# **Type Acceptance Report**

TAR 4/21B/7 – Revision 1 MD 369/500/600 Series

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# Executive Summary

New Zealand Type Acceptance has been granted to the MD500/600 Series based on validation of FAA Type Certificate number H3WE. There are no special requirements for import.

Applicability is currently limited to the Models and/or serial numbers detailed in Section 2, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.) Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

## 1. Introduction

This report details the basis on which Type Acceptance Certificate No. 4/21B/7 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically, the report aims to:

- (a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the model(s) in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and
- (c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

The report notes the status of all models included under the State-of-Design type certificate which have been granted type acceptance in New Zealand, which are listed in Section 2. The history of the MD500/600 type acceptance in New Zealand under FAA type certificate H3WE is listed in Appendix 1, including which models were certificated prior to CAR Part 21B under NZCAR Section B.9 and are now type accepted under the transitional arrangements of Part 21 Appendix A(c).

# 2. Aircraft Certification Details

### (a) State-of-Design Type and Production Certificates:

TC Holder:	MD Helicopters Inc. (since 18 February 1999)
Type Certificate:	H3WE
Issued by:	Federal Aviation Administration

TC and/or Production Certificate Holders:	Date From:	Approval No:
MD Helicopters Inc.	5 Nov 1999	FAA PC715NM
McDonnell Douglas Helicopter Company	18 Feb 1999	FAA PC714NM
McDonnell Douglas Helicopter Company	9 April 1986	FAA PC410NM
Hughes Helicopters Inc.	7 April 1981	FAA PC410
Hughes Helicopters, Division of Summa Corp.	16 April 1973	FAA PC410
Hughes Tool Company, Aircraft Division		FAA PC410

## (b) Models Covered by the Part 21B Type Acceptance Certificate:

(i)	Model:	369HE, 369HS
	MCTOW:	1156 kg (2550 lb.) – s/n 0101 and up
	Max. No. of Seats:	5
	Noise Standard:	Not Applicable (Stage 1)
	Engine:	Rolls Royce 250-C18A or -C18C
	Type Certificate: Issued by:	E4CE Federal Aviation Administration
(ii)	Model:	369D, 369E
	MCTOW:	1360 kg (3000 lb.)
	Max. No. of Seats:	5
	Max. No. of Seats: Noise Standard:	5 Not Applicable (Stage 1)
	Max. No. of Seats: Noise Standard: Engine:	5 Not Applicable (Stage 1) Rolls Royce 250-C20B or -C20R/2

(iii)	Model:	369F, 369FF
	MCTOW:	1406 kg (3100 lb.)
	Max. No. of Seats:	5
	Noise Standard:	Not Applicable (Stage 1)
	Engine:	Rolls Royce 250-C30
	Type Certificate: Issued by:	E1GL Federal Aviation Administration
(iv)	Model:	500N
	MCTOW:	1519 kg (3350 lb.)
	Max. No. of Seats:	5
	Noise Standard:	FAR Part 36 through Amendment 36-18
	Engine:	Rolls Royce 250-C20R/2
	Type Certificate: Issued by:	E4CE Federal Aviation Administration
(v)	Model:	600N
	MCTOW:	1860 kg (4100 lb.)
	Max. No. of Seats:	8
	Noise Standard:	FAR Part 36 through Amendment 36-21
	Engine:	Rolls Royce 250-C47M
	Type Certificate: Issued by:	E1GL Federal Aviation Administration

## 3. Application Details and Background Information

There have been examples of the Model 369 Series in New Zealand prior to 1995 when Part 21 was introduced, and those particular models were therefore deemed to have a type acceptance certificate under the transitional arrangements of Part 21 Appendix A(c). The first application for New Zealand type acceptance under Part 21B was for the Model 600N from Faram Helicopters Limited, dated 10<sup>th</sup> September 2003. The first-of-type example was serial number RN016, registered ZK-INT.

Type Acceptance Certificate No. 4/21B/7 was granted on 10<sup>th</sup> October 2003 to the MDHI 600N based on validation of FAA Type Certificate H3WE. Specific applicability is limited to the coverage provided by the operating documentation supplied. <u>There are no special requirements for import into New Zealand</u>.

Revision 1 was issued to update the report to the latest format, which now includes all models covered by the foreign type certificate.

