

PROPELLER VISUAL INSPECTION

HUB DATA *(Record Blade Palm Data for CP Propellers)*

| | |
|---|--|
| SERIAL NO. | STOCK NO. |
| DRAWING NO. | REV. _____ Hub _____ Dwg |
| MFG. BY | |
| MATERIAL | NO. OF BLADES |
| <input type="checkbox"/> PORT <input type="checkbox"/> STBD <input type="checkbox"/> CENTER <input type="checkbox"/> INBOARD <input type="checkbox"/> OUTBOARD <input type="checkbox"/> RH <input type="checkbox"/> LH | STRESS RELIEF/MODIFICATION DATA AND DATE <i>(if any)</i> |
| ACTIVITY WHERE LAST REPAIRED | DATE OF LAST REPAIR |
| INSPECTION | |
| SIGNATURE & TITLE OF QUALIFIED INSPECTOR | INSPECTING ACTIVITY |
| LOCATION OF INSPECTION (ACTIVITY) | DATE OF INSPECTION |

INSTRUCTIONS

1. Utilize this form by placing a check mark in the appropriate column – YES, NO or NA (not applicable).
2. Answer all questions and record all defects. Use item 15 if more space is needed.
3. If an answer indicates the possibility of an unsatisfactory propeller, explain in the REMARKS column.
4. For Visual Preservation Inspection respond to items 1 and 10 through 15.
5. For Visual Technical Inspection refer to the applicable drawing and respond to items 2 through 15.
6. Show the approximate size and location of all defects and damage on the appropriate attached sketch. Identify damaged areas as old or new, if possible.

| ITEM | YES | NO | NA | REMARKS |
|---|-----|----|----|---------|
| 1. Preservation | | | | |
| a. Is the propeller stored in open covered storage or better? | | | | |
| b. Is the propeller preserved with strippable plastic coating? | | | | |
| c. Is the plastic coating free of damage and deficiencies (e.g., tears, bare spots, peeling, porous, etc.)? | | | | |
| d. Is the propeller preserved with corrosion-preventive compound instead of strippable plastic coating? | | | | |
| e. Are the sheet metal blade edge protectors installed? | | | | |
| f. Is there canvas or equivalent protection between blade edges and blade edge protectors? | | | | |
| g. Are the blade edge protectors free of damage? | | | | |
| h. Are the forward and aft faces of hub protected? | | | | |
| i. Are the ends of the hub bore sealed? | | | | |
| 2. Are the following accessories installed or accompanying this propeller? | | | | |
| a. Gland ring | | | | |
| b. Eyebolts | | | | |
| c. Eyebolt hole plugs | | | | |
| d. Fill and vent hole plugs | | | | |
| e. Gland and cap studs | | | | |
| f. Gland and cap nuts | | | | |

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| ITEM | YES | NO | NA | REMARKS |
|--|-----|----|----|---------|
| <p>3. Prairie System</p> <p>a. Are all the air-emitting holes open?</p> <hr/> <p>b. Are the air channel cover plate welds free of cracks and porosity?</p> <hr/> <p>c. On prairie propellers having an external air seal arrangement at the forward end, is the hub free of grooves and damage in way of the air seal housing?</p> | | | | |
| <p>4. Blade Edges</p> <p>a. Does the latest revision of the propeller drawing specify a trailing-edge knuckle?</p> <p>- Do the trailing edges have a knuckle?</p> <p>- Is the break of the knuckle sharp on all blades?</p> <hr/> <p>b. Does the latest revision of the propeller drawing specify a trailing-edge fairing radius?</p> <p>- Do the trailing edges have a fairing radius?</p> <hr/> <p>c. Does the latest revision of the propeller drawing specify a knuckle on the blade tip?</p> <p>- Do the tips have a knuckle?</p> <p>- Is the break of the knuckle sharp on all blades?</p> <hr/> <p>d. Does the latest revision of the propeller drawing specify a tip fairing radius?</p> <p>- Do the blades have a tip fairing radius?</p> | | | | |

