BUYERS' GUIDE

FOR TURBOPROPS

Charlie Bravo AVIATION

ATR 42-300 (42-500, 42-600)

CHARLIE'S INSIGHTS

The ATR 42 is unique in the fact that it is typically used as an airliner, unlike most of the turboprops in our Buyers' Guide. The ATR 42 is by far the largest of its turboprop competitors, with a fuselage that's nearly 74 and a half feet long. It can seat between 40 and 52 passengers, depending on its configuration. Due to its massive size, its operating costs are easily the highest among turboprops, as it costs a lot more to maintain and its engines burn close to 200 gallons of fuel per hour.

The ATR 42-300 model was the standard production version, produced from 1985 to 1997 before being replaced by the 42-500, which was in production through 2012. The 42-500 has improved PW127 engines, improved six-blade props, better hot and high performance and a redesigned cabin. The ATR 42-600 was the marketing designation for a 42-500 with an upgraded glass cockpit.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	74'5"
Height	24'10"
Wingspan	80'7"
Cabin (ft.)	
Length	31'4"
Height	6'3"
Width	8'4"
Typical Configuration	
Crew	3
Passengers	46
Pressurization (PSI)	N/A
Fuel Capacity (lbs & gals)	10,144 lbs 1,514 gal
Weight (lbs)	
Max Ramp	35,645.00
Max Takeoff	36,817.00
Max Landing	36,155.00
Useful Payload w/ Full Fuel	4,116.00
Basic Operating	22,108.00
Speed (knots)	
Normal Cruise TAS	263.00
Climb	
Normal (fpm)	1,320.00
Ceiling (ft.)	25,000.00
Takeoff Performance (ft.)	4,158.00
Landing Performance (ft.)	2,581.00
5000' + 20C BFL	N/A
Range (nm)	2,400.00

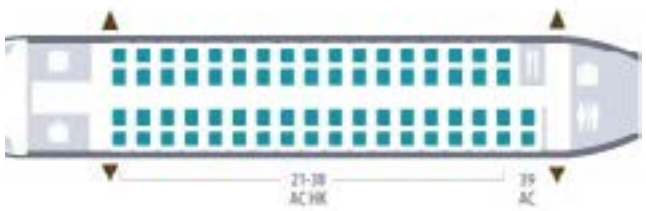
ANNUAL FIXED COSTS

Crew Expense	219,375.00
Hangar Cost	68,000.00
Insurance (Hull + Legal Liability)	30,250.00
Training	38,300.00
Total Fixed Costs	355,925.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	660.00
Total Direct Costs	1,604,460.00
Total Fixed Costs	355,925.00
Total Cost	1,960,385.00
Cost Per Hour	2,970.28
Cost Per Statute Mile	9.80



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	1,040.00
Burn Rate (Gal/hr)	208.00
Maintenance	1,391.00
Airframe	735.00
Engine/APU	656.00
Total Direct Costs	2,431.00
MPH (average)	303.00
Total Cost Per Statute Mile	8.02

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1985-2012

Serial Numbers: 003 & UP

Class: Turboprop

Standard Avionics: Thales

Engine Type: PW120 (121, 127E, 127M)

TBO: On Condition

Hots: On Condition

BEECHCRAFT 1900C (1900D)

CHARLIE'S INSIGHTS

Beechcraft's 1900 is the other turboprop airliner in our lineup, boasting a fuselage that's more than 57 and a half feet long. The Beechcraft 1900 typically seats 19 passengers. It remains in use for some regional airlines and as a freight airliner, although production of the aircraft was ceased in 2002. Two PT6A-65B engines power the 1900C, and the 1900D is equipped with the upgraded 67D engines.

