# PLEASE CHECK WEB SITE AT WWW.ONBOARDSYSTEMS.COM FOR THE LATEST REVISION OF THIS MANUAL

### FAA APPROVED ROTORCRAFT FLIGHT MANUAL **SUPPLEMENT**

STC SR01804SE

Load Weigh System for the Airbus Helicopters AS350 Series

K/IV		5/1\	
FAA Approved:	438t	ROBERT B STONEY	Digitally signed by ROBERT B STONEY Date: 2019.05.09 10:55:33 -07'00'
for/		iation Administrati	est Section, AIR-715

Date: 9 MAY 2019

C'/NT

	_
DEM Cumplement	Document Number

RFM Supplement **Load Weigh System** 

D/NI

121-032-00 Page

Revision 1 1 of 9

### **Record of Revisions**

Rev.	Date	Page(s)	Reason for Revision
0	Nov. 21 2007	All	Initial Release.
1	May 9, 2019	All	Added C-40 Indicator model.



RFM Supplement	Document 121-0		Rev
Load Weigh System		FAA Appro	
Loud Weigh System	2 of 9	9 May	2019

Rev. 1

#### 1 GENERAL

This supplement must be attached to the appropriate FAA approved Airbus Helicopters' Rotorcraft Flight Manual when an Onboard Systems P/N 200-310-00 or 200-310-01 Load Weigh System is installed in accordance with Supplemental Type Certificate (STC) NO. SR01804SE.

The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures and performance information not contained in this supplement consult the basic Rotorcraft Flight Manual and Airbus Helicopters Rotorcraft Flight Manual Supplement – External Load Transport.

The Load Weigh System is a compliment to the helicopter lifting system. Its purpose is to display the weight of the load carried on the cargo hook.

The P/N 200-310-00 and P/N 200-310-01 Load Weigh Systems are replacements for the type certificated load weigh system. These systems consist of three components:

The load weigh indicator. The load weigh indicator is installed on the right forward door pillar. System P/N 200-310-00 includes the C-39 model indicator, system P/N 200-310-01 includes the next generation C-40 model indicator.

For more information on the C-39 indicator (refer to Figure 4.1 for identification) refer to Owner's Manual 120-039-00.

For more information on the C-40 indicator (refer to Figure 4.2 for identification) refer to Owner's Manual 120-152-00.

- A load cell which is installed between the Airbus type certified cargo hook swing suspension frame and cargo hook.
- An internal electrical wire harness which connects the load weigh indicator and load cell and connects to aircraft power and ground.

Rev. 1

ENBOARD*	RFM Supplement	Document 121-0	Number 32-00	Rev
SYSTEMS	Load Weigh System	Page 3 of 9	FAA Appro	

### 2. LIMITATIONS

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – External Load Transport issued by Airbus Helicopters remain applicable.

### **Maximum Load**

The maximum load to be carried with the Load Weigh System installed is the lesser of that specified by the Airbus Helicopters Flight Manual Supplement – External Load Transport or 3086 lbs. (1400 kg).

### 3. EMERGENCY PROCEDURES

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – External Load Transport issued by Airbus Helicopters remain applicable.



<b>RFM</b>	Sup	plement
------------	-----	---------

Document Number 121-032-00

Rev. 1

**Load Weigh System** 

Page 4 of 9

#### 4. NORMAL PROCEDURES

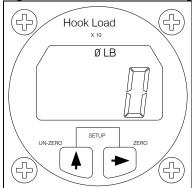
### **Pre-Flight Check**

Prior to a flight involving external load operations with the Load Weigh System perform the following procedures.

- 1. Inspect the electrical connections for damage and security.
- 2. Swing the load cell (and cargo hook) to its full extreme positions to verify that it does not reach the limit of its electrical harness range of motion.
- 3. The Load Indicator powers on when the SLING system is armed. Procedures vary depending on the Indicator model installed. Refer to the following.

