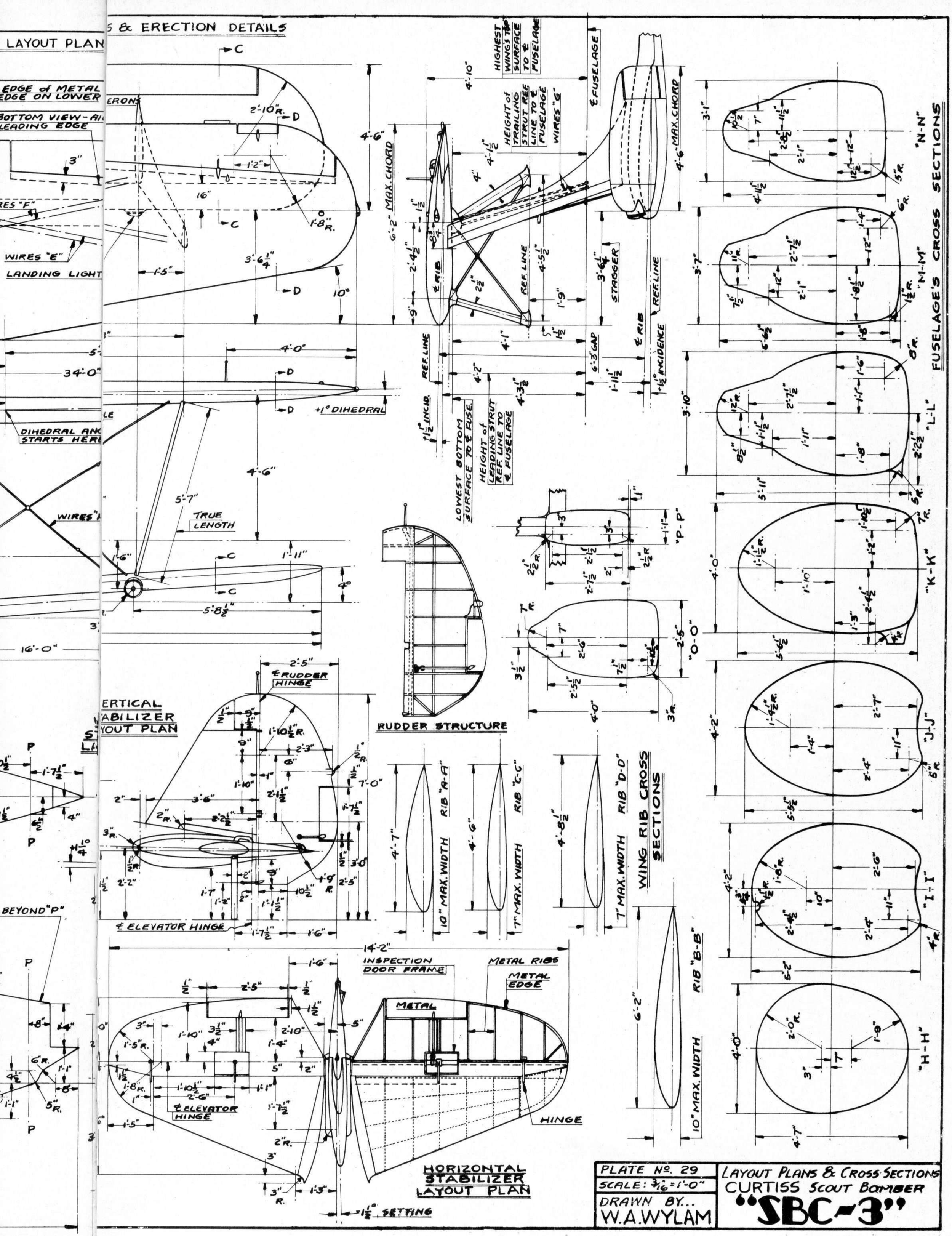

1/8" = 1'-0" SCALE
HINGES
12'-6"
20"
30"
18"R.
Curtiss
"XF13C-2"
ORANGE
35"
11'-0"
12"
48"
7"
45"R.
70"
11"
24"R.
RED
BLUE
DESIGN DISCONTINUED
4'-0"
36'-0"
24'-3"
1½" DIHEDRAL
DIRECT DRIVE WRIGHT "F-50"
32"×6 STREAM'E.
9'-6" DIA. ST'L. PROP.
MACHINE GUNS' SIGHT
MACHINE GUN'S SNOUT
6"
20'-4"
SLIDING HATCH
SILVER
21"
66"
34"
6"
BLACK
SILVER
6'-4½"
20"
36"
23"
3"
62"
18"
23"
U.S.NAVY
12"
7"
10"
6×3 SOLID RUBBER
360° ROTATION
INTERCHANGABLE
TAIL-WHEEL UNIT
14°
52"
25'-8½"
drawn by...
WILLIAM A. WYLAM


WINGS' LAYOUT P
BOTTOM VIEW-LEADING EDGE of LANDING FLAP
LANDING FLAP
CENTER LANDING FLAP
TRAILING EDGE of ME
LEADING EDGE ON LOW
WING
BOTTOM VIEW
LEADING EDG
WIRES "F"
WIRES "E"
LANDING L
FLOATATION GEAR COMP'T.
PARALLEL TO ℄ HORIZONTAL THRUST
DIHEDRAL STARTS
ENTIRE TOP SURFACE IS PARALLEL TO ℄ HORIZONTAL THRUST (OUTSIDE of TIPS)
WIRES "G"
WIRES "E"
DIHEDRAL ANGLE STARTS HERE
FIREWALL
STRAIGHT FROM PAST "H" TO "K"
STRAIGHT FROM "N" TO BEYOND "P"
WHEEL WELL
FUSELAGE'S LAYOUT PLANS


WINGS' LAYOUT PLAN
BOTTOM VIEW-LEADING EDGE of LANDING FLAP
LANDING FLAP
CENTER LANDING FLAP
TRAILING EDGE of METAL LEADING EDGE ON LOWER WING
BOTTOM VIEW-AI LEADING EDGE
WIRES "F"
WIRES "E"
LANDING LIGHT
FLOATATION GEAR COMP'T.
PARALLEL TO ℄ HORIZONTAL THRUST
DIHEDRAL AN STARTS HER
ENTIRE TOP SURFACE IS PARALLEL TO ℄ HORIZONTAL THRUST (OUTSIDE of TIPS)
WIRES "G"
DIHEDRAL ANGLE STARTS HERE
FIREWALL
STRAIGHT FROM PAST "H" TO "K"
STRAIGHT FROM "N" TO BEYOND "P"
WHEEL WELL
FUSELAGE'S LAYOUT PLANS


5 & ERECTIO
ERONS
ERTICAL
ABILIZER
YOUT PLAN
℄ ELEVATOR H


& ERECTION DETAILS
VERTICAL STABILIZER LAYOUT PLAN
TRUE LENGTH
+1° DIHEDRAL
℄ RUDDER HINGE
℄ ELEVATOR HINGE
RUDDER STRUCTURE
HORIZONTAL STABILIZER LAYOUT PLAN
INSPECTION DOOR FRAME
METAL RIBS
METAL EDGE
METAL
HINGE
1½° SETTING
HIGHEST WING'S TOP SURFACE TO ℄ FUSELAGE
HEIGHT of TRAILING STRUT REF. LINE TO ℄ FUSELAGE WIRES "G"
HEIGHT of LEADING STRUT REF. LINE TO ℄ FUSELAGE
LOWEST BOTTOM SURFACE TO ℄ FUSE.
REF. LINE
STAGGER
6'-3" GAP
+1½° INCIDENCE
+1½° INCID.
℄ FUSELAGE
℄ RIB
4'-6" MAX. CHORD
6'-2" MAX. CHORD
FUSELAGE'S CROSS SECTIONS
"N-N"
"M-M"
"L-L"
"K-K"
"J-J"
"I-I"
"H-H"
"P-P"
"O-O"
WING RIB CROSS SECTIONS
RIB "A-A"
10" MAX. WIDTH
RIB "C-C"
7" MAX. WIDTH
RIB "D-D"
7" MAX. WIDTH
RIB "B-B"
10" MAX. WIDTH
PLATE No. 29
SCALE: 3/16" = 1'-0"
DRAWN BY... W.A.WYLAM
LAYOUT PLANS & CROSS SECTIONS
CURTISS SCOUT BOMBER
"SBC-3"

