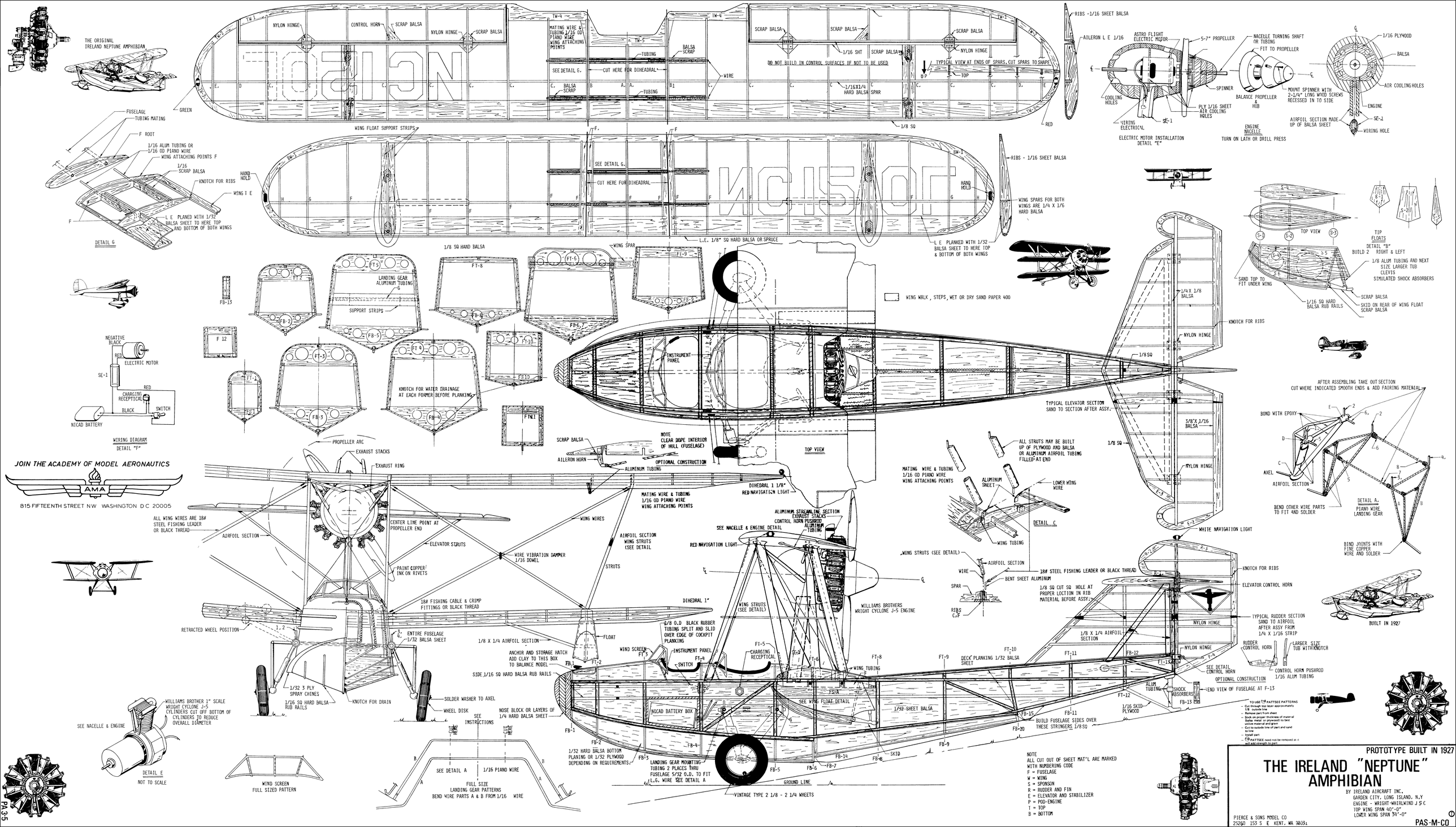
THE ORIGINAL
IRELAND NEPTUNE AMPHIBIAN
NYLON HINGE
CONTROL HORN
SCRAP BALSA
MATING WIRE & TUBING 1/16 OD PIANO WIRE WING ATTACHING POINTS
TUBING
BALSA SCRAP
WIRE
SEE DETAIL G.
