DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H3WE Revision 28 MDHI (HUGHES) 369 (Army YOH-6A) 369A (Army OH-6A) 369H, 369HM, 369HS, 369HE 369D, 369E, 369F, 369FF 500N, 600N

Date: September 30, 2020

TYPE CERTIFICATION DATA SHEET NO. H3WE

This data sheet, which is part of Type Certificate No. H3WE, prescribes conditions and limitations under which the Product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations and, where specified, the Federal Aviation Regulations.

Type Certificate Holder: MD Helicopters Inc. (MDHI)

4555 E. McDowell Road Mesa, Arizona 85215-9734 USA

Phone: (480) 346-6300

Type Certificate Ownership Record: McDonnell Douglas Helicopter Systems transferred ownership of TC H3WE to MD

Helicopters Inc. on February 18, 1999.

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I Model 369 (Army YOH-6A) (Normal Category Helicopter), Approved June 30, 1964

See NOTE 4 regarding modifications required for conversion of Military Models.

Engine Rolls-Royce Corporation (formerly Allison Engine Company) 250-C10 (T63-A-5)

Fuel MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels MIL-DTL-83133 Grade JP-8

Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3 See "Rotorcraft Flight Manual" for

alternate fuels.

See "NOTE 4.e)" for FAA Approved Rotorcraft Flight Manual.

See "NOTE 7" for Anti-Icing additive.

See "Engine TCDS E4CE Note #9" for emergency use mixtures and limits.

Note: Fuels containing Tri-cresyl-phosphate additives shall not be used.

Engine Limits <u>Ratings</u>

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	250	212
Torque	219 ft - lb (91%)	186 ft - lb (77%)
Gas Producer rpm, N1	52,142 (102%)	52,142 (102%)
Output Shaft rpm, N2	6,180 (103%)	6,180 (103%)
Measured Gas Temp.	1,360°F (738°C)	1,280°F (693°C)

Transient Limits

Measured Gas Temp. (6 sec. limit)	1,550°F (843°C)
Measured Gas Temp. During Start (6 sec. limit)	1,700°F (927°C)
Gas Producer rpm, N ₁ (15 Sec. limit)	52,654 (103%)
Output Shaft rpm, N ₂ (15 Sec. limit)	6,600 (110%) at Idle to
	6,300 (105%) at Takeoff

Note: Adequate cooling has been demonstrated to a 117°F day. Power and torque ratings and limits are indicated values. Actual values are 2.5 hp higher.

Rotor Limits and Engine Operating Speeds

Power-Off (Rotor)	Power-On (Engine)
Maximum: 514 rpm	Maximum: 103% N ₂
Minimum: 400 rpm	Minimum: 99% N ₂

Airspeed Limits V_{NE} (Never Exceed Speed) at sea level is 128 knots (148 mph) CAS.

Center of Gravity (C.G.) Range Longitudinal: Sta. 97 to 104

Lateral: 3 inches right and left of helicopter centerline

Leveling Means Plumb bob at Sta. 92.16

Maximum Weight 2,100 lb.

See NOTE 1 for weight and balance report.

Number of Seats 2 at Sta. 73.5, 2 at Sta. 105

Maximum Cargo 1,350 lb. at 115 lb/sq.ft, Sta. 78.5 to 125

Model 369 (Army YOH-6A) (Normal Category Helicopter), Approved June 30, 1964 (cont.)

Capa	

Fuel	Total Tank	Trapped	Total	Usable	Tank
System	Capacity	Fuel *	Unusable	Fuel	Sump
	(lbs.)	(lbs.)	Fuel **	Capacity	Location
			(lbs.)	(lbs.)	(Sta.)
369-8100	383	0.56	3.10	380	98.2

^{*} Fuel which cannot be drained from the tanks, through the drain provided, with the helicopter in the normal ground attitude.

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

Oil Capacity

Engine Oil (lb. at Sta. 122.5)	Transmission Oil (lb. at Sta. 103.5)
11.25	6.94

Note: Oil capacities are total tank capacities over and above trapped oil.

Maximum Operating Altitude

20,000 ft.

Main Rotor Blade Movements

Collective Pitch at 0.75R (Relative to rigging position):

Up and Down	6.5°	(± 0.5°)
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Cyclic pitch (Relative to rigging position):

Forward	16°	(± 1°)
Aft	8°	(± 1°)
Left	7.25°	(± 0.75°)
Right	6.25°	(± 0.75°)

Main Rotor Blade Damper Setting

Torque to move the damper shaft through the low load stage: 240 in-lb. minimum, 300 in-lb. maximum.

Tail Rotor Blade Movements

Collective pitch	Thrust to right	+27°
	Thrust to left	-12°

Manufacturer's Serial Numbers

0011 through 0015.

See "NOTE 4" for configuration and eligibility requirements applicable to the Hughes Model 369 (YOH-6A) helicopter.

See "NOTE 6" for serial number coding.

Certification Basis

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and 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, except Condition 15a.

Type Certificate H3WE issued June 30, 1964.

Date of Application for Type Certificate: November 13, 1961.

^{**} Fuel which cannot be used safely in all flight attitudes, and which must be included in the empty weight. This includes trapped fuel

Model 369 (Army YOH-6A) (Normal Category Helicopter), Approved June 30, 1964 (cont.)

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. All required equipment that must be installed as well as optional equipment installations are listed in the following reports.

Model	Report Number	Title
369	369-E-5001	Model 369 Equipment List

For a list of model 369 critical parts and life limits contact: Federal Aviation Administration Manager Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137

II - Model 369A (Army OH-6A) (Normal Category Helicopter), Approved August 24, 1966

See NOTE 4 regarding modifications required for conversion of Military Helicopters.

Engine Rolls-Royce Corporation (formerly Allison Engine Company) 250-C10B (T63-A-

5A)

Fuel MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels MIL-DTL-83133 Grade JP-8

Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3 See "Rotorcraft Flight Manual" for

alternate fuels.

See "NOTE 4.e)" for FAA Approved Rotorcraft Flight Manual. See "NOTE 7" for

Anti-Icing additive.

See "Engine TCDS E4CE Note #9" for emergency use mixtures and limits. Note:

Fuels containing Tri-cresyl-phosphate additives shall not be used.

II - Model 369A (Army OH-6A) (Normal Category Helicopter), Approved August 24, 1966 (cont.)

Engine Limits

Ratings Applicable to S/N 0001 through 1445

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower*	250	212
Torque*	219 ft-lb (75 psi)	186 ft-lb (63.5 psi)
Gas Producer rpm, N ₁	53,165 (104%)	53,165(104%)
Output Shaft rpm, N2	6,180 (103%)	6,180 (103%)
Measured Gas Temp.	1,380°F (749°C)	1,280°F (693°C)

^{*} Power and torque ratings and limits are indicated valued. Actual values are 2.5 hp higher.

Ratings applicable to S/N 1446 and up, or S/N 0001 through 1445 when modified per NOTE $8\,$

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower*	278	243
Torque*	236 ft-lb	208 ft-lb
	(80.3 psi)	(70 psi)
Gas Producer rpm, N ₁	53,165 (104%)	53,165 (104%)
Output Shaft rpm, N ₂	6,240 (104%)	6,240 (104%)
Measured Gas Temp.	1,380°F (749°C)	1,280°F (693°C)

Transient Limits applicable to S/N 0001 and up

Measured Gas Temp. (6 sec. limit)	1550°F (843°C)
Measured Gas Temp. During Start (10	1700°F (927°C)
sec. limit)	
Gas Producer rpm, N ₁ (15 Sec. limit)	53676 (105%)

Note: Adequate cooling has been demonstrated to at 117°F day.

Rotor Limits and Engine Operating Speeds

S/N 0001 through 1445

Power Off (Rotor)	Power On (Engine)
Maximum: 514 rpm	Maximum: 103% N2
Minimum: 400 rpm	Minimum: 100% N2

II - Model 369A (Army OH-6A) (Normal Category Helicopter), Approved August 24, 1966 (cont.)

Rotor Limits and Engine Operating Speeds (Cont'd)

S/N 1446 and up, or S/N 0001 through 1445 when modified per NOTE 8

Power Off (Rotor)	Power On (Engine)
Maximum: 514 rpm	Maximum: 104% N ₂
Minimum: 400 rpm	Minimum: 103% N ₂

Airspeed Limits

For S/N 0001 through 1445, V_{NE} (Never Exceed Speed) at sea level is 124 knots (143 mph) CAS.

For S/N 1446 and up, or S/N 0001 through 1445 when modified per NOTE 8, V_{NE} at sea level is 130 knots (150 mph) CAS.

For reduction of VNE with altitude and temperature, and doors off, see "NOTE 4.e)" for FAA Approved Rotorcraft Flight Manual.

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Center of Gravity (C.G.) Range Longitudinal: Sta. 97 to 104

Lateral: 3 inches right and left of helicopter centerline

Leveling Means Plumb bob at Sta. 92.64

Maximum Weight S/N 0001 through 1445: 2,400-lb.

S/N 1446 and up: 2,550 lb.

S/N 0001 through 1445 when modified per NOTE 8: 2,550 lb.

See NOTE 1 for weight and balance report.

Number of Seats 2 at Sta. 73.5, 2 at Sta. 105

Maximum Cargo 950 lb. at 115 lb./sq. ft., Sta. 78.5 to 124

Fuel Capacity

Fuel System	Total Tank Capacity (lbs)	Trapped Fuel** (lbs)	Total Unusable Fuel *** (lbs)	Usable Fuel Capacity (lbs)	Tank Sump Location (Sta)
369A8100 M30273 (Gravity	402 359	0.16 0.73	1.50 2.91	400	98.2 98.3
filled) M30273 (Pressure filled.)*	329	0.73	2.91	326	98.0

^{*} Pressure refueling not permitted on civil helicopters

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

^{**} Fuel, which cannot be drained from the tank through the drain, provided - with the helicopter in the normal ground attitude.

^{***} Fuel which cannot be used safely in all flight attitudes, and which must be included in the empty weight. This includes trapped fuel.

II - Model 369A (Army OH-6A) (Normal Category Helicopter), Approved August 24, 1966 (cont.)

Oil Capacity

Engine Oil	Transmission Oil
(lb. at Sta. 138.2)	(lb. at Sta. 105)
5.90	7.00

Note: Oil capacities are total tank capacities over and above trapped oil.

Maximum Operating Altitude

See "NOTE 4.e)" for FAA Approved Rotorcraft Flight Manual.

