

## AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

### Propellers - Variable Pitch - Hartzell

**AD/PHZL/88****CSE Aviation****6/2007**

**Applicability:** Hartzell Propeller Inc. (formerly TRW Hartzell Propeller) propellers that have a part number (P/N) and serial number (SN) listed in Table 1 of this AD, serviced by Oxford Aviation Limited, doing business as CSE Aviation in the United Kingdom.

For propellers listed by SN in Table 1 overhauled or repaired by CSE after November 2003, or overhauled by an approved propeller repair facility after October 2003, do not apply to this AD.

**Table 1. - Hartzell Propellers by P/N and SN**

| <b>CSE Work Order Number</b> | <b>Hartzell Propeller P/N</b> | <b>Hartzell Propeller SN</b> |
|------------------------------|-------------------------------|------------------------------|
| Y03516                       | HC-E2YL-2BSF                  | BG2848                       |
| Y03517                       | HC-E2YL-2BSF                  | BG4112                       |
| Y04052                       | HC-82VL-2C1                   | 942R                         |
| Y02965                       | BHC-C2YF-1BF                  | AM2854                       |
| Y02778                       | BHC-C2YF-2CKUF                | AN1881                       |
| Y03382                       | BHC-C2YF-2CKUF                | AN1968                       |
| Y04132                       | BHC-C2YF-2CKUF                | AN2528                       |
| Y05097                       | BHC-C2YF-2CKUF                | AN3274                       |
| Y05048                       | HC-C2YK-2CUF                  | AN3906                       |
| Y05047                       | HC-C2YK-2CUF                  | AN4033                       |
| Y03016                       | BHC-C2YF-2CKUF                | AN4271                       |
| Y03983                       | BHC-C2YF-2CLKUF               | AN4289                       |
| Y03166                       | BHC-C2YF-2CKUF                | AN5248                       |
| Y02607                       | BHC-C2YF-2CKLUF               | AN5832                       |
| Y04855                       | BHC-C2YF-2CKLUF               | AN6857                       |
| Y04391                       | BHC-C2YF-2CKUF                | AN6981A                      |