CUT HERE FOR DIHEADRAL
DO NOT BUILD IN CONTROL SURFACES IF NOT TO BE USED
TYPICAL VIEW AT ENDS OF SPARS. CUT SPARS TO SHAPE
1/16 SHT
1/16X1/4 HARD BALSA SPAR
1/8 SQ
GREEN
RED
RIBS -1/16 SHEET BALSA
AILERON L E 1/16
WING FLOAT SUPPORT STRIPS
FUSELAGE
TUBING MATING
F ROOT
1/16 ALUM TUBING OR 1/16 OD PIANO WIRE
WING ATTACHING POINTS F
1/16 SCRAP BALSA
KNOTCH FOR RIBS
WING T E
L E PLANED WITH 1/32 BALSA SHEET TO HERE TOP AND BOTTOM OF BOTH WINGS
DETAIL G
HAND HOLD
1/8 SQ HAND BALSA
WING SPAR
L.E. 1/8" SQ HARD BALSA OR SPRUCE
WING SPARS FOR BOTH WINGS ARE 1/4 X 1/6 HARD BALSA
L E PLANKED WITH 1/32 BALSA SHEET TO HERE TOP & BOTTOM OF BOTH WINGS
ASTRO FLIGHT ELECTRIC MOTOR
5-7" PROPELLER
NACELLE TURNING SHAFT OR TUBING
FIT TO PROPELLER
1/16 PLYWOOD
BALSA
COOLING HOLES
SPINNER
BALANCE PROPELLER & HUB
MOUNT SPINNER WITH 2-1/4" LONG WOOD SCREWS RECESSED IN TO SIDE
AIR COOLING HOLES
PLY 1/16 SHEET AIR COOLING HOLES
WIRING ELECTRICAL
SE-1
ELECTRIC MOTOR INSTALLATION DETAIL "E"
ENGINE NACELLE TURN ON LATH OR DRILL PRESS
ENGINE
AIRFOIL SECTION MADE UP OF BALSA SHEET
WIRING HOLE
TIP FLOATS DETAIL "B" BUILD 2 RIGHT & LEFT
TOP VIEW
1/8 ALUM TUBING AND NEXT SIZE LARGER TUB CLEVIS SIMULATED SHOCK ABSORBERS
SAND TOP TO FIT UNDER WING
1/16 SQ HARD BALSA RUB RAILS
SCRAP BALSA
SKID ON REAR OF WING FLOAT SCRAP BALSA
LANDING GEAR ALUMINUM TUBING
SUPPORT STRIPS
WING WALK, STEPS, WET OR DRY SAND PAPER 400
1/4 X 1/8 BALSA
KNOTCH FOR RIBS
NYLON HINGE
INSTRUMENT PANEL
KNOTCH FOR WATER DRAINAGE AT EACH FORMER BEFORE PLANKING
TYPICAL ELEVATOR SECTION SAND TO SECTION AFTER ASSY.
3/8"X 1/16 BALSA
AFTER ASSEMBLING TAKE OUT SECTION CUT WHERE INDICATED SMOOTH ENDS & ADD FAIRING MATERIAL
BOND WITH EPOXY
AXEL
AIRFOIL SECTION
BEND OTHER WIRE PARTS TO FIT AND SOLDER
DETAIL A. PIANO WIRE LANDING GEAR
BIND JOINTS WITH FINE COPPER WIRE AND SOLDER
NEGATIVE BLACK
RED
ELECTRIC MOTOR
SE-1
CHARGING RECEPTICAL
BLACK
SWITCH
NICAD BATTERY
WIRING DIAGRAM DETAIL "F"
PROPELLER ARC
EXHAUST STACKS
EXHAUST RING
SCRAP BALSA
AILERON HORN
OPTIONAL CONSTRUCTION
ALUMINUM TUBING
NOTE CLEAR DOPE INTERIOR OF HULL (FUSELAGE)
TOP VIEW
DIHEDRAL 1 1/8"
RED NAVIGATION LIGHT
MATING WIRE & TUBING 1/16 OD PIANO WIRE WING ATTACHING POINTS
ALL STRUTS MAY BE BUILT UP OF PLYWOOD AND BALSA OR ALUMINUM AIRFOIL TUBING FILLED AT END
MATING WIRE & TUBING 1/16 OD PIANO WIRE WING ATTACHING POINTS
ALUMINUM SHEET
LOWER WING WIRE
DETAIL C
WING TUBING
WHITE NAVIGATION LIGHT
JOIN THE ACADEMY OF MODEL AERONAUTICS
AMA
815 FIFTEENTH STREET NW WASHINGTON DC 20005
ALL WING WIRES ARE 18# STEEL FISHING LEADER OR BLACK THREAD
CENTER LINE POINT AT PROPELLER END
WING WIRES
AIRFOIL SECTION
ELEVATOR STRUTS
WIRE VIBRATION DAMPER 1/16 DOWEL
AIRFOIL SECTION WING STRUTS (SEE DETAIL
STRUTS
ALUMINUM STREAMLINE SECTION EXHAUST STACKS
CONTROL HORN PUSHROD ALUMINUM TUBING
SEE NACELLE & ENGINE DETAIL
RED NAVIGATION LIGHT
PAINT COPPER INK ON RIVETS
WING STRUTS (SEE DETAIL)
AIRFOIL SECTION
18# STEEL FISHING LEADER OR BLACK THREAD
BENT SHEET ALUMINUM
1/8 SQ CUT SQ HOLE AT PROPER LOCTION IN RIB MATERIAL BEFORE ASSY.