The original 1900, first produced in 1982, had two airstair passenger boarding doors, which Beechcraft quickly realized was excessive. This led to the 1900C model that eliminated the aft airstair door. The 1900D model improved upon the 1900C's cabin, adding headroom that allowed passengers to stand up in the aisle. The 1900D also has more powerful engines, modified props, added winglets and an upgraded avionics system.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	57'7"
Height	15'5"
Wingspan	57'8"
Cabin (ft.)	
Length	25'3"
Height	4'10"
Width	4'6"
Typical Configuration	
Crew	2
Passengers	19
Pressurization (PSI)	N/A
Fuel Capacity (lbs & gals)	2,848 lbs 425 gal
Weight (lbs)	
Max Ramp	17,710.00
Max Takeoff	16,600.00
Max Landing	16,100.00
Useful Payload w/ Full Fuel	1,979.00
Basic Operating	9,848.00
Speed (knots)	
Normal Cruise TAS	260.00
Climb	
Normal (fpm)	N/A
Ceiling (ft.)	25,000.00
Takeoff Performance (ft.)	4,388.00
Landing Performance (ft.)	3,827.00
5000' + 20C BFL	N/A
Range (nm)	1,570.00

ANNUAL FIXED COSTS

Crew Expense	219,375.00
Hangar Cost	35,880.00
Insurance (Hull + Legal Liability)	30,000.00
Training	21,840.00
Total Fixed Costs	307,095.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	669.00
Total Direct Costs	867,024.00
Total Fixed Costs	307,095.00
Total Cost	1,174,119.00
Cost Per Hour	1,755.04
Cost Per Statute Mile	5.87

Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	640.00
Burn Rate (Gal/hr)	128.00
Maintenance	656.00
Airframe	293.00
Engine/APU	363.00
Total Direct Costs	1,296.00
MPH (average)	299.00
Total Cost Per Statute Mile	4.33

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1982-2002

Serial Numbers: UB-1 & UP (UE-1 & UP)