The MD500 is a five-seat single turbine light utility helicopter. Although universally known as the Hughes 500, the official designation is Model 369. The original 369 was developed for the US Army LOH contest, which it won as the OH-6A Cayuse. The first civilian development of the military 369A was the 369H, which in production form was built in two versions, the 369HE (Executive version with enhanced interior) and the 369HS (Standard version). Very few 369HE were sold, and there have only been two briefly in New Zealand (ZK-HJL and ZK-HPS). The 369HS is also colloquially referred to as the 369C, although officially there is no such designation.

The next major development was the 369D which used the 375 shp 250-C20 Allison variant. Associated with the power increase was a change to a five-blade main rotor system and a T-tail empennage configuration. The 369E was essentially the same helicopter with a re-styled more streamlined front fuselage. The 369F and 369FF was the next change using the larger 250-C30 for better hot and high performance, and higher Internal Gross Weight. Associated changes included longer main and tail rotor blades, and an extended tailboom. On the 369F the 250-C30 was de-rated to 375 shp. Most 369F models have been converted to the 369FF version (known commercially as the MD530F-Plus), which can use the full 425 shp rated power of the engine. The 369FF also has a higher External gross weight, and uses Kamatic couplings in place of the previous Bendix units on the engine output shaft and tail rotor drive shaft.

The final evolution was the Model 500N, which was the 369E fitted with the new MDdeveloped NOTAR® (No Tail Rotor) torque-control system. With NOTAR an enclosed variable-pitch composite-blade fan produces a low pressure, high volume of air to pressurize the composite tailboom, which is then expelled through two slots which run the length of the tailboom on the right hand side, producing a boundary-layer force due to the Coanda Effect. There is also a directed thrust outlet at the end of the tailboom and fixed vertical stabilizers. The 500N is marketed as the Model MD520N.

The 600N is a stretched development of the Model 500N. The main changes are a 30 inch extension to the cabin to fit an extra row of seats; the NOTAR tailboom is

extended 28 inches; power is increased from 425 to 600 hp with the installation of the FADEC-equipped 250C-47M engine, along with higher fuel capacity; a new transmission and drive system is fitted to support the higher loads, including a sixbladed main rotor head; longer strengthened landing skids are fitted; and maximum gross weight is increased.

The first-of-type example of the Hughes Model 369HS in New Zealand was serial number 0271S ZK-HFK, registered in May 1973. The first 369D was serial number 0023D ZK-HJO in February 1977, while for the 369E this was serial number 0021E ZK-HYO. Serial number 0010F ZK-HTL was the first example of the 369FF. The first example of the 500N NOTAR was a demonstrator, serial number LN045 ZK-HZG

## 4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents, or were already held by the CAA:

(1) State-of-Design Type certificate:

FAA Type Certificate Number H3WE

FAA Type Certificate Data Sheet no. H3WE at Rev 27 dated 31 August 2018

- Model 369HS approved 3 January 1969
  - Model 369HE approved 21 May 1969
  - Model 369D approved 8 December 1976
  - Model 369E approved 15 December 1982
  - Model 369F approved 29 July 1983
  - Model 369FF approved 11 July 1985
  - Model 500N approved 12 September 1991
  - Model 600N approved 15 May 1997

(2) Airworthiness design requirements:

(i) Airworthiness Design Standards:

The certification basis of the Model 369 Series was CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 plus the Special Conditions, "Conditions Establishing Compensating Factors Providing an Equivalent Level of Safety Under Civil Air Regulations, Section 6.10, for Light Turbine Powered Helicopters," dated October 2, 1962, as revised February 8, 1966. For the 369F/FF one equivalent level of safety was added.

For the 500N additional height velocity testing to 7000 feet was required per §6.111 and §6.116 , and Sections of FAR Part 27 at various amendments was applied to the NOTAR system.

All basic requirements for glass cockpit installations have been certified under FAR Part 27 Amendment 27-1 through 27-47, dated 30 January 2012.

