

1982

ECHCRAFT  
35 and M35

### Weight & Balance Change

Aviation Sales, Inc. 10600 Springboro Pike Miamisburg, OH 45342 937-885-3662		Make Model S/N Reg. #	BEECH M35 D-6191 N9597R
<b>EQUIPMENT CHANGE - WEIGHT &amp; BALANCE</b>			
<b>Items: (Description / P/N / S/N)</b>	<b>Weight Pounds</b>	<b>Arm Inches</b>	<b>Moments Inch/Pounds</b>
<b>Previous Aircraft Empty Weight:</b>	2121.5	78.8	167242.97
Removed: GTX-327	-3	64	-192
Installed: GTX-345	3.12	64	192
<b>Totals</b>	2121.62		167242.97

<b>A. Old Empty Weight</b>	2121.5 Pounds
<b>B. Old Empty CG</b>	78.8 Inches
<b>C. Old Empty Weight CG Moment</b>	167243 Inch/Pounds
<b>D. Max Gross Weight</b>	3200 Pounds
<b>E. Old Useful Load</b>	1078.5 Pounds

<b>A. New Empty Weight</b>	2121.62 Pounds
<b>B. New Empty CG</b>	78.82796 Inches
<b>C. New Empty Weight CG Moment</b>	167243 Inch/Pounds
<b>D. Max Gross Weight</b>	3200 Pounds
<b>E. New Useful Load</b>	1078.38 Pounds

This new weight & balance information supersedes all previous weight and balance data.  
For aircraft loading, see instructions in Weight & Balance Section of Aircraft Flight Manual.

FAA Form 337 Completed?  Y  N  
 Equipment List Amended?  Y  N

*James Fowl*      A3690415      July 5, 2017

Rotating Beacon	X	2.00	182.00
Radio Equipment (Factory Installed)			
<b>Totals as Equiped from Factory</b>		1962.0	77.7 152,509.0
<b>EQUIPMENT CHANGES - ADDED / REMOVED</b>			
<b>DATE</b>			

**Weight Balance  
Beechcraft  
N9597R**

Serial No. D6191  
Registration No. N9597R  
ORIGINAL + 35 CHANGES+(Consolidation Thru 5/29/06)+ Changes thru 5/29/12

