

**FAA APPROVED**  
**PILOT'S OPERATING HANDBOOK AND**  
**FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT**

**FOR**

**HAWKER BEECHCRAFT MODEL D35**  
**(s/n D-3401 through D-3698)**

**NORMAL CATEGORY**  
**(Operation in excess of 2725 lb. Max. Gross Weight, or with Fuel in Tip Tanks)**

**UTILITY CATEGORY**  
**(Operation at 2725 lb. Max. Gross Weight or Less - Tip Tanks Empty)**

REG. NO. \_\_\_\_\_

SER. NO. \_\_\_\_\_

This supplement must be attached to the Pilot'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 SA05722CH. 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

Date: \_\_\_\_\_

LOG OF REVISIONS

Revision	Description	FAA Approved
IR	Original Issue	Mark Anderson May 26, 2009
A	Add STC SA153EA as an applicable STC Add Utility Category eligibility	

SAMPLE

Date: \_\_\_\_\_

**SECTION I GENERAL**

This supplement contains revised information for the basic airplane when operated in 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.....2935 lb.  
Maximum Take-off Weight.....2925 lb.  
Maximum Landing Weight .....2925 lb.

**SECTION II LIMITATIONS**

**GENERAL**

The Airplane Flight Manual for this airplane lists information for operation in the UTILITY category. Since the tip tank installation is approved contingent on operation of the airplane in the NORMAL category when operated in excess of 2725 lb. 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) SA153EA or SA02722CH)

**AIRSPEED LIMITATIONS**

Maneuvering Speed (Va).....CAS 109 knots  
CAS 125 mph

**WEIGHT LIMITS**

Maximum Ramp Weight.....2935 lb.  
Maximum Take-off Weight.....2925 lb.  
Maximum Landing Weight .....2925 lb.

## CENTER OF GRAVITY LIMITS (Landing Gear Extended)

### FORWARD LIMITS

76.5 inches aft of datum to 2240 lbs. with straight line variation to 83.2 at 2925 pounds.

### AFT LIMITS

84.3 inches aft of datum at all weights.

## MANEUVER LIMITS

This is a NORMAL CATEGORY airplane when operated in excess of 2725 lb. 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 flying.
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 Factors

Flaps Up.....	3.8G
Flaps Down.....	2.0G

## 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.

## 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 2725 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 FAA APPROVED FLIGHT MANUAL / PILOT'S OPERATING HANDBOOK. INTENTIONAL SPINS ARE PROHIBITED. NO ACROBATIC MANEUVERS APPROVED.

## SECTION III 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.

Date: \_\_\_\_\_

**SECTION IV NORMAL PROCEDURES**

**AIRSPEEDS FOR SAFE OPERATION**

Maximum Turbulent Air Penetration ..... IAS 110 KTS  
 IAS 126 MPH

**PREFLIGHT INSPECTION**

Fuel drains are located on the lower surface of each tip tank. Drain 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.

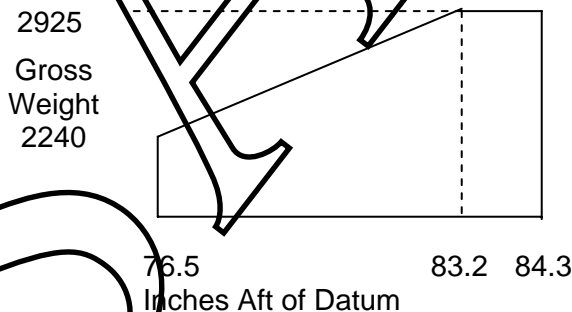
**SECTION V PERFORMANCE**

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 Condition	Forward CG Limit	Aft CG Limit
2925 lb.	83.2	84.3
2240 lb. or less	76.5	84.3

CG Limitations (wheels down)



Note:  
 CG of Tip Tank Fuel  
 Is 87" Aft of Datum

Date: \_\_\_\_\_

**Weight and Balance Loading Form**

Model \_\_\_\_\_ Date: \_\_\_\_\_

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

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

\* Fuel for start, taxi, and take-off is normally 10 lb.

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

Date: \_\_\_\_\_

## 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 solenoid 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 forward 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 full 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.