

BEACHEY MONOPLANE
 THIS MONOPLANE WAS DESIGNED AND BUILT TO LINCOLN BEACHEY'S SPECIFICATIONS BY WARREN EATON, ONE OF THE MECHANICS FOR THE BUREAU OF AIRCRAFT AT WRIGHT FIELD. THIS AIRPLANE WAS STARTED IN EARLY 1915. THE SAME ENGINE WHICH POWERED THE BEACHEY MONOPLANE WAS USED TO POWER THE MONOPLANE. HARRY BEACHEY, A PILOT, FLYER AND AIRCRAFT BUILDER, WAS THE ASSEMBLER AND CONSTRUCTOR OF THE AIRPLANE. INITIAL TEST FLIGHTS WERE MADE AT THE CHRISTOPHER SCHOOL, 1000 SAN FRANCISCO BEACH, THE FUSELAGE AFT OF THE COCKPIT WAS ORIGINALLY NOT COVERED WITH FABRIC. ON THE LAST FLIGHT BEFORE THE BEACHEY MONOPLANE WAS COVERED WITH FABRIC THE FUSELAGE FROM THE FIREWALL TO THE COCKPIT WAS COVERED WITH ALUMINUM SHEET COVERING OVER A WOODEN FRAME WORK.

LANDING SPEED 45 M.P.H.
POWER TO SURFACE RATIO 44
WING LOADING 4.08
WING SPEED 10.4
ASPECT RATIO 3.75
WING AREA 180 SQ.FT.
TOTAL WEIGHT 735 LBS.

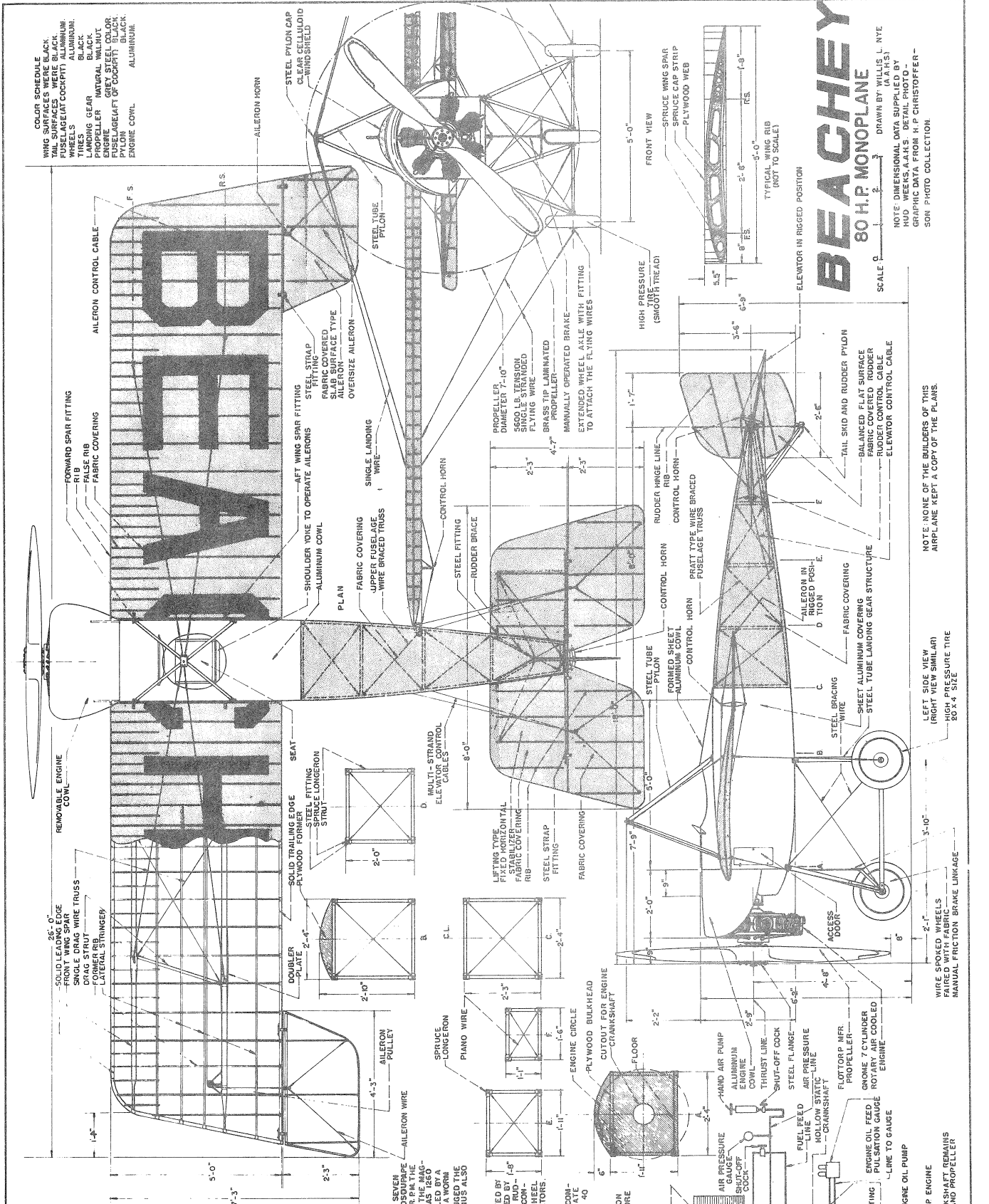
ENGINE INSTALLATION
 THE ENGINE INSTALLED WAS Gnome SEVEN CYLINDER ROTARY AIR COOLED MONOSUPRAE TYPE. IT DEVELOPED 84 H.P. AT 1350 R.P.M. THE METO. FUEL AND OIL PUMPS R.P.M. WAS 1240. ON THE GROUND ENGINE WAS THROTTLED BY A HAND THROTTLE WHICH CONTROLLED A WORM DRIVEN GEAR WHICH CHANGED THE TAPPING OF THE EXHAUST WHICH CHANGED THE CHANGING OF THE ENGINE R.P.M.

FLIGHT CONTROLS
 THE FLIGHT CONTROLS ARE OPERATED BY CABLES. THE ALERONS ARE OPERATED BY A SHOULDER YOKE MECHANISM. THE RUDDER IS OPERATED BY TURNING THE CONTROL RODS WHICH ARE ATTACHED TO THE FORE AND AFT ACTIVATES THE ELEVATORS.

FUEL AND OIL SYSTEM
 THE FUEL AND OIL SYSTEM IS A COMBINATION TANK, LINES AND APPROPRIATE CONTROLS. FUEL WAS CARRIED FOR 40 MINUTES FLIGHT DURATION.

ENGINE MOUNT
 THE ROTARY ENGINE WAS MOUNTED ON TWO STEEL MOUNTING BRACKETS FORE AND AFT.

INSTALLATION OF Gnome 80 H.P. ENGINE
 NOTE: ALL DATA BY ENGINE. THE CRANKSHAFT REMAINS STATIONARY AND THE ENGINE AND PROPELLER REVOLVE ABOUT IT.



BEACHEY

80 H.P. MONOPLANE

SCALE 1" = 1'-0"
 DRAWN BY WILLIS L. NYE
 NOTE: DIMENSIONAL DATA SUPPLIED BY HUD WEEKS, A.A.H.S. DETAIL PHOTO BY SON PHOTO COLLECTION