

Department of Transportation Federal Aviation Administration

## Supplemental Type Certificate

*Number* SR01349LA (Restricted Category)*This certificate, issued to:*

**Tamarack Helicopters, Inc.**  
**2849 McIntyre Road**  
**Stevensville, MT 59870**

*certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 29\* of the Federal Aviation Regulations.*

*Original Product—Type Certificate Number:*

\* \* See attached FAA Approved Model List (AML) No.

*Make:*

\* SR01349LA for list of approved rotorcraft make

*Model:*

\* and models and applicable airworthiness regulations

*Description of the Type Design Change:* Installation of Honeywell (Lycoming) T53-L-13B/-13BA engine to replace General Electric T58-GE-3 engine or T53-L-703 engine to replace Honeywell (Lycoming) T53-L-13B/-13BA engine in accordance with Tamarack Helicopters, Inc. Federal Aviation Administration (FAA) approved Master Drawing List TAM016, Revision 1, dated April 26, 2011, or later FAA-approved revision. This modification must be Maintained in accordance with Tamarack Helicopters, Inc. Instructions for Continued Airworthiness (ICA) Manual T53-L-13B/-703 Lycoming, Revision 1, dated September 15, 2010, or later FAA-approved revision.

*Limitations and Conditions:* Approval of this change in type design applies to the rotorcraft models noted on associated AML SR01349LA only. This approval should not be extended to other specific rotorcraft of these model series on which other previously approved modifications are incorporated, unless it is determined that the relationship between this change and any of those other modifications, including changes in the type design, will introduce no adverse effect upon the airworthiness of those rotorcraft. Rotorcraft modified in accordance with this Supplemental Type Certificate must be Operated in accordance with a FAA-approved copy of the Rotorcraft Flight Manual Supplement (RFMS), Tamarack Helicopters Inc. TAM015, dated June 1, 2011, or later FAA-approved revision.

A copy of this Certificate, the associated AML SR01349LA, the MDL, the ICA, and the RFMS, must be maintained as part of the permanent records for the modified rotorcraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

(See Continuation Sheets 3 through 5)

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* March 29, 2002*Date reissued:**Date of issuance:* July 16, 2002*Date amended:* June 1, 2011*By direction of the Administrator***Originally Signed By Nick Han***(Signature)*

Acting Manager, Seattle Aircraft Certification Office

*(Title)*

**Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.**

**This certificate may be transferred in accordance with FAR 21.47.**

# Supplemental Type Certificate

## (Continuation Sheet)

*Number* **SR01349LA**

### Tamarack Helicopters, Inc.

*Issued:* July 16, 2002

*Reissued:*

*Amended:* June 1, 2011

*Limitations and Conditions continued:*

Engine	Honeywell (Lycoming) T53-L-13B or -13BA
Engine Limits	
Torque Pressure:	50 p.s.i. (See Engine Data Plate for Torque setting)
Horsepower:	1,100 h.p.
Exhaust Gas Temperature:	400°C to 610°C Continuous 610°C to 625°C 30 Minutes 670°C Maximum (625°C to 675°C 10 second limit for starting and acceleration) (675°C to 760°C 5 second limit for starting and acceleration)
Oil Pressure:	25 p.s.i. Minimum 80 to 100 p.s.i. Continuous 100 p.s.i. Maximum
Oil Temperature:	93°C Maximum Below 30°C FAT 100°C Maximum Above 30°C FAT (See Note 4)
Oil Capacity:	3.8 Gallons (0.8 Gallons unusable)
Gas Producer Tachometer (N <sub>1</sub> ):	101.5% Maximum
Engine Tachometer (N <sub>2</sub> ):	6000 to 6400 r.p.m. Transient 6400 to 6600 r.p.m. Continuous 6700 r.p.m. Maximum Continuous above 15 p.s.i. torque 6900 r.p.m. Maximum Continuous at 15 p.s.i. torque or less 6900 r.p.m. Maximum Transient (3 seconds) above 15 p.s.i. torque 6900 r.p.m. Maximum
Rotor Limits:	294 to 324 r.p.m. Continuous 339 r.p.m. Maximum
Fuel:	Mil-T-5624 (JP-4) Mil-T-5624G (JP-5) ASTM Type B (Jet B) ASTM Type A-1 (Jet A)
Fuel Quantity:	245 Gallons (3.0 Gallons unusable)
Airspeed Limits:	Consult Rotorcraft Flight Manual