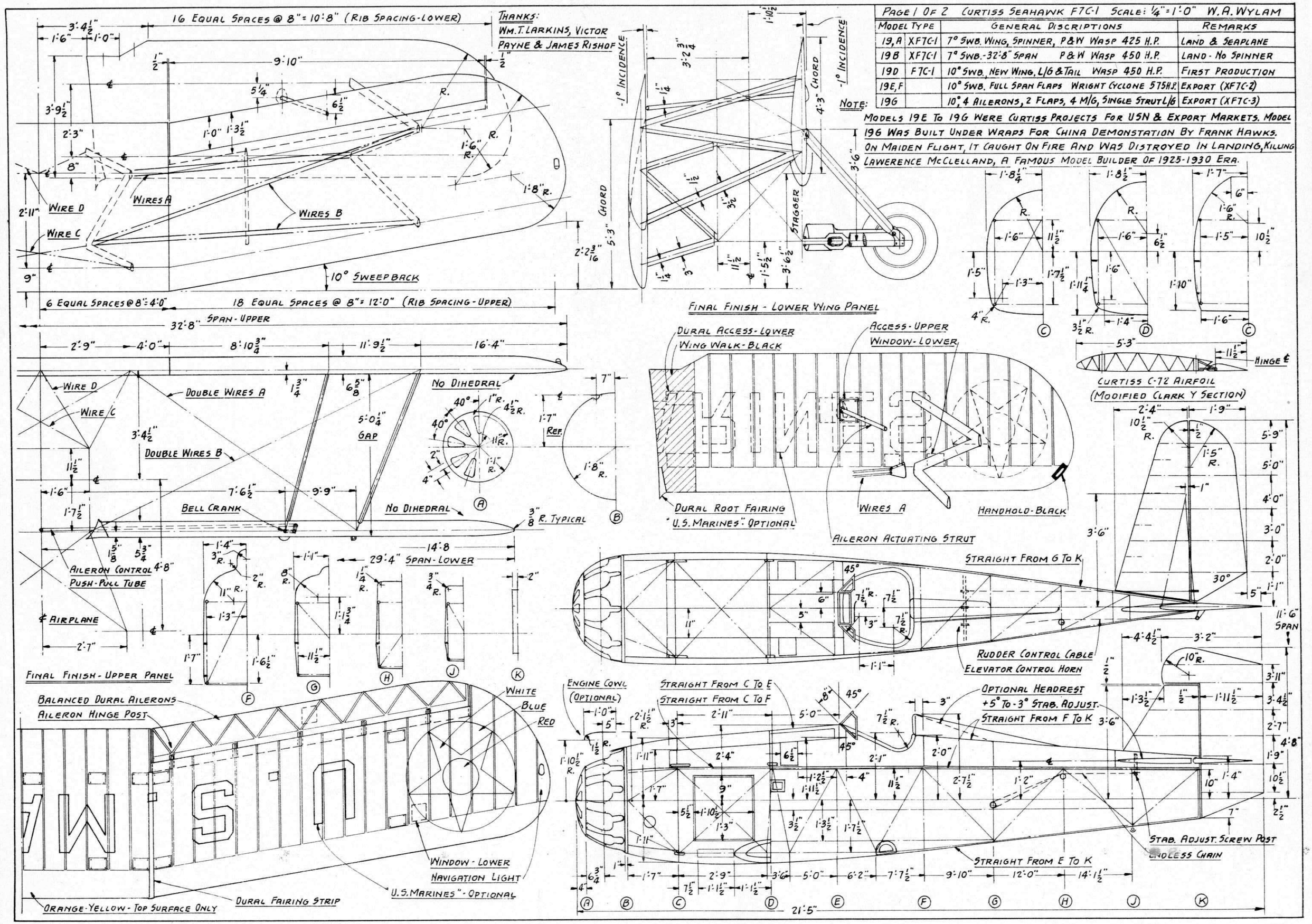

LAYOUT PLAN
EDGE of METAL
EDGE ON LOWER
BOTTOM VIEW-AI
LEADING EDGE
WIRES "F"
WIRES "E"
LANDING LIGHT
34'-0"
DIHEDRAL ANG
STARTS HERE
WIRES "A"
16'-0"
BEYOND "P"
S & ERECTION DETAILS
ERONS
2'-10" R.
1'-2"
16"
1'-8" R.
1'-5"
3'-6 1/4"
10°
4'-6"
6'-2" MAX. CHORD
4'-0"
+1° DIHEDRAL
5'-7"
TRUE LENGTH
1'-6"
1'-11"
4°
5'-8 1/2"
HIGHEST WING'S TOP SURFACE TO ℄ FUSELAGE
HEIGHT of TRAILING STRUT REF. LINE TO ℄ FUSELAGE WIRES "G"
℄ FUSELAGE
4'-10"
4'-6" MAX. CHORD
℄ RIB
REF. LINE
3'-6 1/4" STAGGER
6'-3" GAP
+1 1/2° INCIDENCE
+1 1/2° INCID.
LOWEST BOTTOM SURFACE TO ℄ FUSE.
HEIGHT of LEADING STRUT REF. LINE TO ℄ FUSELAGE
FUSELAGE'S CROSS SECTIONS
"N-N"
"M-M"
"L-L"
"K-K"
"J-J"
"I-I"
"H-H"
"P-P"
"O-O"
VERTICAL STABILIZER LAYOUT PLAN
℄ RUDDER HINGE
℄ ELEVATOR HINGE
RUDDER STRUCTURE
RIB "A-A"
RIB "C-C"
RIB "D-D"
10" MAX. WIDTH
7" MAX. WIDTH
WING RIB CROSS SECTIONS
RIB "B-B"
6'-2"
14'-2"
INSPECTION DOOR FRAME
METAL RIBS
METAL EDGE
METAL
℄ ELEVATOR HINGE
HINGE
HORIZONTAL STABILIZER LAYOUT PLAN
1 1/2° SETTING
PLATE No. 29
SCALE: 3/16" = 1'-0"
DRAWN BY... W.A.WYLAM
LAYOUT PLANS & CROSS SECTIONS
CURTISS SCOUT BOMBER
"SBC-3"

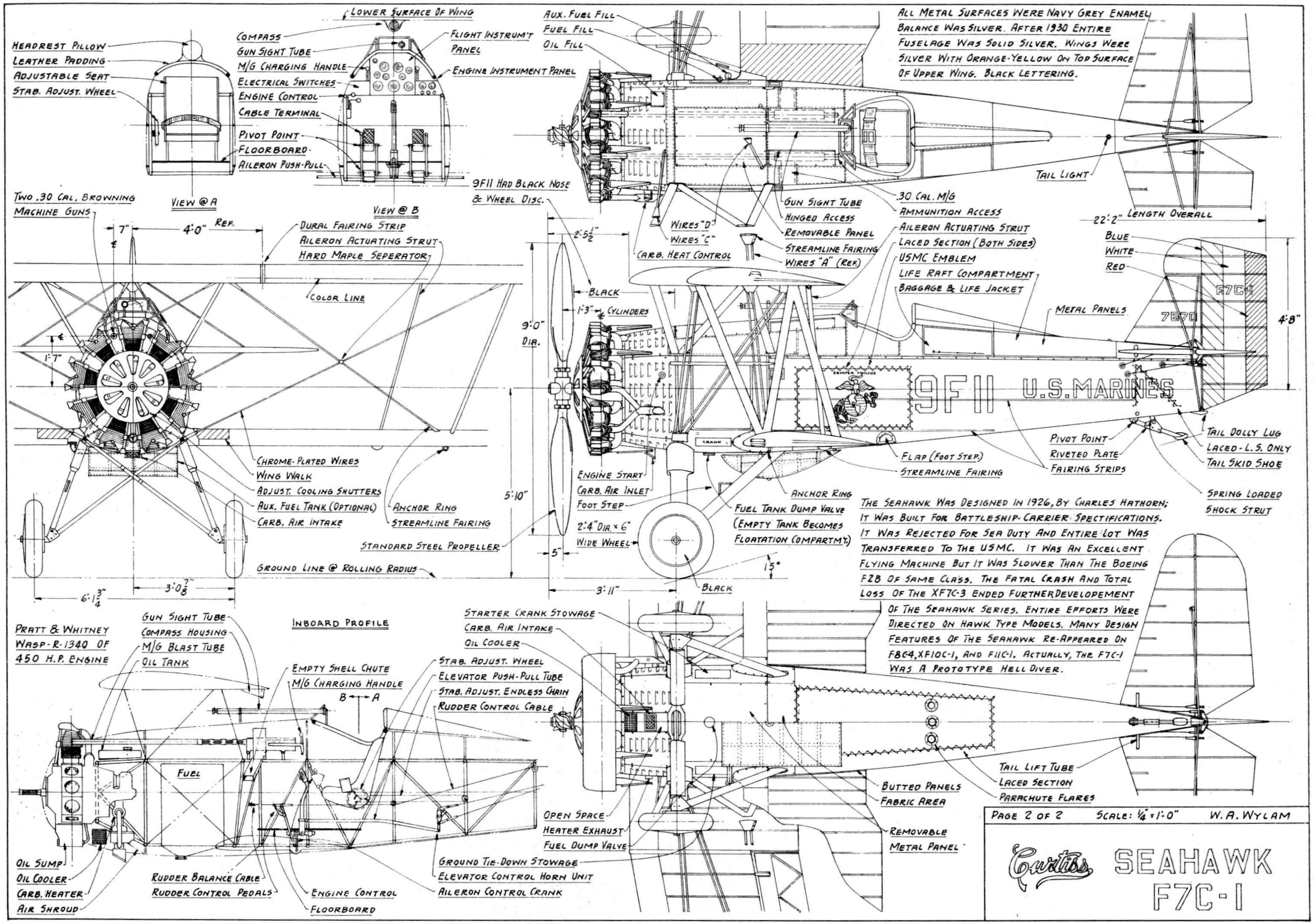
PAGE 1 OF 2 CURTISS SEAHAWK F7C-1 SCALE: 1/4" = 1'-0" W.A. WYLAM

MODEL TYPE		GENERAL DISCRIPTIONS	REMARKS
19,A	XF7C-1	7° SWB. WING, SPINNER, P&W WASP 425 H.P.	LAND & SEAPLANE
19B	XF7C-1	7° SWB.-32'-8" SPAN P&W WASP 450 H.P.	LAND - NO SPINNER
19D	F7C-1	10° SWB., NEW WING, L/6 & TAIL WASP 450 H.P.	FIRST PRODUCTION
19E,F		10° SWB. FULL SPAN FLAPS WRIGHT CYCLONE 575H.P.	EXPORT (XF7C-2)
19G		10°, 4 AILERONS, 2 FLAPS, 4 M/G, SINGLE STRUT L/6	EXPORT (XF7C-3)

NOTE: MODELS 19E TO 19G WERE CURTISS PROJECTS FOR USN & EXPORT MARKETS. MODEL 19G WAS BUILT UNDER WRAPS FOR CHINA DEMONSTATION BY FRANK HAWKS. ON MAIDEN FLIGHT, IT CAUGHT ON FIRE AND WAS DISTROYED IN LANDING, KILLING LAWERENCE MCCLELLAND, A FAMOUS MODEL BUILDER OF 1925-1930 ERA.