Main Rotor Blade Movements

Collective pitch (Relative to rigging position):

Up and Down	15.5°	(±1.25°)

Cyclic pitch (Relative to rigging position):

Forward	16°	(±1°)
Aft	8.5°	(±0.5°)
Left	8.25°	(±1.25°)
Right	6.25°	(±0.75°)

Note: Collective low pitch stop to be established in accordance with RFM or HMI to obtain proper autorotation rpm.

Main Rotor Blade Damper Setting

Torque to move the damper shaft through the low load stage: 265 in-lb., minimum; 325 in-lb. maximum.

Tail Rotor Blade Movements

Collective pitch	Thrust to right	+28° (+2°, -0°)
	Thrust to left	-13° (±1°)

Manufacturer's Serial Numbers

0001 and up

Model 369A helicopters serial numbers 1100 through 1445 and 1079A through 1080A have been manufactured under the Delegation Option Authorization provisions of FAR 21. Acting as Delegation Option Manufacturer Number WE-1, Hughes Tool Company, Aircraft Division, was authorized to issue Airworthiness Certificates for serial numbers noted above under the Delegation Option Authorization provisions of FAR 21.

See NOTE 4 for configuration and eligibility requirements applicable to the Hughes Model 369A (OH-6A) helicopter.

See NOTE 6 for serial number coding.

Certification Basis

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and 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.

Type Certificate H3WE amended August 24, 1966.

Date of Application for Amended Type Certificate: August 19, 1965.

- Model 369A (Army OH-6A) (Normal Category Helicopter), Approved August 24, 1966 (cont.)

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. All required equipment that must be installed as well as optional equipment installations are listed in the following reports.

Model	Report Number	Title
369A	369-E-5002	Model 369A Equipment List

See Limited Life Schedule of this TCDS.

Model 369H (Normal Category Helicopter), Approved November 15, 1966

Model 369HM (Normal Category Helicopter), Approved April 8, 1968 Model 369HS (Normal Category Helicopter), Approved January 3, 1969 Model 369HE (Normal Category Helicopter), Approved May 21, 1969

Engine Rolls-Royce Corporation (formerly Allison Engine Company) 250-C18A or 250-

C18C

Alternate engine: Rolls-Royce Corporation (formerly Allison Engine Company)

250-C20

Note: Model 369HM, 369HS, and 369HE helicopters, S/N 0101 and up, are eligible for installation of the alternate engine when modified in accordance with Hughes Drawing M50031, Revision A, or later approved revision, including M50033.

MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels MIL-DTL-83133 Grade JP-8

Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3.

See "Rotorcraft Flight Manual" for alternate fuels.

See "NOTE 7" for Anti-Icing additive.

See "Engine TCDS E4CE Note #9" for emergency use mixtures and limits. Note:

Fuels containing Tri-cresyl-phosphate additives shall not be used.

Ratings for 250-C18A or 250C18C **Engine Limits**

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	278	243
Torque	236 ft-lb	208 ft-lb
	(80.3 psi)	(70 psi)
Gas Producer rpm, N ₁	53,165 (104%)	53,165 (104%)
Output Shaft rpm, N2	6,240 (104%)	6,240 (104%)
Measured Gas Temp.	1,380°F (749°C)	1,280°F (693°C)

Fuel

III Model 369H (Normal Category Helicopter), Approved November 15, 1966 Model 369HM (Normal Category Helicopter), Approved April 8, 1968 Model 369HS (Normal Category Helicopter), Approved January 3, 1969 Model 369HE (Normal Category Helicopter), Approved May 21, 1969 (cont.)

Engine Limits (cont'd)

Transient Limits for 250-C18 or 250-C18C

Measured Gas Temp. (6 sec. limit)	1,550°F (843°C)
Measured Gas Temp. During Start (10 sec. limit)	1,700°F (927°C)
Gas Producer rpm, N1 (15 Sec. limit)	53,676 (105%)
Output Shaft rpm, N2 (15 Sec. limit)	6,600 (110%) at
	Idle to
	6,340 (105.7%) at
	Takeoff
Torque:	90 psi for 10 sec.
	100 psi for 3 sec.

Ratings for 250-C20

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	278	243
Torque	236 ft-lb	208 ft-lb
_	(64.5 psi)	(56 psi)
Gas Producer rpm, N ₁	53,000 (104%)	53,000 (104%)
Output Shaft rpm, N ₂	6,240 (104%)	6,240 (104%)
Measured Gas Temp.	1,460°F (793°C)	1,358°F (737°C)

Transient Limits for 250-C20

Measured Gas Temp. (6 sec. limit)	1,550°F (843°C)
Measured Gas Temp. During Start (10 sec. limit)	1,700°F (927°C)
Gas Producer rpm, N1 (15 Sec. limit)	53,518 (105%)
Output Shaft rpm, N2 (15 Sec. limit)	6,798 (113%) at
	Idle to
	6,497 (108.7%) at
	Takeoff
Torque	72 psi for 10 sec.
	80 psi for 3 sec.

Rotor Limits and Engine Operating Speeds

Limits and Speeds for 250-C18A or 250-C18C

Power Off (Rotor)	Power On (Engine)
Maximum: 514 rpm	Maximum: 104% N2
Minimum: 400 rpm	Minimum: 103% N2

Limits and Speeds for 250-C20

Power Off (Rotor)	Power On (Engine)
Maximum: 523 rpm	Maximum: 104% N ₂
Minimum: 400 rpm	Minimum: 103% N ₂

Airspeed Limits

 $V_{\rm NE}$ (Never Exceed Speed) at sea level is 130 knots (150 mph) CAS. For reduction of $V_{\rm NE}$ with altitude, and temperature, see Rotorcraft Flight Manual.

III Model 369H (Normal Category Helicopter), Approved November 15, 1966

Model 369HM (Normal Category Helicopter), Approved April 8, 1968

Model 369HS (Normal Category Helicopter), Approved January 3, 1969

Model 369HE (Normal Category Helicopter), Approved May 21, 1969 (cont.)

Center of Gravity (C.G.) Range 369H, 369HM, and 369HS; S/N 0001 through 0100

Longitudinal: Sta. 97 to 104

Lateral: 3 inches right and left of helicopter centerline

369HM, 369HS, and 369HE; S/N 0101 and up

	Longitudinal		Lateral	
Gross Weight (lb.)	Forward (Sta.)	Aft (Sta.)	Left (in.)	Right (in.)
2401 to 2550	99	104	-3	+3
2201 to 2400	97	104	-3	+3
2001 to 2200	97	104	-3	+4
2001 to 2200	97	105	-1	+3
2000 or Below	97	104	-3	+5
2000 or Below	97	106	-1	+3

Note: Facing forward, + indicates right, and – indicates left of helicopter centerline.

Leveling Means Plumb bob at Sta. 92.64

Maximum Weight 369H, 369HM, and 369HS; S/N 0001 through 0100: 2,400 lb.

369HM, 369HS, and 369HE; S/N 0101 and up: 2,550 lb.

See NOTE 1 for weight and balance report. See NOTE 9 for external cargo information.

Number of Seats 369H, 369HS, and 369HE: 1 at Sta. 71.5, 2 at Sta. 73.5, 2 at Sta. 105.

369HM: 2 at Sta. 73.5, 2 at Sta. 105.

Maximum Cargo 50 lb. evenly distributed in utility storage compartment at Sta. 55.

369H, 369HM, and 369HS; S/N 0001 through 0100:

950 lb. at 115 lb./sq. ft., Sta. 78.5 to 124

369HM, 369HS, and 369HE; S/N 0101 and up: 1300 lb. at 115 lb./sq. ft., Sta. 78.5 to 124

Fuel Capacity

Model and	Total Tank	Trapped	Total	Usable Fuel
Applicable Serial	Capacity	Fuel *	Unusable	Capacity
Numbers	(lbs.)	(lbs.)	Fuel **	(lbs.)
			(lbs.)	
369H - All S/Ns	416	1.40	3.40	413
369HM 0001 thru	402	0.16	1.50	400
0100M				
0101M and up	402	0.16	2.50	399
369HS 0001S thru	416	1.40	3.40	413
0100S				
0101S and up	416	1.40	3.70	412
369HE 0101E and	416	1.40	3.70	412
up				

III Model 369H (Normal Category Helicopter), Approved November 15, 1966

Model 369HM (Normal Category Helicopter), Approved April 8, 1968

Model 369HS (Normal Category Helicopter), Approved January 3, 1969

Model 369HE (Normal Category Helicopter), Approved May 21, 1969 (cont.)

Fuel Capacity (cont'd)

*Fuel which cannot be drained from the tank through the drain provided - with the helicopter in the normal ground attitude

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

Oil Capacity

Engine Oil	Transmission Oil
(lb. at Sta. 138.2)	(lb. at Sta. 105.0)
5.90	7.00

Note: Oil capacities are total tank capacities over and above trapped oil.

Maximum Operating Altitude

See Rotorcraft Flight Manual.

Main Rotor Blade Movements

Collective pitch (Relative to rigging position):

Up and Down	15 5°	(+1.25°)
op and Down	13.3	(±1,23)

Cyclic pitch (Relative to rigging position):

Forward	16°	(±1°)
Aft	8.5°	(±0.5°)
Left	8.25°	(±1.25°)
Right	6.25°	(±0.75°)

Note: Collective low pitch stop to be established in accordance with RFM or HMI to obtain proper autorotation rpm.

Main Rotor Blade Damper Setting

Torque to move the damper shaft through the low load stage:

P/N	Minimum Torque	Maximum Torque
	(in - lb)	(in - lb)
369A1400	265	325
369A1417	190	200
369ASK1939	190	200
369A1423	190	200

Tail Rotor Blade Movements

369A1620 Tail Rotor Assembly (aluminum blades)

Collective pitch	thrust to right	+27°	(±1°)
	thrust to left	-15°	(±1°)

369A1600 Tail Rotor Assembly (fiberglass blades)

Collective pitch	thrust to right	+28°	$(+2^{\circ}, -0^{\circ})$
thrust to left		-13°	(±1°)

^{**}Fuel which cannot be used safely in all flight attitudes, and which cannot be included in the empty weight. This includes trapped fuel.

III Model 369H (Normal Category Helicopter), Approved November 15, 1966 Model 369HM (Normal Category Helicopter), Approved April 8, 1968 Model 369HS (Normal Category Helicopter), Approved January 3, 1969 Model 369HE (Normal Category Helicopter), Approved May 21, 1969 (cont.)

