

Avis d'émission d'une Directive de Navigabilité (AD)* par

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l'EASA, European Aviation Safety Agency

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l'autorité primaire d'un matériel étranger

Les examens ou modifications décrits ou rappelés ci-dessous sont impératifs. La non application des exigences contenues dans la Directive de Navigabilité citée ci-dessous entraîne l'inaptitude au vol de l'aéronef concerné.

(Envoi 21/2005 du 12 octobre 2005)

Directive de Navigabilité de la FAA de référence 2005-18-20

GOODRICH DE-ICING AND SPECIALTY SYSTEMS

Hélices - Tous types d'hélices métalliques

Techniques courantes hélices - Dégivrage des pales

Nota pour les exploitants et organismes d'entretien d'aéronefs inscrits au registre français :

Si l'AD jointe invite à un contact vers l'autorité primaire de l'AD, contacter le bureau concerné de la DGAC/DCS.

Si pour l'exécution d'une tâche donnée, l'AD jointe se réfère à une qualification de personnel répondant à une réglementation nationale, il est possible de faire intervenir, pour cette tâche, du personnel de qualification équivalente acceptée dans l'Union Européenne.

Si l'AD jointe se réfère à une donnée de navigabilité ou une instruction pour le maintien de la navigabilité (Manuel de Vol, Manuel de Maintenance, ...) qui n'est pas celle approuvée ou pas celle en vigueur en France ou si l'AD jointe présente une difficulté d'application liée à sa spécificité nationale, exposer le problème auprès du département technique du GSAC (par courriel à "contact@gsac.fr" ou par fax au 01 46 90 48 48) ou auprès du bureau concerné de la DGAC/DCS.

* Cette AD est exigible au titre du règlement Européen 1702/2003 ou de la Décision n° 2/2003 de l'EASA.

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2005-18-20 Goodrich De-icing and Specialty Systems: Amendment 39-14261. Docket No. FAA-2005-20847; Directorate Identifier. 2004-NE-35-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 14, 2005.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Goodrich De-icing and Specialty Systems "FASTprop" propeller de-icers, part numbers (P/Ns) P4E1188 series, P4E1601 series, P4E2200 series, P4E2271-10, P4E2575-7, P4E2575-10, P4E2598-10, P5855BSW, P6199SW, P6592SW, P6662SW, and P6975-11, installed.

These propeller de-icers are installed on, but not limited to, the airplanes listed in Table 1 of this AD.

TABLE 1.-GOODRICH "FASTPROP" PROPELLER DE-ICERS

De-icer P/N	Installed on, but not limited to
P4E1188-2	<i>Metal propellers operated up to 2,900 rpm on:</i> Cessna 210E, 210F, 210G, 210H, 210J, 210K, 210L, T210F, T210G, T210H, T210J, T210K, and T210L. With Supplemental Type Certificate (STC) SA1-502 on Raytheon (Beech) D18C, D18S, E18S, G18S, H18, C45G, C45H, TC45G, and TC45H.
P4E1188-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) D18C, D18S, E18S, E18S-9700, G18S, H18, C-45G, C-45H, C-45J, TC-45G, TC-45H, TC-45J (SNB-5), and JRB-6. With STC SA1-503 on Raytheon (Beech), E50, F50, G50, H50, J50, and 65. With STC SA15EA on Raytheon (Beech) E50, F50, G50, H50, J50, 65, and 65-80. Raytheon (Beech) 55, B55, D55, D55A, E55, 95-C55, 95-C55A, 58, 95-55, 95-A55, 95-B55, 56TC, 60, 65, 65-80, 65-90, 65-A90, B90, C90, 99, 99A, A99, A99A, 100, and A100. With STC SA1-506 on Cessna 310. With McCauley props on Cessna 310, 320, 340, 401, 402, 411, 414, and 421. With STC SA2424WE on Cessna 402. With STC SA132EA on Twin Commander (Gulfstream) 560A, 560E, 680, 680E, and 720. With STC SA179EA on Twin Commander (Gulfstream) 560F, 680FL, 680FL(P), and 680-F. With STC SA1-520 on Twin Commander (Gulfstream) 560A, 560E 680, 680E, and 720. On the following models equipped with 90-amp generator: Twin Commander (Gulfstream) 500B, 500S, and 500U. With STC SA1-607 on Twin Commander (Gulfstream) 500A. With STC SA2478SW on Twin Commander (Gulfstream) 500.