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| ITEM | YES | NO | NA | REMARKS |
|---|-----|----|----|---------|
| e. Do the trailing edges have an edge radius of approximately 1/64"? | | | | |
| f. Do the tips have an edge radius of approximately 1/64"? | | | | |
| g. Are the leading edges, trailing edges, and tips free of damage and deficiencies (e.g., nicks, dents, bends, cable marks, flat spots, ridges, punch marks, gouges, etc.)? | | | | |
| h. Are the leading and trailing edge outlines fair (not wavy)? | | | | |
| i. Are the blade edges and tips free of cracks within a 3 inch wide peripheral band? (Identify location of cracks as being in welded or unwelded areas.) | | | | |
| j. Are the blade edges and tips free of porosity within a 3 inch wide peripheral band? (Identify location of porosity as being in welded or unwelded areas.) | | | | |
| 5. Blade Surfaces | | | | |
| a. Are the blade surfaces free of damage and deficiencies (e.g., dents, gouges, cable marks, etc.)? | | | | |
| b. Are the blade surfaces free of cavitation erosion? | | | | |
| c. Are the blade surfaces fair (not wavy)? | | | | |
| d. Are the blade surfaces free of cracks? (Identify location of cracks as being in welded or unwelded areas.) | | | | |

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| ITEM | YES | NO | NA | REMARKS |
|--|-----|----|----|---------|
| e. Are the blade surfaces free of porosity? (Identify location of porosity as being in welded or unwelded areas.) | | | | |
| 6. Fillet Areas | | | | |
| a. Are the fillet areas free of damage and deficiencies (e.g., dents, gouges, ridges, cable marks, etc.)? | | | | |
| b. Are the fillet areas free of cavitation erosion? | | | | |
| c. Are the fillets fair (not wavy)? | | | | |
| d. Are the fillet areas free of cracks? (Identify location of cracks as being in welded or unwelded areas.) | | | | |
| e. Are the fillet areas free of porosity? (Identify location of porosity as being in welded or unwelded areas.) | | | | |
| 7. Hub | | | | |
| a. Is the hub exterior surface free of damage and deficiencies (e.g., dents, gouges, cable marks, cavitation erosion, cracks, porosity)? | | | | |
| b. Is the gland seal area at forward end of the hub bore free of damage and deficiencies (e.g., gouges scoring, etc.)? | | | | |
| c. Is the O-ring sealing surface on the hub aft face free of damage and deficiencies? | | | | |
| d. Are the installed eyebolt hole plugs and fill and vent plugs flush with the adjacent surface? | | | | |

