

### Visualization of Cavities on Ship Screw Propeller

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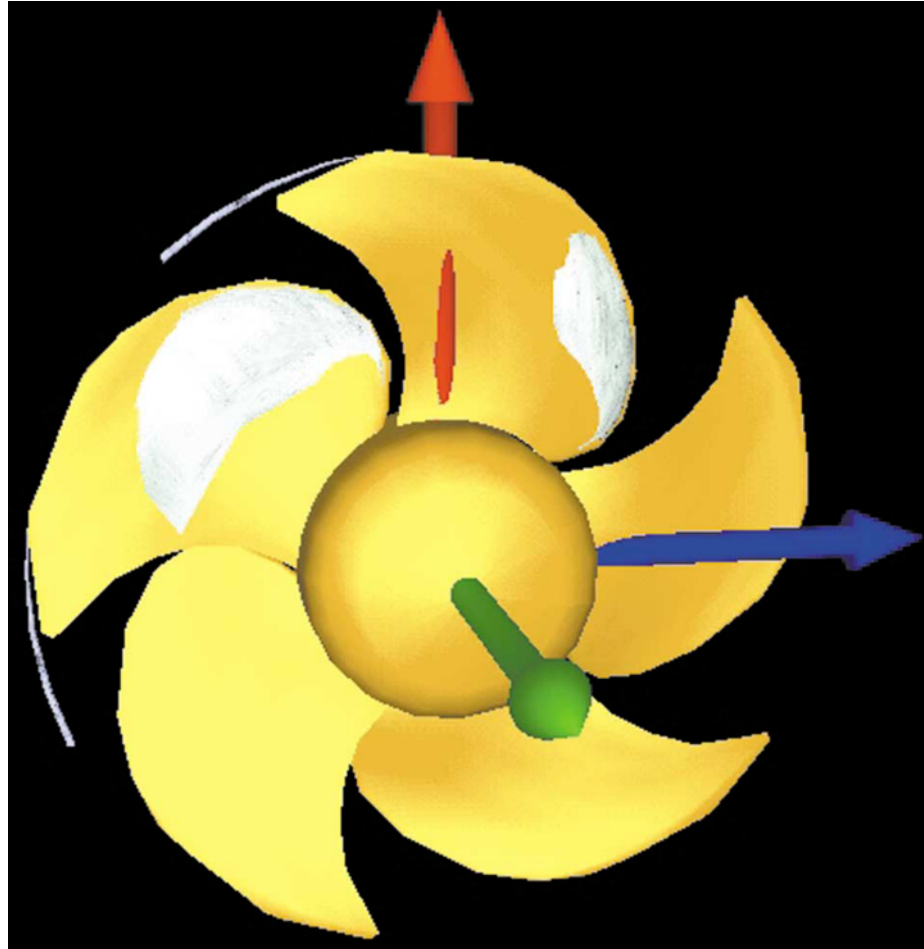


Figure shows visualization of cavitation pattern on screw propeller advancing in ship's wake. Main parameters of the propeller are following: diameter 3.8 m, average pitch ratio 1.08, advance speed 28 knots, shaft speed 212 rpm, twin-screw arrangement. Two types of cavitation may be distinguished at the picture. Large sheet cavity fully developed at 290 deg position that tends to vanish when blade passes its top position and cavitating tip vortex that appears at 250 deg position and closes at 20 deg. Presented visualization is used as a post-processing tool for propeller analysis program used in our facility.