This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41 and Advisory Circular 21-1A, as CAR 6 is the predecessor to FAR Part 27, which is the basic standard for Rotorcraft called up under Part 21 Appendix C. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

The certification basis of the Model 600N was upgraded to FAR Part 27 dated October 2, 1964 through Amendment 27-30, with one Special Condition for HIRF and one Equivalent Level of Safety granted. This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41, as FAR Part 27 is the basic standard for Normal Category Rotorcraft called up under Part 21 Appendix C. One Equivalent Safety Finding was granted and a special condition relating to HIRF was imposed by the FAA, because of the FADEC engine control system. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

(ii) Special Conditions:

MD 600N Special Condition 27-ASW-4, protection for electrical / electronic systems from High Intensity Radiated Fields (HIRF), dated January 21, 1997

(iii) Equivalent Level of Safety Findings:

Issue Paper P-3, Engine Gas Generator Speed Instrument Display (ESF) – The FAA granted an ELOS Decision against 27.1549(b) for the N<sub>1</sub> gauge. The 600N only displays RPM in digits with abnormal values shown by a single red light with no trend indication. This literal non-compliance was accepted because N1 is only a third (back-up) gauge for engine power level and abnormal conditions are adequately indicated by the red LED.

(iv) Airworthiness Limitations:

The FAA Approved schedule for Life-Limited components is contained under Note 3 in the Type Certificate Data Sheet H3WE.

For the Models 369D, 369E, 369F and 369FF manufactured after June 20, 1991, and for the Models 500N and 600N, see the Airworthiness Limitations section (ALS) of the HMI.

- (3) Aircraft Noise and Engine Emission Standards:
  - (i) Environmental Standard:

Discussion Paper: Model 369/500N/600N series "Engine Emissions Compliance" – Conclusion: Engine Emission Certificates not required for the Model 369/500N/600N series.

The Models 500N and 600N have been tested for noise in compliance with FAR Part 36. For the 500N this was to Appendix H at Amendment 36-18, and for the 600N this was to Appendix J at Amendments 36-24.

(ii) Compliance Listing:

MDHS Report 600N-CE-2005 N/C "FAR 36 – Appendix J Noise Certification Test Report for Model 600N Helicopter", dated 05 December 1996

MDHS Report 600N-CE-2008 Rev A "ICAO 16 Chapter 11 Noise Certification Test Report for Model 600N Helicopter", dated 18 August 1998

(4) Certification Compliance Listing:

Type Inspection Report Part 2 – Flight Tests T.I.R. Model 369 (Army OH-6A)

Report No. 369-S-1002 Model 369A & 369H Type Inspection Authorization

Hughes Report No. 369-FT-8026 Model No. 369H T.I.R. Part 2- Flight Tests

Report No. 369-S-0003 – Stress Analysis: Basic Loads 369A/H

Report No. 369-S-1002 – Stress Analysis: Main Rotor 369A/H

Report No. 369-S-1402 – Stress Analysis: Drive System 369A/H

Report No. 369-S-2002 – Stress Analysis: Tail Rotor 369A/H

Report No. 369-S-3002 – Stress Analysis: Fuselage369A

Report No. 369-S-3003 – Stress Analysis: Fuselage 369H

Report No. 369-S-5202 – Stress Analysis: Control System 369A/H

Report No. 369-S-5203 – Stress Analysis: Control System 369H

Hughes Report No. 369-Y-8004 Model No. 369H & 369A Design Criteria Hughes Report No. 369-Y-8008 Model No. 369H, 369HM, 369HS Helicopters and First Production 369A-1 Supplemental design Criteria

Hughes 369D Report No. 369-S-1003 Model 369D

Hughes 369D Report No. 369-S-2003 Model 369D

Hughes 369D Report No. 369-S-5204 Model 369D

Hughes 369D Report No. 369-BT-2024 Model 369D – Fatigue Test of Tailboom

Hughes 369D Report No. 369-S-1406 – Stress Analysis – Drive System

Hughes 369D Report No. 369-Y-8053

Report 369-S-3005: Stress Analysis: Model 369E Helicopter TIA Analysis

Hughes Report No. 369CE-020 – Compliance Checklist for the Model 369F

Hughes Report No. 369-Y-8059 Model 369F Structural Design Criteria

Hughes Report No. 369-CE-040 Flight Strain Survey for the 369F

369 FF Project No. CH8666WE Type Inspection Authorization Part 1 and 2

MDHS Model 600N Compliance Checklist Rev "B", dated 3/1/00

Issue Paper F-1 Power on  $V_{NE}$  Envelope Limits, dated April 22, 1997 – FAR para §27.141(b) and §27.251 specify handling conditions to be met. The 600N initially did not meet these, including pilot control feedback loads and pilot skill level needed to maintain a 30° banked turn. To meet these  $V_{NE}$  was reduced and the MCP TOT limit reduced above 10,000 ft.