Propeller Serial No: _____

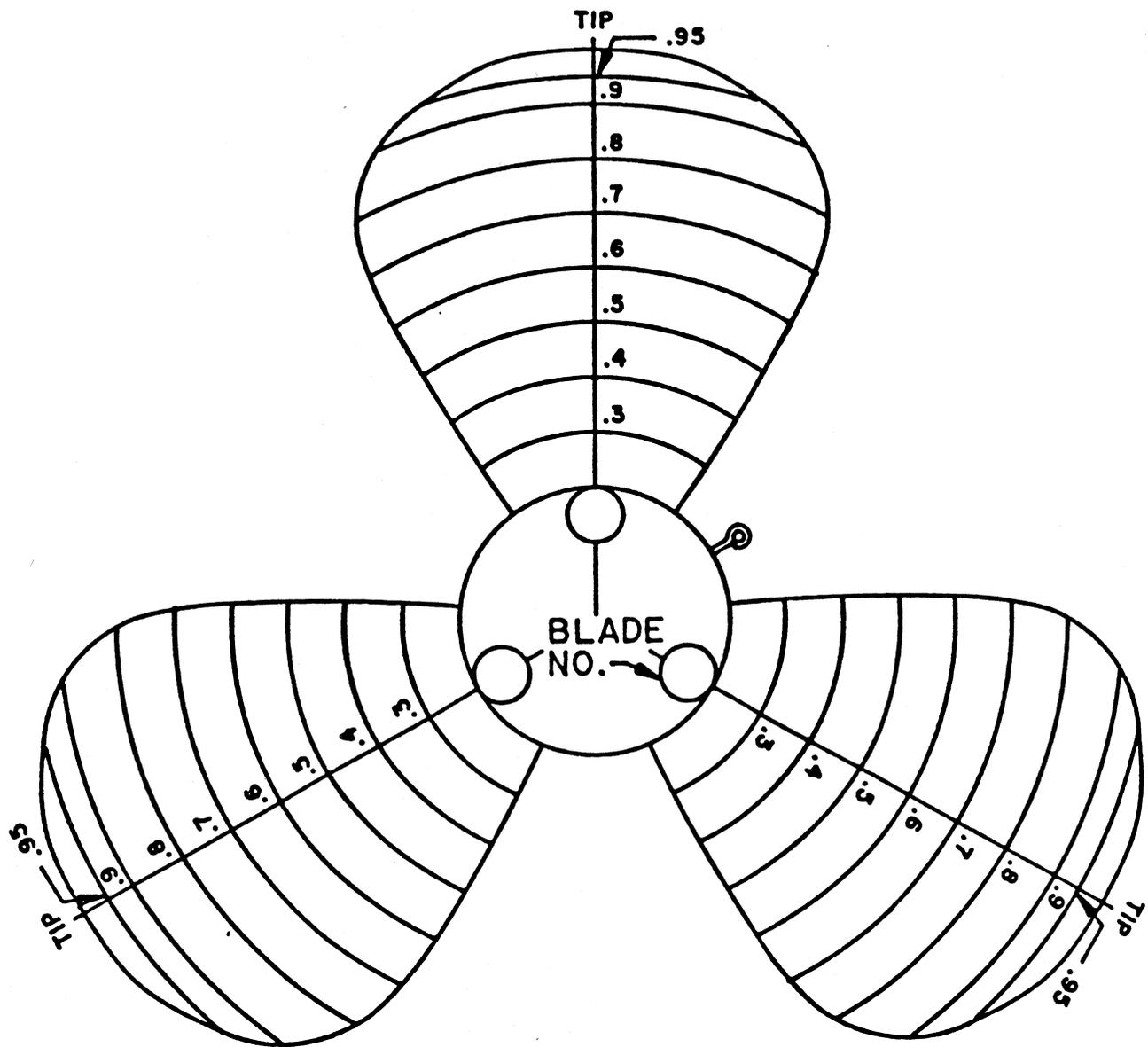
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| ITEM | YES | NO | NA | REMARKS |
|---|-----|----|----|----------------------------------|
| e. Are the keyway(s) free of damage and deficiencies (e.g., nicks, dents, etc.)? | | | | |
| f. Is the hub interior surface free of damage and deficiencies (e.g., dents, gouges, cable marks, upset, cracks, porosity)? | | | | |
| 8. Is the propeller free of marine growth? | | | | |
| 9. Surface Finish | | | | |
| a. Is the hub O.D. surface 125 rms or better? | | | | |
| b. Are the blade surfaces 63 rms or better? (for Class I & II propellers) | | | | |
| c. Are the blade surfaces 125 rms or better? (for Class III & IV propellers) | | | | |
| 10. Are the approximate size and location of all defects and damage shown on the attached sketches? | | | | |
| 11. Is a photograph of the damaged areas and/or entire propeller available? (Note in the REMARKS column if it is attached.) | | | | |
| 12. Is the certification document attached to the propeller? (If it is attached, record data in REMARKS column.) | | | | Activity: Inspector: Date: |
| 13. Does the condition of this propeller indicate that it will provide satisfactory service. | | | | |
| 14. Provide a brief description of the repairs considered necessary to restore this propeller to a serviceable condition. | | | | |
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15. Additional Comments.