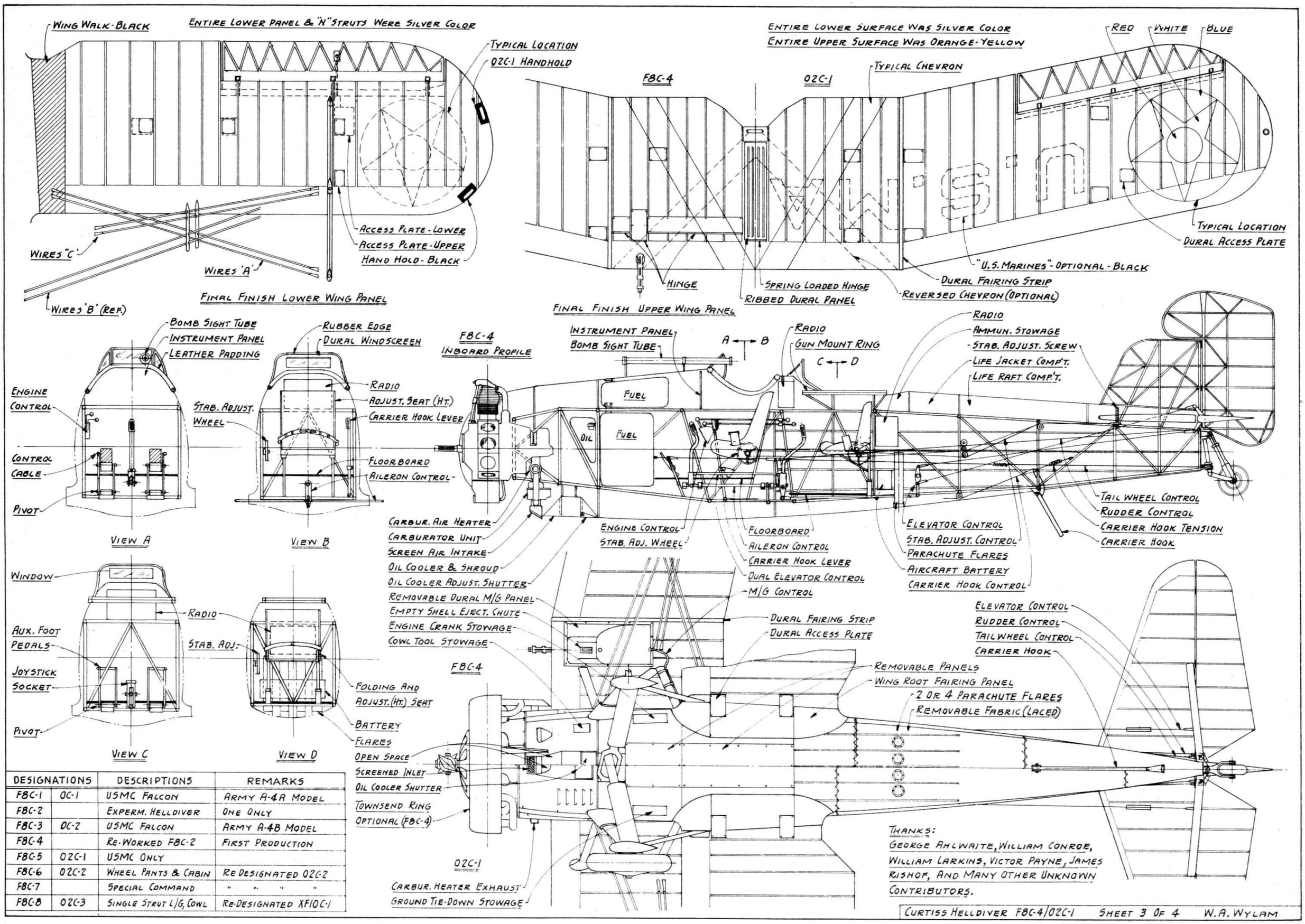
THANKS: WM. T. LARKINS, VICTOR PAYNE & JAMES RISHOF



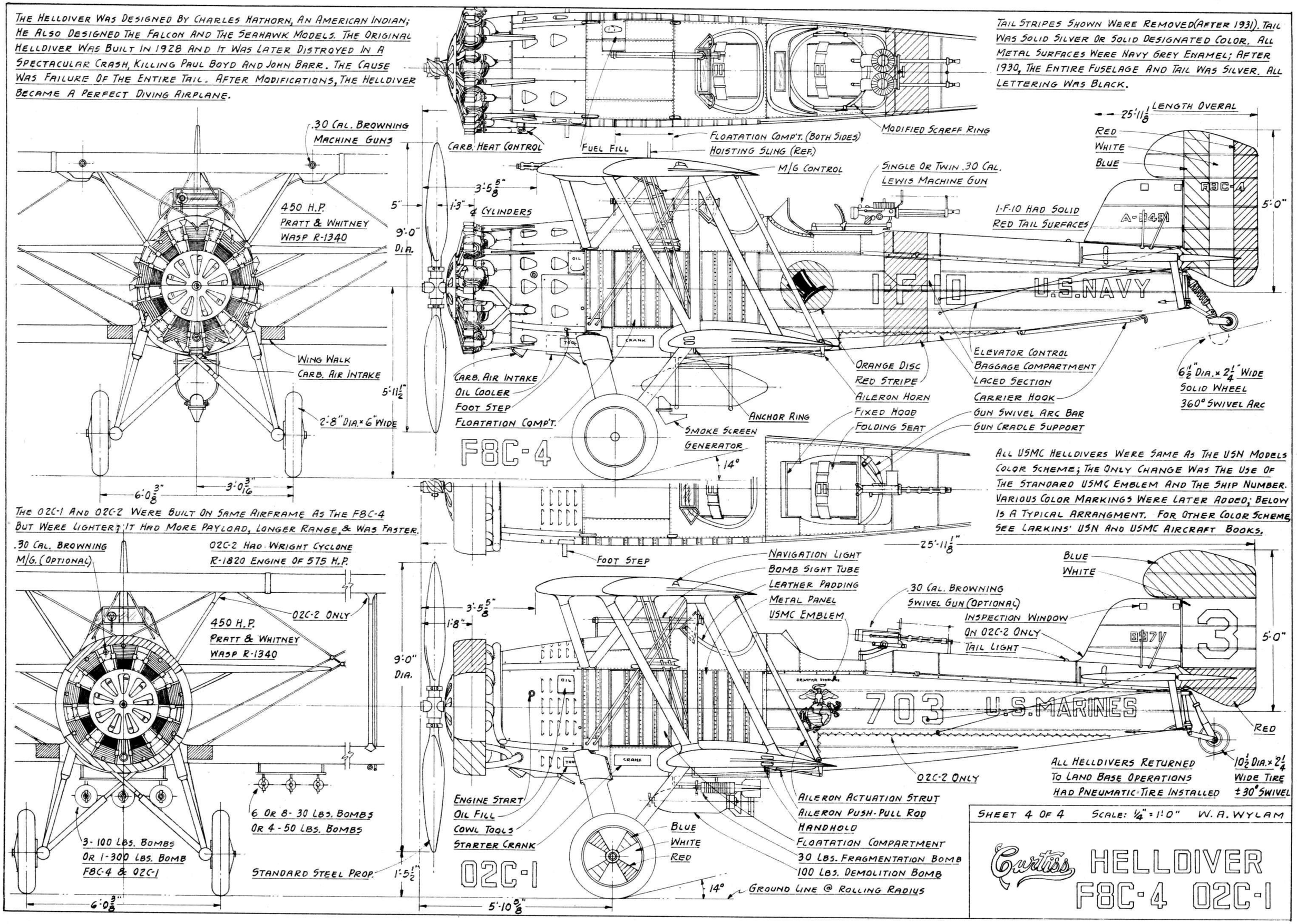

Headrest Pillow
Leather Padding
Adjustable Seat
Stab. Adjust. Wheel
View @ A
Lower Surface Of Wing
Compass
Gun Sight Tube
M/G Charging Handle
Electrical Switches
Engine Control
Cable Terminal
Pivot Point
Floorboard
Aileron Push-Pull
Flight Instrum't Panel
Engine Instrument Panel
View @ B
Aux. Fuel Fill
Fuel Fill
Oil Fill
All Metal Surfaces Were Navy Grey Enamel
Balance Was Silver. After 1930 Entire
Fuselage Was Solid Silver. Wings Were
Silver With Orange-Yellow On Top Surface
Of Upper Wing. Black Lettering.
Tail Light
9F11 Had Black Nose
& Wheel Disc.
Two .30 Cal. Browning
Machine Guns
7"
4'-0" Ref.
Dural Fairing Strip
Aileron Actuating Strut
Hard Maple Seperator
Color Line
Wires "D"
Wires "C"
Carb. Heat Control
Gun Sight Tube
Hinged Access
Removable Panel
Streamline Fairing
Wires "A" (Ref.)
.30 Cal. M/G
Ammunition Access
Aileron Actuating Strut
Laced Section (Both Sides)
USMC Emblem
Life Raft Compartment
Baggage & Life Jacket
22'-2" Length Overall
Blue
White
Red
Metal Panels
4'-8"
2'-5½"
Black
1'-3"
Cylinders
9'-0"
Dia.
1'-7"
9F11 U.S. MARINES
Chrome-Plated Wires
Wing Walk
Adjust. Cooling Shutters
Aux. Fuel Tank (Optional)
Carb. Air Intake
Anchor Ring
Streamline Fairing
Engine Start
Carb. Air Inlet
Foot Step
5'-10"
2'-4" Dia. × 6"
Wide Wheel
Standard Steel Propeller
5"
Ground Line @ Rolling Radius
Flap (Foot Step)
Streamline Fairing
Anchor Ring
Fuel Tank Dump Valve
(Empty Tank Becomes
Floatation Compartm't.)
Pivot Point
Riveted Plate
Fairing Strips
Tail Dolly Lug
Laced - L. S. Only
Tail Skid Shoe
Spring Loaded
Shock Strut
The Seahawk Was Designed In 1926, By Charles Hathorn;
It Was Built For Battleship-Carrier Specifications.
It Was Rejected For Sea Duty And Entire Lot Was
Transferred To The USMC. It Was An Excellent
Flying Machine But It Was Slower Than The Boeing
F2B Of Same Class. The Fatal Crash And Total
Loss Of The XF7C-3 Ended Further Developement
Of The Seahawk Series. Entire Efforts Were
Directed On Hawk Type Models. Many Design
Features Of The Seahawk Re-Appeared On
F8C-4, XF10C-1, And F11C-1. Actually, The F7C-1
Was A Prototype Hell Diver.
15°
3'-11"
Black
6'-1¾"
3'-0⅞"
Pratt & Whitney
Wasp-R-1340 Of
450 H.P. Engine
Gun Sight Tube
Compass Housing
M/G Blast Tube
Oil Tank
Inboard Profile
Empty Shell Chute
M/G Charging Handle
B ← → A
Fuel
Oil Sump
Oil Cooler
Carb. Heater
Air Shroud
Rudder Balance Cable
Rudder Control Pedals
Engine Control
Floorboard
Starter Crank Stowage
Carb. Air Intake
Oil Cooler
Stab. Adjust. Wheel
Elevator Push-Pull Tube
Stab. Adjust. Endless Chain
Rudder Control Cable
Open Space
Heater Exhaust
Fuel Dump Valve
Ground Tie-Down Stowage
Elevator Control Horn Unit
Aileron Control Crank
Butted Panels
Fabric Area
Removable
Metal Panel
Tail Lift Tube
Laced Section
Parachute Flares
Page 2 of 2
Scale: ¼" = 1'-0"
W. A. Wylam
Curtiss
SEAHAWK
F7C-1

