BSCE 21/WP 13

IMPROVING BIRDSTRIKE RESISTANCE OF AIRCRAFT WINDSHIELDS

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ABSTRACT*

USAF aircraft repeatedly prove that birds and aircraft cannot occupy the same airspace at the same time; over 3000 birstrikes per year cause millions of dollars in damage to USAF aircraft. On an average, these birdstrikes result in one aircrew member being killed per year and one aircraft being lost per year. More of these losses are due to birstrikes on the windshield subsystem than to any other subsystem. Windshield systems on several different aircraft are being redesigned to improve tolerance of the birdstrike event. Efforts to improve Birdstrike tolerance and reduce cost-of-ownership characteristics of these windshields will be discussed. Some technical voids in designing for, and integration of, birdstrike resistance will be discussed.

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