| Y05102                       | BHC-C2YF-2CLKUF               | AN6998A                      |
| Y04709                       | BHC-C2YF-2CKUF                | AN7006A                      |
| Y05070                       | BHC-C2YF-2CLKUF               | AN7018A                      |
| Y03863                       | BHC-C2YF-CLKUF                | AN7019A                      |
| Y04108                       | BHC-C2YF-2CKUF                | AN7025A                      |
| Y03206                       | BHC-C2YK-2CLKUF               | AN7168B                      |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |                 |          |
|--------|-----------------|----------|
| Y04592 | BHC-C2YF-2CKUF  | AN7071B  |
| Y04865 | BHC-C2YF-2CLKUF | AN7168B  |
| Y04846 | BHC-C2YF-2CKUF  | AN7184B  |
| Y04808 | BHC-C2YF-2CLKUF | AN7199B  |
| Y03185 | BHC-C2YF-2CLKUF | AN7209B  |
| Y03186 | BHC-C2YF-2CKUF  | AN7215B  |
| Y04975 | BHC-C2YF-2CKUF  | AN7249B  |
| Y04974 | BHC-C2YF-2CLKUF | AN7279B  |
| Y04818 | BHC-C2YF-2CKUF  | AN7280B  |
| Y04532 | BHC-C2YF-2CKUF  | AN7540B  |
| Y04561 | BHC-C2YF-2CKUF  | AN7552B  |
| Y04638 | BHC-C2YF-2CLKUF | AN7567B  |
| Y04639 | BHC-C2YF-2CKUF  | AN7568B  |
| Y04658 | BHC-C2YF-2CLKUF | AN7581B  |
| Y02866 | HC-A3VF-2D      | AT376    |
| Y02867 | HC-A3VF-2D      | AT431    |
| Y04053 | HC-C2YK-2CUF    | AU10008B |
| Y04096 | HC-C2YK-2CUF    | AU10023B |
| Y04143 | HC-C2YK-2CUF    | AU10126B |
| Y04171 | HC-C2YK-2CUF    | AU10139B |
| Y04283 | HC-C2YK-2CUF    | AU10165B |
| Y04274 | HC-C2YK-2CUF    | AU10178B |
| Y04416 | HC-C2YK-2CUF    | AU10401B |
| Y04415 | HC-C2YK-2CUF    | AU10402B |
| Y04478 | HC-C2YK-2CUF    | AU10462B |
| Y04518 | HC-C2YK-2CUF    | AU10541B |
| Y04479 | HC-C2YK-2CUF    | AU10542B |
| Y04563 | HC-C2YK-4BF     | AU10614B |
| Y04564 | HC-C2YK-4BF     | AU10615B |
| Y04560 | HC-C2YK-2CUF    | AU10616B |
| Y04610 | HC-C2YK-2CUF    | AU10696B |
| Y04565 | HC-C2YF-2CUF    | AU10729B |
| Y04566 | HC-C2YK-2CUF    | AU10730B |
| Y04632 | HC-C2YK-4BF     | AU10733B |
| Y04636 | HC-C2YK-2CUF    | AU10771B |
| Y04651 | HC-C2YK-4BF     | AU10790B |
| Y04659 | HC-C2YK-2CUF    | AU10817B |
| Y04681 | HC-C2YK-4BF     | AU10827B |
| Y04701 | HC-C2YK-2CUF    | AU10923B |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |                 |          |
|--------|-----------------|----------|
| Y04785 | HC-C2YK-2CUF    | AU10952B |