Manufacturer's Serial Numbers

369Н	0001 through 0005
369HM	0001 through 0004,
	0005M and up
369HS	0001S and up
369HE	0001E and up

The following helicopters have been manufactured under Delegation Option Authorization provisions of FAR 21. Acting as Delegation Option Manufacturer Number WE-1, Hughes Tool Company, Aircraft Division, was authorized to issue Airworthiness Certificates for the following helicopters under the Delegation Option Authorization provisions of FAR 21.

369Н	0001 through 0005
369HE	0101E through 0110E
	0201E through 0215E
369HM	0001 through 0004
	0005M through 0021M
	0030M through 0054M
	0201M through 0204M
369HS	0001S through 0002S
	0101S through 0130S
	0201S through 0215E

See NOTE 6 for serial number coding.

Certification Basis

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and 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.

Models 369H, 369HM, 369HS, and 369HE were approved under the Delegation Option Authorization provisions of FAR 21.

Type Certificate H3WE Amended:

369H	November 15, 1966	369HS	January 3, 1969
369HM	April 8, 1968	369HE	May 21, 1969

Dates of Application for Amended Type Certificate:

369H	September 8, 1965	369HS	August 12, 1968
369HM	February 16, 1968	369HE	August 12, 1968

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. All required equipment that must be installed as well as optional equipment installations are listed in the following reports.

Model	Report Number	Title
369H	369-E-5003	Model 369H Equipment List
369HM	369-E-5005	Model 369HM Equipment List

(S/N 0001 through 0004)

III Model 369H (Normal Category Helicopter), Approved November 15, 1966

Model 369HM (Normal Category Helicopter), Approved April 8, 1968

Model 369HS (Normal Category Helicopter), Approved January 3, 1969

Model 369HE (Normal Category Helicopter), Approved May 21, 1969 (cont.)

Equipment (cont'd)

Model	Report Number	Title
369HM	369-E-5006	Model 369HM Equipment List

(S/N 0005M and subsequent)

Model	Report Number	Title
369HS	369-E-0004	Model 369HS Equipment List
369HE	369-E-5007	Model 369HE Equipment List

Approved Publications

Rotorcraft Flight Manuals

Model	Configuration	Date
369HM	A	September 13, 1973
369HM	В	May 3, 1974
369HM	С	October 5, 1793
369HS	A	December 21, 1977
369HS	В	December 21, 1977
369HE	A	August 14, 1973
369HE	В	August 14, 1973

IV Model 369D (Normal Category Helicopter), Approved 8 December 1976
 Model 369D (Restricted Category Helicopter), Approved 28 November 1979
 Model 369E (Normal Category Helicopter), Approved 15 December 1982

See NOTE 14 for noise characteristics.

See NOTE 15 for conversion of model 369E to Model 369FF.

Engine

Rolls-Royce Corporation (formerly Allison Engine Company) 250-C20B with Bendix fuel control

Alternate engine: Rolls-Royce Corporation (formerly Allison Engine Company) 250-C20R/2

Note: Model 369D and 369E helicopters are eligible for installation of the alternate engine when modified in accordance with drawing 369D298000, Revision C, or later FAA approved revisions.

Refer to MDHI Drawing 369D28702 for engine configuration. The MDHI part number and ship effectivity are shown in the HMI IPC as reference.

IV Model 369D (Normal Category Helicopter), Approved 8 December 1976 Model 369D (Restricted Category Helicopter), Approved 28 November 1979 Model 369E (Normal Category Helicopter), Approved 15 December 1982 (cont.)

Fuel

MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels

MIL-DTL-83133 Grade JP-8 Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B

ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3

See "Rotorcraft Flight Manual" for alternate fuels.

See "NOTE 7" for Anti-Icing additive.

See "Engine TCDS E4CE Note #9" for emergency use mixtures and limits.

Note: Fuels containing Tri-cresyl-phosphate additives shall not be used.

Engine Limits

Ratings for 250-C20B

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	375	350
Torque	318 ft lb. (87.2 psi)	297 ft lb.(81.3 psi)
Gas Producer rpm, N ₁	53,519 (105%)	53,519 (105%)
Output Shaft rpm, N ₂	6,196 (103%)	6,196 (103%)
Measured Gas Temp.	1,490°F (810°C)	1,360°F (738°C)

Ratings for 250-C20R/2

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	375	350
Torque	318 ft lb. (87.2 psi)	297 ft lb. (81.3 psi)
Gas Producer rpm, N ₁	53,519 (105%)	53,519 (105%)
Output Shaft rpm, N ₂	6,196 (103%)	6,196 (103%)
Measured Gas Temp.	1,490°F (810°C)	1,385°F (752°C)

Transient Limits for 250-C20B or 250-C20R/2

Measured Gas Temp. (6 sec. limit)	1,490°F (810°C)
	1,550°F (843°C) - C20B only
	1,650°F (899°C) - C20R/2 only
Measured Gas Temp.	1,490°F (810°C) to
During Start (10 sec.	1,700°F (927°C)
limit)	(1 Sec. 1700°F)
Gas Producer rpm, N ₁ (15 Sec. limit)	54,028 (106%)
Output Shaft rpm, N ₂ (15 Sec. limit)	6,798 (113%) at Idle to
	6,316 (105%) at Takeoff

Rotor Speed and Engine Operating Speeds

Limits and Speeds for 250C20B or 250-C20R2

Power Off (Rotor)	Power Off (Rotor)
Maximum: 523 rpm	Maximum: 492 rpm/103 % N2
Minimum: 410 rpm*	Minimum: 487 rpm / 102% N2

^{*} Minimum with 4-bladed tail rotor installed: 415 rpm.

IV Model 369D (Normal Category Helicopter), Approved 8 December 1976 Model 369D (Restricted Category Helicopter), Approved 28 November 1979 Model 369E (Normal Category Helicopter), Approved 15 December 1982 (cont.)

Airspeed Limits V_{NE} (Never Exceed Speed) at sea level is 152 knots (175 mph) CAS. For reduction

of V_{NE} with altitude and temperature:

The 369D autorotation V_{NE} at sea level is 127 knots (146 mph) CAS.

The 369E autorotation V_{NE} at sea level is 130 knots (150 mph) CAS.

Center of Gravity (C.G.) Range

	Longitudinal		Lateral	
Gross Weight (lb.)	Forward (Sta.)	Aft* (Sta.)	Left (in.)	Right (in.)
3000	99	103	-3	+3
1538	99	107.4	-3	+3

^{*} Varies linearly between points shown.

NOTE: Facing forward, + indicates right and – indicates left of helicopter

centerline.

Leveling Means Plumb bob at Sta. 92.64

Maximum Weight 3,000 lb.

See NOTE 1 for weight and balance report.

See NOTE 9 for maximum weight of 369D (Restricted Category Helicopter).

Number of Seats 1 at Sta. 71.5, 2 at Sta. 73.5, 2 at Sta. 105 for basic configuration only.

Maximum Cargo 1,300 lb. at 115 lb/sq-ft, Sta. 78.5 to 124.

See NOTE 9 for external cargo information

Fuel Capacity

Fuel System	Total Tank Capacity (lbs.)	Trapped Fuel * (lbs.)	Total Unusable Fuel ** (lbs.)	Usable Fuel Capacity (lbs.)
369A8100	416	0	12.5	403
369H90029 (self sealing)	402	0	12.5	389

^{*}Fuel which cannot be drained from the tanks through the drain provided - with the helicopter in the normal ground attitude.

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

Oil Capacity

Engine Oil	Transmission Oil
(lb. at Sta. 133.3)	(lb. at Sta. 105.0
6.00	11.60

Note: Oil capacities are total tank capacities over and above trapped oil.

^{**}Fuel which cannot be used safely in all flight attitudes, and which must be included in the empty weight. This includes trapped fuel.

IV Model 369D (Normal Category Helicopter), Approved 8 December 1976 Model 369D (Restricted Category Helicopter), Approved 28 November 1979 Model 369E (Normal Category Helicopter), Approved 15 December 1982 (cont.)

Maximum Operating Altitude

16,000 ft. density altitude.

Main Rotor Blade Movements

Collective pitch (Relative to rigging position):

Up and Down	14.25° to 18.0°

Cyclic pitch (Relative to rigging position):

Forward	17° to 18.5°	
Aft	7° to 9.3°	
Left	7° to 9.3°	
Right	5.5° to 8.5°	

Tail Rotor Blade Movements

369D21600 Tail Rotor Assembly (2-bladed)

Collective pitch	thrust to right	27° to 27°
	thrust to left	-13° to -15°

369D21620 Tail Rotoro Assembly (4-bladed)

Collective pitch	thrust to right	31° to 32°
	thrust to left	-13° to -15°

Horizontal Stabilizer Incidence

 8.92° to 9.42° measured relative to a line perpendicular to the main rotor mast centerline.

Manufacturer's Serial Numbers

369D	0003 and up
369E	0001 and up

See NOTE 5 for serial numbers not eligible.

See NOTE 6 for serial number coding.

Certification Basis

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and 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.

Type Certificate H3WE amended:

369D	December 8, 1976
369D	(Restricted Category): November 28, 1979
369E	December 15, 1982

<u>Dates of Application for amended Type Certificate:</u>

369D	May 30, 1974
369D	(Restricted Category): November 26, 1979
369E	December 10, 1982

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. All required equipment that must be installed as well as optional equipment installations are listed in the following reports.

IV Model 369D (Normal Category Helicopter), Approved 8 December 1976 Model 369D (Restricted Category Helicopter), Approved 28 November 1979 Model 369E (Normal Category Helicopter), Approved 15 December 1982 (cont.)

Equipment (cont'd)

 369D
 369-E-5008
 Model 369D Equipment List

 369E
 369-E-5009
 Model 369E Equipment List

Approved Publications

Rotorcraft Flight Manuals

369D	CSP-D-1	Dated December 8, 1976
369E	CSP-E-1	Dated November 23, 1982

V Model 369F (Normal Category Helicopter), Approved July 29, 1983 Model 369FF (Normal Category Helicopter), Approved July 11, 1985

30911 (Normal Category Hencopter), Approved July 11, 196.

See NOTE 12 for conversion of 369F to 369FF. See NOTE 14 for noise characteristics.

See NOTE 15 for conversion of Model 369E to Model 369FF.

Engine Rolls-Royce Corporation (formerly Allison Engine Company) 250-C30.

Refer to MDHI Drawing 369D28640 for engine configuration used in production (S/N 0128FF and prior). RRC P/N 23062052 used in production effective S/N 0129FF and subs and earlier S/N if Technical Bulletin TB369F-004 is incorporated.

Fuel MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels

MIL-DTL-83133 Grade JP-8 Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3. See "Rotorcraft Flight Manual" for alternate fuels

See "NOTE 7" for Anti-Icing additive.

