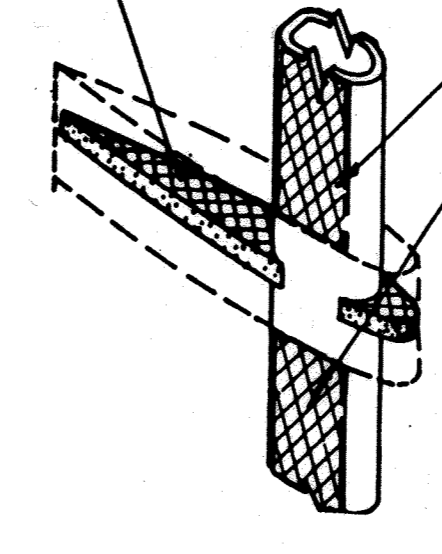


D.W.L.

STOCK LAYOUT

DIMENSIONS TAKEN FROM CHORD 'A'

LEGS OF CHORDS A,C,E,G + ANGLED AT BOTTOM LEGS  
 FOAM WEBS USING 20MM THICK 200KG/M<sup>3</sup> RIGID P.V.C. FOAM  
 LAMINATED WITH 2 LAYERS 200 GM/M<sup>2</sup> 3-GLASS CLOTH ON  
 THE DIAGONAL, THEN ONTO STOCK WITH 4 LAYERS  
 200 GM/M<sup>2</sup> CARBON U.R. 100MM WIDE  
 DOUBLE BIAS GLASS ON SIDES OF  
 SKIRT BETWEEN WEBS - SEE  
 CONSTRUCTION NOTE 7.



TAPE DETAIL

LAMINATE CONTINUOUS  
 ALONG FRONT OF STOCK  
 THEN AFT TO TOLLING  
 EDGE OF BLADE.  
 LAP 60mm  
 FLUID BLOT OF FOAM WEB  
 BODIES MUST BE WITH LABELS  
 LAPPING 60mm

NOTE: CONFIRM LENGTH OF UPPER SECTION  
 UP STOCK ON BEAT BEFORE LAYING

TURN RUDDER STOCK TO A DIAMETER THAT  
 ALLOWS FOR A MINIMUM THICKNESS OF 10mm  
 AT UPPER AND LOWER BEARINGS.

CONSTRUCTION

- FORM RUDDER STOCK MANDREL USING 40mm AND 20mm THICK TIMBER SPINES WITH FOAM AND TIMBER PACKING AS SHOWN.
- COAT MANDREL SURFACE WITH EPOXY RESIN AND FAIR TO A GOOD SURFACE.
- PRE-IMPREGNATE CARBON U.R.'S ON A PRE-WETTING TABLE WITH MEASURED RESIN ISSUE. LAY UP ON MANDREL ENSURING FIBERS ARE STRAIGHT AND ORIENTED AS SPECIFIED.
- HEAT CURE COMPLETED STOCK IN ACCORDANCE WITH RESIN MANUFACTURER'S SPECIFICATIONS.
- ADD FOAM WEBS AND FIT 60 KG/M<sup>3</sup> FOAM BETWEEN WEBS AND SHAPE TO SUIT FOIL SHAPES.
- TAPE 100mm WIDE CARBON U.R.'S ONTO FOAM WEBS, FOAM & STOCK.
- ADD 590GM/M<sup>2</sup> DOUBLE BIAS GLASS ON SIDES OF STOCK BETWEEN 100mm WIDE CARBON U.R. TAPINGS.
- LAMINATE SKINS AND HEAT CURE ENTIRE ASSEMBLY TO RESIN MANUFACTURER'S SPECIFICATIONS.

NOTES

- ALL RESIN TO BE EPOXY
- MANDREL FOAM TO BE 80KG/M<sup>3</sup> RIGID P.V.C.
- MANDREL TIMBER TO BE DRY KALDI, WHITE ASH OR EQUIVALENT - MINIMUM SHEAR STRENGTH PARALLEL TO GRAIN (82 MPa), MINIMUM COMPRESSIVE STRENGTH PERPENDICULAR TO GRAIN (7.45 MPa).
- BLADE SKIN LAYOUT TO BE LAMINATED BOTH SIDES AT THE SAME TIME WITH BLADE HELD IN A VERTICAL POSITION (TRAILING EDGE DOWN). ALL LAMINATE REINFORCEMENTS TO BE CONTINUOUS AROUND PERIPHERY OF RUDDER BLADE.

STOCK BASIC LAYOUT ( FIBER/RESIN VOLUME FRACTION = .43 )

|     |                      |       |      |
|-----|----------------------|-------|------|
| 1.  | 400GM/M <sup>2</sup> | AC400 | 0°   |
| 2.  | 300GM/M <sup>2</sup> | AC300 | +30° |
| 3.  | 400GM/M <sup>2</sup> | AC400 | 0°   |
| 4.  | 300GM/M <sup>2</sup> | AC300 | -50° |
| 5.  | 400GM/M <sup>2</sup> | AC400 | 0°   |
| 6.  | 300GM/M <sup>2</sup> | AC300 | 30°  |
| 7.  | 400GM/M <sup>2</sup> | AC400 | 0°   |
| 8.  | 300GM/M <sup>2</sup> | AC300 | +60° |
| 9.  | 400GM/M <sup>2</sup> | AC400 | 0°   |
| 10. | 300GM/M <sup>2</sup> | AC300 | -30° |
| 11. | 400GM/M <sup>2</sup> | AC400 | 0°   |

BLADE LAYOUT ( FIBER/RESIN VOLUME FRACTION = .39 )

|    |                      |                    |          |      |
|----|----------------------|--------------------|----------|------|
| 1. | 300GM/M <sup>2</sup> | GLASS CLOTH        | [RE292]  | 0°   |
| 2. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | 0°   |
| 3. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | +30° |
| 4. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | 0°   |
| 5. | 240GM/M <sup>2</sup> | CARBON/KEVLAR U.R. | [RAC241] | 45°  |
| 6. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | 0°   |
| 7. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | -30° |
| 8. | 200GM/M <sup>2</sup> | CARBON U.R.        | [AC200]  | 0°   |
| 9. | 300GM/M <sup>2</sup> | GLASS CLOTH        | [RE292]  | 0°   |

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