

Landing Products Inc. APC Propellers

Subject: APC Propeller Life Expectancy Revision: Rev 2 Date: April 25, 2025

APC propellers are designed with a goal of infinite life expectancy under ideal operating conditions.

However, the actual propeller life will depend on the operating environment. When operated below the maximum recommended RPM limit, APC propellers should not experience fatigue stress that will lead to structural failure.

Prolonged exposure to sunlight will eventually degrade the material. Care should be taken to protect the propeller from prolonged exposure to the sun. Since some sun exposure is inevitable, the typical propeller life span for model aircraft applications is 5-10 years.

All APC fiber reinforced aircraft propellers use Nylon (PA6) as the matrix material. When a specific life expectancy needs to be determined, based on hours of UV radiation exposure, the Nylon (PA6) material should be considered in the calculation.

Temperature, humidity, and the presence of other chemicals can also impact the degradation process and should be considered.

In summary, while a specific time-to-life span for Nylon (PA6) under environmental exposure is difficult to provide, prolonged exposure will significantly shorten its lifespan, leading to degradation in strength and appearance.