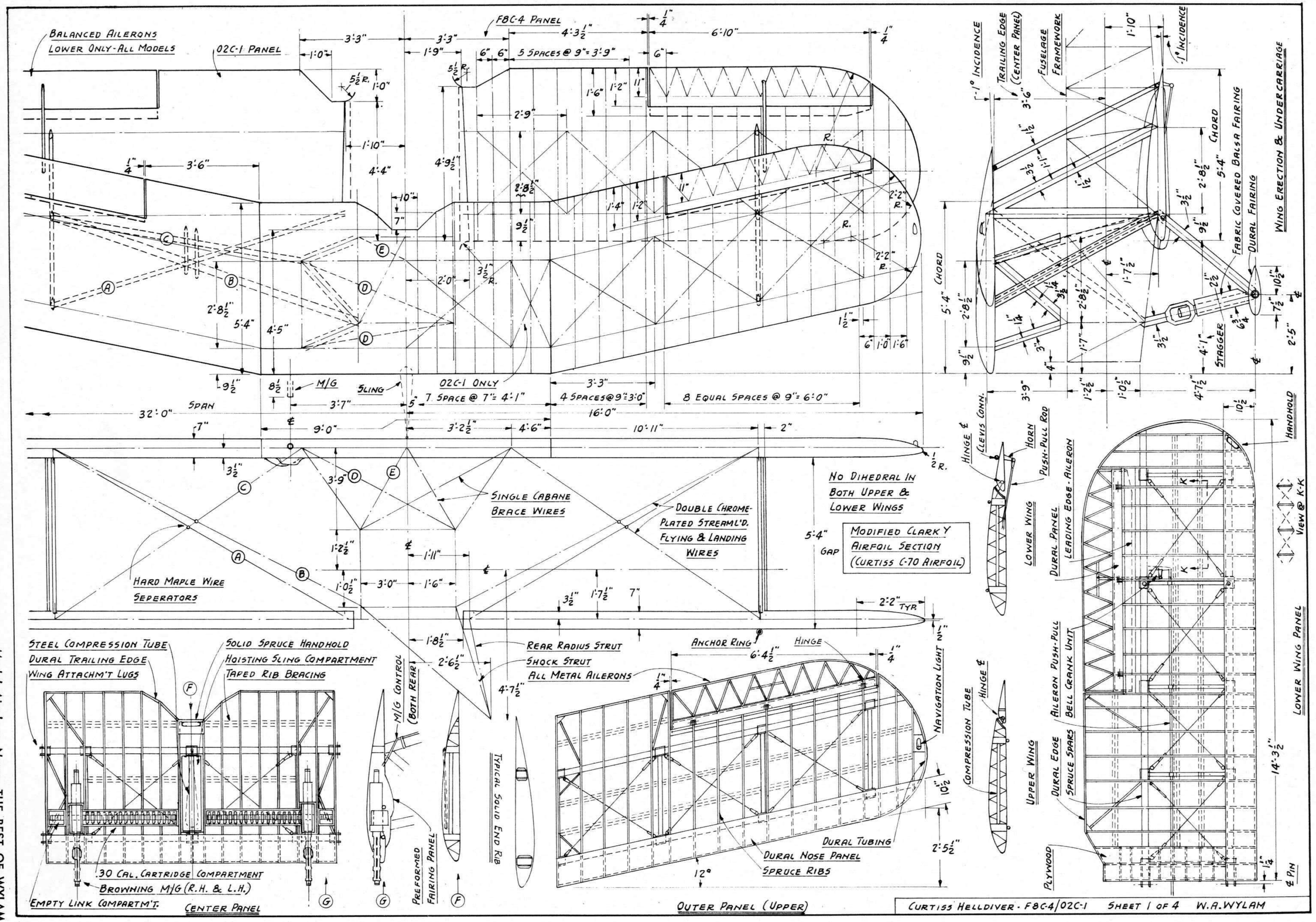
CURTISS XF7C-1 Seahawk

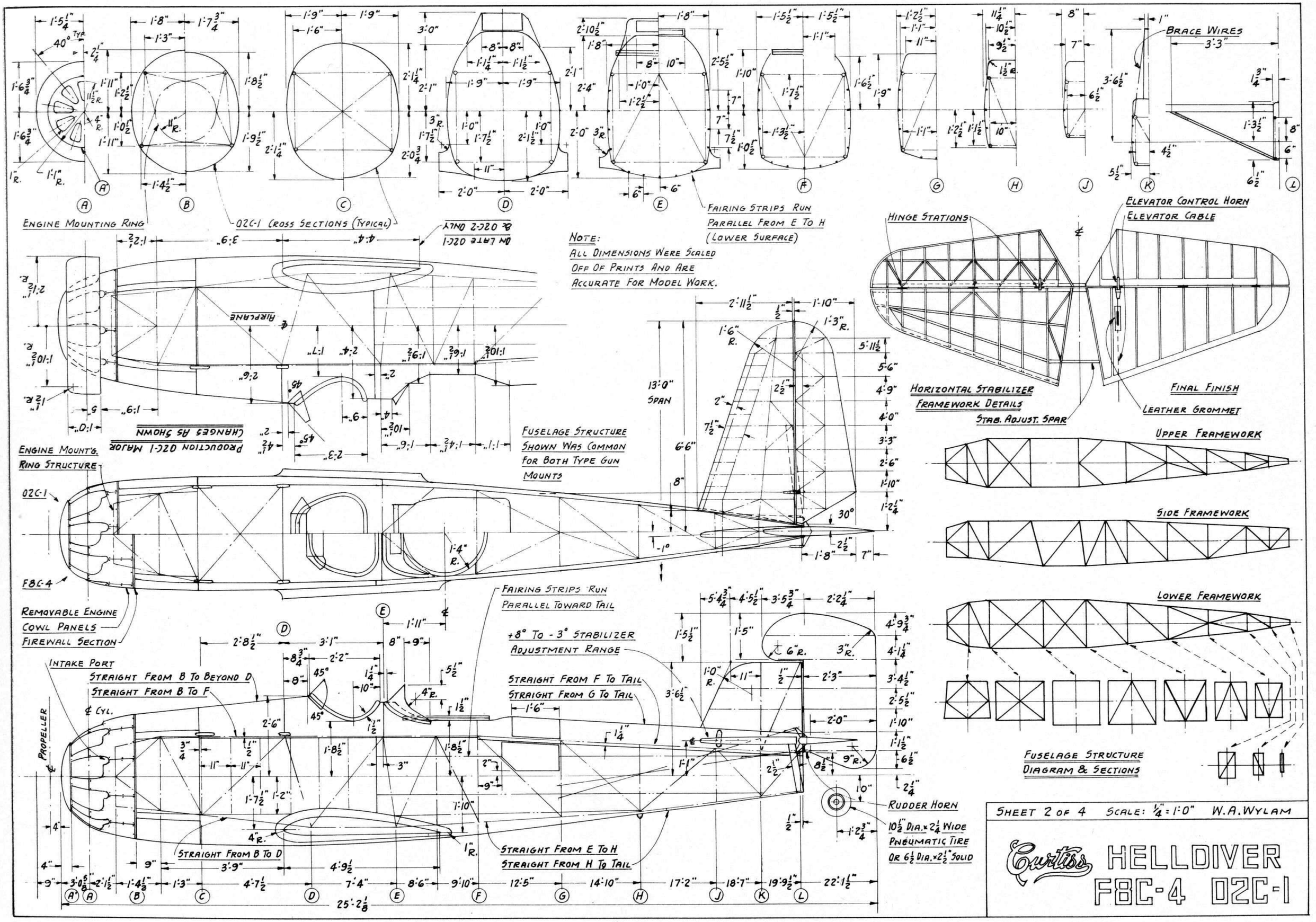
CURTISS F8C-4 Helldiver



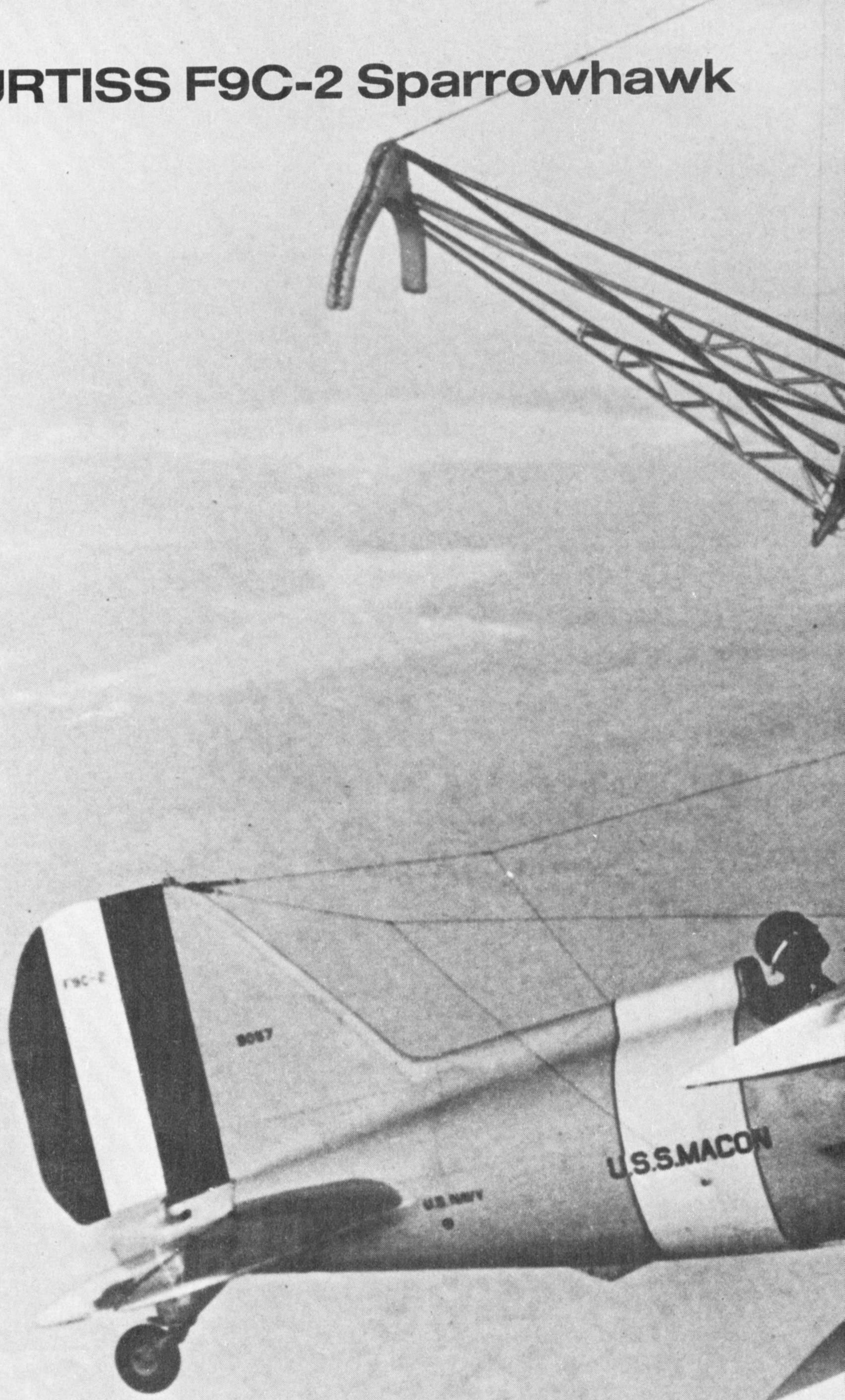
DESIGNATIONS		DESCRIPTIONS	REMARKS
F8C-1	0C-1	USMC FALCON	ARMY A-4A MODEL
F8C-2		EXPERM. HELLDIVER	ONE ONLY
F8C-3	0C-2	USMC FALCON	ARMY A-4B MODEL
F8C-4		RE-WORKED F8C-2	FIRST PRODUCTION
F8C-5	02C-1	USMC ONLY	
F8C-6	02C-2	WHEEL PANTS & CABIN	RE DESIGNATED 02C-2
F8C-7		SPECIAL COMMAND	" " " "
F8C-8	02C-3	SINGLE STRUT L/G, COWL	RE-DESIGNATED XF10C-1