**BEECHCRAFT MODEL M35  
EQUIPMENT LIST / WEIGHT & BALANCE**

Equipment Listing		Weight and Balance Data				
ITEM #	Equipment Description	Status	Wt Lbs	Arm Ins	Moment In/Lbs	
	<b>AIRCRAFT EMPTY WEIGHT AND BALANCE FROM ORIGINAL FACTORY DOCUMENT 10-21-59 INCLUDES FOLLOWING EQUIPMENT AS MARKED</b>	X	1962.0	77.7	152,509.0 0.00	
101	Fuel Pumps					
	(a) Engin Driven- Continental Motors 626062 or 626062-1 or 626062-2	X	2.00	39.00		
	(b) Weldon 40220-A-1-A or 4020-A-2-A or 4032-A	X	3.00	74.00		
102	Oil Radiator					
	(a) Harrison 8524295 (Continental Motors 625062)	X	5.00	11.00		
103	Carburetor Air Cleaner					
104	Vacuum Pump					
	(a) Aro A513-DB or Pesco 3P194F or Garwin G450 or Garwin G455	X	4.00	41.00		
105	Starter					
	(a) Delco Remy 1109471 (Continental Motors 535856)					
	or (b) Delco Remy 1109678 (Continental Motors 625392)					
	or (c) Delco Remy 1109681					
	or (d) Delco Remy 1109684					
	or (e) Delco Remy 1109694	X	13.00	39.00		
106	Two 10-Gallon Auxiliary Wing Fuel Tanks	X	18.00	94.00		
109	Starter Solenoid, Delco Remy 1114213 (Neglegible Weight)	X				
201	Two main wheel - brake assemblies 6.50 X 8, Type III					
	or (b) Goodyear Model PD, 6.50-8, Type III					
	Wheel Assembly No. 9532135					
	Brake Assembly No. 9532167	X	25.00	97.00		
202	(a) Two main wheels 4 ply or 6 ply rated tires, 6.50 -8, with tubes	X	23.00	97.00		
206	(a) One nose wheel 4 ply rating tire, 5.00-5, with regular tube	X	7.00	12.00		
	tire (used only with item 205 (b))	X	18.00	18.00		
	Wheel and Brake Assembly (Main)	X	34.00	55.00		
	Wheel Assembly (Goodyear 530858M-1)					
	Brake Assembly (Goodyear 9531053)					
301	Generator					
	(b) 50 amp Continental Motors 626380 or Delco Remy 1101909	X	16.00	37.00		
303	Landing Lights					
	(a) General Electric 4522 (2 ea @ 1 lb)	X	2.00	72.00		
304	Voltage Regulator					
	or (b) Delco Remy 1119224C	X	2.00	48.00		
403	DMCR Approved Airplane Flight Manual					
	(g) Model M35 Dated Sept 21, 1959 (Neglegible Weight)	X				
404	Air conditioner Instalation (including water)	X	18.00	148.00		
601	Stall warning indicator installation					
	(a) Safe Flight - Beech Drawing 35-361025 (Neglegible Weight)	X				
602	Heated Pilot Head					
	(a) Beech Drawing 35-361100	X	1.00	74.00		
603	Aileron Trimmer Control	X	1.00	73.00		
<b>SPECIAL OR OPTIONAL EQUIPMENT</b>						
	Instruments, Extra	X	1.00	100.00		
	Headrest	X	43.00	126.00		
	Rear Seat	X	2.00	102.00		
	Cabin Speaker	X	2.00	182.00		
	Rotating Beacon	X				
	<b>Radio Equipment (Factory Installed)</b>					
	<b>Totals as Equiped from Factory</b>		1962.0	77.7	152,509.0	
<b>EQUIPMENT CHANGES - ADDED / REMOVED</b>						
Rev #						
7	ADDED I.V.I. (Grimes) Strobe Assembly	08/06/68	A	2.00	82.00	164.0
9	ADDED Bendix T-12D ADF Receiver	01/25/74	A	3.50	63.00	220.5
9	ADDED Bendix ADF Indicator	01/25/74	A	2.10	67.00	140.7
9	ADDED Bendix ADF Loop	01/25/74	A	1.30	160.00	208.0
10	ADDED Beech A.P.U. P/N 35-5000-1	11/07/74	A	2.00	41.00	82.0

