

#### **FAA APPROVED**

#### PILOT'S OPERATING HANDBOOK AND

FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT

**FOR** 

HAWKER BEECHCRAFT MODEL F35, G35 (s/n D-3999 through D-365)

#### NORMAL CATEGORY ONLY

# NORMAL CATEGORY

Model(s)	Operation in excess of:
F35	2750 lb. Max Gross Weigh
G35	2775 lb. Wax Gross Weight

Or with Fuel in Tip Tanks

## UTILITY CATEGORY

Model(s)	Operation at or less than:
F35	2750 b Max Gross Weight   And with Tip Tanks Empty
G35	2775 Ib Max Gross Weight

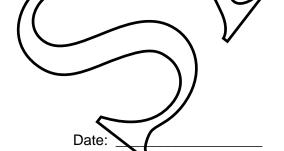
REG. NO.

SER. NO.

This supplement must be attached to the Pilet's Operating Handbook and FAA Approved Airplane Flight Manual when two 20 gallon auxiliary wing tip fuel tanks are installed in accordance with STC(s) SA153EA or SA02722CH. The information contained herein supplements or supersedes the basic handbook only in those areas listed herein. For limitations, procedures, and performance information not contained in this supplement, consult the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

#### **FAA APPROVED:**

Charles L. Smalley, Manager Chicago Aircraft Certification Office Federal Aviation Administration Department of Transportation Federal Aviation Administration Des Plaines, IL 60018



## **SECTION I GENERAL**

This supplement contains revised information for the basic airplane when overall din accordance with STC(S) SA153EA or SA02722CH. The information contained herein supplements or supersedes the basic handbook only in those areas listed herein. Consult the Pilot's Operating Handbook and FAA Approved Flight Manual for limitations, procedures, and performance information not contained herein.

#### **MAXIMUM CERTIFIED WEIGHT**

Maximum Ramp Weight		60 lk	o. fo	r F35.	2985	lb.⁴	<b>(</b> ar	G35
Maximum Ramp Weight	29	50 II	o. fo	r F35.	2975	lb.	for	<b>G</b> 33
Maximum Landing Weight	29!	50 l	fo	r F35	2975	lb.	f∳r	<b>3</b> 5

## **SECTION II LIMITATIONS**

#### **GENERAL**

The Airplane Flight Manual for this airplane lists information for operation in the TILITY category. Since the tip tank installation is approved contingent on operation of the airplane in the NORMAL category when operated in excess of 2750 lb. (Model F35) 2775 lb. (Model G35) or with fuel in Tip Tanks, the following limitations supersede those of the basic Airplane Flight Manual.

This airplane is eligible for operation in accordance with STC(S) SA153EA or SA02722CH and this airplane flight manual supplement only when equipped with the following modifications:

a) Wing Tip Fuel Tanks (STC(S) SA163EA or SA02722CH)

## AIRSPEED LIMITATIONS

Maneuvering Speed (V ......CAS 109 knots CAS 125 mph

#### **WEIGHT LIMITS**

......2960 lb. for F35, 2985 lb. for G35 Maximum Ramp Weight ......2950 lb. for F35, 2975 lb. for G35 Maximum Take-off Weight. Maximum Landing .2950 lb. for F35, 2975 lb. for G35 D'Shannon Products, LTD 1309 County Road 134 Buffalo, MN 55313 Document No: FMS-DP-FG35 TT Hawker Beechcraft \$35, G35

## **CENTER OF GRAVITY LIMITS (Landing Gear Extended)**

#### FORWARD LIMITS

76.5 inches aft of datum to 2265 lbs. with straight line variation to 83.2 inches at 2950 lbs. Model F35.

76.5 inches aft of datum to 2265 lbs. with straight line variation to 83.2 inches at 2975 lbs. Model G35.

#### **AFT LIMITS**

84.9 inches aft of datum at all weights.

#### **MANEUVER LIMITS**

This is a NORMAL CATEGORY airplane when operated in excess of 2750 lb. (Model F35) 2775 lb. (Model G35) or with fuel in Tip Tanks. Spins and acrobatic maneuvers are prohibited. Normal category airplanes are limited to Non-acrobatic operation.

Non-acrobatic operation includes:

- 1. Any maneuver incident to normal lying.
- 2. Stalls (except whip stalls)
- 3. Lazy eights, chandelles, and steep turns, in which the angle of bank is not more than 60°.

Spins are prohibited.

No inverted maneuvers are approved

#### FLIGHT LOAD FACTORS

Positive Maneuvering Load Factor

#### **FUEL**

In addition to the basic airplane fuel system, two auxiliary wing tip fuel transfer tanks are installed with a capacity of 20 gallohs each, all of which is usable.

Take-offs are prohibited with more than 1/4 difference in tip tank fuel quantity. During flight if tip tank fuel quantity gauges indicate more than 1/2 tank difference the landing should be made with flaps up.

Date:

D'Shannon Products, LTD 1309 County Road 134 Buffalo, MN 55313 Document No: FMS-DP-FG35 TT Hawker Beechcraft F35, G35

## **PLACARDS**

In Full View of Pilot:

FUEL CONSUMPTION MAY EXCEED TIP TANK TRANSFER RATE. INITIATE TRANSFER WITH BOTH MAINS AT LEAST ½ FULL. MONITOR MAIN TANK GAUGES TO PREVENT OVERFLOW. TRANSFER TIP TANK FUEL IN LEVEL FLIGHT ONLY.