See Engine TCDS E1GL Note #10 for emergency use mixtures and limits.

Note: Fuels containing Tri-cresyl-phosphate additives shall not be used.

Engine Limits Ratings for 369F

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	375	350
Torque	327.4 ft-lb (52.5 psi)	305.6 ft-lb (48.9 psi)
Gas Producer rpm, N ₁	53,550 (105%)	53,550 (105%)
Output Shaft rpm, N ₂	6,016 (100%)	6,016 (100%)
Measured Gas Temp.	1,414°F (768°C)	1,281°F (694°C)

V Model 369F (Normal Category Helicopter), Approved July 29, 1983 Model 369FF (Normal Category Helicopter), Approved July 11, 1985 (cont.)

Engine Limits (cont'd)

Ratings for 369FF

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	425*	350
Torque	371.0 ft-lb* (59.6 psi)	305.6 ft-lb (48.9 psi)
Gas Producer rpm, N ₁	53,550 (105%)	53,550 (105%)
Output Shaft rpm, N ₂	6,016 (100%)	,6016 (100%)
Measured Gas Temp.	1,414°F (768°C)	1,281°F (694°C)

^{* 0} to 50 KIAS.

Transient Limits for 369F and 369FF

Measured Gas Temp. During Start and shutdown (10 sec. limit)	1,518°F (826°C) to1,700°F (927°C) (1 sec. at 1,700 F)
During Power Change in Flight	1,518°F (826°C) to 1,625°F (885°C)
Gas Producer rpm, N ₁ (10 sec. limit)	54,060 (106%)
Output Shaft rpm, N ₂ (10 sec. limit)	6,377 (106%)

Rotor Limits and Engine Operating Speeds

Power Off (Rotor)	Power On (Engine)
Maximum: 508 rpm	Maximum: 477 rpm / 100% N ₂
Minimum: 410 rpm	Minimum: 473 rpm / 99% N ₂

Airspeed Limits

 V_{NE} (Never Exceed Speed) at sea level is 152 knots (175 mph) CAS. For reduction of V_{NE} with altitude and temperature:

Rotorcraft Flight Manual Autorotation V_{NE} at sea level is 127 knots (146 mph) CAS.

Center of Gravity (C.G.) Range

	Longitudinal			Lateral	
Gross	Forward *(Sta.)	Aft**	Gross Weight	Left	Right
Weight		(Sta.)	(lb.)	***	***
(lb.)				(in.)	(in.)
3,100	99	103.3	3,100	-3	+3
2,600	99	104.8	2,000	-3	+3
1,700	101.7	107.5	1,700	-1.7	+1.7

^{*}Varies linearly between 2600 lb. and 1700 lbs.

Leveling Means

Plumb bob at Sta.92.64.

Maximum Weight

3,350 lb. Serial numbers 0340FF and subsequent. Serial numbers with TB369F-015 applied.

3,100 lb. All other serial numbers.

See NOTE 1 for weight and balance report.

Number of Seats

1 at Sta. 71.5, 2 at Sta. 73.5, 2 at Sta. 105 for basic configuration only.

^{**}Varies linearly between 3100 lb. and 1700 lbs.

^{***}Varies linearly between 2000 lb. and 1700 lbs.

Maximum Cargo

1,300 lb. at 115 lb./sq-ft, Sta. 78.5 to 124.

See NOTE 9 for external cargo information.

V Model 369F (Normal Category Helicopter), Approved July 29, 1983 Model 369FF (Normal Category Helicopter), Approved July 11, 1985 (cont.)

Fuel	Capa	city
I uci	Cupt	CILY

Fuel System	Total Tank Capacity (lb.)	Trapped Fuel * (lb.)	Total Unusable Fuel ** (lb.)	Usable Fuel Capacity (lb.)
369A8100	416	0	12.5	403
369H90029				
(self sealing)	402	0	12.5	389

^{*} Fuel, which cannot be drained from the tanks, through the drain, provided, with the helicopter in the normal ground attitude.

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

Oil Capacity

Engine Oil	Transmission Oil
(lb. at Sta. 133.3)	(lb. at Sta. 105.0
6.00	11.60

Note: Oil capacities are total tank capacities over and above trapped oil.

Maximum Operating Altitude

16,000 ft. density altitude

Main Rotor Blade Movements

Collective Pitch (relative to rigging position):

Up and Down 14.25° to 18.0°

Cyclic Pitch (relative to rigging position):

Forward	17° to 18.5°
Aft	7° to 9.3°
Left	7° to 9.3°
Right	5.5° to 8.5°

Tail Rotor Blade Movements

369D21600 Tail Rotor Assembly (2-blades)

Collective Pitch	Thrust to Right	27° to 29°
	Thrust to Left	-13° to -15°

Horizontal Stabilizer Incidence

 7.50° to 8.00° measured relative to a line perpendicular to the main rotor mast centerline.

Manufacturer's Serial Numbers

369F	0003 and up.
369FF	0001 through 0599
	0600 through 0699 (369E conversion with pre-generic wiring)
	0700 and up (369E conversion with generic wiring)

See NOTE 5 for serial numbers not eligible.

See NOTE 6 for serial number coding.

^{**} Fuel which cannot be used safely in all flight attitudes, and which must be included in the empty weight. This includes trapped fuel.

V Model 369F (Normal Category Helicopter), Approved July 29, 1983 Model 369FF (Normal Category Helicopter), Approved July 11, 1985 (cont.)

Certification Basis

Basic Aircraft

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and 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, and FAR 21.21 providing for equivalent level of safety in lieu of CAR 6.412.

14 CFR Part 36, amendment 36-30, Appendix J.

Glass Cockpit Installations

All basic aircraft requirements with the glass cockpit required installations certified under 14 CFR Part 27 Amendment 27-1 through 27-47, dated 30 January 2012.

Type Certificate H3WE amended

369F	July 26, 1983
369FF	July 11, 1985

Dates of Application for amended Type Certificate

369F	January 7, 1983
369FF	June 6, 1985

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. All required equipment that must be installed as well as optional equipment installations are listed in following reports:

369F	369-E-5010	Model 369F Equipment List
369FF	369-E-5011	Model 369FF Equipment List

Approved Publications

Rotorcraft Flight Manuals

369F	CSP-F-1	Dated July 29, 1983
369FF (Basic)	CSP-FF-1	Dated July 11, 1985
		Reissued October 25, 1985
369FF (Glass)	CSP-FF-2	Dated June 14, 2018

VI Model 500N (Normal Category Helicopter), Approved September 12, 1991

See NOTE 14 for noise characteristics.

Engine

Rolls-Royce Corporation (formerly Allison Engine Company) 250-C20R/2.

Refer to MDHI Drawing 369D28702 for engine configuration. The MDHI part number and ship effectivity are shown in the HMI IPC as reference.

Fuel MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels

MIL-DTL-83133 Grade JP-8 Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3.

See "Rotorcraft Flight Manual" for alternate fuels.

See "NOTE 7" for Anti-Icing additive.

See Engine TCDS E1GL Note #10 for emergency use mixtures and limits.

Note: Fuels containing Tri-cresyl-phosphate additives shall not be used.

Engine Limits

Ratings

	Takeoff (5 min)	Max. Continuous
Shaft Horsepower	425	375
Torque	371.0 ft lb. (101.8 psi)	327.4 ft lb. (89.8 psi)
Gas Producer rpm, N ₁	53,519 (105%)	53,519 (105%)
Output Shaft rpm, N ₂	6,016 (100%)	6,016 (100%)
Measured Gas Temp.	1,490°F (810°C)	1,385°F (752°C)

Transient Limits for 250-C20R/2

	Takeoff (5 min)
Shaft Horsepower	425
Torque	371.0 ft lb. (101.8 psi)
Gas Producer rpm, N ₁	53,519 (105%)
Output Shaft rpm, N ₂	6,016 (100%)

Rotor Limits and Engine Operating Speed

Power Off (Rotor)	Power On (Engine)
Maximum: 508 rpm	Maximum: 477 rpm / 100% N ₂
Minimum: 410 rpm	Minimum: 473 rpm / 99% N ₂

Airspeed Limits

 V_{NE} (Never Exceed Speed) at sea level is 152 knots (175 mph) CAS. For reduction of V_{NE} with altitude, and temperature see Rotorcraft Flight Manual.

Autorotation V_{NE} at sea level is 130 knots (149 mph) CAS.

Center of Gravity (C.G.) Range

Longitudinal			Lateral		
Gross	Forward	Aft**	Gross	left***	Right***
Weight (lb.)	* (Sta.)	(Sta.)	Weight	(in.)	(in.)
			Weight		
3350	99	105.5	3350	-3	+3
2600	99	107.8	2000	-3	+3
1796	101.4	110.3	1796	-2.2	+2.2

^{*}Varies linearly between 2600 lbs. and 1796 lbs.

Note: Facing forward, + indicates right, and - indicates left of helicopter centerline.

^{**}Varies linearly between 3350 lbs. and 1796 lbs.

^{***}Varies linearly between 2000 lbs. and 1796 lbs.

Leveling Means Plumb bob at Sta. 92.64.

Maximum Weight 3,350 lb.

See NOTE 1 for weight and balance report.

Number of Seats 1 at Sta. 71.5, 2 at Sta. 73.5, 2 at Sta. 105

Maximum Cargo 1,300 lb. at 115 lb/sq-ft, Sta. 78.5 to 124.

See NOTE 9 for external cargo information.

Fuel Capacity

Fuel System	Total Tank	Trapped	Total	Usable Fuel
	Capacity (lb.)	Fuel* (lb.)	Unusable	Capacity (lb.)
			Fuel** (lb.)	
369A8100	416	0	12.5	403
369H90029	402	0	12.5	389
(self sealing)				

^{*} Fuel which cannot be drained from the tanks, through the drain provided, with the helicopter in the normal ground attitude.

Note: Fuel capacities are total tank capacities over and above usable fuel. Fuel weights are based on JP-4 fuel.

Oil Capacity

Engine Oil	Transmission Oil (lb. at Sta.
(lb. at Sta. 133.3)	105.0)
6.00	11.60

Note: Oil capacities are total tank capacities over and above trapped oil.

Maximum Operating Altitude

20,000 ft. density altitude.