De-icer P/N	Installed on, but not limited to
P4E1188-3 (continued)	With STC SA2891WE or STC SA2691WE on Twin Commander (Gulfstream) 680F, 680FP, and 680FL(P). Twin Commander (Gulfstream) 680V, 680T, 680W, and 681. Mitsubishi Heavy Industries MU-2 series. With STC SA195EA on Piper PA-23-250, E23-250 (serial number (SN) 27-2505 up). Piper PA-31 (SN 31-5 up), PA-31-300 (SN 31-5 up), PA-31-325 (SN31-5 up), and PA-31-350 (SN 31-5001 up).
P4E1188-4	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten Norman) BN-2, BN-2A, and BN-2A Mark III series, Vulcanair (Partenavia) P-68, Piper Aerostar 600, 601, and 601P. On the following models equipped with 3-blade props: Short Brothers SC7 series 3 M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226-AT, and SA226-TC. The following models equipped with 70-amp alternators and Hartzell HC-A3XK props: Twin Commander (Gulfstream) 500B, 500S, and 500U. The following models equipped with 70-amp alternator and Hartzell HC-C3YR-2props: Twin Commander (Gulfstream) 500S and 500U. The following model with 70- or 100-amp alternators and Hartzell HC-C3YR-R props: Twin Commander (Gulfstream) 500S (SN 3115 up). With STC SA2478SW on model Twin Commander (Gulfstream) 500. With STC SA2691WE or SA2891WE on the following models: Twin Commander (Gulfstream) 680F, 680FL, and 680FLP.
P4E1188-5	<i>Metal propellers operated up to 2,900 rpm on:</i> With Hartzell HC-B3TN-3 props on Raytheon (Beech) D18C, D18S, E18S, E18S-9700, G18S, H18, C45G, C45H, TC45G, TC45H, C45J, TC45J (SN B-5), JRB-6, 99, 99A, A99, A99A, 99B, B99, 100, A100, A100A, A100C, and B100. With Hartzell HC-B3TN-3 props on Raytheon (Beech) 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, E90, and H90. With Hartzell HC-B3TN-3 props on Bombardier (deHavilland) DHC-6-300, Israel Aircraft Industries 101 Arava, Mitsubishi Heavy Industries MU-2B-10, -15, -20, -25, -26, -30, -35, -36, MU-2 Series, Pilatus PC-6, Piper PA-31T (SN 31T-7400002 up), and PA31T1. With STC SA2293SW on British Aerospace (Scotland) Handley Page Jetstream 137 Mark I. AeroSpace Technologies of Australia (Government Aircraft Factories) N22B. Short Brothers SC7 series 3 equipped with 4-blade props.
P4E1188-6	<i>Metal propellers operated up to 2,900 rpm on:</i> With Hartzell HC-B3TN-5() props on Cessna 425 and 441. Embraer EMB-110P1 and 110P2. Short Brothers SC7 series 3 equipped with 3-blade props. M7 Aerospace (Fairchild) SA226-T, SA226-AT, and SA226-TC.
P4E1188-7	<i>Metal propellers operated up to 2,900 rpm on:</i> Mitsubishi Heavy Industries MU-2B, MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60.
P4E1601-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Piper PA31 (SN 5 up), PA31-300 (SN 5 up), PA31-325 (SN 5up), PA31P (SN 31P-3 up), and PA31-350 (SN 31-5001 up).
P4E1601-4	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) 65-88.
P4E1601-5	<i>Metal propellers operated up to 2,900 rpm on:</i> Casa C212CB Twin Commander (Gulfstream) 690 and 690A.
P4E1601-7	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) B55, E55, 56TC, 58P, and 60. With STC SA2369SW on Nord 262A. The following models equipped with 70- or 100-amp alternator and Hartzell HC-C3YR-2 props: Twin Commander (Gulfstream) 500S (SN 3115 up) and Twin Commander (Gulfstream) 685. Short Brothers SD3-30.