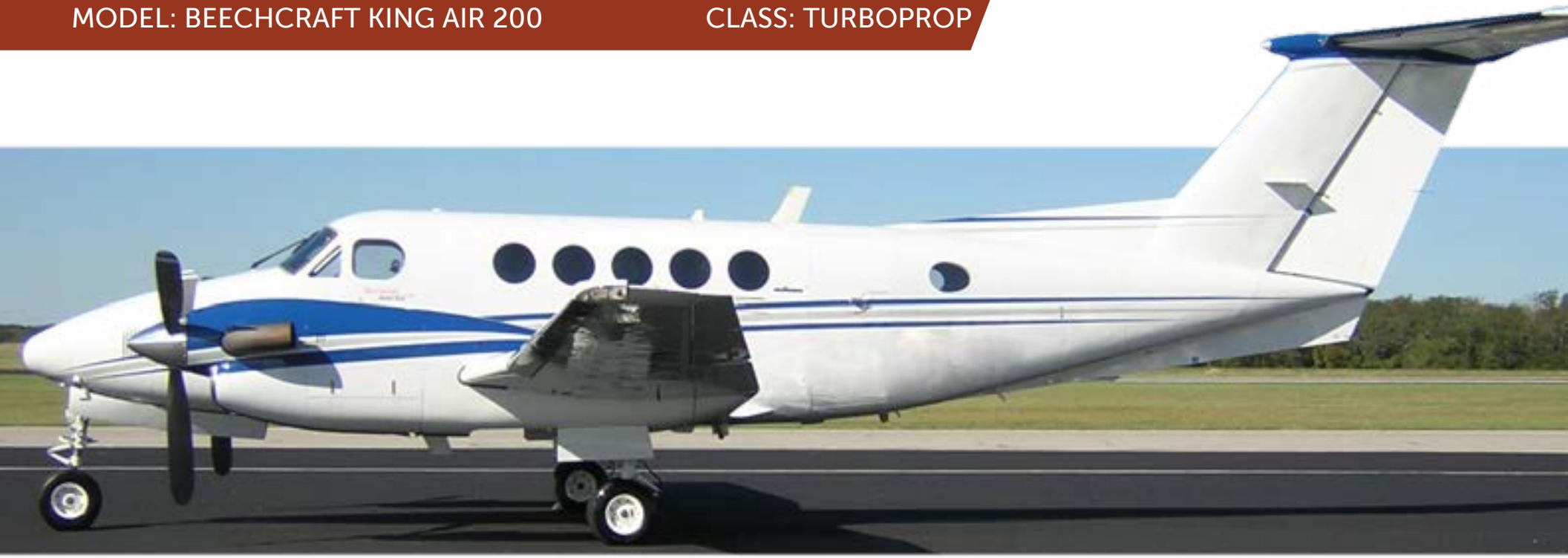
Class: Turboprop

Standard Avionics: Dual Collins

Engine Type: PT6A-65B (67D)

TBO: 9,000

Hots: 4,500



BEECHCRAFT KING AIR 200

CHARLIE'S INSIGHTS

Beechcraft's King Air 200 is one of many iterations of the longest tenured turboprop line of all time, the Super King Air, which includes the 200 and 300 series King Airs. Beechcraft dropped the "Super" designation in 1996, but continues to produce 200 and 300 King Air models. The original King Air 200 is powered by two Pratt & Whitney PT6A-41 engines that allow it to cruise at around 289 knots. These engines burn a mere 101 gallons per hour and allow the aircraft to fly approximately 1,500 nautical miles. The King Air 200 was in production from 1974 to 1981, but lived on in the form of the King Air B200 and the 250, both upgraded successors of the 200. The King Air 200 was the first King Air model to utilize the "T-tail" with the horizontal stabilizer, giving it a unique ramp presence while also making flap deployment and retraction easier on the pilot.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	43'9"
Height	15'0"
Wingspan	54'8"
Cabin (ft.)	
Length	16'8"
Height	4'10"
Width	4'6"
Typical Configuration	
Passengers	8
Pressurization (PSI)	6.00
Fuel Capacity (lbs & gals)	3,645 lbs 544 gal
Weight (lbs)	
Max Ramp	12,590.00
Max Takeoff	12,500.00
Max Landing	12,500.00
Useful Payload w/ Full Fuel	385.00
Basic Operating	8,336.00
Speed (knots)	
Normal Cruise TAS	289.00
Climb	
Normal (fpm)	2,450.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	5,168.00
Landing Performance (ft.)	3,309.00
5000' + 20C BFL	3,890.00
Range (nm)	1,500.00

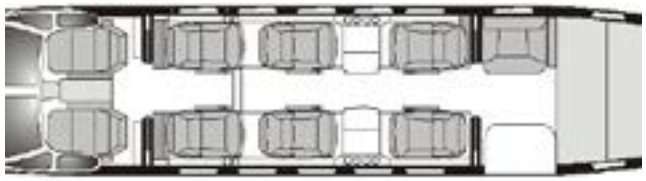
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	31,785.00
Insurance (Hull + Legal Liability)	7,166.25
Training	7,215.00
Total Fixed Costs	114,416.25

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	601.00
Total Direct Costs	835,390.00
Total Fixed Costs	114,416.25
Total Cost	949,806.25
Cost Per Hour	1,580.38
Cost Per Statute Mile	4.75



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	545.00
Burn Rate (Gal/hr)	109.00
Maintenance	845.00
Airframe	546.00
Engine/APU	299.00
Total Direct Costs	1.390.00
MPH (average)	333.00
Total Cost Per Statute Mile	4.17

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1974-1981

Serial Numbers: BB2 - BB912

Class: Turboprop

Standard Avionics: Dual Collins ProLine

Engine Type: PT6A-41 (42, 52, 61)