Issue Paper F-2 MCP Climb Directional Stability, dated April 22, 1997 – FAR §27.177 requires static directional stability be positive in cruise and climb at sideslip angles up to  $\pm 10^{\circ}$ . The 600N had difficulty in complying with this at aft c.g., even at reduced MCP, and V<sub>Y</sub> was increased.

Boeing letter 98-600-188 Magish to Winnert (UK-CAA), Subject: Certification MD 600N: UK CRI A-01 "Applicable Requirements and Depth of Investigation" and CAI 01-07 "FAA Regression", Dated: October 6, 1998 Containing:

➢ ICPTF Justification for MDHS Model 600N

➢ Issue Paper G-1, TC Basis, dated December 26, 1996 and related revisions – The 600N was accepted as a derivative of the 369/500N Series, which were certificated to CAR 6. McDonnell Douglas Helicopter System (MDHS), as it was then known, elected to show compliance against FAR 27 Admt 30. However the FAA agreed to the following regressions:

• FAR 27.562 (Emergency Landing Dynamic Conditions) and FAR 27.863 (Flammable Fluid Fire Protection) were excluded. This was substantiated in accordance with AC20-ICPTF methodology. MDHS demonstrated energy absorbing seats could not be justified economically. This was based on an analysis of Model 369/500N data, which showed only 8% of all survivable accidents resulted in fatalities, even though the helicopter was destroyed in 31% of cases. This proved the inherent crashworthiness of the basic fuselage design. The regulatory analysis using the AC Safety/Resource Evaluation Guide showed

the dynamic seating change in this case would be "not effective". Service experience was also accepted for the fuel system on the basis there had never been an in-flight fire from that cause in 25 million flight hours. MDHS also added other beneficial enhancements including self-sealing valves, fuel-free vent tubes and the 50' drop test for the fuel cell.

- FAR 27.561 at Amendment 27-24 Incidental to the exclusion of FAR 27.562.
- FAR 27.607 (Self Locking Nuts) at Amendment 27-3 Accepted on the basis that service experience shows that current fastener design (expanding bolts) was safe and acceptable.
- FAR 27.785 (Seats, berths, safety belts and harnesses) at Amendment 27-20 Shoulder harnesses are fitted as standard. Otherwise incidental to the exclusion of FAR 27.562.
- FAR 27.1325 (Static Pressure Systems) at Amendment 27-12 Accepted as identical to the Model 500N.

MDHS Memorandum Magish to Distribution, Subject: Minutes MD600N Preliminary Type Board Meeting 7 June 1995 – Ref. JJM 95-038

(5) Flight Manual: FAA-Approved Rotorcraft Flight Manual for the MD 500 (Models 369HE/369HS/369HM) Publication CSP-HE/HS-1 – CAA Approved as AIR 2047

FAA-Approved Rotorcraft Flight Manual for the MD 500D Publication CSP-D-1 – CAA Approved as AIR 2021 (Model 369D)

FAA-Approved Rotorcraft Flight Manual for the MD 500E Publication CSP-E-1 – CAA Approved as AIR 2318 (Model 369E)

FAA-Approved Rotorcraft Flight Manual for the MD 530F Plus Publication CSP-FF-1 – CAA Approved as AIR 2471 (369FF)

FAA-Approved Rotorcraft Flight Manual for the MD 520N Publication CSP-520N-1 - CAA Approved as AIR 2477 (500N)

FAA-Approved Rotorcraft Flight Manual for the MD 600N Publication CSP-600RFM-1 – CAA Accepted as AIR 2838

- Note: The FM has an unusual presentation of performance in three sections. (See Discussion Paper: MD 600N Certification Basis and the Rotorcraft Flight Manual, Dated 11 Feb 2000) MD was only able to show compliance with the FAR 27 H-V requirement at 7000 ft Density Altitude (DA) up to 3850 lb. Above this weight the FAA accepted compliance with the "more restrictive" FAR 29 case where the manufacturer can demonstrate all critical combinations of internal weight and DA, on the basis of equivalent safety. However the FAA would not allow RFM charts that combined FAR 27 and FAR 29 rules. Therefore there are two separate FAA approved performance sections in the Flight Manual, and another MD-approved section which combines them, for ease of reading.
- (6) Operating Data for Aircraft:
  - (i) Maintenance Manual:

CSP-H-4 – Airworthiness Limitations, Overhaul and Replacement Schedules, Periodic Inspections, & Weight and Balance Procedures – 369H (Appendix B)

CSP-H-2 – Basic Handbook of Maintenance Instructions – Model 369H

CSP-H-5 – Component Overhaul Manual – 369H Series

CSP-H-6 – Structural Repair Manual – 369H Series

- Basic Handbook of Maintenance Instructions 369D/369E/359FF/500N/600N CSP-HMI-2 - Servicing & Maintenance CSP-HMI-3 – Instrument-Electrical-Avionics
- CSP-COM-5 Component Overhaul Manual 369D/369E/359FF/500N/600N

CSP-SRM-6 – Structural Repair Manual

CSP-ISC-7 – Illustrated Structures Catalog

CSP-A-3 – Corrosion Control Manual – All Models

- (ii) Current service Information: Service Bulletins, Technical Bulletins, Service Letters
- (iii) Illustrated Parts Catalogue: CSP-H-7 – IPC 500 Series Helicopter (Model 369HS/369HM/369HE)

CSP-IPC-4 - IPC (369D/369E/369FF/500N/600N)

(7) Agreement from manufacturer to supply updates of data in (5), and (6):

CAA form 2171 from MDHI Manager, Certification Department, dated 24/9/03 (MDHI manuals in (5) and (6) above are supplied to the CAA on their website)

(8) Other information:

600N Weight & Balance Documents (Form 600-0078 [8/97])

MDHS Drawing 600N-CE-4001 – Electrical Load Analysis, 600N Helicopter

MDHS Drawing 600N90000 Rev E – Options List, Model 600N

MDHS Report No.600N-CE-0033 Rev.B, Model 600N Required Equipment List

International Certification Model 600N Product Overview

FAA MMEL: MDHS Model 369, 500 Series and 600N, Rev.0b, Date: 02/09/98

## 5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 has been assessed as they are a prerequisite for the grant of an airworthiness certificate.

#### **Civil Aviation Rules Part 26**

#### Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA: REQUIREMENT:		MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	To be determined on an individual aircraft basis
B.2	Crew Protection Requirements – CAM 8 Appdx. B # .35	Not Applicable – Agricultural Aircraft only

#### Appendix E – Helicopters

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
E.1	Doors and Exits	FAR §27.783 and FAR §27.807(b)(2)
E.2.1	Emergency Exit Marking	FAR §27.807(b)(3)

Compliance with the following additional NZ operating requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