Main Rotor Blade Movements

Collective Pitch (relative to rigging position):

Up and Down	14.25° to 18.0°

Cyclic Pitch (relative to rigging position):

forward	17° to 18.5°
aft	7° to 9.3°
left	7° to 9.3°

Fan Blade Movements

500N5010 NOTAR Fan Installation

Minimum	26° ±1° (Rig Position)
Full Right Pedal	52° ±2°
Full Left Pedal	71° ±2°

Horizontal Stabilizer Incidence

-1.9° nose down with respect to waterline plane.

^{**} Fuel which cannot be used safely in all flight attitudes and which must be included in the empty weight. This includes trapped fuel.

Vertical Stabilizer Movements

	Left Vertical*	Right Vertical**
Leading Edge Left***	$-6.5^{\circ} \pm 0.5^{\circ}$	$-4.0^{\circ} \pm 0.5^{\circ}$
Leading Edge Right***	$+22.5^{\circ} \pm 0.5^{\circ}$	$+8.0^{\circ} \pm 0.5^{\circ}$
Travel, minimum linear in. at trailing	6.46	2.70
edge		

^{*}Connected to directional control system.

Manufacturer's Serial Numbers

LN001 and up

See NOTE 6 for serial number coding.

Certification Basis

CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-4 and

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. In addition, height velocity testing is required to 7000 feet, in accordance with paragraphs 6.111 and 6.116, as amended by Amendment 6-7, issued October 8, 1963.

14 CFR Part 36, amendments 36-1 through 36-18, Appendix J.

14 CFR Part 27 sections listed below are applicable to the NOTAR system

Regulations	Amendments
27.143* (a), (b), (c), (d), (e)	27-21
27.399	27-1
27.571	27-18
27.605 (b)	27-16
27.672**	27-21
27.927 (b)	27-12
27.1529	27-18

^{*} Replaces CAR 6.121 (a), (b), (c), (e)

Type Certificate H3WE amended

500N	September 12, 1991

Dates of Application for amended Type Certificate

500N July 11, 1988

^{**}Connected to yaw SAS.

^{***}Relative to rigging position

^{**} Applicable to the yaw stability augmentation system.

Equipment The basic required equipment as prescribed in the applicable airworthiness

regulations (see Certification Basis) must be installed in the aircraft for certification.

All required equipment that must be installed as well as optional equipment

installations are listed in following reports:

500N 500N-CE-0059 Model 500N Basic Weight Checklist

Approved Publications Rotorcraft Flight Manuals

500N CSP-520N-1 Dated September 12, 1991

VII Model 600N (Normal Category Helicopter) Approved May 15, 1997

Aircraft Type Designator

(FAA & ICAO)

HU60

Engine Rolls Royce Corporation (formerly Allison Engine Company) 250-C47M

Fuel MIL-DTL-5624, Grade JP-4, and JP-5 Aviation Fuels

MIL-DTL-83133 Grade JP-8 Aviation Fuel

ASTM D-1655 Jet A, A-1 or Jet B ASTM D-6615 Jet B

Chinese Specification GB6537-94 Grade RP-3 See "Rotorcraft Flight Manual" for alternate fuels.

See "NOTE 7" for Anti-Icing additive.

See "Engine TCDS E1GL Note #10" for emergency use mixtures and limits.

Note: Fuels containing Tri-cresyl-phosphate additives shall not be used.

Engine Oil Engine oil conforming to MIL-PRF-23699 and subsequent

revisions are authorized for use. See Rolls-Royce Corporation (formerly Allison Engine Company) Operation and Maintenance Manual, CSP21004 (latest revision),

for approved oil manufacturers.

VII Model 600N (Normal Category Helicopter) Approved May 15, 1997 (cont.)

Engine Limits

Ratings

	Takeoff (5 min.)	Max. Continuous
Shaft Horsepower	600 shp	530 shp
Torque	524 ft-lb.	463 ft-lb.
	$(600 Q^{(3)})$	$(530 Q^{(3)})$
Gas Producer rpm (N ₁)	53,550 (105%)	53,550 (105%)
Output Shaft and Power	(Same as Continuous.)	6858 rpm output shaft,
Turbine rpm (N ₂)		34,941 rpm power
		turbine (114%) ⁽²⁾ at
		autorotation torque
		varying linearly to 6443
		rpm output shaft, 32,826
		rpm power turbine
		(107.1%) at 590 ⁽¹⁾ ft-lbs
		torque.
Turbine Outlet Temp.	1435°F (779°C)	1,340°F (727°C) less
		than 10,000 ft. pressure
		altitude.
		,1256°F (680 °C) 10,000
		ft.
		pressure altitude or
		greater.

Transient Ratings

Condition	Time Limit	Parameter Limit
Torque	10 seconds	576 ft-lbs (660 Q ⁽³⁾)

<u>Turbine Outlet Temperature</u>

Start and Shutdown	10 seconds	1,550°F (843°C) to but not including 1700°F (927°C)
Start and Shutdown	1 second	1,700°F (927°C)
During Power Change in Flight	12 seconds	1,435°F (779°C) to 1,662°F (905°C)
Gas Producer rpm, N1	10 seconds	54,060 rpm, 106 %
Output Shaft and Power Turbine rpm, N2	15 seconds	7,159 rpm output shaft, 36,474 rpm power turbine (119%) ⁽²⁾ at autorotation torque varying linearly to 6,557 rpm output shaft, 33,409 rpm power turbine (109%) at 590 ⁽¹⁾ ft-lbs torque.

(1)Note: Aircraft torque limit is 524 ft-lb. (2)Note: Aircraft Rotor RPM limit is 106.4%.

(3)Note: Torque unit.

Model 600N (Normal Category Helicopter) Approved May 15, 1997 (cont.) VII

Rotor Limits and Engine Operating

Speeds

Power Off (Rotor/Engine)	Power On (Rotor/Engine)
Maximum - 506 rpm (106.4%)	Maximum - 480.1 rpm/101% ⁽³⁾ N ₂
Minimum - 428 rpm (90%)	Minimum - 470.6 rpm/99% ⁽³⁾ N ₂

(3)Note: ECU Governs Rotor RPM between 99.25% and 100.75%.

Airspeed Limits

V_{NE} (Never Exceed Speed) power-on at sea level is 155 knots (178 mph) IAS for 3,600 lbs. or less internal gross weight; 145 knots (167 mph) IAS for 3,601 lbs. to 3,800 lbs. internal gross weight; 135 knots (156 mph) IAS for 3801 lbs or more internal gross weight. V_{NE} power-off (autorotation) at sea level is 115 knots (132 mph) IAS. For reduction of V_{NE} with altitude and temperature, see FAA approved

Rotorcraft Flight Manual.

See FAA approved Rotorcraft Flight Manual for variation of CG limit with gross Center of Gravity

weight, nominal limits are 91.0 to 100.0 longitudinal, -5.0 to +5.0 lateral.

Plumb bob at station 81.54. Leveling Means

4,100 lbs. (1860 kg) at sea level. See RFM for variation of maximum weightwith Maximum Weight

density altitude. See NOTE 16 for weight and balance report.

Minimum Crew 1 (pilot)

Maximum Occupants 8 (includes crew)

Maximum Cargo 1350 lbs. at 115 lb. / sq. ft., sta. 48.5 to 124.0.

612 kg at 561.5 kg / sq. meter, sta 48.5 to 124.0

Outside Air Temperature Limits -40° to $+51.9^{\circ}$ C (-40° to $+125^{\circ}$ F)

(OAT at Sea Level See RFM for variation at altitude)

Engine Cold Start Limits -40°C (-40°F)

Fluid Capacity

		Liters	Imp. Gal.	U.S. Gal.
Fuel	Usable	433.8	95.5	114.6
	Unusable	6.1	1.3	1.6
	Total	439.9	96.8	116.2
Main Trans. Oil	Total	6.62	1.46	1.75
Hydraulic Fluid (Rotor Brake)	Total	0.118	0.026	0.031
Engine Oil	Total	2.95	0.65	0.78

Maximum Operating Altitude

20,000-ft density altitude, 18.700-ft pressure altitude with JP-4 or Jet-B, or 20,000-ft pressure altitude with Jet-A, Jet-A1, JP-5, or JP-8; whichever is lower.

Main Rotor Blade Movements

Collective Pitch (relative to rigging position)

Up to Down	17.1° to 21.6°

VII Model 600N (Normal Category Helicopter) Approved May 15, 1997 (cont.)

Main Rotor Blade Movements (cont)

Cyclic (relative to rigging position)

Forward	18.2° to 19.7°
Aft	11.5° to 13.5°
Left	7.6° to 9.6°
Right	5.2° to 7.2°

Fan Blade Movements

Minimum	26° ± 1°
Full Right Pedal	$54^{\circ} \pm 2^{\circ}$
Full Left Pedal	$73^{\circ} \pm 2^{\circ}$

Horizontal Stabilizer Incidence

1.9° nose down with respect to waterline plane.

Vertical Stabilizer Movements

Vertical Stabilizer (relative to rigging position)

	Left	Right
Leading Edge Left	$-10.5^{\circ} \pm 0.5^{\circ}$	$-14.5^{\circ} \pm 0.5^{\circ}$
Leading Edge Right	+23.5° ± 1°	+19.5°±1°
Travel, minimum linear	7.1 inches	7.1 inches
inches at trailing edge		

Certification Basis

Basic Aircraft

14 CFR Part 27 dated October 2, 1964, through Amendment 27-30 with the following deviations:

27.562 and 27.863 excluded (earlier models did not have these requirements);

27.561 at Amendment 27-24;

27.607 at Amendment 27-3;

27.785 at Amendment 27-20;

27.1325 at Amendment 27-12;

14 CFR Part 36, amendments 36-1 through 36-21, Appendix J.

Special Condition

High-Intensity Electromagnetic Radiation Fields (H.I.R.F.) protection per 14 CFR 21.16 effective January 29, 1997, as published in the Federal Register FR 66, Page No. 4134, dated January 29, 1997.

Equivalent Level of Safety

The N_1 gauge has shown compliance to 27.1549(b) through an alternate means.

Glass Cockpit Installations

14 CFR Part 27 Amendments 27-1 through 27-47, dated January 30, 2012.

VII Model 600N (Normal Category Helicopter) Approved May 15, 1997 (cont.)

Manufacturer's Serial Numbers S/N RN003 and subsequent

See "NOTE 6" for serial number coding.

Equipment The basic required equipment as prescribed in the applicable airworthiness

regulations (see Certification Basis) must be installed in the aircraft for certification.

All required equipment that must be installed.