**For the C-39 model.** After a brief self-diagnostic routine is complete verify the indicator display indicates "0" as shown below (with no load on the cargo hook).

Figure 4.1 C-39 Indicator Display



### NOTICE

For the C-39 model refer to Owner's Manual 120-039-00 for setup instructions including changing the units, changing the calibration code, zeroing the display, changing the dampening level, etc.



RFM Supplement	t
----------------	---

Document Number 121-032-00

Rev. 1

**Load Weigh System** 

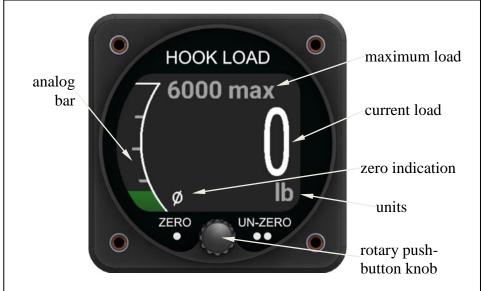
Page 5 of 9

### 4. **NORMAL PROCEDURES** continued

Pre-Flight Check continued

For the C-40 model, on power up an Information screen will display the Hook Hours, software version, and serial number (S/N) and then the indicator should display the Load screen. The Load screen of the C-40 model is shown below.

Figure 4.2 C-40 Indicator Load Screen



### NOTICE

For the C-40 model refer to Owner's Manual 120-152-00 for detailed setup instructions including changing the units, changing the brightness of the display, etc. and additional operation instructions.

ONBOARD"	RFM Supplement	Document 121-0		Rev. 1
SYSTEMS	Load Weigh System	Page 6 of 9	FAA Appro	

### 4. **NORMAL PROCEDURES** continued

#### Pre-Flight Check continued

The C-40 model includes a Maximum Load setting, this setting provides the option to select a maximum load for each flight involving external load operations based on flight conditions (temperature, altitude, fuel, etc.) or it can be set to the maximum external load rating for the helicopter. To set the maximum load:

 From the Load screen press and hold the rotary push button knob until the Maximum Load screen appears. Release the knob.

Figure 4.3 Maximum Load Screen



- Rotate the knob to the left or right to decrease or increase the value to the desired setting.
- Press the knob to set this value.

	ONBOARD"	<b>RFM Supplement</b> $ \begin{array}{c c} \text{Document Number} \\ 121-032-00 \end{array} $ Rev	. 1
Load Weigh System 7 of 9 Page 7 of 9 May 2019		Load Weigh SystemPage 7 of 9FAA Approved 9 May 2019	

### 4. NORMAL PROCEDURES continued

Pre-Flight Check continued

To zero (or tare) the weight of the long line, net, remote hook, etc. from the displayed load, apply that weight to the cargo hook and press the knob once and the display should zero out. Press the knob twice to un-zero (un-tare) the display and add this weight back in.

## NOTICE

The analog bar <u>always</u> displays the un-zeroed load. If there is a discrepancy between the analog bar and the displayed load, a large amount of load has likely been zeroed.

	•	2									
4		-		_	_	_	_	 -		$\mathbf{D}_{\mathbf{r}}$	
		1	_			_	-		-	45	

**RFM Supplement** 

Document Number 121-032-00

Rev. 1

**Load Weigh System** 

Page 8 of 9

### 5. PERFORMANCE

The basic Rotorcraft Flight Manual and Rotorcraft Flight Manual Supplement – External Load Transport issued by Airbus Helicopters remain applicable.

The Load Weigh System is intended as a means of MONITORING the weight of the load suspended from the Cargo Hook.

Before lifting a load, it is recommended that the load weight be estimated, the shape/size is considered and, upon lifting the load, monitor the load indicator and compare the actual engine torque value vs. the expected value for a given weight to verify sufficient performance.

ONBOARD
SYSTEMS

<b>RFM</b>	Supp	lement
------------	------	--------

Document Number 121-032-00

Rev. 1

**Load Weigh System** 

Page 9 of 9