| Y04786 | HC-C2YK-2CUF    | AU11050B |
| Y04736 | HC-C2YK-2CUF    | AU11117B |
| Y04826 | HC-C2YK-4BF     | AU11145B |
| Y04871 | HC-C2YK-1BF     | AU11279B |
| Y04890 | HC-C2YK-4BF     | AU11343B |
| Y05000 | HC-C2YK-4CF     | AU11591B |
| Y05050 | HC-C2YK-2CUF    | AU11731B |
| Y04410 | HC-C2YK-2CGUF   | AU1533   |
| Y04409 | HC-C2YK-2CGUF   | AU1603   |
| Y04344 | HC-C2YK-2CLGUF  | AU2892E  |
| Y03377 | HC-C2YK-2CGUF   | AU2955   |
| Y03688 | HC-C2YK-2CU     | AU354    |
| Y02769 | HC-C2YK-2CUF    | AU9013B  |
| Y04343 | HC-C2YR-2CGUF   | AU508E   |
| Y03110 | HC-C2YK-2CUF    | AU5236   |
| Y04400 | HC-C2YK-2CLEUF  | AU5974E  |
| Y04652 | HC-C2YK-1B      | AU6120   |
| Y04321 | HC-C2YR-2CLEUF  | AU6163   |
| Y03200 | HC-C2YK-2CUF    | AU7153E  |
| Y03838 | HC-C2YK-2CUF    | AU7357   |
| Y04362 | BHC-C2YF-2CLKUF | AU7491B  |
| Y04219 | HC-C2YK-2CLGUF  | AU7662   |
| Y02598 | HC-C2YK-CUF     | AU8212A  |
| Y02770 | HC-C2YK-2CUF    | AU822    |
| Y03482 | HC-C2YK-2CUF    | AU8233A  |
| Y03564 | HC-C2YK-2CUF    | AU8299A  |
| Y03773 | HC-C2YK-2CUF    | AU8318A  |
| Y03674 | HC-C2YK-2CUF    | AU8338A  |
| Y02991 | HC-C2YK-2CUF    | AU8339A  |
| Y03137 | HC-C2YK-2CUF    | AU8347A  |
| Y03018 | HC-C2YK-2CUF    | AU8349A  |
| Y02805 | HC-C2YK-2CUF    | AU8354A  |
| Y02703 | HC-C2YK-2CUF    | AU8417A  |
| Y02664 | HC-C2YK-2CUF    | AU8859A  |
| Y04095 | HC-C2YK-2CUF    | AU8923B  |
| Y03761 | HC-C2YK-CUF     | AU8968B  |
| Y02792 | HC-C2YK-2CUF    | AU9012B  |
| Y02848 | HC-C2YK-2CUF    | AU9014B  |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |               |         |
|--------|---------------|---------|
| Y03597 | HC-C2YK-2CUF  | AU9015B |
| Y04735 | HC-C2YK-2CUF  | AU9041B |
| Y03229 | HC-C2YK-2CGUF | AU9135B |
| Y02943 | HC-C2YK-2CUF  | AU9136B |
| Y03197 | HC-C2YK-2CUF  | AU9150B |
| Y04675 | HC-C2YK-2CUF  | AU9182B |
| Y03352 | HC-C2YK-2CUF  | AU9241B |
| Y03354 | HC-C2YK-2CUF  | AU9243B |
| Y03097 | HC-C2YK-2CUF  | AU9246B |
| Y03201 | HC-C2YK-2CUF  | AU9247B |
| Y03686 | HC-C2YK-2CUF  | AU9312B |
| Y03607 | HC-C2YK-2CUF  | AU9332B |
| Y03614 | HC-C2YK-2CGUF | AU9393B |
| Y03606 | HC-C2YK-2CUF  | AU9394B |
| Y03791 | HC-C2YK-2CUF  | AU9395B |
| Y03866 | HC-C2YK-CUF   | AU9396B |
| Y03888 | HC-C2YK-CUF   | AU9509B |
| Y04948 | HC-C2YK-2CUF  | AU9511B |
| Y03891 | HC-C2YK-2CUF  | AU9518B |
| Y03797 | HC-C2YK-2CUF  | AU9520B |
| Y04001 | HC-C2YK-2CGUF | AU9593B |