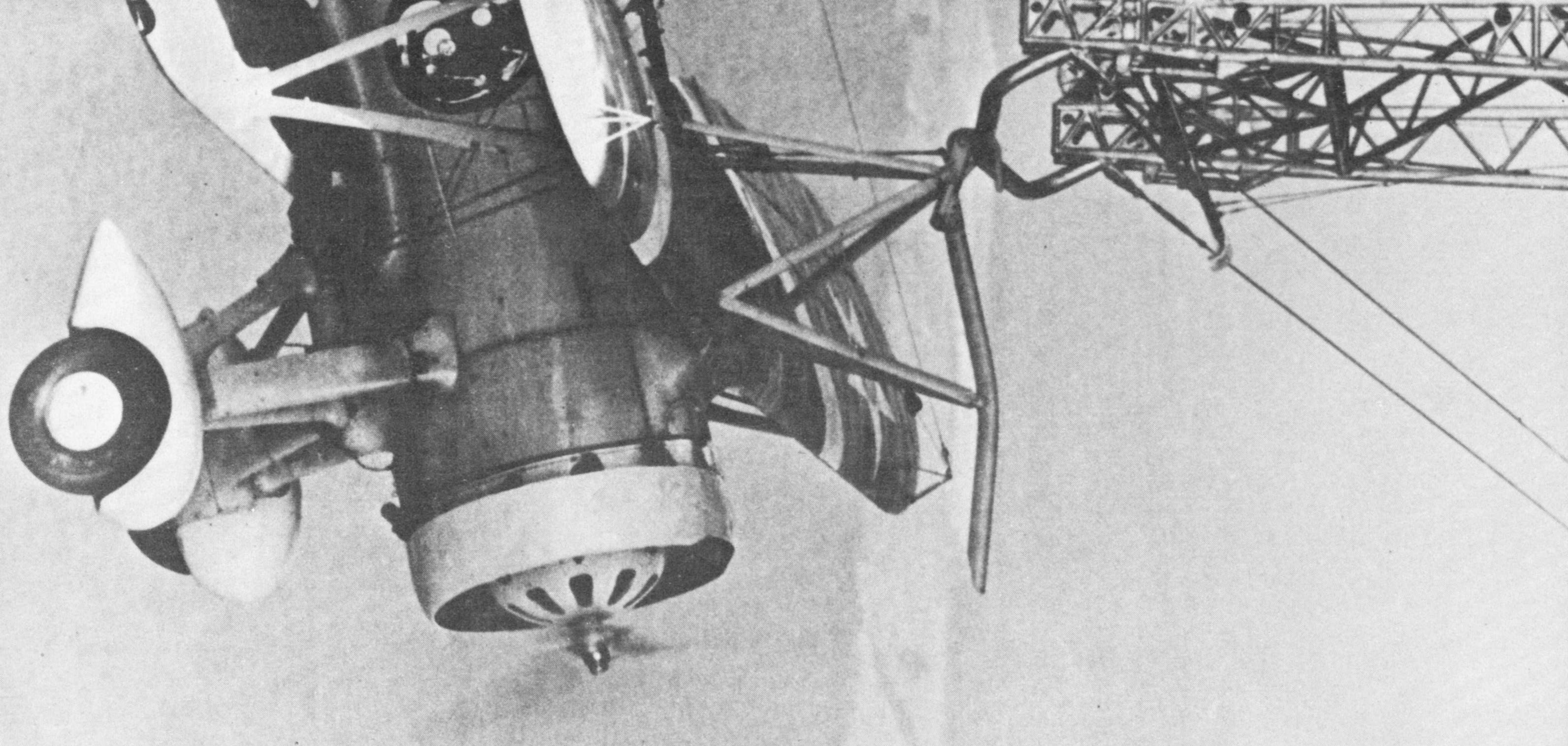

THE HELLDIVER WAS DESIGNED BY CHARLES HATHORN, AN AMERICAN INDIAN; HE ALSO DESIGNED THE FALCON AND THE SEAHAWK MODELS. THE ORIGINAL HELLDIVER WAS BUILT IN 1928 AND IT WAS LATER DISTROYED IN A SPECTACULAR CRASH, KILLING PAUL BOYD AND JOHN BARR. THE CAUSE WAS FAILURE OF THE ENTIRE TAIL. AFTER MODIFICATIONS, THE HELLDIVER BECAME A PERFECT DIVING AIRPLANE.
TAIL STRIPES SHOWN WERE REMOVED (AFTER 1931). TAIL WAS SOLID SILVER OR SOLID DESIGNATED COLOR. ALL METAL SURFACES WERE NAVY GREY ENAMEL; AFTER 1930, THE ENTIRE FUSELAGE AND TAIL WAS SILVER. ALL LETTERING WAS BLACK.
.30 CAL. BROWNING MACHINE GUNS
450 H.P. PRATT & WHITNEY WASP R-1340
WING WALK
CARB. AIR INTAKE
2'-8" DIA. × 6" WIDE
5'-11½"
6'-0⅜"
3'-0 3/16"
5"
9'-0" DIA.
3'-5⅝"
1'-3"
4 CYLINDERS
CARB. HEAT CONTROL
FUEL FILL
FLOATATION COMP'T. (BOTH SIDES)
HOISTING SLING (REF.)
M/G CONTROL
MODIFIED SCARFF RING
SINGLE OR TWIN .30 CAL. LEWIS MACHINE GUN
1-F-10 HAD SOLID RED TAIL SURFACES
LENGTH OVERAL
25'-11⅛"
RED
WHITE
BLUE
F8C-4
A-8141
5'-0"
1-F-10
U.S. NAVY
CARB. AIR INTAKE
OIL COOLER
FOOT STEP
FLOATATION COMP'T.
ANCHOR RING
SMOKE SCREEN GENERATOR
14°
ORANGE DISC
RED STRIPE
AILERON HORN
FIXED HOOD
FOLDING SEAT
ELEVATOR CONTROL
BAGGAGE COMPARTMENT
LACED SECTION
CARRIER HOOK
GUN SWIVEL ARC BAR
GUN CRADLE SUPPORT
6½" DIA. × 2¼" WIDE SOLID WHEEL 360° SWIVEL ARC
F8C-4
ALL USMC HELLDIVERS WERE SAME AS THE USN MODELS COLOR SCHEME; THE ONLY CHANGE WAS THE USE OF THE STANDARD USMC EMBLEM AND THE SHIP NUMBER. VARIOUS COLOR MARKINGS WERE LATER ADDED; BELOW IS A TYPICAL ARRANGMENT. FOR OTHER COLOR SCHEME, SEE LARKINS' USN AND USMC AIRCRAFT BOOKS.
THE O2C-1 AND O2C-2 WERE BUILT ON SAME AIRFRAME AS THE F8C-4 BUT WERE LIGHTER; IT HAD MORE PAYLOAD, LONGER RANGE, & WAS FASTER.
.30 CAL. BROWNING M/G. (OPTIONAL)
O2C-2 HAD WRIGHT CYCLONE R-1820 ENGINE OF 575 H.P.
O2C-2 ONLY
450 H.P. PRATT & WHITNEY WASP R-1340
6 OR 8-30 LBS. BOMBS OR 4-50 LBS. BOMBS
3-100 LBS. BOMBS OR 1-300 LBS. BOMB F8C-4 & O2C-1
STANDARD STEEL PROP.
6'-0⅜"
9'-0" DIA.
3'-5⅝"
1'-8"
1'-5½"
5'-10⅝"
FOOT STEP
NAVIGATION LIGHT
BOMB SIGHT TUBE
LEATHER PADDING
METAL PANEL
USMC EMBLEM
30 CAL. BROWNING SWIVEL GUN (OPTIONAL)
INSPECTION WINDOW ON O2C-2 ONLY
TAIL LIGHT
BLUE
WHITE
B3371
3
5'-0"
703
U.S. MARINES
RED
O2C-2 ONLY
ALL HELLDIVERS RETURNED TO LAND BASE OPERATIONS HAD PNEUMATIC TIRE INSTALLED
10½ DIA. × 2¼ WIDE TIRE ±30° SWIVEL
ENGINE START
OIL FILL
COWL TOOLS
STARTER CRANK
BLUE
WHITE
RED
O2C-1
AILERON ACTUATION STRUT
AILERON PUSH-PULL ROD
HANDHOLD
FLOATATION COMPARTMENT
30 LBS. FRAGMENTATION BOMB
100 LBS. DEMOLITION BOMB
14°
GROUND LINE @ ROLLING RADIUS
SHEET 4 OF 4
SCALE: ¼" = 1'-0"
W. A. WYLAM
Curtiss HELLDIVER
F8C-4 O2C-1

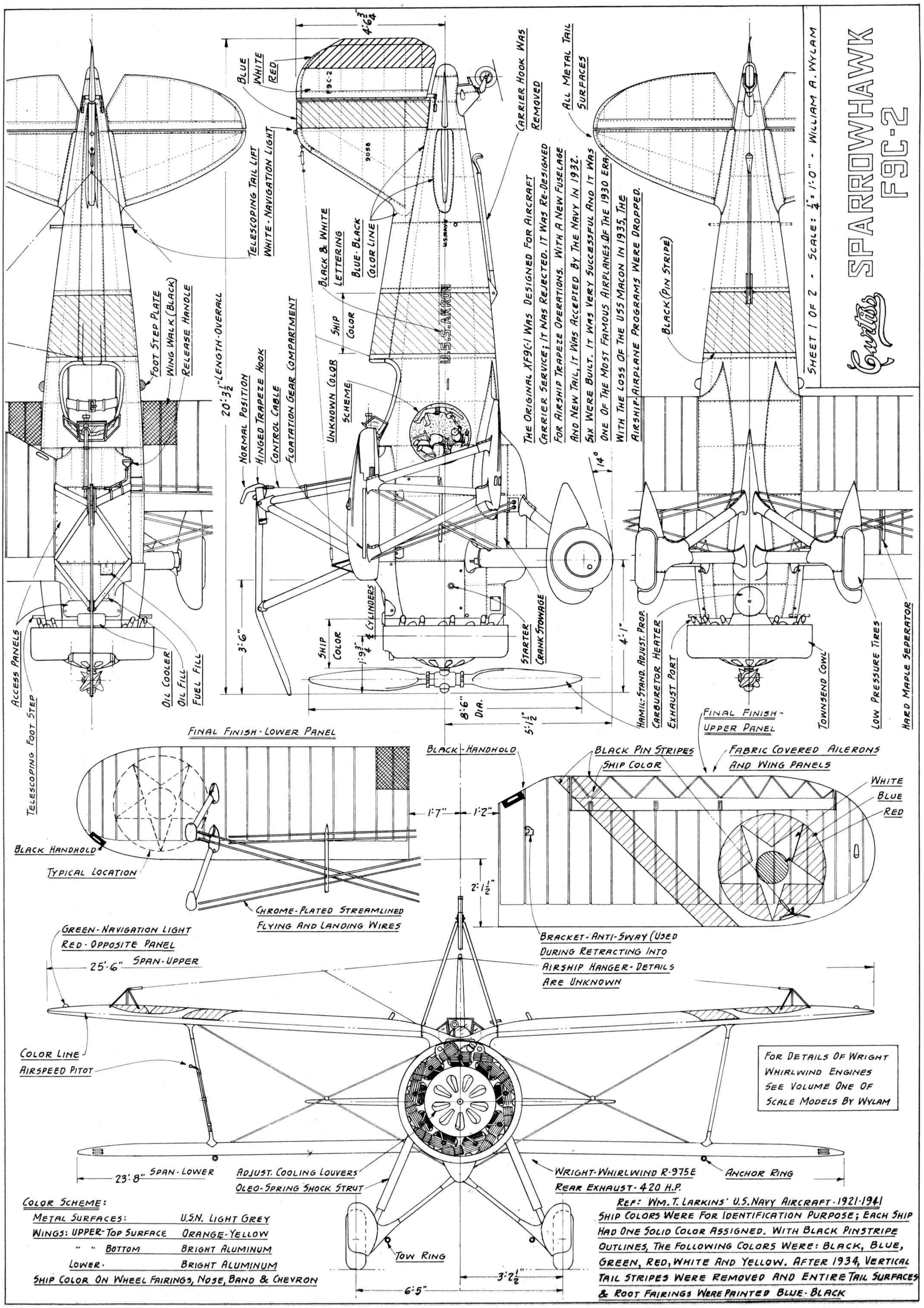

BALANCED AILERONS
LOWER ONLY-ALL MODELS
02C-1 PANEL
F8C-4 PANEL
5 SPACES @ 9" = 3'-9"
02C-1 ONLY
7 SPACE @ 7" = 4'-1"
4 SPACES @ 9" = 3'-0"
8 EQUAL SPACES @ 9" = 6'-0"
SPAN
32'-0"
16'-0"
M/G
SLING
SINGLE CABANE BRACE WIRES
DOUBLE CHROME-PLATED STREAML'D. FLYING & LANDING WIRES
HARD MAPLE WIRE SEPERATORS
NO DIHEDRAL IN BOTH UPPER & LOWER WINGS
MODIFIED CLARK Y AIRFOIL SECTION (CURTISS C-70 AIRFOIL)
GAP
REAR RADIUS STRUT
SHOCK STRUT
ALL METAL AILERONS
ANCHOR RING
HINGE
NAVIGATION LIGHT
DURAL TUBING
DURAL NOSE PANEL
SPRUCE RIBS
STEEL COMPRESSION TUBE
DURAL TRAILING EDGE
WING ATTACHM'T LUGS
SOLID SPRUCE HANDHOLD
HOISTING SLING COMPARTMENT
TAPED RIB BRACING
.30 CAL. CARTRIDGE COMPARTMENT
BROWNING M/G (R.H. & L.H.)
EMPTY LINK COMPARTM'T.
CENTER PANEL
M/G CONTROL (BOTH REAR)
PREFORMED FAIRING PANEL
TYPICAL SOLID END RIB
OUTER PANEL (UPPER)
TRAILING EDGE (CENTER PANEL)
FUSELAGE FRAMEWORK
CHORD
FABRIC COVERED BALSA FAIRING
DURAL FAIRING
WING ERECTION & UNDERCARRIAGE
STAGGER
CLEVIS CONN.
HORN
PUSH-PULL ROD
LOWER WING
DURAL PANEL
LEADING EDGE-AILERON
HANDHOLD
VIEW @ K-K
AILERON PUSH-PULL
BELL CRANK UNIT
LOWER WING PANEL
COMPRESSION TUBE
UPPER WING
DURAL EDGE
SPRUCE SPARS
PLYWOOD
℄ PIN
CURTISS HELLDIVER - F8C-4/02C-1 SHEET 1 OF 4 W.A.WYLAM