De-icer P/N	Installed on, but not limited to
P4E1601-10	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) B55, E55, 56TC, 58P, and 60. Twin Commander (Gulfstream) 690C and 695. M7 Aerospace (Fairchild) SA-226-TB, SA227-AC, SA227-TT, and SA227-AT.
P4E2200-2	<i>Metal propellers operated up to 2,900 rpm on:</i> With STC SA00719LA on Raytheon (Beech) A36. With STC SA00718LA on Raytheon (Beech) B36TC. Raytheon (Beech) V35 equipped with 2- or 3-blade McCauley props.
P4E2200-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) E50, F50, G50, H50, and J50. Cessna E310J, T310P, 310, 310E, 310J, 310K, 310L, 310N, 320, 320D, 320F, 40, 402A, 402B, 411, 411A, 414, 421, 421A, and 421B. Piper PA23-250.
P4E2200-4	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten Norman) BN-2A Mark III, BN-2, BN-2A. Piper 600, 601, 601P.
P4E2200-10	<i>Metal propellers operated up to 2,900 rpm on:</i> With Volpar Turboliner conversion on the following models: Raytheon (Beech) D18C and D18S. Raytheon (Beech) 56TC, A56TC, 65-90, 65-A90, B90, C90, E90, H90, 99, A99, 99A, B99, 99B, 100, A100, A100A, A100C, B100, and 200. Embraer EMB 110P1 and 110P2. Mitsubishi Heavy Industries MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-30, and MU-2B-35. Pilatus PC-6. Piper PA31-350 (SN 5001 up) and PA31P (SN 31P-3 up). M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226TC, and SA226AT. Twin Commander (Gulfstream) 500B, 500U, 560F, 680F, 680FP, 680FL, and 680FLP.
P4E2200-21	<i>Metal propellers operated up to 2,900 rpm with STC SA812NE on the following models:</i> Raytheon (Beech) 65-90 series, B90, C90, E90, F90, H90, 99 A99 series, C99, 100, A100 series, B100, and 200. Embraer EMB110 series. M7 Aerospace (Fairchild) SA226-AT, SA226-T, and SA-226TC. Mitsubishi Heavy Industries MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU- 2B-35, and MU-2B-36. Pilatus PC-6, PC-6B-H2, PC-6B1-H2, PC-6C-H2, PC-6C1-H2, and PC-7. Piper PA-31T, PA-31T1, PA-31T1A, PA-31T2A, PA-31T3, and PA-31T-1040.
P4E2271-10	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten-Norman) BN-2, BN-2A series, and BN-2A Mark III. With Volpar Turboliner conversion on the following models: Raytheon (Beech) D18C, and D18S. The following models equipped with 2- or 3-blade props: S35, V35, V35A, V35B, 35-C33A, F33A, F33C, and A36. Raytheon (Beech) E50, F50, G50, H50, J50, E55, E55A, 56TC, A56TC, 58, 58A, 60, A60, B60, 65-90, 65-A90, B90, C90, E90, H90, 95-B55, 95-B55A, 99, A99, A99A, 99A, 100, A100, A100A, A100C, B100, and 200. With STC SA00966CH on Raytheon (Beech) C90B With STC SA3593NM on Raytheon (Beech) E90. With STC SA4131NM on Raytheon (Beech) F90. With STC SA2698NM on the following models: Raytheon (Beech) 200 and B200. Cessna 310, 310J, 310K, 310L, 310N, E310J, T310P, 320D, 320E, 320F, 340, 401A, 401B, 402A, 402B, 411, 411A, 414A, 414B, 421A, and 421B. With STC SA3532NM on Bombardier (deHavilland) DHC-6. With STC SA2369SW on Nord 262A.

De-icer P/N	Installed on, but not limited to
P4E2271-10 (continued)	Mitsubishi Heavy Industries MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26A, MU-2B-30, MU-2B-35, MU-2B-36A, MU-2B-40, and MU-2B-60. Piper PA23, PA23-160, PA23-250, PA-E23-250 (SN 27-2505 UP), PA31 (SN 31-5 up), PA31-300 (SN 31-5 up), PA31-325 (SN 31-5 up), PA31-350 (SN 5001 up) PA34-200, PA34-200T, PA600, PA601, and PA601P. Pilatus PC-6. Short Brothers SD-3-30. M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226-AT, SA226TB, and SA226-TC. Twin Commander (Gulfstream) 500B, and 500U.
P4E2575-7	Metal propellers operated up to 1,700 rpm on Raytheon (Beech) 300.
P4E2575-10	Metal propellers operated up to 1,700 rpm on Raytheon (Beech) 300.
P4E2598-10	<i>Metal propellers operated up to 1,591 rpm on:</i> AvCraft (Dornier) 228, M7 Aerospace (Fairchild) SA227-TT (SN 421-541), SA227-AT (SN 423-549), and SA227-AC (SN 420-545).
P5855BSW	<i>Metal propellers on:</i> Cessna T310Q, T310R, 340, 340A, 402B, 402C, 414, 414A, 421A, and 421B.
P6199SW	<i>Metal propellers operated up to 2,900 rpm on:</i> The following models equipped with McCauley D3A34C401 or D3A34C402 props: Cessna 210L, 210M, 210N, P210N, T210L, T210M, and T210N.
P6592SW	<i>Metal propellers operated up to 2,900 rpm on:</i> Various aircraft models equipped with McCauley 3AF32C504, 3AF32C505, 3AF32C506, or 3AF32C507 props.
P6662SW	<i>Metal propellers operated up to 2,900 rpm on:</i> Various aircraft models equipped with McCauley 3AF32C512/G-82NEA-5, 3AF32C511/G-82NEA-4, or 4HFR34C7 props.
P6975-11	<i>Metal propellers operated up to 2,900 rpm on:</i> With STC SA812EA and equipped with Hartzell HC-B3TN-3D, HC-B3TN-5C, or HC-B3TN-5M props: Air Tractor, AT-302 and AT-400. With STC SA812EA and equipped with Hartzell HC-B3TN-3C or HC-B3TN-3D props: Quality Aerospace (Ayres) S2R-T11. With STC SA2204WE and equipped with Hartzell HC-B3TN-5C props: Raytheon (Beech) D18C, D18S, E18S-9700, C45G, C45H, TC-45G, TC-45H, and TC-45J. Raytheon (Beech) T-34C equipped with Hartzell HC-B3TN-3H props. The following models equipped with Hartzell HC-B3TN-2B, HC-B3TN-3B, or HC-B3TN-3M props: Raytheon (Beech) 65-90, 65-A-90, 65-A90-1, 65-A90-2, 65-A90-3, and 65-A90-4. The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3M props: Raytheon (Beech) B90, C90, E90, and H90. Raytheon (Beech) F90 equipped with Hartzell HC-B4TN-3A or HC-B4TN-3B props. The following models equipped with Hartzell HC-B3TN-3B props: Raytheon (Beech) 99, 99A, A99, and A99A. The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3M props: Raytheon (Beech) C99, and 100. The following models equipped with Hartzell HC-B4TN-3 or HC-4TN-3A props: Raytheon (Beech) A100, A100A, and A100-1. Raytheon (Beech) B100 equipped with Hartzell HC-B4TN-5C or HC-B4TN-5F props. The following models equipped with Hartzell HC-B3TN-3G or HC-B3TN-3N props: Raytheon (Beech) 200, 200C, 200CT, 200T, A200, A200C, A200CT, B200, B200C, B200CT, and B200T. Raytheon (Beech) JRB-6 with STC SA1171WE equipped with Hartzell HC-B3TN-5C props. British Aerospace HP.137MK.1 with STC SA2293WE equipped with Hartzell HC-B3TN-3D props. CASA C212-100 Aviocar equipped with Hartzell HC-B4TN-5EL props. Cessna 441 equipped with Hartzell HC-B3TN-5E or HC-B3TN-5M props.