Weight Balance  
Beechcraft  
N9597R

Equipment Listing

Weight and Balance Data

ITEM #					Wt	Arm	Moment
10	ADDED	Cleveland Wheel & Brake Kit P/N 19949	11/07/74	A	-5.00	97.00	-485.0
14	ADDED	Edo-Aire Mitchell Autopilot (Roll Servo)	6/4/1976	A	2.50	107.00	267.5
14	ADDED	Edo-Aire Mitchell Autopilot (Amplifier & Cables)	6/4/1976	A	1.50	55.00	82.5
14	ADDED	Edo-Aire Mitchell Autopilot (Attitude Gyro)	6/4/1976	A	2.70	66.00	178.2
14	ADDED	Edo-Aire Mitchell Autopilot (Course Selector-DG)	6/4/1976	A	2.90	66.00	191.4
14	ADDED	Edo-Aire Mitchell Autopilot (Radio Coupler)	6/4/1976	A	1.00	63.00	63.0
16	ADDED	King KN-65 DME	12/22/1976	A	9.30	73.00	678.9
16	ADDED	King KI-214 Indicator	12/22/1976	A	3.20	63.00	201.6
16	ADDED	King KMA-20-03 Audio/Marker Panel	12/22/1976	A	2.30	58.00	133.4
18	ADDED	Brittain Industries Wing Tip Tanks	8/14/1981	A	24.00	90.00	2,160.0
19	ADDED	Precise Flight Standby Vacuum System	12/3/1986	A	1.50	38.00	57.0
20	ADDED	Beech "V" Tail Reinforcement kit P/N 35-4016-5	9/9/1987	A	1.00	245.00	245.0
21	<b>Aircraft Weighed - Corrective Entries</b>						
23	ADDED	3M - WX-10A Stormscope Display	3/28/1988	C	46.75	115.28	5,389.4
23	ADDED	3M - WX-10A Stormscope Processor	7/12/1988	A	3.40	62.00	210.8
23	ADDED	3M - WX-10A Stormscope Antenna	7/12/1988	A	4.50	165.00	742.5
23	ADDED	3M - WX-10A Stormscope Cabling & Mounting Shelf	7/12/1988	A	2.50	209.00	522.5
24	ADDED	Beryl D'Shannon Sloped Windshield Kit (STC SA997SO)	7/12/1988	A	4.00	100.00	400.0
24	ADDED	Ameri-King AK-450 ELT-Antenna & Mounting Shelf	7/12/1988	A	8.00	64.00	512.0
25	ADDED	Cleveland Nose Wheel (P/N 40-87D)	10/16/1989	A	4.50	185.00	832.5
26	ADDED	Hartzell GHC-L2YF-1BF Propeller (STC SA818CE)	3/6/1997	A	3.00	12.00	36.00
27	ADDED	Woodward A210680 AA/AC Governor (STC SA300CE)	2/23/1998	A	69.00	1.00	69.00
27	ADDED	Airwolf Remote Oil Filter, Adapter & Spin-on Filter	7/15/1998	A	3.00	10.00	30.00
28	ADDED	Garmin GTX-320 Transponder	3/23/2000	A	2.38	45.30	107.81
29	ADDED	Comant CI 120G/S Blade Antennas	11/18/2002	A	3.00	64.00	192.00
30	ADDED	J.P. Instruments EGT-701 Scanner (STC SA2586NM)	6/6/2004	A	2.80	266.25	745.50
31	ADDED	Beech Battery Box	6/8/2004	A	3.00	50.00	150.00
32	ADDED	Aviation Research Battery Box (STC SA00423SE)	6/1/2005	R	-2.00	54.00	-108.00
32	ADDED	Battery 12 Volt Concord RG35A	6/1/2005	A	3.50	47.00	164.50
33	ADDED	Airwolf (Walker) Air/Oil Separator System	3/24/2006	A	29.50	47.00	1,386.50
34	ADDED	Ameri-King AK350 Encoder (Unknown when Changed)	5/29/2006	A	2.50	36.00	90.00
35	ADDED	Pesco Vacuum Pump	3/5/2010	R	-4.00	41.00	-164.00
36	ADDED	Rapco 216CW Vacuum Pump	3/5/2010	A	3.00	41.00	123.00
37	REMOVED	Beech Factory Instrument Panel w/Engine & Fuel Gauges	10/13/2011	R	-30.00	68.00	-2,040.00
38	ADDED	A.R.S. Instrument Panel w/Engine & Fuel Gauges	10/13/2011	A	30.00	68.00	2,040.00
39	REMOVED	United Instruments V.S.I.	10/13/2011	R	-1.00	66.00	-66.00
40	REMOVED	Beech Turn & Bank	10/13/2011	R	-2.00	62.00	-124.00
41	REMOVED	8 Day Wind Up Clock	10/13/2011	R	-0.40	67.50	-27.00
42	ADDED	Davtron M803 Clock	10/13/2011	R	0.30	67.50	20.25
43	REMOVED	2 1/4" Vacuum Gauge	1/23/2012	A	0.30	67.50	20.25
44	ADDED	UMA 1" Vacuum Gauge	10/13/2011	R	-0.25	67.50	-16.88
45	REMOVED	Garwin Manifold Press Gauge	10/13/2011	A	0.10	67.50	6.75
46	ADDED	Garwin Fuel Press Gauge	10/13/2011	R	-1.25	66.00	-82.50
47	REMOVED	Garwin Fuel Press Gauge	10/13/2011	R	-1.25	66.00	-82.50
48	ADDED	United Instruments Dual Manifold/Fuel Press Gauge	10/13/2011	R	1.25	66.00	82.50
49	REMOVED	Delco Remy 1101909 50 Amp Generator & Bracket	10/13/2011	A	-17.50	37.00	-647.50
50	ADDED	Delco Remy 1119224C Voltage Regulator	10/13/2011	R	-2.00	48.00	-96.00
51	REMOVED	Plane Power 10-1050C 70 Amp Alternator & Bracket	10/13/2011	A	11.40	39.00	444.60
52	ADDED	Plane Power R1224 Voltage Regulator	10/13/2011	A	0.30	48.00	14.40
53	REMOVED	Precise Flight Standby Vacuum Source	10/13/2011	R	-1.50	38.00	-57.00
54	ADDED	I.V.I. (Grimes) Strobe System	10/13/2011	R	-2.00	82.00	-164.00
55	REMOVED	Whelen HDCF 3 Light Strobe System & Shelf	10/13/2011	A	4.50	159.00	715.50
56	ADDED	Whelen Red Beacon	10/13/2011	R	2.00	182.00	364.00
57	REMOVED	Kuntzelman Red LED Beacon	1/23/2012	A	1.00	112.00	112.00
58	ADDED	King KMA-20-03 Audio/Marker Panel & Tray	10/13/2011	R	2.30	58.00	133.40
59	REMOVED	Garmin GMA-340 Audio/Marker/ICS	1/23/2012	A	1.70	65.90	112.03
60	ADDED	King KX-170B #1	10/13/2011	R	-7.00	63.00	-441.00
61	REMOVED	King KI-214 Indicator	10/13/2011	R	-3.20	63.00	-201.60
62	ADDED	King KX-170B #2	10/13/2011	R	-7.00	63.00	-441.00
63	REMOVED	King KI-201C Indicator	10/13/2011	R	-2.50	64.00	-160.00
64	ADDED	Rami Com #2 Antenna	10/13/2011	R	-1.20	188.00	-225.60
65	REMOVED	Commant CI-122 Com #2 Antenna	10/13/2011	A	1.30	158.00	205.40
66	ADDED	Garmin GTX-320 Transponder	1/23/2012	A	3.00	64.00	192.00
67	REMOVED	Garmin GTX-327 Transponder	10/13/2011	R	-3.00	64.00	-192.00
68	ADDED	AmeriKing AK350 Encoder	10/13/2011	A	2.70	64.90	175.23
69	REMOVED	Aviation Research Systems Equipment Shelf	1/23/2012	A	2.70	64.90	175.23
70	ADDED	Sandia SAE 5-35 Encoder	10/13/2011	R	-1.50	78.00	-117.00
71	REMOVED	Bendix T12D ADF Receiver	10/13/2011	R	-1.80	54.00	-97.20
72	ADDED	Bendix ADF Indicator	10/13/2011	A	0.70	54.00	37.80