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR 250

CHARLIE'S INSIGHTS

Beechcraft's King Air 250 was the successor of the B200, continuing the Super King Air's run as the longest tenured turboprop line in the world. The 250 is essentially a B200 with Hartzell composite propellers, third-party winglets and Ram Air Recovery system. One of the reasons for the 250's popularity is the aircraft's versatility, able to haul heavy cargo into mountain ranges, fly business executives to meetings and take friends and family on vacations. Many King Air 250 owners use the aircraft for various purposes, making a relatively simple seat change to switch from one mission to the next. Compared to the King Air B200, the 250 is able to go more places, with more people, in more comfort. Its takeoff and landing performance is significantly better, allowing it to access airports with shorter runways that previous King Air models couldn't. In hot and high conditions, the difference in runway performance is even more noticeable. The most obvious physical change is the addition of winglets, improving lift and reducing drag.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	43'10"
Height	14'10"
Wingspan	57'10"
Cabin (ft.)	
Length	16'8"
Height	4'9"
Width	4'6"
Typical Configuration	
Passengers	8
Pressurization (PSI)	6.5
Fuel Capacity (lbs & gals)	3,645 lbs 544 gal
Weight (lbs)	
Max Ramp	12,590.00
Max Takeoff	12,500.00
Max Landing	12,500.00
Useful Payload w/ Full Fuel	2,450.00
Basic Operating	8,755.00
Speed (knots)	
Normal Cruise TAS	310.00
Climb	
Normal (fpm)	1,755.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	3,827.00
Landing Performance (ft.)	3,532.00
5000' + 20C BFL	3,099.00
Range (nm)	1,582.00

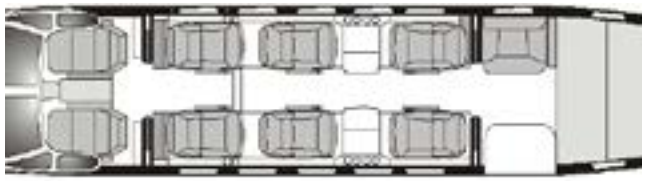
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	33,735.00
Insurance (Hull + Legal Liability)	17,858.10
Training	12,480.00
Total Fixed Costs	132,323.10

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	560.00
Total Direct Costs	682,640.00
Total Fixed Costs	132,323.10
Total Cost	814,963.10
Cost Per Hour	1,455.29
Cost Per Statute Mile	4.07



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	720.00
Burn Rate (Gal/hr)	144.00
Maintenance	499.00
Airframe	194.00
Engine/APU	305.00
Total Direct Costs	1,219.00
MPH (average)	357.00
Total Cost Per Statute Mile	3.41

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2011-present

Serial Numbers: BY117 & UP

Class: Turboprop

Standard Avionics: Collins ProLine 21

Engine Type: PT6A-52

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR 300 (300LW)

CHARLIE'S INSIGHTS

Beechcraft created two versions of the King Air 300, the standard Model 300 with an increased max takeoff weight of 14,000 lbs and the Model 300LW with a lower max takeoff weight limited to meet the aviation regulatory requirements of some countries. The 300LW was created with a lower certified Take-Off Gross Weight of 12,500 lbs specifically for the European market to meet certain tax requirements. For the 300, Beechcraft took the B200's airframe and gave it more powerful PT6A-60A engines, increasing its cruise speed by close to 30 knots, improving its climb rate and, as mentioned above, increasing its max takeoff weight. The King Air 300 has a range of close to 1,800 nautical miles and a cruise speed of just above 300 knots. The conversion from a 300LW to a 300 is fairly simple for those who want to carry more weight.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	43'10"
Height	15'0"
Wingspan	54'6"
Cabin (ft.)	
Length	16'8"
Height	4'9"
Width	4'6"
Typical Configuration	
Passengers	8
Pressurization (PSI)	6.50
Fuel Capacity (lbs & gals)	3,611 lbs 539 gal
Weight (lbs)	
Max Ramp	14,100.00
Max Takeoff	14,000.00
Max Landing	14,000.00
Useful Payload w/ Full Fuel	1,520.00
Basic Operating	8,707.00
Speed (knots)	
Normal Cruise TAS	317.00
Climb	
Normal (fpm)	2,844.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	3,851.00
Landing Performance (ft.)	3,157.00
5000' + 20C BFL	3,600.00
Range (nm)	1,795.00