De-icer P/N	Installed on, but not limited to
P6975-11 (continued)	Bombardier (deHavilland) DHC-2MK.III equipped with HC-B3TN-3, HC-B3TN-3B, or HC-B3TN-3BY props.
	Bombardier (deHavilland) DHC-6-300 equipped with Hartzell HC-B3TN-3(D)(Y) props.
	Embraer EMB-110P1/2 equipped with Hartzell HC-B3TN-3C or HC-B3TN-3D props.
	The following models equipped with Hartzell HC-B3TN-5() props: M7 Aerospace (Fairchild) SA226-AT, and SA226T.
	M7 Aerospace (Fairchild) SA226-TC equipped with Hartzell HC-B4TN-5() props.
	M7 Aerospace (Fairchild) SA226-TC with STC SA344GL equipped with Hartzell HC-B3TN-5() props.
	M7 Aerospace (Fairchild) SA226-TC with STC SA344GL.
	The following models equipped with Hartzell HC-A3VF-7 or HC-3VH-7B props: AeroSpace Technologies of Australia (Government Aircraft Factories) N22B and N24A.
	The following models equipped with Hartzell HC-B3TN-3D props: IAI Arava 101 and 101B.
	The following models equipped with Hartzell HC-B3TN-3DY props: McKinnon (Grumman) G-21E and G-21G.
	The following models equipped with HC-B3TN-5() props: Mitsubishi Heavy Industries MU-2B, and MU-2B-10.
	The following models equipped with Hartzell HC-B3TN-5 props: Mitsubishi Heavy Industries MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36.
	The following models equipped with Hartzell HC-B3TN-3C props: Pilatus PC-6, PC-6/B-H2, PC-6/B1-H2, PC-6/C- H2, PC-6/C1-H2.
	The following models equipped with Hartzell HC-B3TN-3B props: Piper PA-31T and PA31T1.
	The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3K props: Piper PA42 and PA42-720.
	The following model equipped with Hartzell HC-B3TN-5() props: Short Brothers SC-7 series 3 Variant 200.
	With STC SA02059AK on the following model equipped with HC-B4TN-5 props: Short Brothers SC-7 series 3 Variant 200.
	The following models equipped with Hartzell HC-B3TN-5() props: Twin Commander (Gulfstream) 690, 690A, and 690B.

Unsafe Condition

(d) This AD results from reports of Goodrich "FASTprop" propeller de-icers becoming loose or debonded, and detaching from propeller blades during operation. We are issuing this AD to prevent Goodrich "FASTprop" propeller de-icers from detaching from the propeller blade, resulting in damage to the airplane, and possible injury to passengers and crewmembers.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

(f) Properly certificated maintenance personnel must perform the initial inspection required in this AD. Thereafter, the pilot or properly certificated maintenance personnel may perform the repetitive visual check.

Initial Visual Inspection of "FASTprop" Propeller De-Icers

(g) Within 10 hours after the effective date of this AD, inspect the "FASTprop" propeller deicers. If any "FASTprop" propeller de-icer fails the inspection, then the "FASTprop" de-icer must be repaired or replaced as necessary before the next flight. Use paragraphs 2.A(3) through (5) of the Accomplishment Instructions of Goodrich De-icing and Specialty Systems Alert Service Bulletin (ASB) No. 30-60-00-1, dated November 15, 2004 to do these actions.

Repetitive Visual Inspections of "FASTprop" Propeller De-Icers

(h) After the initial inspection, visually check the "FASTprop" propeller de-icer once per day either during the pilot's first preflight inspection of the day or when maintenance personnel are available. If any "FASTprop" propeller de-icer fails the visual check, then the "FASTprop" de-icer must be inspected, repaired, or replaced as necessary before the next flight. Terminating action is accomplished when the "FASTprop" propeller de-icer is removed and replaced with an approved propeller de-icer. Use paragraph 2.A(2) of the Accomplishment Instructions of Goodrich De-icing and Specialty Systems Alert Service Bulletin (ASB) No. 30-60-00-1, dated November 15, 2004 to do these actions.