In Full View of Pilot (Airspeed values are CAS)

# NORMAL CATEGORY AIRPLANE

(WHEN OPERATED IN EXCESS OF 2750) LB. MAX. GROSS WEIGHT, OR WITH FUEL IN TIP TANKS)

AIRSPEED LIMITATION (NORMAL CAT. OPERATIONS)

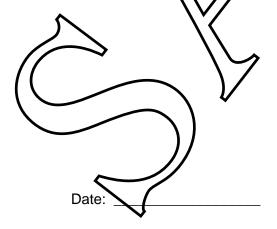
MAXIMUM DESIGN MANEUVERING SPEED 125 MPH (109 KNOTS)

OPERATE IN ACCORDANCE WITH FAY APPROVED FLIGHT MANUAL / PILOTIS OPERATING HANDBOOK. INTENTIONAL SPINS ARE PROHIBITED. NO ACROBATIC MANEUVERS APPROVED.

\*Placard is marked 2759 for Model F35
Placard is marked 2775 for Model G35

# SECTION II EMERGENCY PROCEDURES

If for any reason it is necessary to land with more than 1/2 tank difference in tip tank quantities, the landing should be made with wing flaps in the "up" position.



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## SECTION IV NORMAL PROCEDURES

#### **AIRSPEEDS FOR SAFE OPERATION**

Maximum Turbulent Air Penetration ...... IAS 108 KTS for F35, 110 KTS for G35

#### PREFLIGHT INSPECTION

Fuel drains are located on the lower surface of each tip tank. Orbin these points daily before the first flight to purge any water from the system.

Check security of flush mounted tip tank filler caps during preflight inspection.

Before flight, check the tip tanks for unsymmetrical fuel loading. If fuel tank capacities differ more than 1/4 tank, relocate fuel prior to take-off

See Section 7, Systems for additional information.

## **SECTION V PERFORMANCE**

The performance listed in the basic Airplane Flight Manual is applicable to this airplane with the tip tank installation at the gross weight listed in the basic Airplane Flight Manual. Since the certification basis of the tip tank installation does not include a requirement that performance be made available in the AIM, and since the modifier did not choose to supply this information, no performance is listed at gross weights above that of the basic airplane.

## SECTION VI WEIGHT AND BALANCE Weight <del>-orw</del>ard Condition Limit G Limit 2950 lb. for F35, 83.2 84.9 2975 lb. for G35 2265 lb. or less 84.9 76.5 CG Limitations (wheels down) 2950 for F35 2975 for G35 Note: Gross CG of Tip Tank Fuel Weight Is 87" Aft of Datum 2265 83.2 84.9 6.5 Inches Aft of Datum

# Weight and Balance Loading Form

Model	Date:
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Serial No: D- \_\_\_\_\_ Reg. No.:

Item	Weight	Mom./100
1. Basic Empty Weight		1
2. Front Seat Occupants		
3. 3 <sup>rd</sup> and 4 <sup>th</sup> Seat Occupants	<b>V</b>	
4. 5 <sup>th</sup> and 6 <sup>th</sup> Seat Occupants		
5. Baggage		
6. Cargo		
7. Sub Total Zero Fuel Condition		<i>//</i>
8. Basic Fuel Loading		
9. Tip Tank Fuel Loading		
10. Sub Total Ramp Condition		
11. Less Fuel for Start, Taxi, and Take-o		7
12. Sub Total Take-off Condition		
13. Less Fuel to Destination	7/ "	
14. Landing Condition	$\rightarrow$	

<sup>\*</sup> Fuel for start, taxi, and take-off is normally 16 b.

Usable tip tank fuel is located at an average arm of 87 inches aft datum.

## SECTION VII SYSTEMS DESCRIPTION

#### **FUEL**

In addition to the basic airplane fuel system, two auxiliary wing tip fuel transfer tanks are installed with a capacity of 20 gallons each, all of which is usable. Take-offs are prohibited with more than 1/4 difference in tip tank fuel quantity. During flight if tip tank fuel quantity gauges indicate more than 1/2 tank difference the landing should be made with flaps up.

Tip tank fuel is transferred into its respective main tank by an electric pump at a rate of approximately 15 gallons per hour. The transfer pump and a solehoid valve are mounted inside the wheel well of each wing on the rib at wing station 66. At higher power settings, fuel consumption may exceed the fuel transfer rate to the main tank selected.

Tip tank transfer pump switches are located either on the face of the instrument panel or between the front seats on the partition assembly to ward of the main spar truss. The pump and solenoid valve circuit breaker is installed adjacent to the pump switches.

A fuel drain is provided on the lower surface of each tip tank,

Fuel quantity is measured by observing the fuel level on a sight gauge located on the inboard side of each tip tank.

Normal tip tank fuel transfer should be accomplished simultaneously to maintain symmetrical wing tip tank fuel loading. Initiate transfer with the left main at 1/2 fall and feeding the engine. During the transfer, monitor fuel gauges for both main tanks and stop transfer if gauge indicates full to prevent overflow of fuel through the main tank vent tubes.

SECTION VIII HANDLING, SERVICING AND MAINTENANCE

No Change.

SECTION IX SUPPLEMENTS

No Change.

SECTION X SAFETY INFORMATION

No Change.