*Remove  
2/15/12*

**Weight Balance  
Beechcraft  
N9597R**

**Equipment Listing**

**Weight and Balance Data**

ITEM #					Wt	Arm	Moment	
73	REMOVED	Bendix ADF Loop	10/13/2011	R	-1.30	160.00	-208.00	
74	REMOVED	King KN-60 DME	10/13/2011	R	-5.50	63.00	-346.50	
75	REMOVED	AmeriKing AK-450 ELT & Antenna	10/13/2011	R	-4.50	185.00	-832.50	
76	ADDED	AmeriKing AK-451-23 406 ELT & Antenna	1/23/2012	A	4.50	185.00	832.50	
77	REMOVED	Edo-Aire Mitchell DG	10/13/2011	R	-2.90	66.00	-191.40	
78	REMOVED	Edo-Aire Mitchell 1C388 Radio Coupler	10/13/2011	R	-1.00	63.00	-63.00	
79	ADDED	Edo-Aire 1C388-2 Radio Coupler	1/23/2012	A	1.00	63.00	63.00	
80	ADDED	Bendix-King KNS-80 Nav-DME-G/S	1/23/2012	A	6.00	62.40	374.40	
81	ADDED	King KNI-520 ILS Indicator	1/23/2012	A	1.80	64.00	115.20	
82	ADDED	Garmin GNS-430W	2/2/2012	A	6.50	62.50	406.25	
83	ADDED	Garmin GA-35 GPS Antenna	2/2/2012	A	0.25	119.00	29.75	
84	ADDED	Shadin Micro Flow Fuel Flow Gauge & Transducer	10/13/2011	A	1.50	63.50	95.25	
85	ADDED	Aspen EFD-1000 Pro (PFD)	2/2/2012	A	2.40	66.00	158.40	
86	ADDED	Aspen Configuration Module (Pro)	2/2/2012	A	0.10	60.00	6.00	
87	ADDED	Aspen Remote Sensor Module w/GPS Sense	2/2/2012	A	0.20	199.25	39.85	
88	ADDED	Aspen EFD-1000 Pro (MFD)	2/2/2012	A	2.40	66.00	158.40	
89	ADDED	Aspen Configuration Module (MFD)	2/2/2012	A	0.10	60.00	6.00	
90	ADDED	Aspen Remote Sensor Module w/o GPS Sense	2/2/2012	A	0.20	214.00	42.80	
91	ADDED	Aspen EBB58 Backup Battery	2/2/2012	A	2.25	74.50	167.63	
92	ADDED	Aspen Analog Converter Unit	2/2/2012	A	0.80	54.00	43.20	
93	ADDED	A.R.S Autopilot Adapter	2/2/2012	A	0.20	54.00	10.80	
94	ADDED	Aspen EWR50 Datalink XM Weather Receiver	2/2/2012	A	1.40	55.50	77.70	
95	ADDED	Garmin GX-55A XM Weather Antenna	2/2/2012	A	0.25	92.50	23.13	
<b>Aircraft Weighed by ASI -5-29-2012- Corrective Entries</b>				5/29.12	C	-79.98	17.89	-1,430.92
								0.00
								0.00
<b>Added/Removed Equipment Totals</b>						159.50		14,733.96