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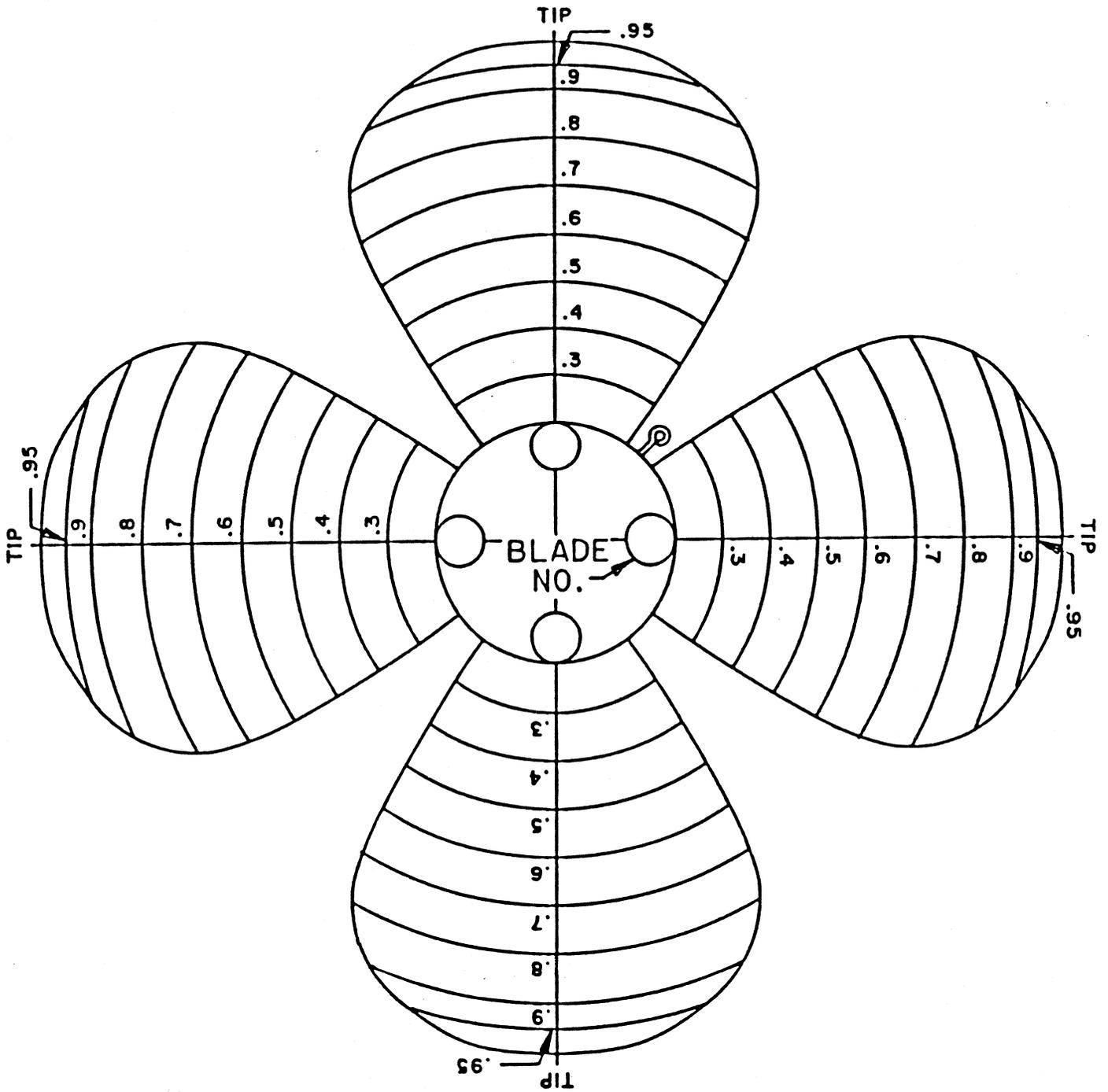