Approved Publications Rotorcraft Flight Manuals

600N (Basic)	CSP-600RFM-1	Dated May 15, 1997
600N (Glass)	CSP-600RFM-2	Dated July 26, 2017

Airworthiness Limitations Section (ALS)

CSP-600HMI-2, Section 04-00-00 of the MDHI Model Helicopters Model 600N Basic Handbook of Maintenance Instructions

VIII Data Pertinent to all Models

Service Life Limits

See NOTE 3 for list of life limited components for 369, 369A, 369H, 369HM, 369HS, 369HE, 369D, 369E, 369F, and 369FF aircraft manufactured on or before June 20, 1991.

See Airworthiness Limitations Section (ALS) of Handbook of Maintenance Instruction (HMI) for the life limited components for 369D, 369E, 369F, and 369FF aircraft manufactured after June 20, 1991.

See Airworthiness Limitations Section of HMI for the life-limited components for 500N and 600N aircraft.

The HMI ALS and the Life Limit Schedule (NOTE 3 of the TCDS) specify that Service Life Limited parts are retired according to an FAA approved schedule. These values of retirement or service life cannot be increased without approval by FAA engineering.

Production Basis

Production Certificate No. 410NM was utilized through February 18, 1999 for the 369, 369A, 369H, 369HM, 369HS, 369HE, 369D, 369E, 369F, 369FF, 500N, and 600N helicopters.

Effective February 18, 1999 the Type Certificate (TC) No. H3WE was transferred to MD Helicopters Inc. (MDHI), the new TC holder. MDHI has licensed back to McDonnell Douglas Helicopter Company (MDHC) to build the 369E, 369FF, 500N, and 600N helicopters under a new Production Certificate No. 714NM. Effective February 19, 1999 the following serial number helicopters were built under PC 714NM.

369E	0542 and 0543
369FF	0134 through 0137
500N	LN086 through LN089
600N	RN047, RN052 and RN054

Production Basis (cont.)

On November 5, 1999 MD Helicopters, Inc. received Production Certificate PC 715NM under which MDHI was authorized to manufacture the 369E, 369FF, 500N and 600N helicopters. Effective November 5, 1999 the following serial number helicopters and subsequent will be built under PC715NM.

369E	0544 and subsequent
369FF	0138 and subsequent
500N	LN090 and subsequent
600N	RN053, RN055 and subsequent

NOTE 1

A current weight and balance report, including a list of equipment included in certificated empty weight and loading instructions, must be provided for each helicopter at the time of original airworthiness certification and at all times thereafter, except in the case of operators having an approved weight control system.

NOTE 2

The following placard must be installed in clear view of the pilot:

"This Helicopter must be operated in compliance with the operating limitations specified in the Rotorcraft Flight Manual."

For additional placards, see Rotorcraft Flight Manual.

NOTE 3

Information essential to the proper maintenance of these helicopters is contained in the Manufacturer's Handbook of Maintenance Instructions (HMI) which is provided with each civil helicopter at the time of delivery to the operator. These handbooks specify that Service Life Limited parts are retired according to an FAA approved schedule. These values of retirement or service life cannot be increased without approval by FAA engineering.

For Models 369D, 369E, 369F, and 369FF aircraft manufactured after June 20, 1991, see the Airworthiness Limitations Section of the HMI for the Limited Life Schedule.

For Model 500N and 600N aircraft see the Airworthiness Limitations Section of the HMI for the Limited Life Schedule.

Model Applicability Codes for Aircraft Manufactured on or Prior to June 20, 1991

A Model 369

For a list of critical parts and life limits contact: Federal Aviation Administration Manager Los Angeles Aircraft Certification Office 3960 Paramount Boulevard Lakewood, California 90712-4137

B Model 369

For a list of critical parts and life limits contact: Federal Aviation Administration Manager Los Angeles Aircraft Certification Office 3960 Paramount Boulevard Lakewood, California 90712-4137

C Model 369A; S/N 1446 and up or S/N 0001 through 1445 with M30242 Kit; and Models 369HM, 369HS, and 369HE; S/N 0001 and up with Rolls-Royce Corporation (formerly Allison Engine Company) 250-C18A or 250-C18C engine, unless otherwise noted.

D Model 369H, 369HM, 369HS; S/N 0101 and up with Rolls-Royce Corporation (formerly Allison Engine Company) 250-C20 engine, unless otherwise noted.

E Model 369D; S/N 003 and up, Model 369E S/N 0001 and up, Model 369F S/N 0003 and up and Model 369FF S/N 0001and up, unless otherwise noted.

Limited Life Schedule

Applicability: Component see Note (1)	B, C, D Part Number	B Hours	C Hours	D Hours	E Part Number (5)	E Hours
<u>component</u> see twice (1)	(5)	/TE (11)	/TE (11)	/TE (11)	Ture realiser (3)	/TE (11)
Folding pin, main rotor	369A1004	5760	5760	5760	369A1004-BSC	2850
					369A1004-3 369A1004-5	2850 7600
Applicability: Component	B, C, D	В	С	D	E E	7000 E
see Note (1)	Part Number	Hours	Hours	Hours	Part Number (5)	Hours
, ,	(5)	/TE (11)	/TE (11)	/TE (11)	. ,	/TE (11)
Blade, main rotor(7) S/N 0001 to 3499	369A1100-501	1655	1570	1570		
S/N 3500 & Sub A000 & Sub	369A1100-501	2440	2440	2440		
S/N 3500 & Sub A000 & Sub	369A1100-503	2440	2440	2440		
S/N 3500 & Sub A000 & Sub	369A1100-505	2440	2440	2440		
S/N D139 thru D203, D209	369A1100-507	1,750	1,750	1,750		
thru D223		/10,600	/10,600	/10,600		
S/N 3500 & Sub	369A1100-511	TE (11)	TE (11)	TE (11)		
3/1 v 3300 & 3 u 0	307A1100-311	3300	3300	3300		
Blade, main rotor 369D & 369E blades except listed below:					369D21100	3530
S/N H664, H665, H667, H669, H671, H672, H674, H676, H679, H680, H683, thru H724, H726 thru H999 & J000 thru J039, J041 thru J055					369D21100-517	2,500 /15,000 TE (11)

B, C, D Part Number	B Hours /TE (11)	C Hours /TE (11)	D Hours /TE (11)	E Part Number (5)	E Hours /TE (11)
				369D21102	3430
				369D21102-517	2500 /15,000 TE (11)
369A1201	8900	8900	8900	369D21201	8,900
369A1300	6200	6200	6200	369D21300	9100
369D21300- 501	6200	6200			
369A1210	2774(2)	2774(2)	2774(2)	369D21210(2)	2770(2)
369A1220 369D21220	5490 5490	4220 4220	4220 4220	369A1220 369D21220	6120 6120
369A1234	2860	2650	2650		
369H1203- BSC, -21, and - 31	6396	6396	6396	369H1203-BSC, - 21, and -31	5762
369H1203-51, and -61	10600	10600	10600	369H1203-51, and -61	11080
369A2014 369D22014	5710 5710	5710 5710	5710 5710	369D22014	10450
				369D21400-501	6060
				369D21400-503	(9)
				M50452	(9)
369D21400- 503	*(9)	(9)			
				369A7301	6500
				369A7603	13600
	Part Number (5) 369A1201 369A1300 369D21300-501 369A1210 369A1220 369D21220 369H1203-BSC, -21, and -31 369H1203-51, and -61 369A2014 369D22014	Part Number (5) /TE (11) 369A1201 8900 369A1300 6200 369D21300- 501 2774(2) 369A1210 2774(2) 369A1220 5490 369D21220 5490 369H1203- BSC, -21, and -31 369H1203-51, and -61 369A2014 5710 369A2014 5710 369D22014 5710	Part Number (5)	Part Number (5) Hours /TE (11) Hours /TE (11) Hours /TE (11) 369A1201 8900 8900 8900 369A1300 6200 6200 6200 369D21300-501 6200 6200 6200 369A1210 2774(2) 2774(2) 2774(2) 369A1220 5490 4220 4220 369A1234 2860 2650 2650 369H1203-BSC, -21, and -31 6396 6396 6396 369H203-51, and -61 10600 10600 10600 369A2014 5710 5710 5710 369D22014 5710 5710 5710 369D21400- *(9) (9)	Part Number (5) Hours (7E (11)) Hours (7E (11)) Hours (7E (11)) Part Number (5) 369A1201 8900 8900 369D21102 369A1201 8900 8900 369D21201 369A1300 6200 6200 6200 369D21300 369A1210 2774(2) 2774(2) 2774(2) 369D21210(2) 369A1220 5490 4220 4220 369D21220 369A1220 5490 4220 4220 369D21220 369A1234 2860 2650 2650 2650 369H1203-BSC, -21, and -31 10600 10600 369H1203-BSC, -21, and -31 21, and -31 369H203-51, and -61 5710 5710 5710 369D22014 5710 5710 5710 369D22014 369D22014 5710 5710 5710 369D21400-503 369D21400-503 *(9) 9) 369D21400-503 369A7301

Applicability: Component see Note (1)	B, C, D Part Number	B Hours /TE (11)	C Hours /TE (11)	D Hours /TE (11)	E Part Number (5)	E Hours /TE (11)
Driveshaft, main rotor	369A5500 369A5520	6500 1990	3960 1740	3960 1300		
369D & 369E					369D25510	5020
369F & 369FF					369D25510	3675
Driveshaft, Main trans. (Bendix)	369A5510	3700	3700	3700	369A5510	3790
Driveshaft coupling, main trans.					369H5660	4300
Blade, tail rotor (fiberglass)	369A1710 369A1607	2861 2861	2861 2861			
Blade, tail rotor (Aluminum) (10)	369A1613- BSC, -3, -501, -503, -505, -	5600	5600	5600		
369D & 369E					369D21613	5200
					369D21613-11 -31, -41, & -51	5140
369F & 369FF					369D21606	5140
Blade, tail rotor (4-blade). 369D & 369E only					369D21615	10000
Driveshaft, tail rotor 369F &369FF	369A5518	8730	8730	8730	369D25518 369DSK152-11 369D25518-503	13900 13900 14610
Gearshaft, tail rotor input assy.(1)	369A5406	1800	1800	1800		
Gearshaft, tail rotor output assy.(1)	369A5406	2940	2940	2940		
Input Gearshaft assembly, tail rotor(1)	369A5425* *Except 369A5425-5,	1800	1800	1800	369D25434	12000
369F, 369FF	which is replaced "on condition".				369D25434	3365
Output Gearshaft assembly, tail rotor					369D25430	7290

