## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H2SO Revision 1 MARRS (VERTOL) H-21B Revised January 24, 2005

## TYPE CERTIFICATE DATA SHEET NO. H2SO

This data sheet which is a part of type certificate number H2SO prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: This Type Certificate (TC) has been designated as ABANDONED (See Note 5)

Type Certificate Holder Record: Joe G. Marrs

RFD 2, Box 340

Lake Placid, Florida 33852

## I. - Model U.S. Air Force H21B (restricted category) approved 12 October 1972

Engine Wright R-1820-103A

<u>Fuel</u> 100/130 or 115/145 maximum grade

**Engine Limits** 

	Low R	Low Ratio Supercharger		
	<u>HP</u>	RPM	MAP	ALT (FT)
Maximum Continuous	1275	2500	46.5	S.L.
	1275	2500	45.5	3000
Takeoff (30 minutes)	1425	2700	51.5	S.L.
	1425	2700	50.5	1300
	High F	Ratio Supero	charger	
Maximum Continuous	980	2500	43.0	10,800
Takeoff (5 minutes)	1100	2600	50.0	9,800

 Rotor Limits
 Power On 233 to 258 rpm
 Power Off 250 to 300 rpm

Airspeed Limits V<sub>ne</sub> (never exceed) 110 knots IAS

(See NOTE 2(b) for required placard)

<u>Datum</u> 100 inches forward of forward rotor centerline

Maximum Weight 15,200 pounds

Minimum Crew 1 (pilot)

<u>Fuel Capacity</u> 300 gallon usable, fully serviced 304 gallon

Oil Capacity 21.5 gallon

Other Operating Limitations USAF T.O. 1H-21 (C) B-1 Flight Manual

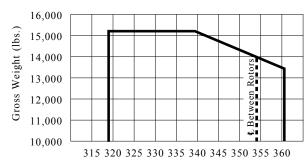
Page No.	1	2	3
Rev. No.	1	-	1

H2SO

Page 2 of 3 Revision 1

## C.G. Range

Station 319.0 to Station 339.5 at 15,200 lb. Station 319.0 to Station 360.5 at 13,500 lb. or less (See Center of Gravity Envelope)



Balance Station (inches from Datum Line) Center of gravity envelope

Serial Numbers Eligible

All USAF Serial Numbers with Forms DD.829, 829-1, and 829-2 (Historical Records) and AFTO Form 100A (Accessory Replacement Record) which completely describe the maintenance history of the helicopter.

**Certification Basis** 

FAR 21.25(a)(2). Type Certificate No. H2SO dated 12 October 1972, issued for the purpose of: Carriage of external loads not to be conducted for compensation or hire.

<u>Date of application for</u> <u>Type Certificate</u>

30 March 1972

**Production Basis** 

None. No helicopters may be produced under this approval.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

- (a) Cargo sling installed in accordance with Section V of T.O. 1H-21-2--2
- (b) USAF T.O. 1H-21(c)B-1 Flight Manual
- NOTE 1. Current weight and balance report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be in each helicopter at the time of original airworthiness certification and at all times thereafter.
- NOTE 2. The following placards must be displayed in the cockpit in full view of the pilot:
  - (a) This helicopter must be operated in accordance with the operating limitations noted in USAF T.O. 1H-21 (C) B-1 Flight Manual

(b)	ALT	VNE IAS KNOTS			
	(FT)	2500 RPM	2400 RPM	2300 RPM	
	S.L.	110	101	93	
	2000	97	89	81	
	4000	85	77	69	
	6000	73	65		
	8000	60	60		
	10 000	60	60		

H2SO Revision 1 Page 3 of 3

NOTE 3. Information essential to the proper maintenance of the helicopter including retirement time of critical components is contained in T.O. 1H-21(C) B-6. The values of retirement or service life cannot be increased without FAA engineering approval.

- NOTE 4. Prior to Civil Airworthiness Certification, the provisions of AD 58-20-4, AD 60-23-5, AD 64-19-6, AD 64-27-4, AD 68-6-1, and any follow-on applicable ADs must be accomplished.
- NOTE 5. **This Type Certificate (TC) has been designated "ABANDONED".** A "Notice of Intent To Designate as Abandoned Certain Type Certificates Issued in the Restricted Category," was published by the Federal Aviation Administration (FAA) in the Federal Register on August 8, 2003 (68 FR 47379). That Notice listed this TC. The FAA received no comments on the published Notice. The FAA has been unable to contact this TC holder. Hence, the FAA has determined that this TC holder is not complying with its Continued Operational Safety (COS) responsibilities. Therefore, no additional aircraft will be added to this TC and no additional original airworthiness certificates will be issued based on this TC. The effectiveness of this TC is limited to those aircraft that received original airworthiness certification prior to the incorporation of this note (Date of Incorporation, January 24, 2005). Subsequently, if the TC holder is located and assumes their COS responsibilities, the restriction(s) imposed by this note may be lifted.

...END...