**Equipment Status Legend:**

- X = Original factory equipped
- O = Factory option, not equipped
- A = Added equipment, currently installed
- R = Removed equipment, previously installed.
- C = Corrective Entries

Basic Weight + Unuseable Fuel and Oil

Equipment

Licensed Empty Weight (Total of above items)

Maximum Gross Weight from Factory for Take-Off and Landing  
 Gross Weight Increase with Addition of Brittain Tipp Tanks for Take-Off 8/14/1981  
 New Maximum Gross Weight for Take-Off  
 NOTE: Landing Gross Weight Remains 2950 Lbs.

Minus Empty Weight

Useful Load at Take-Off

Weight Lbs	C.G Arm Ins	Moment In/Lbs
1962.0	77.7	152,509.0
159.5		14,734.0
<u>2,121.50</u>	<u>78.8</u>	<u>167,242.97</u>
2950.0		
250.0		
3200.0		
-	<u>2121.5</u>	
	<u>1078.5</u>	

*Superseded 1/5/17*

# Aircraft Weighing Report

N9597R  
Raytheon M35  
Serial Number D-6191

Aircraft weighed on wheels using scales, s/n 26141 certified 12/22/2011. Aircraft weighed with no fuel and full oil.

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Nose	446.0	12.0	5352.0
Left	822.0	97.0	79734.0
Right	814.0	97.0	78958.0
Total	2082.0	78.79	164044.0
ADD:			
Main unusable fuel	34.5	79.1	2728.95
Aux unusable fuel	5.0	94.0	470.0
Total	2121.5	78.8	167242.95
Max Gross Weight	3200.0		
Empty Weight	2121.5		
Empty Weight CG	78.8		
Useful load	1078.5		
Max Landing Weight	2950.0		

May 29, 2012

P/N 11476 5-11

*Joseph W. Kelly A112263396*

BEECH MODEL K 35 & M-35

FAA IDENTIFICATION # \_\_\_\_\_

JIM KILGUS - OSBORN

FAA APPROVED  
CLASS. 3-NORMAL CATEGORY  
DATE: 3-12-63

BY: Charles R. Stank  
CHIEF, ENG. & MFG. BRANCH  
WESTERN REGION FAA

AIRPLANE FLIGHT MANUAL SUPPLEMENT  
FOR  
BEECHCRAFT WING TIP FUEL TANK INSTALLATION  
MANUFACTURED BY BRITTAIN INDUSTRIES