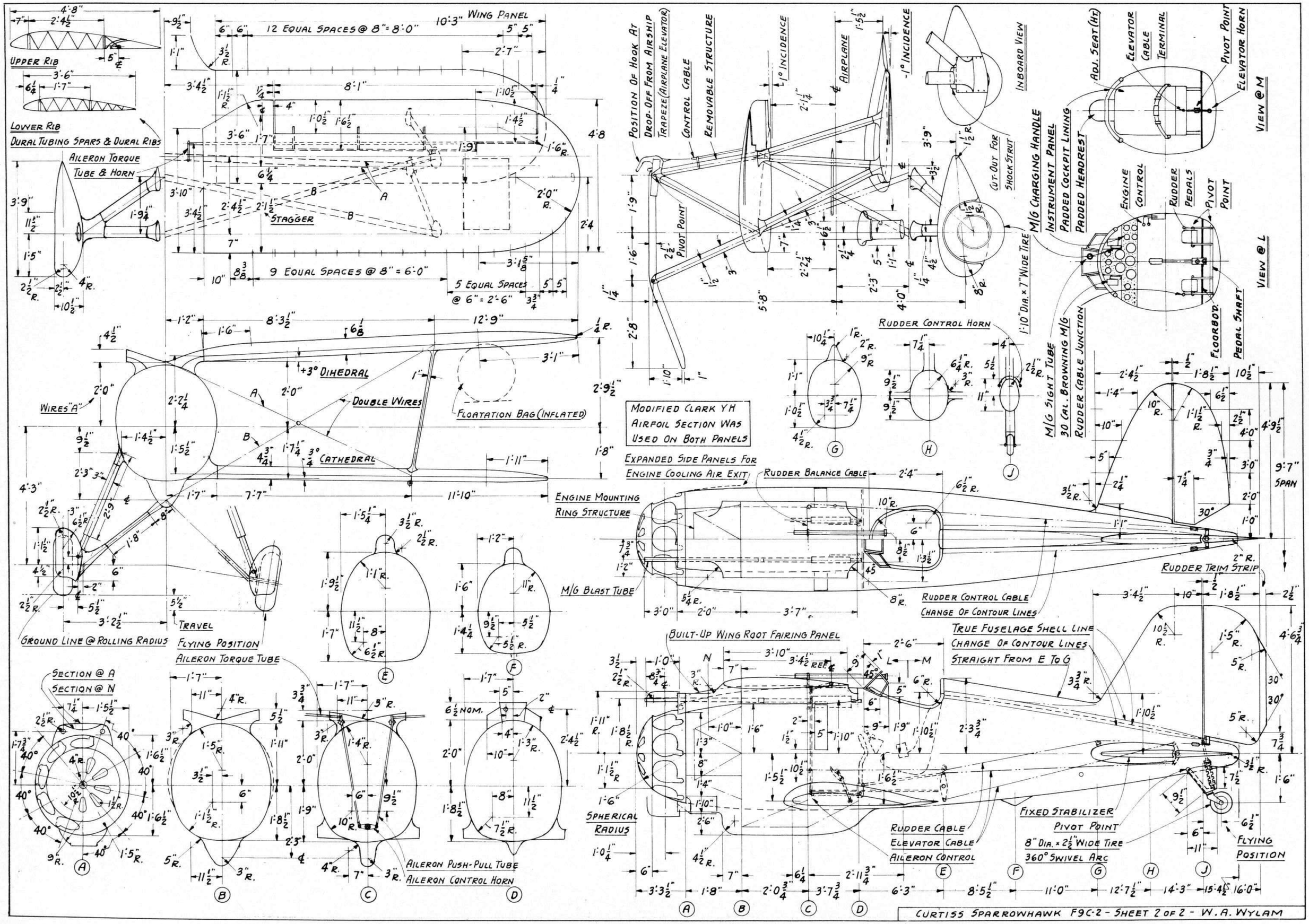

ENGINE MOUNTING RING
O2C-1 CROSS SECTIONS (TYPICAL)
FAIRING STRIPS RUN PARALLEL FROM E TO H (LOWER SURFACE)
BRACE WIRES
NOTE: ALL DIMENSIONS WERE SCALED OFF OF PRINTS AND ARE ACCURATE FOR MODEL WORK.
ON LATE O2C-1 & O2C-2 ONLY
PRODUCTION O2C-1 MAJOR CHANGES AS SHOWN
FUSELAGE STRUCTURE SHOWN WAS COMMON FOR BOTH TYPE GUN MOUNTS
HINGE STATIONS
ELEVATOR CONTROL HORN
ELEVATOR CABLE
HORIZONTAL STABILIZER FRAMEWORK DETAILS
STAB. ADJUST. SPAR
FINAL FINISH
LEATHER GROMMET
UPPER FRAMEWORK
SIDE FRAMEWORK
LOWER FRAMEWORK
FUSELAGE STRUCTURE DIAGRAM & SECTIONS
13'-0" SPAN
ENGINE MOUNT'G. RING STRUCTURE
O2C-1
F8C-4
REMOVABLE ENGINE COWL PANELS
FIREWALL SECTION
FAIRING STRIPS RUN PARALLEL TOWARD TAIL
+8° TO -3° STABILIZER ADJUSTMENT RANGE
INTAKE PORT
STRAIGHT FROM B TO BEYOND D
STRAIGHT FROM B TO F
STRAIGHT FROM F TO TAIL
STRAIGHT FROM G TO TAIL
STRAIGHT FROM B TO D
STRAIGHT FROM E TO H
STRAIGHT FROM H TO TAIL
PROPELLER
RUDDER HORN
10½" DIA. x 2¼" WIDE PNEUMATIC TIRE OR 6½" DIA. x 2½" SOLID
SHEET 2 OF 4 SCALE: ¼" = 1'-0" W.A.WYLAM
Curtiss HELLDIVER F8C-4 O2C-1

CURTISS F9C-2 Sparrowhawk





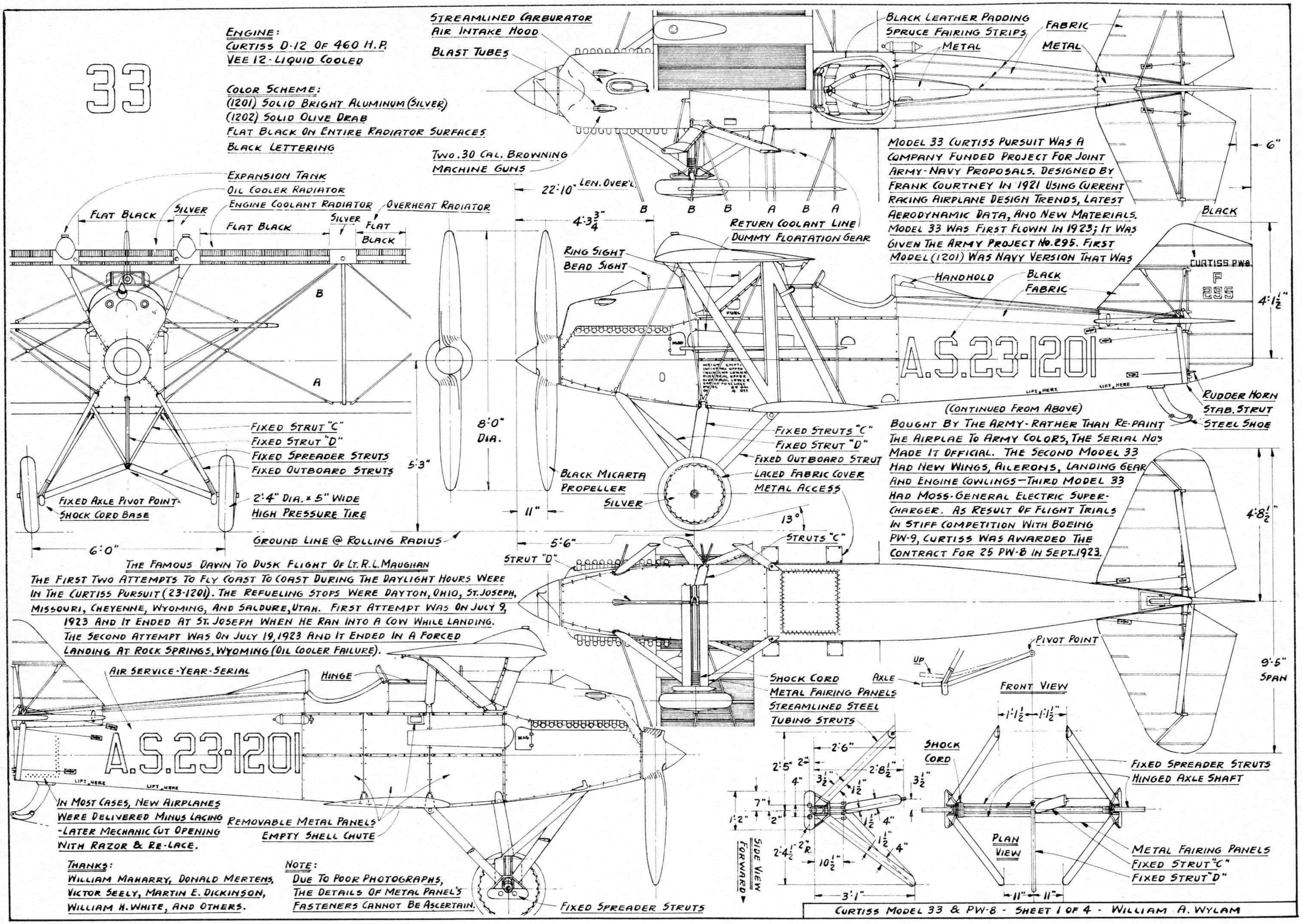

SPARROWHAWK
F9C-2
SHEET 1 OF 2 - SCALE: 1/4" = 1'-0" - WILLIAM A. WYLAM
Curtiss
TELESCOPING TAIL LIFT
WHITE - NAVIGATION LIGHT
BLUE
WHITE
RED
4'-6 3/4"
CARRIER HOOK WAS REMOVED
ALL METAL TAIL SURFACES
BLACK & WHITE LETTERING
BLUE - BLACK COLOR LINE
SHIP COLOR
U.S.S. AKRON
UNKNOWN COLOR SCHEME
THE ORIGINAL XF9C-1 WAS DESIGNED FOR AIRCRAFT CARRIER SERVICE; IT WAS REJECTED. IT WAS RE-DESIGNED FOR AIRSHIP TRAPEZE OPERATIONS. WITH A NEW FUSELAGE AND NEW TAIL, IT WAS ACCEPTED BY THE NAVY IN 1932. SIX WERE BUILT. IT WAS VERY SUCCESSFUL AND IT WAS ONE OF THE MOST FAMOUS AIRPLANES OF THE 1930 ERA WITH THE LOSS OF THE U.S.S. MACON IN 1935. THE AIRSHIP-AIRPLANE PROGRAMS WERE DROPPED.
BLACK (PIN STRIPE)
20'-3 1/2" LENGTH-OVERALL
FOOT STEP PLATE
WING WALK (BLACK)
RELEASE HANDLE
NORMAL POSITION
HINGED TRAPEZE HOOK
CONTROL CABLE
FLOATATION GEAR COMPARTMENT
14°
ACCESS PANELS
TELESCOPING FOOT STEP
OIL COOLER
OIL FILL
FUEL FILL
3'-6"
SHIP COLOR
1'-9 3/4" 1/4 CYLINDERS
8'-6" DIA.
5'-1 1/2"
STARTER CRANK STOWAGE
4'-1"
HAMIL-STAND. ADJUST. PROP.
CARBURETOR HEATER
EXHAUST PORT
TOWNSEND COWL
LOW PRESSURE TIRES
HARD MAPLE SEPERATOR
FINAL FINISH - LOWER PANEL
FINAL FINISH - UPPER PANEL
BLACK - HANDHOLD
BLACK PIN STRIPES
SHIP COLOR
FABRIC COVERED AILERONS AND WING PANELS
WHITE
BLUE
RED
1'-7"
1'-2"
BLACK HANDHOLD
TYPICAL LOCATION
2'-1 1/2"
CHROME-PLATED STREAMLINED FLYING AND LANDING WIRES
GREEN - NAVIGATION LIGHT
RED - OPPOSITE PANEL
25'-6" SPAN-UPPER
BRACKET - ANTI-SWAY (USED DURING RETRACTING INTO AIRSHIP HANGER - DETAILS ARE UNKNOWN
COLOR LINE
AIRSPEED PITOT
FOR DETAILS OF WRIGHT WHIRLWIND ENGINES SEE VOLUME ONE OF SCALE MODELS BY WYLAM
23'-8" SPAN - LOWER
ADJUST. COOLING LOUVERS
OLEO-SPRING SHOCK STRUT
WRIGHT-WHIRLWIND R-975E
REAR EXHAUST - 420 H.P.
ANCHOR RING
TOW RING
3'-2 1/2"
6'-5"
COLOR SCHEME:
METAL SURFACES: U.S.N. LIGHT GREY
WINGS: UPPER-TOP SURFACE ORANGE-YELLOW
" " BOTTOM BRIGHT ALUMINUM
LOWER- BRIGHT ALUMINUM
SHIP COLOR ON WHEEL FAIRINGS, NOSE, BAND & CHEVRON
REF: WM. T. LARKINS' U.S. NAVY AIRCRAFT - 1921-1941
SHIP COLORS WERE FOR IDENTIFICATION PURPOSE; EACH SHIP HAD ONE SOLID COLOR ASSIGNED. WITH BLACK PINSTRIPE OUTLINES, THE FOLLOWING COLORS WERE: BLACK, BLUE, GREEN, RED, WHITE AND YELLOW. AFTER 1934, VERTICAL TAIL STRIPES WERE REMOVED AND ENTIRE TAIL SURFACES & ROOT FAIRINGS WERE PAINTED BLUE-BLACK


Wing Panel
12 Equal Spaces @ 8" = 8'-0"
9 Equal Spaces @ 8" = 6'-0"
5 Equal Spaces @ 6" = 2'-6"
Upper Rib
Lower Rib
Dural Tubing Spars & Dural Ribs
Aileron Torque Tube & Horn
Stagger
+3° Dihedral
Cathedral
Double Wires
Wires "A"
Floatation Bag (Inflated)
Ground Line @ Rolling Radius
Travel
Flying Position
Aileron Torque Tube
Section @ A
Section @ N
Aileron Push-Pull Tube
Aileron Control Horn
Position Of Hook At Drop-Off From Airship Trapeze (Airplane Elevator)
Control Cable
Removable Structure
Airplane
Pivot Point
Modified Clark Y H Airfoil Section Was Used On Both Panels
Expanded Side Panels For Engine Cooling Air Exit
Engine Mounting Ring Structure
M/G Blast Tube
Rudder Balance Cable
Rudder Control Horn
Rudder Control Cable
Change Of Contour Lines
Built-Up Wing Root Fairing Panel
Spherical Radius
Rudder Cable
Elevator Cable
Aileron Control
Fixed Stabilizer
Pivot Point
8" Dia. x 2½" Wide Tire
360° Swivel Arc
True Fuselage Shell Line
Change Of Contour Lines
Straight From E To G
Inboard View
Cut-Out For Shock Strut
1°-10" Dia. x 7" Wide Tire
M/G Charging Handle
Instrument Panel
Padded Cockpit Lining
Padded Headrest
Adj. Seat (Ht)
Elevator Cable Terminal
Pivot Point
Elevator Horn
View @ M
Engine Control
Rudder Pedals
Pivot Point
View @ L
Floorboard
Pedal Shaft
M/G Sight Tube
30 Cal. Browning M/G
Rudder Cable Junction
Rudder Trim Strip
9'-7" Span
Curtiss Sparrowhawk F9C-2 - Sheet 2 of 2 - W. A. Wylam