Applicability: Component see Note (1)	B, C, D Part Number (5)	B Hours /TE (11)	C Hours /TE (11)	D Hours /TE (11)	E Part Number (5)	E Hours /TE (11)
Strap assembly tail rotor *When installed with fiberglass tail rotor blades, P/N 369A1710- BSC, -9, - 11, -13, or 369A1607-BSC	369A1706*	5100 3250	5100 3250	5100 3250	369A1706	5100
Hub assy., tail rotor					369A1725	3450
Tailboom(6)	369A3500	2674	2450		369D3500	10300
369A & 369HM		2674	2177			
Except: 369A & 369HM with 369A1620 tail rotor		1800	1800	1800		
369HS & 369HE with 369A1620 tail rotor		2030	2030	2030		
369H, 369H, 369HM, 369HS, & 369HE	369A3500-619	1880	1880	1880		
Tailboom attach bolts(6) 369A & 369HM Except: 369A, 369HM, 369HS, & 369A1620 tail rotor	NAS625-14 MS21250- 05014	2598 2598 2598 2400	2504 2504 2400 2400	2400	MS21250-06014	21950
Horizontal Stab.(6) 369A, 369H, 369HE, 369HM, 369HS Except: 369A & 369HM with	369A3600	3,150 3,050	3,050	3,050		
369A1620 aluminum tail rotor 369H, 369HE & 369HS		3,450	3,450	3,450		
with 369A1620 aluminum tail rotor 369D 369E		,			369D23601 421-087-505 421-087-905 421-087-503	7,700 7,700 7,700 7,700 7,700
369F & 369FF Vertical Stab. 369D &					421-087-903	7,700
369E 369F & 369FF					369D23600 369D23600-505	12,700 3,300

Applicability:	B, C, D	В	С	D	Е	Е
Component see Note (1)	Part Number	Hours	Hours	Hours	Part Number (5)	Hours
	(5)	/TE (11)	/TE (11)	/TE (11)		/TE (11)
Upper Vertical Stab.(6) 369A, 369H, 369HE, 369HM, 369HS except: 369A & 369HM with 369A1620 aluminum tail rotor 369H, 369HS & 369HE with 369A1620 aluminum tail rotor	369A3625	3,840 3,280 3,840	3,840 3,280 3,840	3,280 3,840		
Coupling, tail rotor shaft	369A5501 369H925643	7080	7080 7080	7080 7080	369A5501 369H925643	4980 4980
Damper assy., Landing Gear	369A6300	(4)	(4)			
For 369A (only)	369A6350	(4)				
Emergency Float (Option) 369H, 369HM, 369HS & 369HE,	369Н90121	(8)	(8)	(8)	369D292473-5 -6, -9, -10, -11, and -12	(8)
Utility Float Kit					369DSK66	3190
Kit (Option), Stabilizer Support 369D/E only					369D292036	3190

Footnotes to the Limited Life Schedule

- (1) Life limited components interchanged between models or configurations, including Model 369 series where applicable, must be restricted in the lowest service life indicated for the models or configurations affected. Life limited components removed at retirement are to be destroyed or conspicuously marked to prevent inadvertent return to service. Parts are applicable only on models under which a service is listed.
- (2) The service life for the strap retention system is a calculated maximum. In actual fact, the strap retention system is an on-condition replacement in accordance with MDHI Service Bulletin HN- 214/DN-154/EN-44/FN-33.
- (3) Used with 369H90123 Rotor Brake Kit. (Not applicable on Model 369A).
- (4) Must be overhauled at 1200 hour intervals per manufacturer's instructions.
- (5) Service life shown for basic part number applies to all dash-numbered versions unless otherwise indicated.
- (6) Applicable to all models and configurations except as noted.

- (7) Blade serialization sequence as follows: 0001 9999, A001 Z999, AA01 ZZ99
- (8) A life limit of five (5) years from date of manufacture has been established for the Holex, Inc., P/N 12552-1 (Walter Kidde P/N 281993) and Holex, Inc., P/N12754-1 (TAVCO P/N 5003527) SQUIB CARTRIDGES.
- (9) The 369D21400-503 and 50452 damper assemblies are to continue being inspected for deterioration every 600 hours up to a total time of 4200 hours and every 300 hours thereafter until deterioration is sufficient to retire assembly. Allowable deterioration is denoted in the Handbooks of Maintenance Instructions for the Model 369D, 369E, 369F, and 369FF helicopters.
- (10) The 369A1613-7, -9, and -11 tail rotor blades are for military use only (OH-6A) and are not FAA certified for Model 369H series helicopters.
- (11) These Blades are Subject Flight Hour Factoring. See applicable Service Bulletin SB369H-243R3, SB369D-195R3, SB369E-088R3 or SB369F-075R3, SB500N-015R3, SB600N-007R2 dated July 13, 1998 and FAA AD 98-15-26. TE = Torque Events is defined as the transition to a hover from forward flight. For this definition of TE, Forward Flight is considered to be flight at any airspeed after attaining transitional lift.
- NOTE 4 The following information applies to the U.S. standard and export airworthiness certification of Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters:
 - a) The Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters were only produced for and delivered to military customers. To meet the basic eligibility requirements for a U.S. standard and export airworthiness certificate, Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters must have been issued an FAA Form 8130-2 (previously FAA Form 970), "FAA Conformity Certificate Military Aircraft", prior to delivery to the U.S. Army. Civil conversion of these helicopters requires certain modifications to be made in accordance with the applicable FAA approved type design data which forms the basis of Type Certificate H3WE.
 - b) Government furnished equipment identified in Hughes Report No. 369-X-0008, dated June 24, 1964 must be removed from Hughes Model 369 (YOH-6A) helicopters to be eligible for a U.S. standard and export airworthiness certificate.
 - c) The FAA approved parts and equipment identified as required in Hughes Report No. 369-E-5002, dated April 15, 1966 must be installed on Hughes Model 369A (OH-6A) helicopters to be eligible for a U.S. standard and export airworthiness certificate.
 - d) Information essential to the proper maintenance of the Hughes Model 369A (OH-6A) helicopters is contained in the latest version of U.S. Army Technical Manual TM 55-1520-214-23 and is applicable to civil converted Hughes Model 369A (OH-6A) helicopters. However, civil conversion of these helicopters in accordance with the applicable NOTE 4.a) above will result in configuration changes to these helicopters which are not included in TM 55-1520-214-23.

Maintenance information associated with the configuration changes does not exist and must be furnished and submitted, by the applicant for an airworthiness certificate, to the FAA Ft. Worth Aircraft Evaluation Group (FTW-AEG) for review and acceptance prior to issuance of a U.S. standard and export airworthiness certificate. See NOTE 3 and Service Life Limits section of this TCDS above for maintenance information and a list of life limited components for civil converted Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters.

Note 4 (cont.)

e) Operational information and operating limitations essential for the proper operation of the Hughes Model 369 (YOH-6A) helicopters is contained in the FAA approved Flight Manual for the Hughes Model 369 (YOH-6A) Helicopter, dated July 17, 1968, or later FAA approved revision and is applicable to civil converted Hughes Model 369 (YOH-6A) helicopters. However, civil conversion of these helicopters in accordance with the applicable NOTE 4.a) above will result in configuration changes to these helicopters which may effect the operation of these helicopters.

Operational information and operating limitations essential for the proper operation of the Hughes Model 369A (OH-6A) helicopters is contained in the FAA approved Owners Manual for the Hughes Model 369A (OH-6A) Helicopter, dated June 16, 1975, or later FAA approved revision and is applicable to civil converted Hughes Model 369A (OH-6A) helicopters. However, civil conversion of these helicopters in accordance with the applicable NOTE 4.a) above will result in configuration changes to these helicopters which may effect the operation of these helicopters.

Helicopter operational and operating limitation information associated with configuration changes must be furnished and submitted, by the applicant for an airworthiness certificate, to the FAA Los Angeles Aircraft Certification Office (LAACO) in the form of a Rotorcraft Flight Manual (RFM) for review and FAA approval prior to issuance of a U.S. standard and export airworthiness certificate.

- f) Historical records must be made available and evaluated to determine if any major repairs and alterations, including the installation of various U.S. Army replacement parts, were performed on Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters by the U.S. Army. Any major repairs and alterations, including the installation of U.S. Army replacement parts, must be removed unless FAA approved in order for helicopters to be eligible for a U.S. standard and export airworthiness certificate.
- g) The use of a rotorcraft operating or flight manual other than the FAA approved manual identified in the applicable NOTE 4.e), must be FAA approved in order for helicopters to be eligible for a U.S. standard and export airworthiness certificate.
- h) Hughes Model 369 (YOH-6A) and 369A (OH-6A) helicopters surplused from other than U.S. Armed Forces of the United States are not eligible for issuance of a U.S. standard and export airworthiness certificate or issuance of an FAA restricted category type certificate.

NOTE 5

The following list of aircraft serial numbers are those used for foreign military helicopters and/or special production, and are not eligible for a U.S. standard airworthiness certificate.

Note 5 (cont.) <u>369D Derivative Serial Numbers Not Eligible</u>

0026	0046	0056	0186	0194	0202	0210	0278	0279	0280
0281	0322	0323	0324	0325	0340	0366	0367	0368	0369
0402	0407	0408	0409	0410	0411	0418	0425	0426	0427
0428	0430	0435	0443	0468	0469	0470	0504	0508	0511
0520	0523	0550	0551	0552	0553	0569	0570	0571	0597
0598	0599	0608	0615	0616	0617	0618	0620	0642	0643
0644	0645	0666	0667	0668	0669	0682	0684	0685	0686
0687	0712	0713	0722	0723	0740	0741	0760	0761	0781
0782	0783	0802	0803	0804	0805	0948	0956	0965	0972
0977	0989	1001	1005	1047	1056	1061	1071	1081	1093
1107	1116	1222	1235	1236	1237	1241	1242	1243	1244
1245	1246	1247	1248	1249	1250	1251	1252	1253	1256
1257	1266	1267	1276	1277	1287	1288			

369E Derivative Serial Numbers Not Eligible

0081	0102	0103	0104	0112	0113	0114	0124	0125	0131
0132	0137	0138	0139	0142	0153	0154	0158	0159	0160
0161	0162	0163	0164	0171	0172	0173	0174	0175	0176
0183	0184	0185	0186	0212	0213	0214	0254	0257	0263
0264	0265	0269	0272	0271	0273	0274	0275	0277	0278
0279	0283	0284	0285	0286	0289	0290	0291	0294	0295
0296	0297	0298	0299	0300	0305	0306	0307	0308	

369F AND 369FF Derivative Serial Numbers Not Eligible

0007	0008	0016	0017	0018	0019	0020	0021	0022	0024
0025	0026	0027	0028	0029	0030	0031	0032	0033	0034
0035	0036	0037	0038	0039	0040	0043	0045	0047	0048
0051	0053	0054	0055	0057	0059	0069	0070	0071	0072
0073	0074	0084	0085	0090	0091	0118	0132	0179	0180
0181	0182	0183	0184	0214	0215	0216	0217	0218	0219
0220	0221	0222	0223	0224	0225	0252	0256	0257	0258
0259	0260	0261	0262	0263	0264	0265	0266	0267	0268
0271	0272	0273	0274	0275	0276	0277	0278	0278	0280
0281	0282	0283	0284	0285	0286	0287	0288	0289	0290
0291	0292	0293	0294	0295	0296	0297	0298	0299	0300
0301	0302	0303	0304	0305	0306	0307	0308	0309	0310
0311	0312	0313	0314	0315	0316	0319			
0700	0701	0702	0703	0704	0705	0706	0707	0708	

NOTE 6 Aircraft serial numbers are coded to show the month and year of manufacture in that sequence.