Alternative Methods of Compliance

(i) The Manager, Chicago Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Special Flight Permits

(j) Under 14 CFR part 39.23, we are limiting the special flight permits for this AD by requiring that any propeller found with a loose or debonded "FASTprop" de-icer must have all propeller blade de-icers removed before the flight, to maintain a balanced propeller. Information on removing deicers can be found in paragraph 1.K.(1) of Goodrich De-icing and Specialty Systems ASB No. 30-60-00-1, dated November 15, 2004.

Related Information

(k) None.

Material Incorporated by Reference

(l) You must use Goodrich De-icing and Specialty Systems Alert Service Bulletin No. 30-60-00-1, dated November 15, 2004, to perform the inspections, repairs, and replacements required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Goodrich De-icing and Specialty Systems, 1555 Corporate Woods Parkway, Uniontown, Ohio 44685, telephone (330) 374-3743, for a copy of this service information. You may review copies at the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001, on the Internet at <http://dms.dot.gov>, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Burlington, Massachusetts, on September 1, 2005.

Peter A. White,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

TRADUCTION DE COURTOISIE

de la DIRECTIVE de NAVIGABILITE de la FAA de référence 2005-18-20

GOODRICH DE-ICING AND SPECIALTY SYSTEMS

1. MATERIELS CONCERNES :

La présente Directive de Navigabilité (AD) s'applique aux dégivreurs de pales d'hélices «FASTprop» de GOODRICH ayant les PN P4E1188, P4E1601, P4E2200, P4E2271-10, P4E2575-7, P4E2575-10, P4E2598-10, P5855BSW, P6199SW, P6592SW, P6662SW, et P6975-11, montés sur des hélices équipant les aéronefs du tableau ci-dessous.

TABLE 1.-GOODRICH "FASTPROP" PROPELLER DE-ICERS

De-icer P/N	Installed on, but not limited to
P4E1188-2	<i>Metal propellers operated up to 2,900 rpm on:</i> Cessna 210E, 210F, 210G, 210H, 210J, 210K, 210L, T210F, T210G, T210H, T210J, T210K, and T210L. With Supplemental Type Certificate (STC) SA1-502 on Raytheon (Beech) D18C, D18S, E18S, G18S, H18, C45G, C45H, TC45G, and TC45H.
P4E1188-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) D18C, D18S, E18S, E18S-9700, G18S, H18, C-45G, C-45H, C-45J, TC-45G, TC-45H, TC-45J (SNB-5), and JRB-6. With STC SA1-503 on Raytheon (Beech), E50, F50, G50, H50, J50, and 65. With STC SA15EA on Raytheon (Beech) E50, F50, G50, H50, J50, 65, and 65-80. Raytheon (Beech) 55, B55, D55, D55A, E55, 95-C55, 95-C55A, 58, 95-55, 95-A55, 95-B55, 56TC, 60, 65, 65-80, 65-90, 65-A90, B90, C90, 99, 99A, A99, A99A, 100, and A100. With STC SA1-506 on Cessna 310. With McCauley props on Cessna 310, 320, 340, 401, 402, 411, 414, and 421. With STC SA2424WE on Cessna 402. With STC SA132EA on Twin Commander (Gulfstream) 560A, 560E, 680, 680E, and 720. With STC SA179EA on Twin Commander (Gulfstream) 560F, 680FL, 680FL(P), and 680-F. With STC SA1-520 on Twin Commander (Gulfstream) 560A, 560E 680, 680E, and 720. On the following models equipped with 90-amp generator: Twin Commander (Gulfstream) 500B, 500S, and 500U. With STC SA1-607 on Twin Commander (Gulfstream) 500A. With STC SA2478SW on Twin Commander (Gulfstream) 500. With STC SA2891WE or STC SA2691WE on Twin Commander (Gulfstream) 680F, 680FP, and 680FL(P). Twin Commander (Gulfstream) 680V, 680T, 680W, and 681. Mitsubishi Heavy Industries MU-2 series. With STC SA195EA on Piper PA-23-250, E23-250 (serial number (SN) 27-2505 up). Piper PA-31 (SN 31-5 up), PA-31-300 (SN 31-5 up), PA-31-325 (SN31-5 up), and PA-31-350 (SN 31-5001 up).
P4E1188-4	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten Norman) BN-2, BN-2A, and BN-2A Mark III series, Vulcanair (Partenavia) P-68, Piper Aerostar 600, 601, and 601P. On the following models equipped with 3-blade props: Short Brothers SC7 series 3 M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226-AT, and SA226-TC. The following models equipped with 70-amp alternators and Hartzell HC-A3XK props: Twin Commander (Gulfstream) 500B, 500S, and 500U. The following models equipped with 70-amp alternator and Hartzell HC-C3YR-2props: Twin Commander (Gulfstream) 500S and 500U. The following model with 70- or 100-amp alternators and Hartzell HC-C3YR-R props: Twin Commander (Gulfstream) 500S (SN 3115 up).