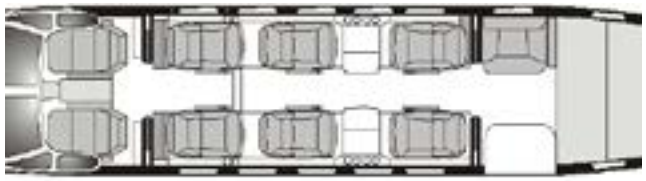
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	31,687.50
Insurance (Hull + Legal Liability)	6,727.50
Training	15,502.50
Total Fixed Costs	122,167.50

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	548.00
Total Direct Costs	764,460.00
Total Fixed Costs	122,167.50
Total Cost	886,627.50
Cost Per Hour	1,617.93
Cost Per Statute Mile	4.43



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	650.00
Burn Rate (Gal/hr)	130.00
Maintenance	745.00
Airframe	425.00
Engine/APU	320.00
Total Direct Costs	1,395.00
MPH (average)	365.00
Total Cost Per Statute Mile	3.82

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1984-1994

Serial Numbers: FA1 - FA247

Class: Turboprop

Standard Avionics: Dual Collins ProLine

Engine Type: PT6A-60A

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR 350 (I, IER, IC, ICER)

CHARLIE'S INSIGHTS

Due to the success of Beechcraft's 200 series of King Airs, they decided to move forward with a more powerful, redesigned successor in the King Air 300 series, which includes the 300 and the 350, along with their variants. The 350 line includes the 350i, 350iER, 350iC, and 350 iCER. The 350's cabin is close to three feet longer than the 300's, giving it room for nine passengers. The 350 was also given winglets that the 300 does not have. The 350i comes equipped with improvements to the cabin, increasing comfort levels and reducing cabin noise. The ER versions have an extended range, and the C versions come equipped with a cargo door. Wheels Up's selection of the King Air 350 as its primary platform has caused a resurgence in executive turboprop charter.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	46'8"
Height	14'4"
Wingspan	57'10"
Cabin (ft.)	
Length	19'5"
Height	4'9"
Width	4'6"
Typical Configuration	
Passengers	10
Pressurization (PSI)	6.6
Fuel Capacity (lbs & gals)	3,611 lbs 539 gal
Weight (lbs)	
Max Ramp	15,100.00
Max Takeoff	15,000.00
Max Landing	15,000.00
Useful Payload w/ Full Fuel	1,563.00
Basic Operating	9,638.00
Speed (knots)	
Normal Cruise TAS	310.00
Climb	
Normal (fpm)	2,700.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	3,217.00
Landing Performance (ft.)	3,161.00
5000' + 20C BFL	5,376.00
Range (nm)	1,806.00

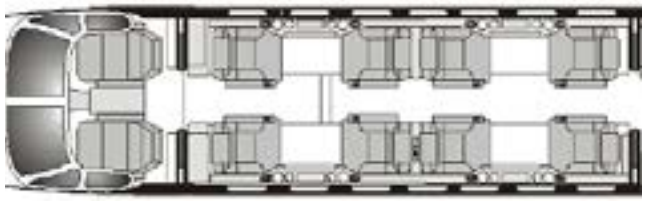
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	30,000.00
Insurance (Hull + Legal Liability)	28,500.00
Training	15,502.50
Total Fixed Costs	142,252.50

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	560.00
Total Direct Costs	659,120.00
Total Fixed Costs	142,252.50
Total Cost	801,372.50
Cost Per Hour	1,431.02
Cost Per Statute Mile	4.00



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	655.00
Burn Rate (Gal/hr)	131.00
Maintenance	522.00
Airframe	202.00
Engine/APU	320.00
Total Direct Costs	1,177.00
MPH (average)	357.00
Total Cost Per Statute Mile	3.30

