

U.S. DEPARTMENT OF TRANSPORTATION  FEDERAL AVIATION ADMINISTRATION  TYPE CERTIFICATE DATA SHEET P31NE	TCDS NUMBER P31NE REVISION: 1  DOWTY PROPELLERS MODEL/S: (c)R. 390  February 27, 2007
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Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P31NE) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's and other approved instructions.

Type Certificate Holder      Dowty Propellers  
    Anson Business Park  
    Cheltenham Road East  
    Gloucester, GL2 9QH, England

Type                                    Constant speed; hydraulic (See Notes 3 and 4)

Engine flange                      Special flange with 12 bolts and 2 dowels (all at 5.125 inches P.C.D.)

Hub material                        Aluminum alloy

Blade material:                    Composite glass and carbon re-inforced plastic

Number of blades                 4

Design series                       (c) R.390

BLADES (See Note 2 )	MAXIMUM CONTINUOUS		< TAKE OFF >		NOMINAL DIAMETER	APPROXIMATE WEIGHT
	HP	RPM	HP	RPM		
660714214-6	1,700	1,384	1,750	1,384	132 inches	216.0 lbs.

CERTIFICATION BASIS:      FAR 21.29 and FAR 35 effective February 1, 1965, Amendments 35-1 through 35- 6. Compliance established by equivalency to British Civil Airworthiness Requirements (BCAR) Section A Issue 24 Chapter A3-2 (Grey Paper No. A44 3 June 1980). Section C Issue 12 Chapters C1-1, C1-2, and sub-section C5, together with the installation requirements of JAR 25, Change 13, Paragraphs 33,901(c) 905, 907, 933(c), 937 and 1337, also Special Requirements detailed in CAA letter ref 9/216/11 dated 5 June 1981.

Civil Aviation Authority (UKCAA) originally type certificated this propeller under its Type Certificate Number 113. The FAA validated this product under U.S. Type Certificate Number P31NE. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the United Kingdom of Great Britain and Northern Ireland

TC (IMPORT) NO:                UKCAA Type Certificate Number 113

TC APPLICATION DATE:        October 5, 1992

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Rev No.	1	1	1

TC ISSUED: October 15, 1992

IMPORT REQUIREMENTS: To be considered eligible for installation on U.S. registered aircraft, each propeller to be exported to the United States shall be accompanied by a Certificate of Airworthiness for export endorsed by the UKCAA on behalf of the European Community which contains the following language:

(1) This propeller conforms to its United States type design (Type Certificate number P31NE) and is in a condition for safe operation.

(2) This propeller has been subjected by the manufacturer to a final operational check and is in a proper state of airworthiness. Reference FAR Section 21.500 which provides for the airworthiness acceptance of aircraft engines or propellers manufactured outside the U.S. for which a U.S. type certificate has been issued. Additional guidance is contained in FAA Advisory Circular 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products, Imported into the United States.

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NOTES

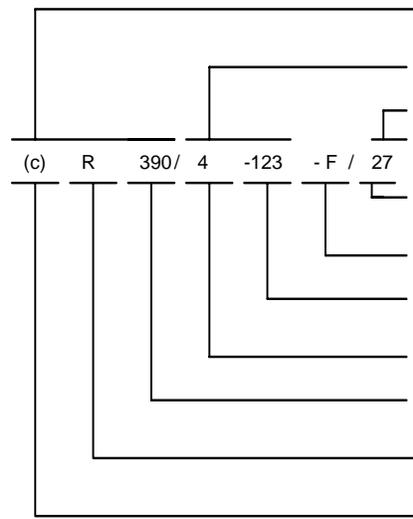
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NOTE 1. Propeller Model Designation

The model designation of a complete Dowty Aerospace Propeller assembly consists of the basic model designation with prefix and suffix letters and numbers as shown below:



- Suffix number denotes interchangeable design standards.
- Engine flange mounted
- Blade shank size No. 123
- Number of blades - 4
- Prefix number notes non-interchangeable design standard.
- Dowty Aerospace
- Civil(non-military)

The prefix number indicates the design series, and propellers with different prefix numbers are not generally interchangeable. Certain models may be interchanged as complete aircraft sets on the advice of the propeller manufacturer only.

The suffix number is used to record minor alterations which do not affect interchangeability.

NOTE 2. Blade Model Designation

Dowty Aerospace propeller blades are identified by a serialized part number only, which does not constitute a model designation. A dash number following the part number indicates the type of finish.

NOTE 3: Pitch control:

Propeller pitch control unit. woodward governor type 663006008, 663006009, 663006010

- NOTE 4: (a) Feathering: Model incorporates feathering and unfeathering features by means of counterweights and motor/pump unit, Dowty Aerospace type (c)RFP/34.  
 (b) Reversing: Model incorporates reversing feature.
- NOTE 5: Right-hand model: (c) R.390 These propellers are designed and manufactured for right-hand tractor only.
- NOTE 6: Interchangeable blades: Only blades of the same part numbers are interchangeable and may be incorporated in the same propeller.
- NOTE 7: Accessories: (a) Propeller De-icing: Electrical de-icing with blade de-icing to Dowty Aerospace drawing 660000929 for R390/4-123-F/27 .  
 (b) Spinners: Dowty Aerospace spinner design (c) SB.25/4/1 and backplate 664005244 of Dowty Aerospace design.
- NOTE 8: 8.1 Propeller types (c) R390/4-123-F/27 supersedes propeller type R375/4-123-F/21 and features a new hub assembly.  
 8.2  
 MANUALS  
 Propellers 61-10-39  
 Spinner 61-10-40  
 Feathering Pump 61-20-26  
 Woodward PCU 61-20-27  
 Woodward OSG 61-20-28
- NOTE 9: Approved installations: Propellers listed in this data sheet are approved from a vibration standpoint only for use on the engine-aircraft combinations shown below:

PROPELLER MODEL	AIRCRAFT MODEL	ENGINE MODEL	FAA SPECIFICATION OR TC DATA SHEET	
			AIRCRAFT	ENGINE
(c)R. 390/4-123-F/27	Saab	Genl Electric	A52EU	E8NE
	SF340A	CT7-5A2		
	SF340B	CT7-5A3		
	Max. T/O weight: 29,000 lbs.	CT7-9B		

- NOTE 10: Aircraft installations must be approved as part of the aircraft type certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.
- NOTE 11: Service Information: Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the UKCAA. Any such documents are accepted by the FAA and are considered FAA approved.
- Service bulletins,
  - Structural repair manuals,
  - Vendor manuals,
  - Aircraft flight manuals, and
  - Overhaul and maintenance manuals.

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