De-icer P/N	Installed on, but not limited to
P4E1188-4 (continued)	With STC SA2478SW on model Twin Commander (Gulfstream) 500. With STC SA2691WE or SA2891WE on the following models: Twin Commander (Gulfstream) 680F, 680FL, and 680FLP.
P4E1188-5	<i>Metal propellers operated up to 2,900 rpm on:</i> With Hartzell HC-B3TN-3 props on Raytheon (Beech) D18C, D18S, E18S, E18S-9700, G18S, H18, C45G, C45H, TC45G, TC45H, C45J, TC45J (SN B-5), JRB-6, 99, 99A, A99, A99A, 99B, B99, 100, A100, A100A, A100C, and B100. With Hartzell HC-B3TN-3 props on Raytheon (Beech) 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, E90, and H90. With Hartzell HC-B3TN-3 props on Bombardier (deHavilland) DHC-6-300, Israel Aircraft Industries 101 Arava, Mitsubishi Heavy Industries MU -2B-10, -15, -20, -25, -26, -30, -35, -36, MU-2 Series, Pilatus PC-6, Piper PA-31T (SN 31T-7400002 up), and PA31T1. With STC SA2293SW on British Aerospace (Scotland) Handley Page Jetstream 137 Mark I. AeroSpace Technologies of Australia (Government Aircraft Factories) N22B. Short Brothers SC7 series 3 equipped with 4-blade props.
P4E1188-6	<i>Metal propellers operated up to 2,900 rpm on:</i> With Hartzell HC-B3TN-5() props on Cessna 425 and 441. Embraer EMB-110P1 and 110P2. Short Brothers SC7 series 3 equipped with 3-blade props. M7 Aerospace (Fairchild) SA226-T, SA226-AT, and SA226-TC.
P4E1188-7	<i>Metal propellers operated up to 2,900 rpm on:</i> Mitsubishi Heavy Industries MU-2B, MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60.
P4E1601-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Piper PA31 (SN 5 up), PA31-300 (SN 5 up), PA31-325 (SN 5up), PA31P (SN 31P-3 up), and PA31-350 (SN 31-5001 up).
P4E1601-4	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) 65-88.
P4E1601-5	<i>Metal propellers operated up to 2,900 rpm on:</i> Casa C212CB Twin Commander (Gulfstream) 690 and 690A.
P4E1601-7	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) B55, E55, 56TC, 58P, and 60. With STC SA2369SW on Nord 262A. The following models equipped with 70- or 100-amp alternator and Hartzell HC-C3YR-2 props: Twin Commander (Gulfstream) 500S (SN 3115 up) and Twin Commander (Gulfstream) 685. Short Brothers SD3-30.
P4E1601-10	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) B55, E55, 56TC, 58P, and 60. Twin Commander (Gulfstream) 690C and 695. M7 Aerospace (Fairchild) SA-226-TB, SA227-AC, SA227-TT, and SA227-AT.
P4E2200-2	<i>Metal propellers operated up to 2,900 rpm on:</i> With STC SA00719LA on Raytheon (Beech) A36. With STC SA00718LA on Raytheon (Beech) B36TC. Raytheon (Beech) V35 equipped with 2- or 3-blade McCauley props.
P4E2200-3	<i>Metal propellers operated up to 2,900 rpm on:</i> Raytheon (Beech) E50, F50, G50, H50, and J50. Cessna E310J, T310P, 310, 310E, 310J, 310K, 310L, 310N, 320, 320D, 320F, 40, 402A, 402B, 411, 411A, 414, 421, 421A, and 421B. Piper PA23-250.
P4E2200-4	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten Norman) BN-2A Mark III, BN-2, BN-2A. Piper 600, 601, 601P.