#### **Civil Aviation Rules Part 91**

#### Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:		MEANS OF COMPLIANCE:		
91.505	Seating and Restraints – Safety belt/Shoulder Harness		FAR 27.785 – See Report 600N-CE-0033 Items A-17 to 19		
91.507	Pax Information Signs	– Smoking, safety belts fastened	Not Applicable – Less than ten passenger seats		
91.509	(1) ASI	FAR §27.1303(a) - See Report	(7) Oil Pressure	FAR §27.1305(h) – See Report	
Min.		600N-CE-0033 Item D-13		600N-CE-0033 Item D-09	
VFR	(2) Machmeter	N/A – No mach no. limitations	(8) Coolant Temp	N/A – Turbine engine	
	(3) Altimeter	FAR §27.1303(b) – See Report	(9) Oil Temperature	FAR §27.1305(j) - See Report	
		600N-CE-0033 Item D-10		600N-CE-0033 Item D-09	
	(4) Magnetic Compass	FAR §27.1303(c) – See Report	(10) Manifold Pressure	N/A – Turbine engine	
		600N-CE-0033 Item A-05	(11) Cylinder Head Temp	N/A – Turbine engine	
	(5) Fuel Contents	FAR §27.1305(d) – See Report	(12) Flap Position	N/A – Helicopter	
		600N-CE-0033 Item D-07	(13) U/C Position	N/A – Fixed skid undercarriage	
	(6) Engine RPM	FAR §27.1305(k) – See Report	(14) Ammeter/Voltmeter	FAR §27.1351(d) – See Report	
		600N-CE-0033 Items D-08, 11		600N-CE-0033 Item D-12	
91.511	(1)Turn and Slip	Available as Option – See Rpt.	(3) Anti-collision Lights	Fitted as standard– See Report	
Night		600N-CE-0033 Item D-21		600N-CE-0033 Item X-10	
	(2) Position Lights	Fitted as standard– See Report	(4) Instrument Lighting	Fitted as standard– See Report	
		600N-CE-0033 Item X-11, 12		600N-CE-0033 Item D-02	
91.513	VFR Communication E	quipment	KX155 or KY196A NAV/COM available as options – See		
		Report 600N-CE-00		Items D-24 or D-25	
91.517	IFR Communication an	d Navigation Equipment	N/A – MD500/600 is only approved for Day/Night VFR		
91.519	IFR Communication an	d Navigation Equipment	N/A – MD500/600 is only approved for Day/Night VFR		
91.523	Emergency Equipment				
	(a) More Than 9 pax –	First Aid Kits per Table 7	Operational Requirement – Compliance as applicable		
	– I	Fire Extinguishers per Table 8	Fitted as Standard – See R	eport 600N-CE-0033 Item A-03	
	(b) More than 20 pax –	Axe readily accessible to crew	Not Applicable – Less than	n 20 passenger seats	
	(c) More than 61 pax –	Portable Megaphones per Table 9	Not Applicable – Less than 61 passenger seats		
91.529	ELT – TSO C126 406 M	Hz after 22/11/2007	To be determined on an individual aircraft basis		
91.531	Oxygen Indicators – Vo	lume/Pressure/Delivery	<b>Operational Requirement – Compliance as applicable</b>		
91.533	Oxygen for non-Pressu	rised Aircraft:	Not fitted as standard.		
			(Maximum operating altitude in Flight Manual is 20,000 ft.)		
91.541	1 SSR Transponder and Altitude Reporting Equipment Operational Requirement - Compliance as applied		nt – Compliance as applicable		
			KT-70 or KT-76A TX avail	able as options – See Report	
			600N-CE-0033 Items D-22 or D-23		
91.543	Altitude Alerting Devic	e – Turbojet or Turbofan	Not Applicable – Not turbe	ojet or turbofan powered	
91.545	Assigned Altitude Indicator		N/A – MD500/600 is only approved for Day/Night VFR		
A.15	ELT Installation Requirements		To be determined on an individual aircraft basis		

## **Civil Aviation Rules Part 135**

#### Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:		MEANS OF COMPLIANCE:	
135.355	Seating & Restraints – Shoulder harness flight-crew seat		Fitted as Standard	
135.357	Additional Instruments (Powerplant and Propeller)		(1) Model 600N is certificated to FAR 27 Amendment 30	
			(2) N/A – Helicopter	
135.359	Night Flight	Landing light, Pax compartment	To be determined on an individual aircraft basis	
135.361	IFR Operations	Speed, Alt, spare bulbs/fuses	N/A – MD500/600 is only approved for Day/Night VFR	
135.363	Emergency Equipment (Part 91.523 (a) and (b))		To be determined on an individual aircraft basis	
135.367	Cockpit Voice Recorder		N/A – Only for 2-crew helicopters with more than 10 pax	
135.369	Flight Data Recorder		Not Applicable – Less than 10 passenger seats	
135.371	Additional Attitude Indicator		Not Applicable – Not turbo jet or turbofan powered	

NOTES: 1. A Design Rule reference in the Means of Compliance column indicates the Design Rule was directly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.

2. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since that date and should be checked individually.

3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

4. The tables above were prepared for the Model 600N. Other earlier models are similar.

## Attachments

The following documents form attachments to this report:

Copy of FAA Type Certificate and Data Sheet Number H3WE

#### Sign off

David Gill Team Leader Aircraft Inspection

Checked – Tim Dutton Flight Test Engineer

## Appendix 1

#### List of Type Accepted Variants:

Model(s):	Applicant:	CAA Work Request	: Date Granted:
369HS, 369HE, 369D	AC 21-1.2/NZCAR Part	21 Appendix A(c)	
369E, 369F, 369FF	AC 21-1.2/NZCAR Part	21 Appendix A(c)	
500N	AC 21-1.2/NZCAR Part	21 Appendix A(c)	
600N	Faram Helicopters Ltd	4/21B/7	7 November 2003

# Appendix 2

Three-view drawing Model 369D.



Three-view drawing Model 500N.



Three-view drawing Model 600N.