| Y05083 | HC-C2YK-2CUF  | AU9599B |
| Y03694 | HC-C2YK-4BF   | AU9616B |
| Y03696 | HC-C2YK-4BF   | AU9618B |
| Y03695 | HC-C2YK-4BF   | AU9630B |
| Y03620 | HC-C2YK-4BF   | AU9631B |
| Y03627 | HC-C2YK-4BF   | AU9638B |
| Y03625 | HC-C2YK-4BF   | AU9649B |
| Y04047 | HC-C2YK-2CUF  | AU9985B |
| Y04376 | HC-C2YL-1BF   | AX522   |
| Y05051 | HC-C2YR-1BF   | AX527   |
| Y02908 | HC-C2YL-1BF   | AX841B  |
| Y04763 | HC-C2YL-1BF   | AX720A  |
| Y04731 | HC-E2YR-2RBSF | BB6694  |
| Y04900 | HC-E2YL-2BSF  | BG2122  |
| Y04738 | HC-E2YL-2BSF  | BG2923  |
| Y04547 | HC-E2YL-2BSF  | BG3219  |
| Y03153 | HC-E2YL-2BSF  | BG3287  |
| Y04061 | HC-E2YL-2BSF  | BG3363  |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |               |           |
|--------|---------------|-----------|
| Y04917 | HC-E2YL-2BSF  | BG372     |
| Y04062 | HC-E2YL-2BSF  | BG434     |
| Y04190 | HC-E2YL-2BSF  | BG4344    |
| Y04901 | HC-E2YL-2BSF  | BG4557    |
| Y04737 | HC-E2YL-2BSF  | BG648     |
| Y04898 | HC-E2YR 2RBSF | BP3287    |
| Y03327 | HC-E2YR-2RBS  | BP5179    |
| Y03680 | HC-E2YR-2RBSF | BP6199    |
| Y04167 | HC-E2YR-2RBSF | BP6206    |
| Y03138 | HC-E2YR-2RBSF | BP6606    |
| Y02709 | HC-E2YR-2RBSF | BP6838    |
| Y04899 | HC-E2YR-2RBSF | BP9158    |
| Y03913 | HC-E2YR-2RBSF | BP9159    |
| Y03139 | HC-E2YR-2RBSF | BP9168    |
| Y04780 | PHC-A3VF-2B   | BR834     |
| Y02939 | HC-B3TN-3DY   | BUA22056  |
| Y02971 | HC-B3TN-3DY   | BU12462   |
| Y04089 | HC-B3TN-3C    | BU14589   |
| Y03948 | HC-BCTN-3B    | BU16789   |
| Y02767 | HC-B3TN-5FL   | BV3382    |
| Y02768 | HC-B3TN-5FL   | BV3540    |
| Y02946 | HC-B3TN-3DY   | BUA22136  |
| Y03726 | HC-B3TN-3G    | BUA21467  |
| Y03727 | HC-B3TN-3G    | BUA23284  |
| Y03928 | HC-B3TN-3D    | BUA24401  |
| Y04429 | HC-B3TN-3N    | BUA24852  |
| Y04430 | HC-B3TN-3N    | BUA24992  |
| Y05019 | HC-B3TN-3G    | BUA27325  |
| Y03719 | HC-B3TN-5E    | BVA7456   |
| Y03718 | HC-B3TN-5E    | BVA7457   |
| Y04443 | HC-B3TN-5FL   | BVA7770   |
| Y04444 | HC-B3TN-5FL   | BVA7771   |
| Y03304 | HC-B4TN-5ML   | CD1746    |
| Y03165 | HC-B4TN-5ML   | CD1752    |
| Y03164 | HC-B4TN-5ML   | CD1973    |
| Y04535 | HC-B4TN-S     | CDA3529M1 |
| Y04787 | HC-B4N-ML     | CDA3703   |
| Y04788 | HC-B4TN-5ML   | CDA3704   |
| Y03351 | HC-B4TN-5ML   | CDA4424   |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |              |            |
|--------|--------------|------------|