PRESSURE FACE

SUCTION FACE

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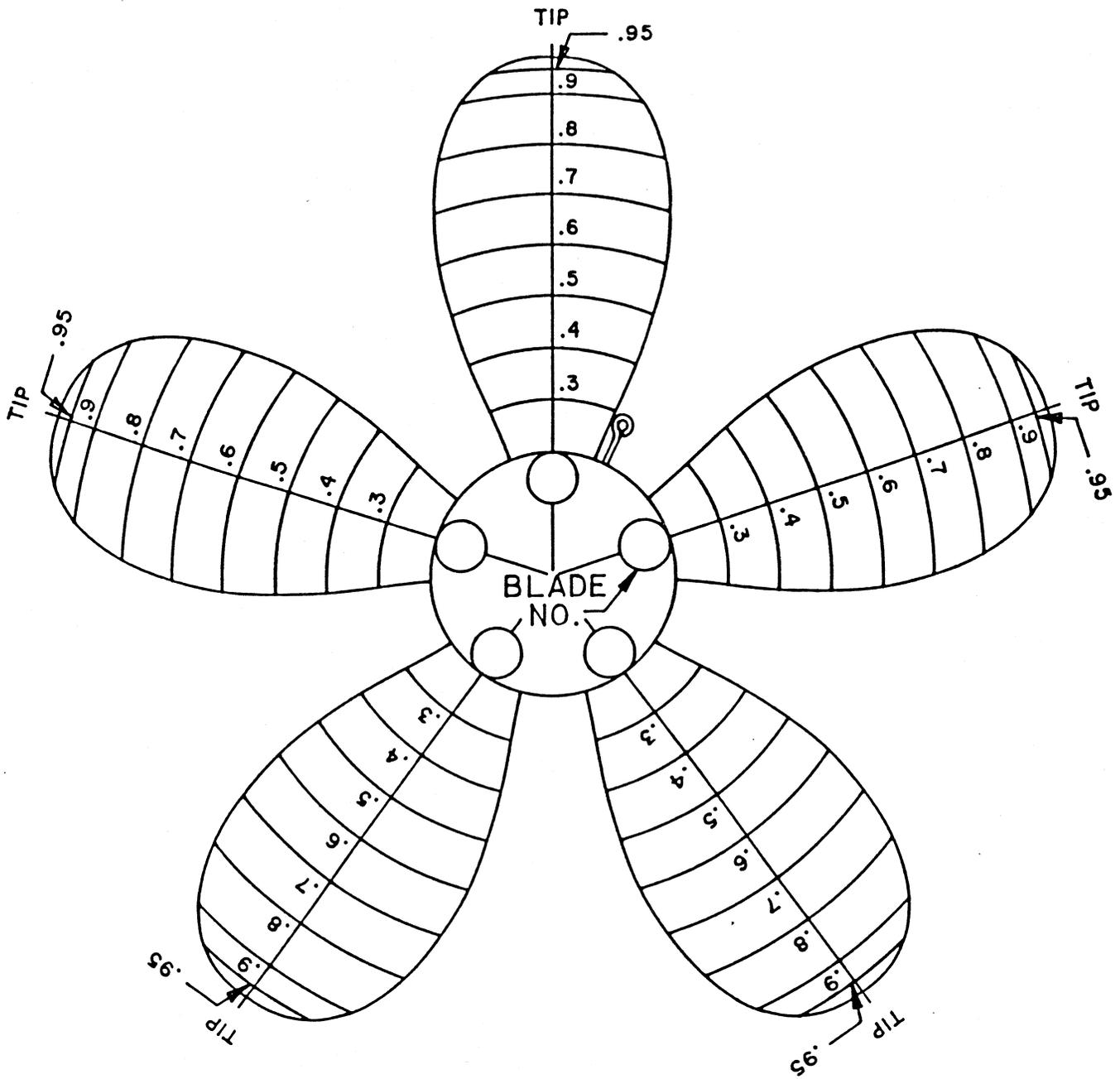


