**Drive Shaft Assembly**

*107-402-004*

**Propeller Bearing Housing**

*107-402-004*

**Propeller Bearing Housing**

*107-402-004*

**Spratt Control Wing Flying Boat**

Drive Shaft Assembly

Propeller Stub (Hub)

Bearing Stub

Bearing Housing
USED IV0-PROP
# MODIFIED TOYOTA
DRIVE SHAFT FTG.

MATERIAL: 4130

SPRATT CONTROL WING FLYING BOAT
WOODEN PROP RING

Dwg No: 107-406-007  Date: 8-30-73  Scale: Full
(USED WELDED MAST CAP)  
1 MADE - NOT USED  
(ITS AVAILABLE)  

2 1/2 DRILL  
WING ATTACHMENT BLOCK - ALUMINUM  

HEX HF-8 ROD END - MODIFY AS SHOWN  
(2 RPD)  

3/16 DRILL  
SODIUM PRESS INTO HF-8  
ONE FROM EACH SIDE  

INSERTS FOR HF-8  
(A RPD) - 4130  

USE 4 WELDED CAP +  
LONGER STUD + 7/16 ROD ENDS  
TO PERMIT FOLDING WING  
ABOUT MAST ATTACH WITH T.E.U.P.  
BUT ELECTED NOT TO DO THIS FOLD.
1. Use plate welded on end and access notch.

2. Determine L after hull is constructed.

3. Drill 2 holes.

4. Slot tubing on minor axis.

5. Insert plate and weld.

6. Nut AC36S-428

7. Washer AN960-416

8. Bolt AN4-11

**Spratt Control-wing Flying Boat**

**Propeller A-frame Support**

**DWG NO. 107-400-010**

**DATE 10-5-72**

**SCALE: FULL**
Use \( \frac{1}{4}\) Bolt and \( \frac{3}{4}\) Spacer at each end to attach brackets to strut fittings.

Use \( \frac{1}{8}\) Bolt to attach rod end to center of bracket. Both rod end to \( \frac{3}{8}\) and use spacers as necessary.

Add bushings to permit rotation of lift strut in a conical.

Use \( \frac{5}{16}\) Anchor Nut due to space.

Suggest use of wing fitting.

Caution: Ball joint must clear thru all angles of incidence plus differential angle from roll input. (Needs study to suit your situation.)

Make 2 brackets for each wing \( 4\frac{1}{2}\) long x \( 1\) wide. Lower bracket has one edge turned up \( \frac{1}{2}\). Upper bracket has one edge turned up \( \frac{1}{4}\). Material is \( 9/30\) flat stock, \( \frac{1}{8}\) thick.

Main strut: 107-100-050.

Strut fitting: 107-210-002.

Forward strut: 107-110-061.
Spratt Control Wing Flying Boat

Hull Fittings for Wing Struts

*Main Strut: Hull Fitting (2 RQD)*

*Forward Strut: Hull Fitting (2 RQD)*

*Dwg. No. MT-250-04/011  Date: 10-23-72  Scale: 1/8"
Mast Strut (2 Rods)

10½ Nominal Length

Mast Clamp (2 Rod - 1 RH - 1 LH)

Material - 4130 300³

Spratt Control Wing Flying Boat

Mast Clamp
Mast Strut
Strut Fitting

Dwg No. 107-100-060/060 Date 10/12/72 Scale 1/12

Used at Bulkhead

Lugs for Thrust Strut + Braces

Similar but Used Different Fitg
Position of main fitting is determined by fire wall, however it is at a slight angle which must be determined during final set-up of wing.

Position of propeller x-frame is determined during final set-up.

Position mast anchor so that rear end of collective pitch control (107-300-065) and rod (107-200-065) do not strike fire wall.

Hull fittings
107-2000K-901
5-9-73
OUTLET 1/2 OD COPPER SOLDER IN PLACE

INLET 1/2 OD COPPER SOLDER IN PLACE

SIZE OF TANKS 8 3/4 X 2 5/8
SIZE OF TUBES 3/4 X 3/32
NO. OF TUBES 43
NO. OF LAYERS 3

SPRATT CONTROL WING, FLYING BOAT
RADIATOR

DRAWN NO: 107-400-088
DATE: 5-14-73
SCALE: 1

[Diagram of a rectangular object with dimensions and notes on copper and tube specifications]
CENTER OF MIXER BUTTERFLY

BOLT AN3-6, WASHED AC763-10, AN7 AC365-2332.

DRILL $\frac{3}{4}$", REW $\frac{7}{16}$

BASE $\frac{3}{4}$" X $\frac{3}{16}$" (1 REED)

TO MIXER

PULLEY 2\(\frac{1}{2}\)" OD AN916-2A

CABLE GUARD CLEARANCE $\frac{3}{32}$

BEND HOUSING FROM 430.035" (2 REED)
WELD ON BASE PLATE - SEE ABOVE

SPRATT CONTROL WING FLYING BOAT
REAR CONTROL PULLEYS

C.W. & N. 187-300-030
DATE: 2-7-73
SCALE: FULL