STC SAA-1629

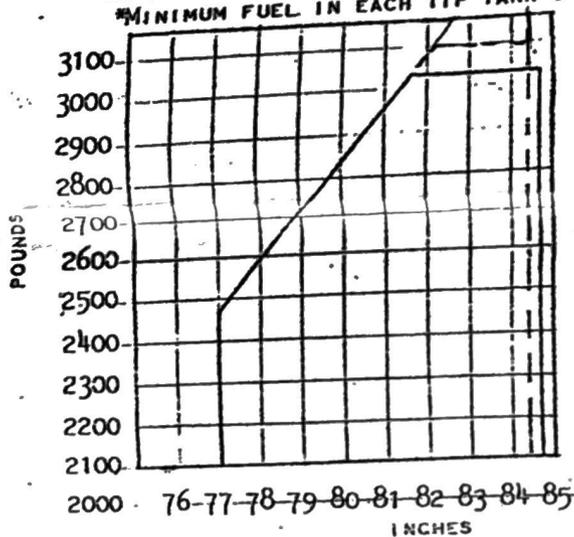
THIS AIRCRAFT IS EQUIPPED WITH WING TIP TANKS BRITTAIN PART #55000, 20 GALLONS EACH, AND MUST BE OPERATED IN COMPLIANCE WITH THE LIMITATIONS HEREIN.

I. LIMITATIONS SECTION

SAME AS PRESCRIBED IN APPROPRIATE CAA, FAA, OR DMCB APPROVED AIRPLANE FLIGHT MANUAL EXCEPT:

1. C.G. RANGE - (AS SHOWN BELOW)
2. MAXIMUM ALLOWABLE GROSS WEIGHT FOR LANDING IS 2950 LBS. <sup>3200#</sup>
3. MAXIMUM ALLOWABLE GROSS WEIGHT FOR TAKE-OFF IS ~~3100~~ <sup>3200#</sup> LBS. <sup>ref 17B</sup>
4. AUXILIARY WING TIP TANK FUEL TO BE USED IN LEVEL FLIGHT ONLY.
5. AIRCRAFT TO BE OPERATED IN NORMAL CATEGORY ONLY, WITH DESIGNED STRUCTURAL LOADING OF 3.8 G. NO AEROBATICS PERMITTED.
6. USE A MINIMUM OF 10 GALLONS OF FUEL FROM THE LH MAIN TANK BEFORE USING WING TIP TANK FUEL.

\*MINIMUM FUEL IN EACH TIP TANK 6 1/4 GALS. WHEN TAKE-OFF AT 3100 LBS.



C.G. RANGE WITHOUT FUEL IN TIP TANKS\*  
81.7" TO 84.7" AT 3030 LBS.  
77.0" TO 84.7" AT 2475 LBS. OR LESS

C.G. RANGE WITH FUEL IN TIP TANKS:\*\*  
82.1" TO 84.4" AT 3100 LBS.  
77.0" TO 84.4" AT 2475 LBS. OR LESS

\*\* (STRAIGHT LINE VARIATION BETWEEN POINTS GIVEN)

C.G. OF WING TIP TANK FUEL IS 89.5"

II. PROCEDURE SECTION

SAME AS PRESCRIBED IN APPROPRIATE CAA, FAA, OR DMCB APPROVED AIRPLANE FLIGHT MANUAL, EXCEPT:

1. LOAD TIP TANK FUEL SYMMETRICALLY.
2. IF UNSYMMETRICAL FUEL LOADING SHOULD OCCUR IN FLIGHT, ADEQUATE CONTROL IS AVAILABLE FOR LANDING.
3. AUXILIARY FUEL SELECTOR VALVES SHOULD BE IN "OFF" POSITION WHEN TIP TANKS ARE NOT IN USE. (EXCEPT FOR POSITIONING OF AUXILIARY FUEL VALVE TO ALLOW FOR OPERATION FROM EXISTING AUXILIARY SYSTEM).
4. FOR USE OF AUXILIARY FUEL PRESELECT THE TANK FROM WHICH FUEL WILL BE DRAWN BEFORE TURNING THE MASTER FUEL SELECTOR VALVE TO THE "AUXILIARY FUEL SYSTEM" POSITION.
5. EXCESS FUEL FROM THE ENGINE IS RETURNED TO THE LH MAIN TANK. TO PREVENT IN-ADVERTANT OVERFLOW OF FUEL USE A MINIMUM OF 10 GALLONS FROM THE LH MAIN TANK BEFORE SELECTING AN AUXILIARY FUEL CELL. RETURN TO OPERATION FROM LH MAIN TANK AT ANY TIME THAT THE LH FUEL QUANTITY INDICATOR INDICATES MORE THAN 3/4 FULL.