Examples: 640103, 1150015E

Examples: 040105, 1150015E					
6	4	0103			
11	5	0015	E		
Month of Manufacture	Year of Manufacture	Serial Number in Consecutive	Additional		
6 - June	4 - 1964	order from 0001 for each model	designation as		
11 - November	5 - 1965	(this is the number used for S/N	noted below		
		applicability requirements)			

Model 369A helicopters, S/N 1079 through 1099, utilize an alpha numeric serialization system. The letters used are A, B, C, D, E, F, G, J, K, L, N, P, R, T, U, W, and Y. First aircraft of the block is S/N 1079A, the second is 1079B, etc.

Model 369HM helicopters carry the letter M following the serial number. This was effective with Ship S/N 0004M.

Model 369HE helicopters carry the letter E following the serial number. This was effective with Ship $S/N\ 0101E$.

The helicopters listed below have been or will be delivered without the manufacturing date coding as part of the serial number:

369D	S/N 1068, 1087, 1095; S/N 1100 and subsequent.
369E	S/N 0001 and subsequent
369F	S/N 0003 and subsequent
369FF	S/N 0001 and subsequent
500N	S/N LN001 and subsequent
600N	S/N RN003 and subsequent

NOTE 7

For all operations below 40° F ambient temperature all fuel, except MIL-G-5572 (Aviation Gasoline), must contain anti-icing additive conforming to MIL-I-27686 in concentrations of 0.035 per cent by volume minimum 0.15 percent by volume maximum. See Rotorcraft Flight Manual for checking concentrations and blending.

NOTE 8

For Model 369A the maximum weight may be increased to 2550 pounds when the M30242 "OH-6A revised operating limits-kit, modification" is incorporated. For additional limitations when this kit is installed see Fuel, Engine Limits, Transient Limits, Rotor Limits, and Engine Operating Speeds, and NOTE 3.

NOTE 9

Model 369H Series aircraft, Serial No. 0101 and up, with the 369H90065 or 369H90072 Cargo Hook installed meet the structural and design requirements of the certification basis provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 3000 pounds gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement for the cargo hook. The retirement times listed in NOTE 3 are not changed.

Model 369D Series aircraft, Serial No. 003 and up, and Model 369E Series aircraft, Serial No. 0001 and up, with 369H90072 Cargo Hook installed, meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 3550 pounds gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement for the Cargo Hook. The retirement times listed in NOTE 3 are not changed

Model 369D Series Aircraft operated in the Restricted Category with the 429-4537 Jettisonable Load Kit installed meet the structural and design requirements of the certification basis, provided the weight in excess of 3000 pounds must be external jettisonable. Maximum takeoff and power-on landing gross weight is 3550 pounds. The retirement times listed in NOTE 3 are not changed.

Model 369F Series aircraft, Serial No. 0003 and up, and Model 369FF Series aircraft, Serial No. 0001 and up, with Cargo Hook installed, meet the structural design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when the Model 369F is operated at 3550 pounds gross weight or when Model 369FF is operated at 3750 pounds gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement (as applicable to the Model 369F or 369FF) for Cargo Hook. The retirement times listed in NOTE 3 are not changed

Model 500N aircraft, Serial No. LN0001 and up, with Cargo Hook installed, meet the structural design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when the Model 500N is operated at 3850 pounds gross weight in accordance with the limits of the approved Rotorcaraft Flight Manual. The retirement times listed in the Airworthiness Limitations Section of the HMI are not changed.

NOTE 10

Inspect the P/N 369A5364 Sprag Assembly, 369A5352 Outer Race, and 369A5353 Inner Race of P/N 369A5350-603 Overrunning Clutch Assembly in Model 369E, 369F, and 369FF helicopters for wear in the cages and sprags of the sprag assembly, inner and outer race every 300 hours and replace the sprag assembly every 1800 hours of total service time in accordance with MDHI Service Bulletin EN-3 or FN-3, as appropriate.

NOTE 11

Inspect the main rotor drive shaft, P/N 369D25510, in Model 369E, 369F, and 369FF for cracks and damage every 300 hours in accordance with MDHI Service Bulletin EN-4 or FN-4, as appropriate.

NOTE 12

The Model 369F Series aircraft may be converted to a Model 369FF Series aircraft with the installation of those parts called out on Drawing 369D290100.

NOTE 13

Models 369D and 369E with alternate engine (Rolls-Royce Corporation - formerly Allison Engine Company) 250-C20R/2) are approved with the kits/options identified on 369D290000, Revision G, or later approved revisions and Kit Compatibility Substantiation Report No. 369-CE-195, dated March 28, 1989, or latest approved revision.

NOTE 14

NOISE CHARACTERISTICS. Model 369D and 369E helicopters with the Rolls-Royce Corporation (formerly Allison Engine Company) 250-C20B engine installed have not been tested for noise in accordance with the requirements of FAR Part 36. Therefore, they are Stage 1 helicopters. Substitution of Rolls-Royce Corporation 250-C20R/2 engine results in no acoustic change. Thus, Model 369D and 369E aircraft with the 250-C20R/2 engine installed are also Stage 1 helicopters. Model 369FF helicopter with the Rolls-Royce Corporation 250-C30 engine has not been tested for noise in accordance with the requirements of FAR Part 36, therefore, the Model 369FF is a Stage 1 helicopter.

The Model 500N has demonstrated compliance with FAR Part 36, Appendix H, through Amendment 36-18, for Stage 2 helicopters.

The Model 600N has demonstrated compliance with FAR part 36, Appendix J, through Amendment 36-21.

NOTE 15

The Model 369E helicopter may be converted to Model 369FF helicopter with the installation of those parts called out on Drawing 369D292202, Revision A, dated 7/29/94, or later FAA approved revision, and in accordance with MDHS Report No. 369-CE-293, "E-FF Conversion Report", Revision N/C, dated 9/94, or later FAA approved revision.

The following is a list of 369Es converted to 369FFs:

Was:	Became:	Date of Certificate of
369E S/N	369FF S/N	Airworthiness as 369FF
0292	0075FF	April 29, 1993
		•
0228	0600FF	January 31, 1996
0287E	0601FF	May 01, 1998
0128E	0602FF	October 8, 1998
0095E	0603FF	September 22, 2015
0247E	0604FF	December 03, 2015
0343E	0605FF	September 20, 2017
0311E	0606FF	July 31, 2020
BT890001*	0700FF	(1)
0422	0701FF	(1)
0369E	0702FF	(1)
0052E	0703FF	(1)
0094E	0704FF	(1)
0468E	0705FF	(1)
0381E	0706FF	(1)
0391E	0707FF	(1)
0355E	0708FF	(1)
0242E	0709FF	March 16, 2009
0545E	0710FF	April 28, 2010
0481E	0711FF	February 17, 2012
0573E	0712FF	September 9, 2015
0595E	0713FF	September 9, 2015
0575E	0714FF	January 8, 2016
0581E	0715FF	January 9, 2016
0571E	0716FF	July 17, 2017
0606E	0717FF	July 27, 2017
0601E	0718FF	September 25, 2020

NOTE 15 (cont.)

(1) These helicopters were built for foreign military and are not eligible for an FAA Certificate of Airworthiness (See NOTE 5).

NOTE 16

For Model 600N, a current Weight and Balance Report (MDHS' Basic Weight and Balance Record) listing the helicopter certificated empty (basic) weight and loading instructions including a List of Equipment (MDHS' MD-600N Required/Optional Equipment List is provided as a separate document) must be provided for each helicopter at the time the helicopter's original airworthiness certification is issued. This Basic Weight and Balance Record shall be kept current as the configuration, affecting the helicopter's weight and balance, is changed. The MDHS Basic Weights Checklist Record (Chart A) and Basic Weight Checklist Supplement for the Model 600N contains needed reference data for the Weight and Balance Record. A copy of the current MDHS Basic Weight and Balance Record shall be kept in the helicopter. The certificated basic weight and corresponding center of gravity locations includes all transmission, hydraulic and engine oil/fluids as well as trapped/unusable fuel.

NOTE 17

The model 600N rotorcraft employs electronic engine controls, commonly named Full Authority Digital Engine Controls (FADEC) and is recognized to be more susceptible to Electromagnetic Interference (EMI) than rotorcraft that have only manual (non-electronic) controls (EMI may be the result of radiated or conducted interference.) For this reason modifications that add or change systems that have the potential for EMI, must either be qualified to an FAA acceptable standard or tested at the time of installation for interference to the FADEC. This type of testing must employ the particular FADEC's diagnostic techniques and external diagnostic techniques. The test procedure must be FAA approved.

NOTE 18

Extension of the basic fuel capacity over 148.1 US gal. (Main Fuel Tank – 114.6 US Gal, plus Fuel Tank – 33.5 US Gal) for the Model 600N may require reevaluation of the FADEC control system reliability due to time limited exposure determinations made during certification.

NOTE 19

The Model 600N is prohibited from flying in falling or blowing snow with the standard engine inlet screen installed.

NOTE 20

Any changes to the type design of this helicopter by means of an amended type certificate (TC), supplemental type certificate (STC), or amended STC, requiring instructions for continued airworthiness (ICA) must be submitted through the project aircraft certification office (ACO) for review and acceptance by the Fort Worth -Aircraft Evaluation Group (FTW-AEG) Flight Standards District Office (FSDO) prior to the aircraft delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft, whichever occurs later as prescribed by Title 14 CFR § 21.50. Type design changes (major repairs or alterations) by means of a FAA Form 337 (field approval) that require ICA's must have those ICA's reviewed by the field approving FSDO.