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# Supplemental Type Certificate

## (Continuation Sheet)

*Number* **SR01349LA**

### TAMARACK HELICOPTERS, INC.

*Issued:* July 16, 2002

*Reissued:*

*Amended:* June 1, 2011

*Limitations and Conditions continued:*

Engine:	Honeywell (Lycoming) T53-L-703
Engine Limits:	
Torque Pressure:	50 p.s.i. (See Engine Data Plate for Torque setting)
Horsepower:	1,100 h.p.
Turbine Gas Temperature:	400°C to 820°C Continuous 820°C to 880°C 30 Minutes 880°C Maximum (880°C to 950°C 5 second limit for starting and acceleration)
Oil Pressure:	25 p.s.i. Minimum 80 to 100 p.s.i. Continuous 100 p.s.i. Maximum
Oil Temperature:	93°C Maximum Below 30°C FAT 100°C Maximum Above 30°C FAT (See Note 4)
Oil Capacity:	3.8 Gallons (0.8 Gallons unusable)
Gas Producer Tachometer (N <sub>1</sub> ):	105.8% Maximum
Engine Tachometer (N <sub>2</sub> ):	6000 to 6400 r.p.m. Transient 6400 to 6600 r.p.m. Continuous 6700 r.p.m. Maximum Continuous above 15 p.s.i. torque 6900 r.p.m. Maximum Continuous at 15 p.s.i. torque or less 6900 r.p.m. Maximum Transient (3 seconds) above 15 p.s.i. torque 6900 r.p.m. Maximum
Rotor Limits:	294 to 324 r.p.m. Continuous 339 r.p.m. Maximum
Fuel:	Mil-T-5624 (JP-4) Mil-T-5624G (JP-5) ASTM Type B (Jet B) ASTM Type A-1 (Jet A)
Fuel Quantity:	245 Gallons (3.0 Gallons unusable)
Airspeed Limits:	Consult Rotorcraft Flight Manual

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# Supplemental Type Certificate

## (Continuation Sheet)

*Number* **SR01349LA**

### TAMARACK HELICOPTERS, INC.

*Issued:* July 16, 2002

*Reissued:*

*Amended:* June 1, 2011

*Limitations and Conditions continued:*

Certification Basis: See associated AML SR01349LA

14 CFR part 36 through Amendment 23; 14 CFR part 34 through Amendment

#### **NOTES:**

- Note 1. The helicopter shall be maintained in accordance with USAF T.O. 1H-1(U)F-2-1, Organizational Maintenance and Inspection program as modified as follows:
- See Tamarack Helicopters, Inc. Manual No. T53-L-13B/-703 Lycoming, Instructions for Continued Airworthiness for Installation of Lycoming T53-L-13B/BA and T53-L-703 On USAF Model UH-1F, UH-1P & TH-1F Helicopters, Revision 1, dated September 15, 2010, which has been reviewed and accepted by the FTW-AEG.
- Note 2. The helicopter shall be operated in accordance with USAF T.O. 1H-1(U)F-1 as supplemented by Tamarack Helicopters, Inc. FAA Approved Rotorcraft Flight Manual Supplement, Document No. TAM015. (See associated AML SR01349LA)
- Note 3. Limited life schedule for the helicopter components is included in the USAF T.O. 1H-(U)F-6 amended as follows:
- The Honeywell (Lycoming) T53-L-13B and -13BA engines component life limits and overhaul intervals are to be complied with in accordance with Honeywell Service Bulletin T53-L-13B-0020, Revision 3, dated October 25, 2001, or later revision.
- The Honeywell (Lycoming) T53-L-703 engine component life limits and overhaul intervals are to be complied with in accordance with Honeywell Service Bulletin T53-L-703-0020, Revision 2, dated November 25, 2002, or later revision.
- The main transmission assembly part number 204-040-016-5 component life limits and overhaul intervals are to be complied with in accordance with U.S. Army TM 55-1520-210-23.
- Note 4. At ambient temperatures below 30°C and the maximum "Oil In" temperature is 93°C, inspect oil filter when oil temperature exceeds 93°C for more than 10 minutes.
- At ambient temperatures of 30°C and above a steady state engine "Oil In" temperature of 100°C is acceptable provided the following requirements and limitations are observed: Inspect oil filter after 50 hours of engine operation for excessive accumulation of carbon or metal particles.

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