De-icer P/N	Installed on, but not limited to
P4E2200-10	<i>Metal propellers operated up to 2,900 rpm on:</i> With Volpar Turboliner conversion on the following models: Raytheon (Beech) D18C and D18S. Raytheon (Beech) 56TC, A56TC, 65-90, 65-A90, B90, C90, E90, H90, 99, A99, 99A, B99, 99B, 100, A100, A100A, A100C, B100, and 200. Embraer EMB 110P1 and 110P2. Mitsubishi Heavy Industries MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-30, and MU-2B-35. Pilatus PC-6. Piper PA31-350 (SN 5001 up) and PA31P (SN 31P-3 up). M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226TC, and SA226AT. Twin Commander (Gulfstream) 500B, 500U, 560F, 680F, 680FP, 680FL, and 680FLP.
P4E2200-21	<i>Metal propellers operated up to 2,900 rpm with STC SA812NE on the following models:</i> Raytheon (Beech) 65-90 series, B90, C90, E90, F90, H90, 99 A99 series, C99, 100, A100 series, B100, and 200. Embraer EMB110 series. M7 Aerospace (Fairchild) SA226-AT, SA226-T, and SA-226TC. Mitsubishi Heavy Industries MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36. Pilatus PC-6, PC-6B-H2, PC-6B1-H2, PC-6C-H2, PC-6C1-H2, and PC-7. Piper PA-31T, PA-31T1, PA-31T1A, PA-31T2A, PA-31T3, and PA-31T-1040.
P4E2271-10	<i>Metal propellers operated up to 2,900 rpm on:</i> B-N Group Ltd. (Britten-Norman) BN-2, BN-2A series, and BN-2A Mark III. With Volpar Turboliner conversion on the following models: Raytheon (Beech) D18C, and D18S. The following models equipped with 2- or 3-blade props: S35, V35, V35A, V35B, 35-C33A, F33A, F33C, and A36. Raytheon (Beech) E50, F50, G50, H50, J50, E55, E55A, 56TC, A56TC, 58, 58A, 60, A60, B60, 65-90, 65-A90, B90, C90, E90, H90, 95-B55, 95-B55A, 99, A99, A99A, 99A, 100, A100, A100A, A100C, B100, and 200. With STC SA00966CH on Raytheon (Beech) C90B With STC SA3593NM on Raytheon (Beech) E90. With STC SA4131NM on Raytheon (Beech) F90. With STC SA2698NM on the following models: Raytheon (Beech) 200 and B200. Cessna 310, 310J, 310K, 310L, 310N, E310J, T310P, 320D, 320E, 320F, 340, 401A, 401B, 402A, 402B, 411, 411A, 414A, 414B, 421A, and 421B. With STC SA3532NM on Bombardier (deHavilland) DHC-6. With STC SA2369SW on Nord 262A. Mitsubishi Heavy Industries MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26A, MU-2B-30, MU-2B-35, MU-2B-36A, MU-2B-40, and MU-2B-60. Piper PA23, PA23-160, PA23-250, PA-E23-250 (SN 27-2505 UP), PA31 (SN 31-5 up), PA31-300 (SN 31-5 up), PA31-325 (SN 31-5 up), PA31-350 (SN 5001 up) PA34-200, PA34-200T, PA600, PA601, and PA601P. Pilatus PC-6. Short Brothers SD-3-30. M7 Aerospace (Fairchild) SA26-T, SA26-AT, SA226-T, SA226-AT, SA226TB, and SA226-TC. Twin Commander (Gulfstream) 500B, and 500U.
P4E2575-7	Metal propellers operated up to 1,700 rpm on Raytheon (Beech) 300.
P4E2575-10	Metal propellers operated up to 1,700 rpm on Raytheon (Beech) 300.
P4E2598-10	<i>Metal propellers operated up to 1,591 rpm on:</i> AvCraft (Dornier) 228, M7 Aerospace (Fairchild) SA227-TT (SN 421-541), SA227-AT (SN 423-549), and SA227-AC (SN 420-545).
P5855BSW	<i>Metal propellers on:</i> Cessna T310Q, T310R, 340, 340A, 402B, 402C, 414, 414A, 421A, and 421B.

De-icer P/N	Installed on, but not limited to
P6199SW	<i>Metal propellers operated up to 2,900 rpm on:</i> The following models equipped with McCauley D3A34C401 or D3A34C402 props: Cessna 210L, 210M, 210N, P210N, T210L, T210M, and T210N.
P6592SW	<i>Metal propellers operated up to 2,900 rpm on:</i> Various aircraft models equipped with McCauley 3AF32C504, 3AF32C505, 3AF32C506, or 3AF32C507 props.
P6662SW	<i>Metal propellers operated up to 2,900 rpm on:</i> Various aircraft models equipped with McCauley 3AF32C512/G-82NEA-5, 3AF32C511/G-82NEA-4, or 4HFR34C7 props.
P6975-11	<i>Metal propellers operated up to 2,900 rpm on:</i> With STC SA812EA and equipped with Hartzell HC-B3TN-3D, HC-B3TN-5C, or HC-B3TN-5M props: Air Tractor, AT-302 and AT-400. With STC SA812EA and equipped with Hartzell HC-B3TN-3C or HC-B3TN-3D props: Quality Aerospace (Ayres) S2R-T11. With STC SA2204WE and equipped with Hartzell HC-B3TN-5C props: Raytheon (Beech) D18C, D18S, E18S-9700, C45G, C45H, TC-45G, TC-45H, and TC-45J. Raytheon (Beech) T-34C equipped with Hartzell HC-B3TN-3H props. The following models equipped with Hartzell HC-B3TN-2B, HC-B3TN-3B, or HC-B3TN-3M props: Raytheon (Beech) 65-90, 65-A-90, 65-A90-1, 65-A90-2, 65-A90-3, and 65-A90-4. The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3M props: Raytheon (Beech) B90, C90, E90, and H90. Raytheon (Beech) F90 equipped with Hartzell HC-B4TN-3A or HC-B4TN-3B props. The following models equipped with Hartzell HC-B3TN-3B props: Raytheon (Beech) 99, 99A, A99, and A99A. The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3M props: Raytheon (Beech) C99, and 100. The following models equipped with Hartzell HC-B4TN-3 or HC-4TN-3A props: Raytheon (Beech) A100, A100A, and A100-1. Raytheon (Beech) B100 equipped with Hartzell HC-B4TN-5C or HC-B4TN-5F props. The following models equipped with Hartzell HC-B3TN-3G or HC-B3TN-3N props: Raytheon (Beech) 200, 200C, 200CT, 200T, A200, A200C, A200CT, B200, B200C, B200CT, and B200T. Raytheon (Beech) JRB-6 with STC SA1171WE equipped with Hartzell HC-B3TN-5C props. British Aerospace HP.137MK.1 with STC SA2293WE equipped with Hartzell HC-B3TN-3D props. CASA C212-100 Aviocar equipped with Hartzell HC-B4TN-5EL props. Cessna 441 equipped with Hartzell HC-B3TN-5E or HC-B3TN-5M props. Bombardier (deHavilland) DHC-2MK.III equipped with HC-B3TN-3, HC-B3TN-3B, or HC-B3TN-3BY props. Bombardier (deHavilland) DHC-6-300 equipped with Hartzell HC-B3TN-3(D)(Y) props. Embraer EMB-110P1/2 equipped with Hartzell HC-B3TN-3C or HC-B3TN-3D props. The following models equipped with Hartzell HC-B3TN-5() props: M7 Aerospace (Fairchild) SA226-AT, and SA226T. M7 Aerospace (Fairchild) SA226-TC equipped with Hartzell HC-B4TN-5() props. M7 Aerospace (Fairchild) SA226-TC with STC SA344GL equipped with Hartzell HC-B3TN-5() props. M7 Aerospace (Fairchild) SA226-TC with STC SA344GL. The following models equipped with Hartzell HC-A3VF-7 or HC-3VH-7B props: AeroSpace Technologies of Australia (Government Aircraft Factories) N22B and N24A. The following models equipped with Hartzell HC-B3TN-3D props: IAI Arava 101 and 101B.