| Y04644 | HC-B4TN-5ML  | CDA4819    |
| Y04534 | HC-B4TN-S    | CDA5047M1  |
| Y04399 | HC-C2YK-1BF  | CH11322    |
| Y03764 | HC-C2YK-1BF  | CH1614B    |
| Y02124 | HC-C2YK-1BF  | CH23470    |
| Y02897 | HC-C2YK-1BF  | CH32119A   |
| Y04516 | HC-C2YK-1BF  | CH20231    |
| Y04371 | HC-C2YK-1BF  | CH21618    |
| Y04260 | HC-C2YK-1BF  | CH23621    |
| Y02641 | HC-C2YK-1BF  | CH23890(E) |
| Y03969 | HC-C2YK-1BF  | CH25517    |
| Y02648 | HC-C2YK-1BF  | CH26145    |
| Y02896 | HC-C2YK-1BF  | CH32118A   |
| Y04244 | HC-C2YR-1BF  | CH27227    |
| Y03763 | HC-C2YK-1BF  | CH27235    |
| Y03704 | HC-C2YK-1BF  | CH28190    |
| Y03141 | HC-C2YK-1BF  | CH29976    |
| Y05015 | HC-C2YK-1BF  | CH30451    |
| Y04153 | HC-C2YK-1BF  | CH32838B   |
| Y03949 | HC-C2YK-1BF  | CH32683B   |
| Y05124 | HC-C2YKR-1BF | CH33316B   |
| Y03205 | HC-C2YK-1BF  | CH33520B   |
| Y03850 | HC-C2YK-1BF  | CH33777B   |
| Y03843 | HC-C2YK-1BF  | CH34179B   |
| Y04230 | HC-C2YK-1BF  | CH34607B   |
| Y04014 | HC-C2YR-1BF  | CH34638B   |
| Y05078 | HC-C2YK-1BF  | CH35009B   |
| Y04361 | HC-C2YK-1BF  | CH35037B   |
| Y04587 | HC-C2YK-1BF  | CH35445B   |
| Y04588 | HC-C2YK-1BF  | CH35466B   |
| Y05076 | HC-C2YK-1BF  | CH37285B   |
| Y05079 | HC-C2YK-1BF  | CH37286B   |
| Y05056 | HC-C2YK-1BF  | CH3730B    |
| Y04891 | HC-C3YR-2LUF | CH4488A    |
| Y03425 | HC-C2YK-1BF  | CH5073     |
| Y03428 | HC-C2YK-1B   | CH617      |
| Y04126 | HC-E2YL-2BTF | CJ514      |
| Y03027 | HC-C3YR-2UF  | CK3633A    |
| Y02594 | HC-C3YR-2UF  | CK3634A    |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |               |          |
|--------|---------------|----------|
| Y03429 | HC-C3YR-2UF   | CK3651A  |
| Y03168 | HC-C3YR-2UF   | CK3662A  |
| Y03995 | HC-C3YR-2UF   | CK3663A  |
| Y03573 | HC-C3YR-2UF   | CK3678A  |
| Y03611 | HC-C3YR-2UF   | CK3705A  |
| Y03707 | HC-C3YR-2UF   | CK3706A  |
| Y03513 | HC-E3YR-2UF   | CK3719A  |
| Y03937 | HC-C3YR-2UF   | CK3872A  |
| Y03794 | HC-C3YR-2UF   | CK3873A  |
| Y03921 | HC-C3YR-2UF   | CK3874A  |
| Y04892 | HC-C3YR-2UF   | CK4263A  |
| Y03317 | HC-C3YR-2UF   | CK4459A  |
| Y02871 | HC-C3YR-2UF   | CK4460A  |
| Y02704 | HC-C3YR-2UF   | CK4645A  |
| Y03522 | HC-C3YR-2UF   | CK4682A  |
| Y04770 | HC-F2YR-1F    | CM535    |
| Y05039 | HC-C2YK-4BF   | DH687E   |
| Y04872 | HC-E3YR-2ATF  | DJ10539A |
| Y04873 | HC-E3YR-2ALTF | DJ10542A |
| Y03975 | HC-E3YR-2ALTF | DJ10585A |
