

**97-18-02R1 Hartzell Propeller Inc.:**  
Amendment 39-13212. Docket No. 96-  
ANE-40-AD. Revises AD 97-18-02,  
Amendment 39-10112

*Applicability:* This airworthiness directive  
(AD) is applicable to Hartzell Propeller Inc.  
( )HC-( ) (2,3)(X,V)( )-( ) series and HA-  
A2V20-1B series propellers with aluminum

blades. These propellers are installed on but  
not limited to the aircraft listed in the  
following Table 1:

TABLE 1.—AFFECTED AIRCRAFT

Manufacturer	Aircraft model
Aero Commander (Twin Com- mander).	500; 500A; 500B, 500S, and 500U; 520; 560; 560A, 560E; 680, 680E, 720; 680F, 680FP, 680FL, 680FLR; B1 (CALLAIR).
Aeromere .....	FALCO F.8.L.
Aeronautica Macchi .....	AL60-F5; AM-3.
Bauger .....	SAIL PLANE.
Beech .....	35 SERIES BONANZA; 35-C33 DEBONAIR; 35-C33A, E33A, F33A; 50 SERIES TWIN BONANZA; 58P, 58TC BARON; 95-55, 95-A55, 95-B55 BARON; 65, A65, 65-(B)80, 65-A80, A65-8200, 70.
Bellanca .....	14-13; 14-19; 14-19-2; 14-19-3; 7GCA, 7GCB, 7GCC; DW-1 EAGLE.
Camair .....	480.
Cessna .....	170; 170A; 172 SKYHAWK; 175; 180, A, B, C, D, E, F, G, H; 182, A, B, C, D, E, G, H, J, K, L, M; 210, A, B, C, 5, 5A; 310, A, B, C, D, E, F, G, H, E310H; 320, 320-1 SKYKNIGHT; 320A, 320B; 402 BUSINESSLINER; 411; WREN 460; WREN 460H, J, K, L, M.
deHavilland .....	DH104 DOVE; DH114 HERON.
Dornier .....	DO27Q-6; DO28A-1; DO28B-1.
Fuji .....	T-3, LM-2.
GAF—Gov't. Aircraft Factories ....	N22B, N24A, N22S, N22C.
Goodyear .....	(Loral); GA22A GOODYEAR BLIMP; GZ19, 19A GOODYEAR BLIMP.
Great Lakes .....	2T-1A-2.
Grumman .....	G44, G44A WIDGEON; G21C, D GOOSE.
Helio .....	H-391 COURIER; H-391B COURIER; H-395A COURIER.
Luscombe .....	11; 11A.
Mooney .....	M20.
Multitech (Temco) .....	D16 TWIN NAVION; D16A TWIN NAVION.
Nardi .....	FN-333.
Navion .....	NAVION B; NAVION, NAVION A.
Pacific Aerospace (Fletcher) .....	FU-24, FU-24A.
Piaggio .....	P-149D; P136-L1 ROYAL GULL; P136-L2 ROYAL GULL; P149D; P166 ROYAL GULL.
Pilatus .....	PC-3; PC-6; PC-6-H1, -H2 PORTER.
Piper .....	PA-E23-250 AZTEC; PA14 FAMILY CRUISER; PA18(A)(S)-150 SUPER CUB; PA18A-150 SUPER CUB; PA22-150, PA22S-150 TRIPACER; PA23 SERIES APACHE; PA23-160 APACHE; PA23-235 AZTEC; PA23-250 AZTEC; PA24-250 COMANCHE; PA24-400 COMANCHE; PA24S COMANCHE; PA28 CHER- OKEE; PA28-140 CHEROKEE.
Prop Jets Inc. ....	200; 200A,B,C.
Republic (STOL Amphibian) .....	RC3 SEABEE.
Scottish Aviation (BAE) .....	B.206 SERIES 2 BEAGLE.
Stinson .....	L-5; 108, -1, -2, -3; 108-2-3.
Sud Aviation (SOCATA) .....	GY.80-150 GARDAN; GY.80-160 GARDAN HORIZON.
Swift .....	GC-1B.
Taylorcraft .....	20.
Texas Bullet .....	205.
Windecker .....	EAGLE.

**Note 1:** The above is not a complete list of aircraft which may contain the affected Hartzell Propeller Inc. ( )HC-( ) (2,3)(X,V)( )-( ) series and HA-A2V20-1B series propellers with aluminum blades because of installation approvals made by, for example, Supplemental Type Certificate or field approval under FAA Form 337 "Major Repair and Alteration." It is the responsibility of the owner, operator, and person returning the aircraft to service to determine if an aircraft has an affected propeller.

**Note 2:** The parentheses that appear in the propeller models indicate the presence or absence of additional letter(s) which vary the basic propeller hub model designation. This airworthiness directive is applicable regardless of whether these letters are present or absent on the propeller hub model designation.

**Note 3:** This AD applies to each propeller identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For propellers that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Compliance with this AD is required as indicated, unless already done. To prevent blade separation due to cracked blades, hubs, or blade clamps, which can result in loss of control of the airplane, accomplish the following:

#### Hartzell Propeller Models With Hub Models ( )HC-(1,4,5,8)(2,3)(X,V)( )-( )

(a) On Hartzell propeller models with hub models ( )HC-(1,4,5,8)(2,3)(X,V)( )-( ) perform initial and repetitive inspections and, if necessary, replace with serviceable parts in accordance with Hartzell Propeller Inc. Service Bulletin (SB) No. HC-SB-61-217, Revision 1, dated July 11, 1997, as follows:

(1) Initially perform a fluorescent dye penetrant and eddy current inspection of the blade, an optical comparator inspection of the blade retention area, a dye penetrant inspection of the blade internal bearing bore, and a visual and magnetic particle inspection of the blade clamp and of the hub. The initial inspection is required within the following:

(i) 1,000 hours time-since-new (TSN) for propellers with less than 900 hours TSN on September 11, 1997, provided that the initial inspections are performed within 60 calendar months TSN or 24 calendar months after