De-icer P/N	Installed on, but not limited to
P6975-11 (continued)	The following models equipped with Hartzell HC-B3TN-3DY props: McKinnon (Grumman) G-21E and G-21G.
	The following models equipped with HC-B3TN-5() props: Mitsubishi Heavy Industries MU-2B, and MU-2B-10.
	The following models equipped with Hartzell HC-B3TN-5 props: Mitsubishi Heavy Industries MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36.
	The following models equipped with Hartzell HC-B3TN-3C props: Pilatus PC-6, PC-6/B-H2, PC-6/B1-H2, PC-6/C- H2, PC-6/C1-H2.
	The following models equipped with Hartzell HC-B3TN-3B props: Piper PA-31T and PA31T1.
	The following models equipped with Hartzell HC-B3TN-3B or HC-B3TN-3K props: Piper PA42 and PA42-720.
	The following model equipped with Hartzell HC-B3TN-5() props: Short Brothers SC-7 series 3 Variant 200.
	With STC SA02059AK on the following model equipped with HC-B4TN-5 props: Short Brothers SC-7 series 3 Variant 200.
	The following models equipped with Hartzell HC-B3TN-5() props: Twin Commander (Gulfstream) 690, 690A, and 690B.

2. **RAISONS :**

Cette Directive de Navigabilité (AD) est la conséquence de rapports de GOODRICH relatifs à des systèmes de dégivrage d'hélices "FASTprop" se desserrant ou trop lâches, pouvant se détacher pendant le vol.

La diffusion de cette AD a pour objet d'empêcher les systèmes de dégivrage d'hélices "FASTprop" de se détacher des pales, ce qui peut endommager l'avion et blesser les passagers et les membres d'équipage.

3. **ACTIONS ET DELAIS D'APPLICATION :**

Sauf si déjà effectuées, les opérations suivantes sont à réaliser à compter de la date d'entrée en vigueur de cette AD.

Seul du personnel de maintenance qualifié doit réaliser l'inspection initiale exigée dans cette AD. Puis, le pilote ou du personnel qualifié de maintenance peut faire les inspections visuelles répétitives.

3.1. **Inspection visuelle initiale des dégivreurs de pales "FASTprop"**

Dans les 10 heures de vol, inspecter les dégivreurs de pales "FASTprop". Si un dégivreur est trouvé défectueux, il doit être réparé ou remplacé, si nécessaire, avant le prochain vol. Suivre les § 2.A(3) à (5) des instructions d'exécution du Bulletin de Service d'Alerte de GOODRICH n° 30-60-00-1 du 15 novembre 2004.

3.2. **Inspections visuelles répétitives des dégivreurs de pales "FASTprop"**

Après l'inspection initiale, contrôler visuellement les dégivreurs de pales "FASTprop" une fois par jour pendant la première visite prés vol du pilote ou lorsque du personnel d'entretien est disponible. Si un dégivreur est trouvé défectueux, il doit être contrôlé, réparé ou remplacé, si nécessaire, avant le prochain vol. L'action terminale consiste au remplacement du système de dégivrage par un autre approuvé. Suivre le § 2.A(2) des instructions d'exécution du Bulletin de Service d'Alerte de GOODRICH n° 30-60-00-1 du 15 novembre 2004.

4. **REFERENCE :**

Bulletin de Service d'Alerte de GOODRICH n° 30-60-00-1 du 15 novembre 2004.

5. **DATE D'ENTREE EN VIGUEUR :**

14 octobre 2005.