| Y03974 | HC-E3YR-2ATF  | DJ10832A |
| Y03023 | HC-E3YR-2ATF  | DJ8092A  |
| Y03998 | HC-E3YR-2ATF  | DJ8105A  |
| Y03997 | HC-E3YR-2ATF  | DJ8106A  |
| Y02865 | HC-E3YR-2ALTF | DJ8128A  |
| Y04149 | HC-E3YR-2ATF  | DJ8137A  |
| Y04150 | HC-E3YR-2ALTF | DJ8139A  |
| Y04911 | HC-E3YR-2ALTF | DJ8151A  |
| Y02580 | HC-E3YR-2ALTF | DJ8154A  |
| Y04912 | HC-E3YR-2ATF  | DJ8157A  |
| Y02864 | HC-E3YR-2ATF  | DJ8161A  |
| Y02581 | HC-E3YR-2AFT  | DJ8180A  |
| Y04775 | HC-E3YR-2ATF  | DJ8326A  |
| Y04774 | HC-E3YR-2ALTF | DJ8329A  |
| Y03760 | HC-E3YR-2ATF  | DJ8872A  |
| Y03022 | HC-E3YR-2ALTF | DJ9503A  |
| Y02120 | HC-E2YR-1BF   | DK1068   |
| Y04375 | HC-E2YR-1BF   | DK155    |
| Y03331 | HC-E2YR-1BF   | DK1902B  |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |                  |         |
|--------|------------------|---------|
| Y04373 | HC-E2YR-1BF      | DK611   |
| Y04168 | HC-E2YR-1BF      | DK620   |
| Y04471 | HC-C2YK-1BF      | DK669   |
| Y03040 | HC-C2YK-4BF      | DN4101A |
| Y03590 | HC-C2YK-4BF      | AU8619A |
| Y03129 | HC-C2YK-4BF      | DN4111A |
| Y03442 | HC-C2YK-4BF      | DN4112A |
| Y03003 | HC-C2YK-2CEUF    | DN4126A |
| Y03630 | HC-C2YK-4BF      | DN4127A |
| Y02620 | HC-C2YK-4FC7666A | DN4168A |
| Y02680 | HC-C2YK-4FC7666A | DN4171A |
| Y02786 | HC-C2YK-4FC7666A | DN4172A |
| Y02619 | HC-C2YK-4FC7666A | DN4175A |
| Y03588 | HC-C2YK-4BF      | DN4187A |
| Y03116 | HC-C2YK-4CF      | DN4216A |
| Y02679 | HC-C2YK-4FC7666A | DN4231A |
| Y03209 | HC-C2YK-4BF      | AU9643B |
| Y02677 | HC-C2YK-4FC7666A | DN4249A |
| Y02667 | HC-C2YK-4FC7666A | DN4263A |
| Y03253 | HC-C2YK-4BF      | DN4265A |
| Y03592 | HC-C2YK-4BF      | DN4268  |
| Y02796 | HC-C2YK-4FC7666A | DN4279A |
| Y02788 | HC-C2YK-4FC7666A | DN4280A |
| Y03210 | HC-C2YK-4BF      | DN4284A |
| Y03212 | HC-C2YK-4BF      | DN4299A |
| Y03574 | HC-C2YK-4BF      | DN9650B |
| Y03260 | HC-C2YK-4BF      | DN4340A |
| Y03254 | HC-C2YK-4BF      | DN4341A |
| Y02665 | HC-C2YK-4FC7666A | DN4351A |
| Y02681 | HC-C2YK-4FC7666A | DN4364A |
| Y03208 | HC-C2YK-4BF      | DN4371A |
| Y02787 | HC-C2YK-4FC7666A | DN4380A |
| Y03621 | HC-C2YK-4BF      | DN4510A |
| Y02666 | HC-C2YK-4FC7666A | DN4521A |
| Y03589 | HC-C2YK-4BF      | DN4514A |
| Y03619 | HC-C2YK-4BF      | DN4515A |
| Y02678 | HC-C2YK-4FC7666A | DN4516A |
| Y02618 | HC-C2YK-4FC7666A | DN4522A |
| Y02615 | HC-C2YK-4FC7666A | DN4524A |