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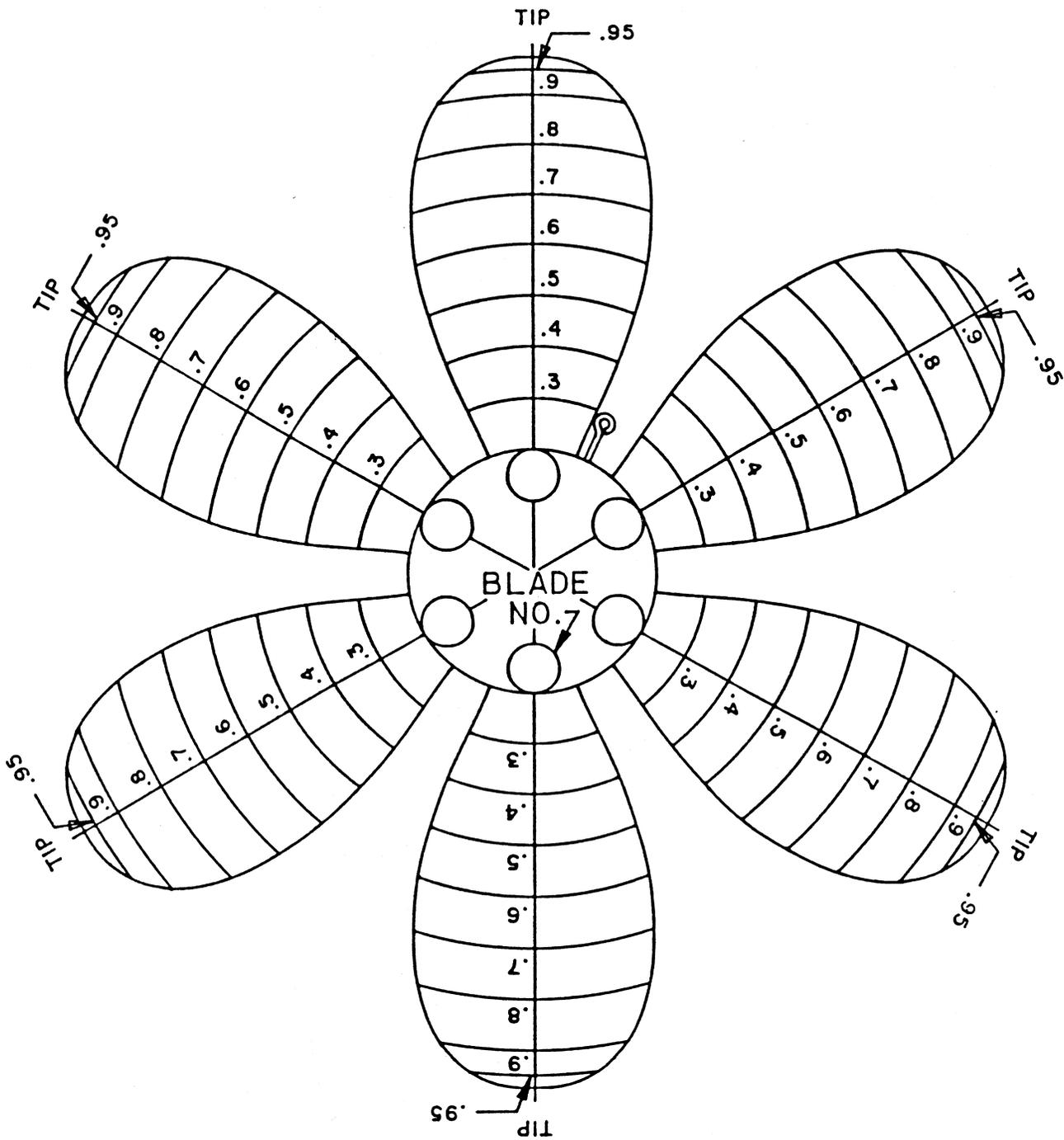