33

ENGINE:
CURTISS D-12 OF 460 H.P.
VEE 12-LIQUID COOLED

COLOR SCHEME:
(1201) SOLID BRIGHT ALUMINUM (SILVER)
(1202) SOLID OLIVE DRAB
FLAT BLACK ON ENTIRE RADIATOR SURFACES
BLACK LETTERING



MODEL 33 CURTISS PURSUIT WAS A COMPANY FUNDED PROJECT FOR JOINT ARMY-NAVY PROPOSALS. DESIGNED BY FRANK COURTNEY IN 1921 USING CURRENT RACING AIRPLANE DESIGN TRENDS, LATEST AERODYNAMIC DATA, AND NEW MATERIALS. MODEL 33 WAS FIRST FLOWN IN 1923; IT WAS GIVEN THE ARMY PROJECT NO. 295. FIRST MODEL (1201) WAS NAVY VERSION THAT WAS

(CONTINUED FROM ABOVE)

BOUGHT BY THE ARMY-RATHER THAN RE-PAINT THE AIRPLAE TO ARMY COLORS, THE SERIAL NOS MADE IT OFFICIAL. THE SECOND MODEL 33 HAD NEW WINGS, AILERONS, LANDING GEAR AND ENGINE COWLINGS—THIRD MODEL 33 HAD MOSS-GENERAL ELECTRIC SUPER-CHARGER. AS RESULT OF FLIGHT TRIALS IN STIFF COMPETITION WITH BOEING PW-9, CURTISS WAS AWARDED THE CONTRACT FOR 25 PW-8 IN SEPT. 1923.

THE FAMOUS DAWN TO DUSK FLIGHT OF LT. R. L. MAUGHAN

THE FIRST TWO ATTEMPTS TO FLY COAST TO COAST DURING THE DAYLIGHT HOURS WERE IN THE CURTISS PURSUIT (23-1201). THE REFUELING STOPS WERE DAYTON, OHIO, ST. JOSEPH, MISSOURI, CHEYENNE, WYOMING, AND SALDURE, UTAH. FIRST ATTEMPT WAS ON JULY 9, 1923 AND IT ENDED AT ST. JOSEPH WHEN HE RAN INTO A COW WHILE LANDING. THE SECOND ATTEMPT WAS ON JULY 19, 1923 AND IT ENDED IN A FORCED LANDING AT ROCK SPRINGS, WYOMING (OIL COOLER FAILURE).

THANKS:
WILLIAM MAHARRY, DONALD MERTENS, VICTOR SEELY, MARTIN E. DICKINSON, WILLIAM H. WHITE, AND OTHERS.

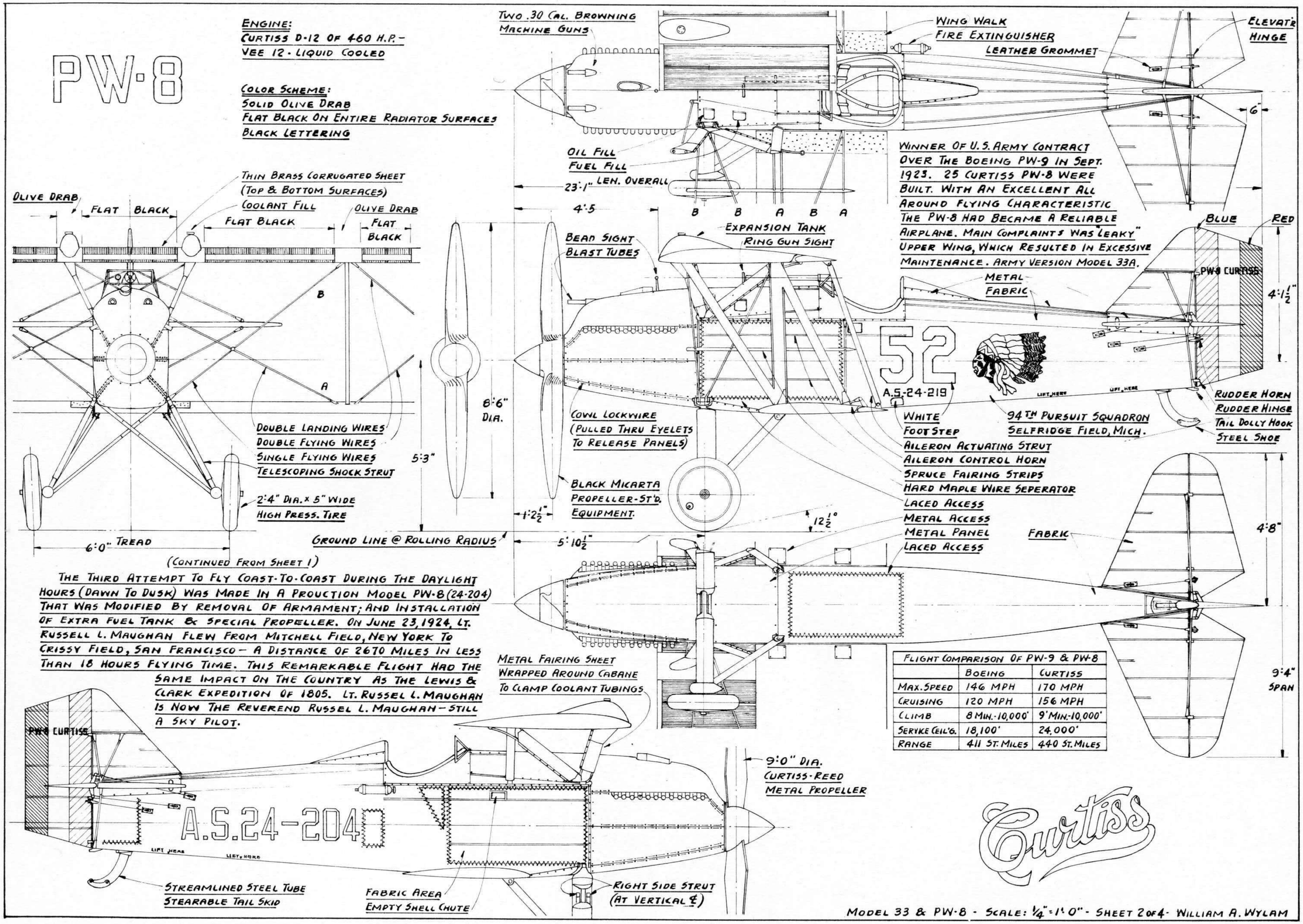
NOTE:
DUE TO POOR PHOTOGRAPHS, THE DETAILS OF METAL PANEL'S FASTENERS CANNOT BE ASCERTAIN.

CURTISS MODEL 33 & PW-8 - SHEET 1 OF 4 - WILLIAM A. WYLAM

PW-8

ENGINE:
CURTISS D-12 OF 460 H.P.-
VEE 12 - LIQUID COOLED

COLOR SCHEME:
SOLID OLIVE DRAB
FLAT BLACK ON ENTIRE RADIATOR SURFACES
BLACK LETTERING



WINNER OF U.S. ARMY CONTRACT OVER THE BOEING PW-9 IN SEPT. 1923. 25 CURTISS PW-8 WERE BUILT. WITH AN EXCELLENT ALL AROUND FLYING CHARACTERISTIC THE PW-8 HAD BECAME A RELIABLE AIRPLANE. MAIN COMPLAINTS WAS "LEAKY" UPPER WING, WHICH RESULTED IN EXCESSIVE MAINTENANCE. ARMY VERSION MODEL 33A.

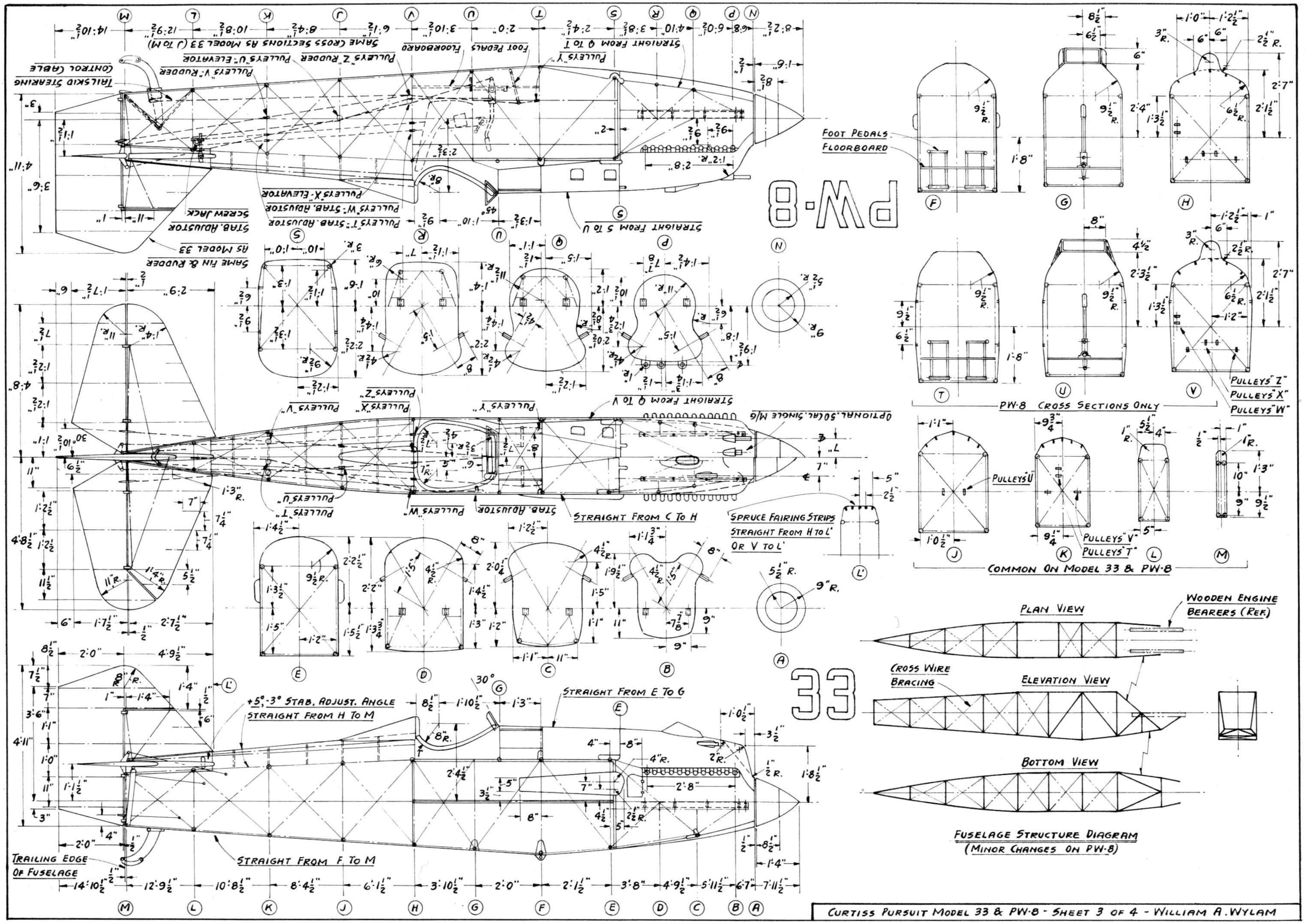
(CONTINUED FROM SHEET 1)