**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |                  |         |
|--------|------------------|---------|
| Y02614 | HC-C2YK-4FC7666A | DN4712A |
| Y02616 | HC-C2YK-4FC7666A | DN4716A |
| Y03439 | HC-C2YK-4BF      | DN4719A |
| Y02662 | HC-C2YK-4FC7666A | DN4955A |
| Y03626 | HC-C2YK-4BF      | DN4957A |
| Y03252 | HC-C2YK-4BF      | DN4963A |
| Y02668 | HC-C2YK-4FC7666A | DN4965A |
| Y04191 | HC-E2YL-2BLSF    | DP94    |
| Y02832 | HC-C3YR-1RF      | DY2464A |
| Y04175 | PHC-C3YF-2UF     | EB171   |
| Y04174 | PHC-C3YF-2UF     | EB173   |
| Y03788 | PHC-C3YF-2UF     | EB1977  |
| Y03787 | PHC-C3YF-2UF     | EB1978  |
| Y02779 | HC-M2YR-2CEUF    | FB379   |
| Y04943 | PHC-C3YF-1RF     | EE1354  |
| Y03959 | PHC-C3YF-1RF     | EE1369  |
| Y03754 | HC-C2YR-1RF      | EE227   |
| Y04730 | PHC-C3YF-1RF     | EE2322A |
| Y03767 | HC-C3YF-1RF      | EE351   |
| Y04246 | HC-BM5P-3C       | EVA2226 |
| Y04246 | HC-BM5P-3C       | EVA2246 |
| Y04169 | HC-B5MP-3C       | EVA2281 |
| Y02634 | HC-M2YR-2CLEUF   | FB102   |
| Y02732 | HC-M2YR-2CEUF    | FB1061A |
| Y04252 | HC-M2YR-2CEUF    | FB1064A |
| Y02733 | HC-M2YR-2CLEUF   | FB1066A |
| Y04253 | HC-M2YR-2CLEUF   | FB1067A |
| Y03332 | HC-M2YR-2CLEUF   | FB1177B |
| Y04170 | HC-M2YR-2CLEUF   | FB1196B |
| Y02719 | HC-M2YR-2CLEUF   | FB1167B |
| Y02708 | HC-M2YR-2CEUF    | FB409   |
| Y04492 | HC-M2YR-2CEUF    | FB454   |
| Y03043 | HC-M2YR-2CEUF    | FB99    |
| Y02905 | HC-F2YL-2UF      | FE11    |
| Y02917 | HC-F2YL-2UF      | FE229   |
| Y03753 | HC-F2YL-2UF      | FE282B  |
| Y03827 | HC-F2YL-2UF      | FE285B  |
| Y03453 | HC-F2YL-2UF      | FE58    |
| Y04876 | HC-C3YF-5F       | FR101   |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |            |         |
|--------|------------|---------|
| Y04725 | HC-C3YF-5F | FR185A  |
| Y04726 | HC-C3YF-5F | FR186A  |
| Y04829 | HC-C3YF-5F | FR187A  |
| Y04830 | HC-C3YF-5F | FR188A  |
| Y05110 | HC-C3YF-5F | FR192A  |
| Y05111 | HC-C3YF-5F | FR193A  |
| Y04971 | HC-C3YF-5F | FR206A  |
| Y03814 | HC-C3YF-5F | FR207A  |
| Y04878 | HC-C3YF-5F | FR39    |
| Y03125 | HC-C3YF-5F | FR206A  |
| Y02715 | HC-C3YF-5F | FR58    |
| Y04448 | HC-C3YF-5F | FR68    |
| Y02716 | HC-C3YF-5F | FR72    |
| Y04450 | HC-C3YF-5F | FR73    |
| Y04569 | HC-C3YF-5F | FR74    |
| Y04449 | HC-C3YF-5F | FR78    |
| Y04085 | HC-C3YF-5F | FR79    |
| Y04970 | HC-C3YF-5F | FR80    |
| Y02600 | HC-C3YF-5F | FR82    |
| Y03527 | HC-C3YF-5F | FR83    |
| Y04877 | HC-C3YF-5F | FR86    |
| Y04570 | HC-C3YF-5F | FR87    |
| Y04752 | HC-C3YF-5F | FR92    |
| Y05008 | HC-C3YF-5F | FR94    |
| Y03605 | HC-B4MP-3B | FWA3209 |
| Y03604 | HC-B4MP-3B | FWA3201 |
| Y03987 | HC-B4MP-3A | FWA3043 |
| Y03902 | HC-B4MP-3A | FWA3216 |
| Y03903 | HC-B4MP-3A | FWA3217 |
| Y04351 | HC-B4MP-3A | FWA3270 |
| Y03911 | HC-B4MP-3A | FWA3444 |
| Y03910 | HC-B4MP-3A | FWA3445 |
| Y03986 | HC-B4MP-3A | FWA3538 |
| Y04352 | HC-B4MP-3A | FWA3732 |
| Y04465 | HC-B4MP-3A | FWA3760 |
| Y04466 | HC-B4MP-3A | FWA3761 |
| Y03647 | HC-A6A-3A  | GP135   |
| Y03647 | HC-A6A-3A  | GP135   |
| Y02882 | HC-A2VK-2  | H238    |