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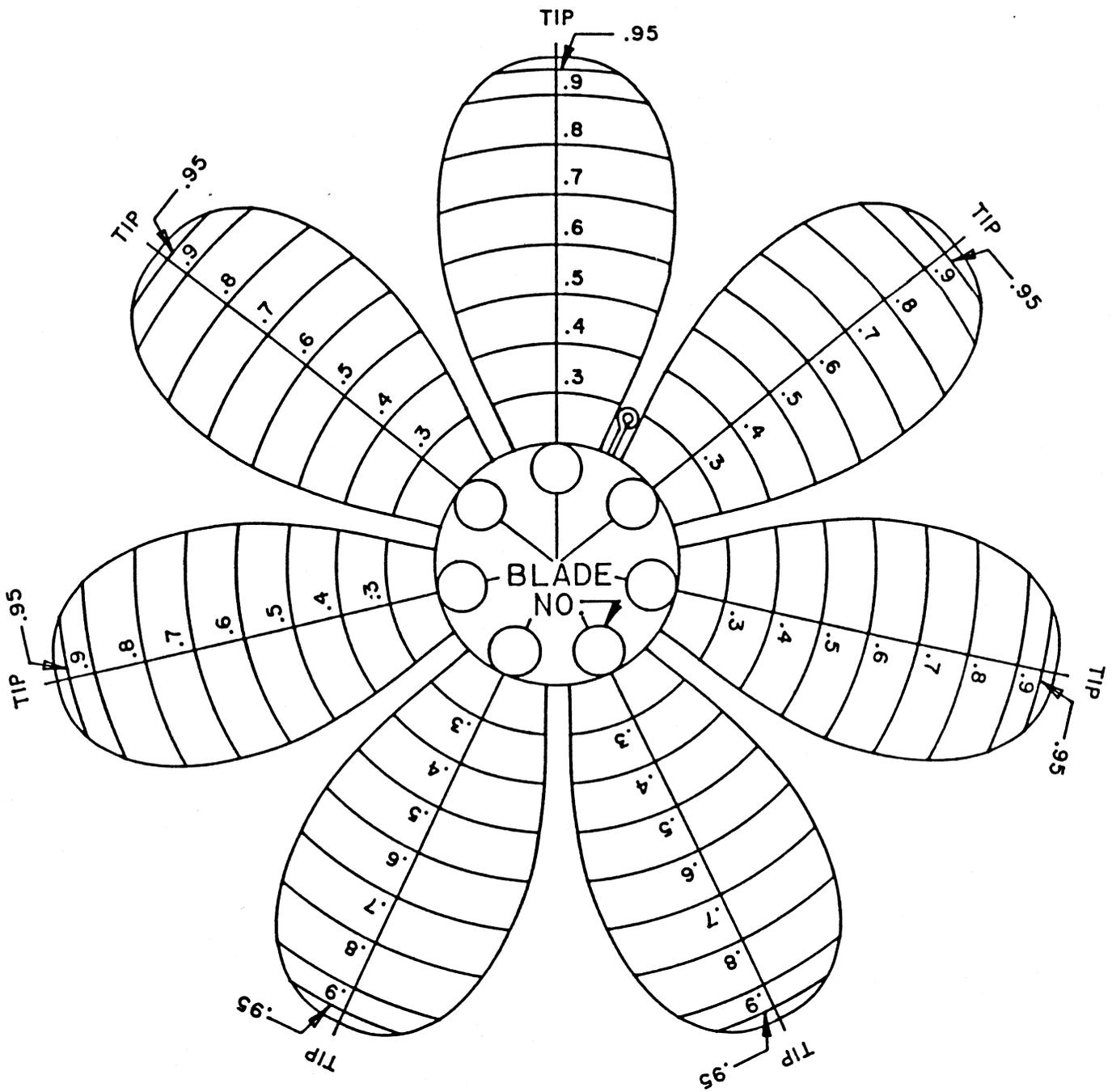


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