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Subject: Renegade Alert Submarine In-Game Video  
Posted by [mahkra](#) on Mon, 31 May 2004 00:18:14 GMT  
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the bubbles look kinda cool, but should they really be there?

cavitation (bubbles of water vapor forming in the water) occurs because the pressure on the back of the prop blade is so low that the water boils. but this is a really bad thing, because when the bubbles collapse, it makes lots of noise, reduces the prop's efficiency, and damages the propeller. therefore, propellers are designed to avoid cavitation.

cavitation is a particularly severe problem on naval vessels, especially submarines, because the noise from the bubbles makes the vessels show up VERY easily on sonar (which is obviously something one would want to avoid).

because props are designed to avoid cavitation (and have been since WWII), it generally only occurs when a propeller is damaged or is being used improperly (such as a propeller that is much too small for the engine).

you may want to leave the bubbles in anyway if you like the way it looks, but any submarine that actually made that many bubbles would be a sitting duck in any actual naval battle.

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