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

|        |                 |        |
|--------|-----------------|--------|
| Y02883 | HC-A2VK-2       | H2472  |
| Y04864 | HC-A2YK-2       | H392   |
| Y04863 | HC-A2YK-2       | H396   |
| Y04979 | HC-E4N-3G       | HH1739 |
| Y04980 | HC-E4N-3G       | HH360  |
| Y04977 | HC-E4N-3G       | HH378  |
| Y04978 | HC-E4N-3G       | HH379  |
| Y03667 | HC-E4N-3        | HH43   |
| Y04125 | HC-E4A-3J       | HJ1050 |
| Y04124 | HC-E4A-3J       | HJ1079 |
| Y04123 | HC-E4A-3J       | HJ1213 |
| Y04874 | HC-I3YR-1RF     | HK127A |
| Y04597 | HC-A2VK-1       | J1153  |
| Y04783 | BHC-C2YF-2CLKUF | JS11B  |
| Y04687 | BHC-C2YF-CLKUF  | JS70B  |
| Y04051 | HC-82VL-2C      | K2624N |

- Requirement:
1. Perform a document search of aeroplane and propeller records to determine if the propeller was involved in a ground strike.
  2. Perform the following requirements:
    - (a) Disassemble the propeller.
    - (b) Clean all disassembled propeller parts.
    - (c) Perform a visual inspection for the following conditions:
      - (i) Wear or damage such as cracks, corrosion, scratches, or nicks.
      - (ii) Except for blades installed new at the last CSE maintenance action, examine for:
        - (A) Bent or damaged pitch change knobs.
        - (B) Damage in the bore area of the blade shank.
        - (C) Damage in the blade balance hole.
      - (iii) Damage that indicates a previous ground strike (if applicable).

## Propellers - Variable Pitch - Hartzell

AD/PHZL/88 (continued)

- (iv) Unacceptable wear or damage in areas where shot peening is required. It is not necessary to strip the paint and corrosion protective coatings from the external surface of the blade. It is also not necessary to perform dimensional measurements on the external surface of the blade unless there is evidence of damage that has occurred since CSE returned the propeller to service.
- (v) Confirm that CSE Aviation correctly performed the repairs listed in the manufacturer's maintenance manuals. An example of a maintenance manual repair is chamfering of the hub grease fitting hole on Hartzell "Y" shank series propellers.
- (d) Perform all Eddy Current inspections applicable.
- (e) Repair and replace with serviceable parts, as necessary.
- (f) Assemble and test.
- (g) Confirm that hubs affected by AD/PHZL/74 (FAA AD 2001-23-08) are returned to service only on aircraft affected by that AD.

### Definitions:

For the purposes of this AD:

- (1) Overhauling a propeller is not necessary to comply with the requirements specified in Requirement 2 of this AD. If you do not overhaul the propeller, the TSO does not change.
- (2) Unacceptable wear is wear or damage that can penetrate the shot peen compressive layer.

*Note: FAA AD 2006-24-07 Amdt 39-14836 dated 21 November 2006 refers.*

- Compliance:
- 1. Within 30 days after the effective date of this AD.
  - 2. If the propeller was involved in a ground strike, within 10 flight hours (FH) time-in-service (TIS) after the effective date of this AD, or 2 years after the effective date of this AD, whichever is earlier.

For all propellers listed by SN in Table 1 of this AD, not involved in a ground strike, using the compliance schedule detailed in Table 2 of this AD.

**Propellers - Variable Pitch - Hartzell**

AD/PHZL/88 (continued)

**Table 2. - Compliance Schedule**

| <b>If the time-since-overhaul (TSO) for the propeller on the effective date of this AD is ...</b> | <b>Then perform the requirements of paragraph (j) or paragraph (k) of this AD within ...</b>                   |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| (1) 1,500 FH TSO or more.                                                                         | 200 FH TIS after the effective date of this AD, but do not exceed 2 years after the effective date of this AD. |
| (2) More than 1,000 FH TSO, but fewer than 1,500 FH TIS.                                          | 350 FH TIS after the effective date of this AD, but do not exceed 2 years after the effective date of this AD. |
| (3) 1,000 FH TSO or fewer.                                                                        | 500 FH TIS after the effective date of this AD, but do not exceed 2 years after the effective date of this AD. |

This Airworthiness Directive becomes effective on 7 June 2007.

**Background:** This AD pertains to certain Hartzell Propeller Inc. HC, BHC, and PHC series propellers serviced by Oxford Aviation Services Limited, doing business as CSE Aviation, in the United Kingdom between September 1998 and October 2003. This AD requires inspecting the propeller blades and other critical propeller parts for wear and mechanical damage. This AD results from findings that CSE Aviation failed to perform some specific inspections and repairs. The issuing of this AD is to detect unsafe conditions that could result in a propeller blade separating from the hub and loss of control of the aeroplane.



David Punshon  
Delegate of the Civil Aviation Safety Authority

27 April 2007