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1990-present

Serial Numbers: FL1 & UP

Class: Turboprop

Standard Avionics: Dual Collins ProLine

Engine Type: PT6A-60A

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR B200 (SE, C, T, CT)

CHARLIE'S INSIGHTS

Beechcraft followed the King Air 200 with the B200, upgrading the aircraft with more powerful, more efficient PT6A-42 engines. There are several variants of the B200: the SE model is equipped with updated Electronic Flight Instrument System (EFIS) avionics, the C model has a cargo door, the T model is configured for aerial surveillance and the CT model combined the cargo door of the C model with the various subtleties added for surveillance on the T model. The B200 has a range of close to 1,800 nautical miles, which is among the best in its class. It's 275-knot cruise speed is pretty average compared to competing turboprops, but its low operational costs are among the best in its class, as well.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	43'9"
Height	15'0"
Wingspan	54'6"
Cabin (ft.)	
Length	16'8"
Height	4'10"
Width	4'6"
Typical Configuration	
Passengers	8
Pressurization (PSI)	6.60
Fuel Capacity (lbs & gals)	3,645 lbs 544 gal
Weight (lbs)	
Max Ramp	12,590.00
Max Takeoff	12,500.00
Max Landing	12,500.00
Useful Payload w/ Full Fuel	122.00
Basic Operating	8,600.00
Speed (knots)	
Normal Cruise TAS	289.00
Climb	
Normal (fpm)	2,450.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	5,168.00
Landing Performance (ft.)	3,374.00
5000' + 20C BFL	3,800.00
Range (nm)	1,755.00

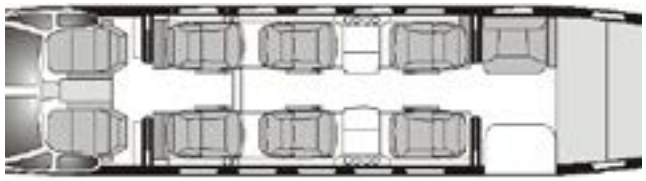
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	31,785.00
Insurance (Hull + Legal Liability)	11,310.00
Training	7,215.00
Total Fixed Costs	118,560.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	601.00
Total Direct Costs	640,666.00
Total Fixed Costs	118,560.00
Total Cost	759,226.00
Cost Per Hour	1,263.27
Cost Per Statute Mile	3.80



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	545.00
Burn Rate (Gal/hr)	109.00
Maintenance	521.00
Airframe	221.00
Engine/APU	300.00
Total Direct Costs	1,066.00
MPH (average)	333.00
Total Cost Per Statute Mile	3.20

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1981-2012

Serial Numbers: BB734 & UP

Class: Turboprop

Standard Avionics: Dual Collins ProLine

Engine Type: PT6A-42 (41, 52, 61)

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR B200GT (CGT)

CHARLIE'S INSIGHTS

The King Air B200 was followed by the B200GT, which Beechcraft fitted with upgraded PT6A-52 engines, compared to the PT6A-42 engines on the original B200. Beechcraft also produced a B200C-GT model, adding a cargo door to the B200GT.

The B200GT model has a higher cruise speed, better runway performance and performs better at hot temperatures and high altitude. One of the biggest differences between the B200 and B200GT is its performance at service ceiling. Although both aircraft can operate at a maximum of 35,000 feet, the B200GT continues to operate at full power at altitudes in the high 20s, while the original B200's max cruise speed tops out at altitudes in the high teens.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	43'9"
Height	14'9"
Wingspan	57'10"
Cabin (ft.)	
Length	16'8"
Height	4'6"
Width	4'6"
Typical Configuration	
Passengers	8
Pressurization (PSI)	6.50
Fuel Capacity (lbs & gals)	3,645 lbs 544 gal
Weight (lbs)	
Max Ramp	12,590.00
Max Takeoff	12,500.00
Max Landing	12,500.00
Useful Payload w/ Full Fuel	180.00
Basic Operating	8,541.00
Speed (knots)	
Normal Cruise TAS	290.00
Climb	
Normal (fpm)	1,785.00
Ceiling (ft.)	35,000.00
Takeoff Performance (ft.)	3,549.00
Landing Performance (ft.)	3,389.00
5000' + 20C BFL	3,800.00
Range (nm)	1,500.00