KNOTCH FOR RIBS
ELEVATOR CONTROL HORN
BUILT IN 1927
18# FISHING CABLE & CRIMP FITTINGS OR BLACK THREAD
DIHEDRAL 1"
WING STRUTS (SEE DETAIL)
WILLIAMS BROTHERS WRIGHT CYCLONE J-5 ENGINE
TYPICAL RUDDER SECTION SAND TO AIRFOIL AFTER ASSY FROM 1/4 X 1/16 STRIP
RETRACTED WHEEL POSITION
ENTIRE FUSELAGE 1/32 BALSA SHEET
1/8 X 1/4 AIRFOIL SECTION
1/8 O.D BLACK RUBBER TUBING SPLIT AND SLID OVER EDGE OF COCKPIT PLANKING
FLOAT
WIND SCREEN
INSTRUMENT PANEL
ANCHOR AND STORAGE HATCH ADD CLAY TO THIS BOX TO BALANCE MODEL
SWITCH
CHARGING RECEPTICAL
WING TUBING
DECK PLANKING 1/32 BALSA SHEET
1/8 X 1/4 AIRFOIL SECTION
RUDDER CONTROL HORN
LARGER SIZE TUB WITH KNOTCH
SEE DETAIL CONTROL HORN
CONTROL HORN PUSHROD 1/16 ALUM TUBING
OPTIONAL CONSTRUCTION
SIDE 1/16 SQ HARD BALSA RUB RAILS
1/32 3 PLY SPRAY CHINES
1/16 SQ HARD BALSA RUB RAILS
KNOTCH FOR DRAIN
SOLDER WASHER TO AXEL
WHEEL DISK
SEE INSTRUCTIONS
NOSE BLOCK OR LAYERS OF 1/4 HARD BALSA SHEET
NICAD BATTERY BOX
SEE WING FLOAT DETAIL
1/32 SHEET BALSA
ALUM TUBING
SHOCK ABSORBERS
END VIEW OF FUSELAGE AT F-13
1/16 SKID PLYWOOD
BUILD FUSELAGE SIDES OVER THESE STRINGERS 1/8 SQ
SKID
SEE NACELLE & ENGINE
WILLIAMS BROTHER 1" SCALE WRIGHT CYCLONE J-5 CYLINDERS CUT OFF BOTTOM OF CYLINDERS TO REDUCE OVERALL DIAMETER
DETAIL E NOT TO SCALE
WIND SCREEN FULL SIZED PATTERN
SEE DETAIL A
1/16 PIANO WIRE
FULL SIZE LANDING GEAR PATTERNS BEND WIRE PARTS A & B FROM 1/16 WIRE
1/32 HARD BALSA BOTTOM PLANING OR 1/32 PLYWOOD DEPENDING ON REQUIREMENTS.
LANDING GEAR MOUNTING TUBING 2 PLACES THRU FUSELAGE 5/32 O.D. TO FIT L.G. WIRE SEE DETAIL A
GROUND LINE
VINTAGE TYPE 2 1/8 - 2 1/4 WHEETS
TO USE PATTSEE PATTERNS
- Cut through top layer approximately 1/8 outside line
- Remove part from sheet
- Stock on proper thickness of material (balsa metal or plywood) to best utilize material and grain
- Cut to outside line of part and sand to line
- Install part
PATTSEE need not be removed as it will add strength to part
NOTE
ALL CUT OUT OF SHEET MAT'L ARE MARKED WITH NUMBERING CODE
F = FUSELAGE
W = WING
S = SPONSON
R = RUDDER AND FIN
E = ELEVATOR AND STABILIZER
P = POD-ENGINE
T = TOP
B = BOTTOM
PROTOTYPE BUILT IN 1927
THE IRELAND "NEPTUNE" AMPHIBIAN
BY IRELAND AIRCRAFT INC.
GARDEN CITY, LONG ISLAND, N.Y
ENGINE - WRIGHT-WHIRLWIND J 5 C
TOP WING SPAN 40'-0"
LOWER WING SPAN 34'-0"
PIERCE & SONS MODEL CO
22960 153 S E KENT, WA 98031
PAS-M-CO
PA3-5