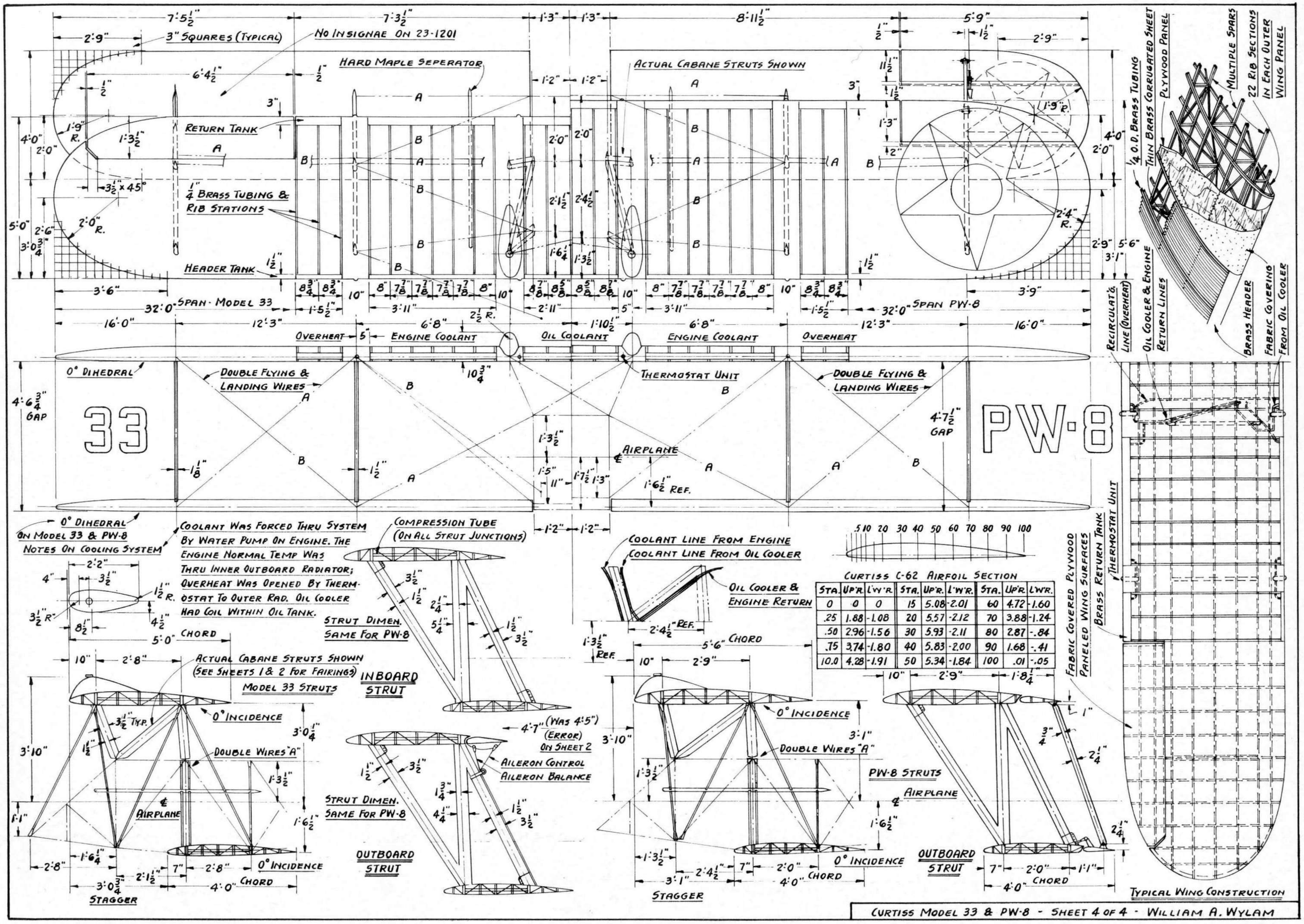
THE THIRD ATTEMPT TO FLY COAST-TO-COAST DURING THE DAYLIGHT HOURS (DAWN TO DUSK) WAS MADE IN A PROUCTION MODEL PW-8 (24-204) THAT WAS MODIFIED BY REMOVAL OF ARMAMENT; AND INSTALLATION OF EXTRA FUEL TANK & SPECIAL PROPELLER. ON JUNE 23, 1924, LT. RUSSELL L. MAUGHAN FLEW FROM MITCHELL FIELD, NEW YORK TO CRISSY FIELD, SAN FRANCISCO — A DISTANCE OF 2670 MILES IN LESS THAN 18 HOURS FLYING TIME. THIS REMARKABLE FLIGHT HAD THE SAME IMPACT ON THE COUNTRY AS THE LEWIS & CLARK EXPEDITION OF 1805. LT. RUSSEL L. MAUGHAN IS NOW THE REVEREND RUSSEL L. MAUGHAN — STILL A SKY PILOT.

FLIGHT COMPARISON OF PW-9 & PW-8		
	BOEING	CURTISS
MAX. SPEED	146 MPH	170 MPH
CRUISING	120 MPH	156 MPH
CLIMB	8 MIN.-10,000'	9' MIN.-10,000'
SERVICE CEIL'G.	18,100'	24,000'
RANGE	411 ST. MILES	440 ST. MILES

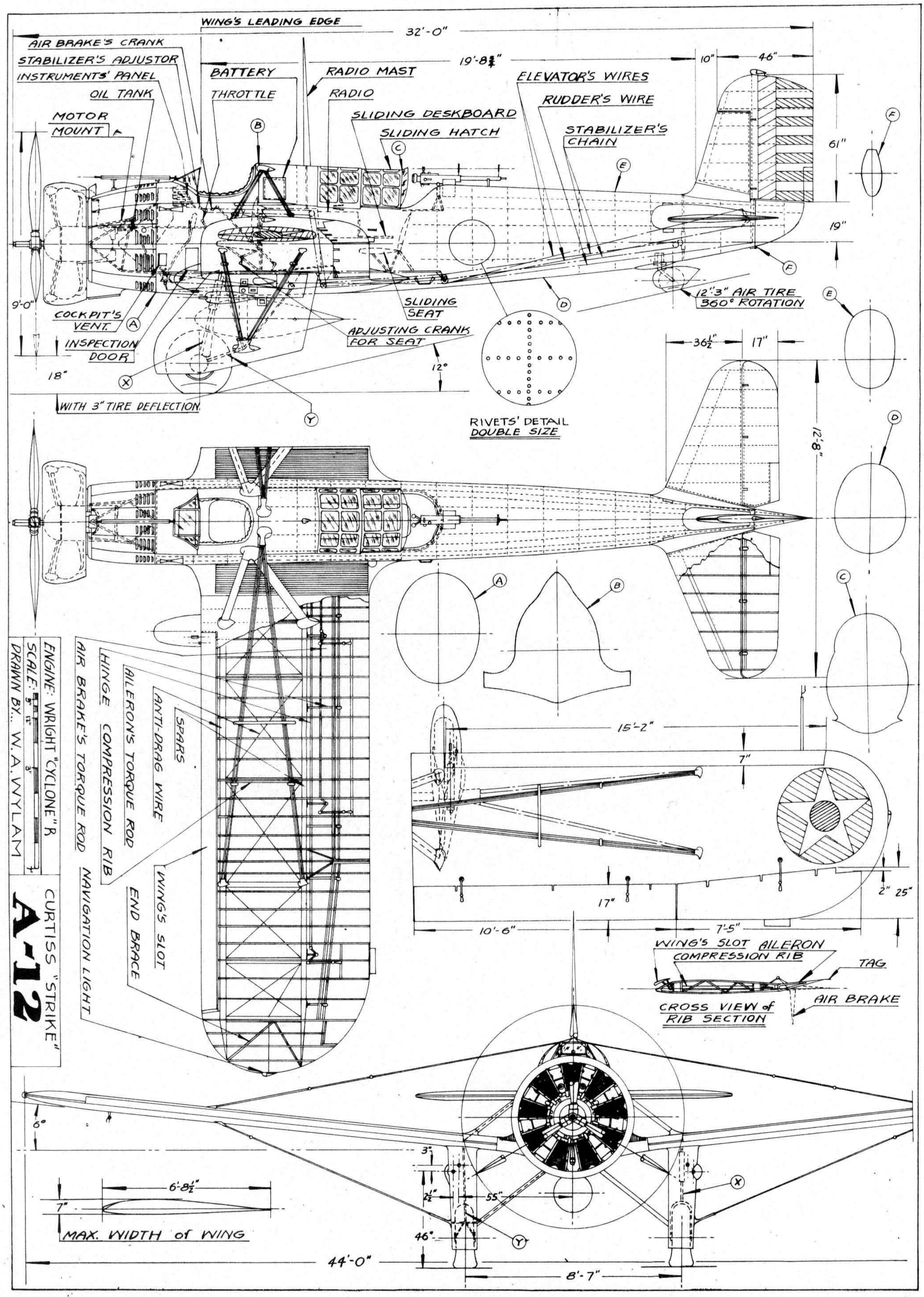
Curtiss

MODEL 33 & PW-8 - SCALE: ¼" = 1'-0" - SHEET 2 OF 4 - WILLIAM A. WYLAM


PW-8
33
Foot Pedals
Floorboard
PW-8 Cross Sections Only
Pulleys "Z"
Pulleys "X"
Pulleys "W"
Pulleys "U"
Pulleys "V"
Pulleys "T"
Common On Model 33 & PW-8
Straight From 5 To U
Stab. Adjustor Screw Jack
Same Fin & Rudder As Model 33
Pulleys "T": Stab. Adjustor
Pulleys "W": Stab. Adjustor
Pulleys "X": Elevator
Pulleys "Y": Rudder
Pulleys "Z": Rudder
Pulleys "U": Elevator
Trailskid Steering Control Cable
Straight From Q To T
Foot Pedals
Floorboard
Same Cross Sections As Model 33 (J To M)
Straight From Q To V
Optional .50 Cal. Single M/G
Pulleys "Y"
Pulleys "X"
Pulleys "Z"
Pulleys "V"
Pulleys "U"
Pulleys "T"
Pulleys "W"
Stab. Adjustor
Straight From C To H
Spruce Fairing Strips Straight From H To L' Or V To L'
Wooden Engine Bearers (Ref.)
Plan View
Cross Wire Bracing
Elevation View
Bottom View
Fuselage Structure Diagram
(Minor Changes On PW-8)
+5°, -3° Stab. Adjust. Angle
Straight From H To M
Straight From E To G
Straight From F To M
Trailing Edge Of Fuselage
Curtiss Pursuit Model 33 & PW-8 - Sheet 3 of 4 - William A. Wylam



STA.	UP'R.	L'W'R.	STA.	UP'R.	L'W'R.	STA.	UP'R.	L'W'R.
0	0	0	15	5.08	-2.01	60	4.72	-1.60
.25	1.88	-1.08	20	5.57	-2.12	70	3.88	-1.24
.50	2.96	-1.56	30	5.93	-2.11	80	2.87	-.84
.75	3.74	-1.80	40	5.83	-2.00	90	1.68	-.41
10.0	4.28	-1.91	50	5.34	-1.84	100	.01	-.05


WING'S LEADING EDGE
32'-0"
AIR BRAKE'S CRANK
STABILIZER'S ADJUSTOR
INSTRUMENTS' PANEL
OIL TANK
MOTOR MOUNT
BATTERY
THROTTLE
19'-8¾"
RADIO MAST
RADIO
SLIDING DESKBOARD
SLIDING HATCH
ELEVATOR'S WIRES
RUDDER'S WIRE
STABILIZER'S CHAIN
10"
46"
61"
19"
9'-0"
COCKPIT'S VENT.
INSPECTION DOOR
18"
WITH 3" TIRE DEFLECTION
SLIDING SEAT
ADJUSTING CRANK FOR SEAT
12°
12"3" AIR TIRE 360° ROTATION
RIVETS' DETAIL DOUBLE SIZE
36½"
17"
12'-8"
SPARS
ANTI-DRAG WIRE
AILERON'S TORQUE ROD
HINGE COMPRESSION RIB
AIR BRAKE'S TORQUE ROD
WING'S SLOT
END BRACE
NAVIGATION LIGHT
ENGINE: WRIGHT "CYCLONE" R
SCALE:
DRAWN BY... W. A. WYLAM
CURTISS "STRIKE"
A-12
15'-2"
7"
17"
10'-6"
7'-5"
2"
25"
WING'S SLOT
AILERON COMPRESSION RIB
TAG
AIR BRAKE
CROSS VIEW of RIB SECTION
6°
3"
½"
55"
46"
6'-8½"
7"
MAX. WIDTH of WING
44'-0"
8'-7"