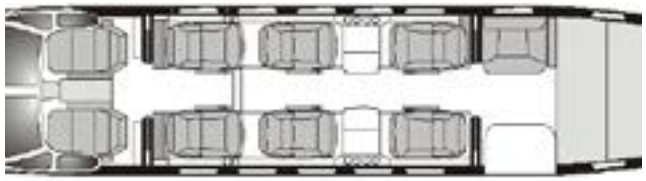
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	31,785.00
Insurance (Hull + Legal Liability)	16,380.00
Training	12,480.00
Total Fixed Costs	128,895.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	598.00
Total Direct Costs	690,690.00
Total Fixed Costs	128,895.00
Total Cost	819,585.00
Cost Per Hour	1,370.54
Cost Per Statute Mile	4.10



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	650.00
Burn Rate (Gal/hr)	130.00
Maintenance	505.00
Airframe	195.00
Engine/APU	310.00
Total Direct Costs	1,155.00
MPH (average)	334.00
Total Cost Per Statute Mile	3.46

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2008-2013

Serial Numbers: BY1 - BY118

Class: Turboprop

Standard Avionics: Collins ProLine 21

Engine Type: PT6A-52

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR C90 (-1, A, B, SE)

CHARLIE'S INSIGHTS

The King Air C90 was first manufactured in 1971, following the B90 model with a longer wingspan, higher maximum take-off weight and upgraded PT6A-20 engines. The C90-1 followed, equipped with PT6A-21 engines and improved pressurization. Next was the C90A, featuring redesigned engine cowlings, upgraded PT6A-135A engines and hydraulic landing gear. The C90B followed the C90A with an improved airframe, four-bladed props and prop synchophrasing to reduce cabin noise. Beechcraft's King Air 90 series is the smallest of the King Airs, typically seating five passengers. The C90 has a modest cruise speed of around 211 knots, and a range of about 1,100 nautical miles. Due to its age, its operational costs are among the highest of its competitors.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	35'6"
Height	14'4"
Wingspan	50'4"
Cabin (ft.)	
Length	12'5"
Height	4'10"
Width	4'6"
Typical Configuration	
Passengers	7
Pressurization (PSI)	5.00
Fuel Capacity (lbs & gals)	2,573 lbs 384 gal
Weight (lbs)	
Max Ramp	9,710.00
Max Takeoff	9,650.00
Max Landing	9,168.00
Useful Payload w/ Full Fuel	879.00
Basic Operating	6,021.00
Speed (knots)	
Normal Cruise TAS	219.00
Climb	
Normal (fpm)	1,955.00
Ceiling (ft.)	30,000.00
Takeoff Performance (ft.)	5,070.00
Landing Performance (ft.)	2,610.00
5000' + 20C BFL	3,600.00
Range (nm)	1,120.00

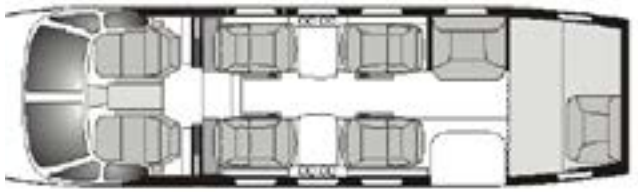
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	23,692.50
Insurance (Hull + Legal Liability)	5,425.88
Training	9,652.50
Total Fixed Costs	107,020.88

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	794.00
Total Direct Costs	871,812.00
Total Fixed Costs	107,020.88
Total Cost	978,832.88
Cost Per Hour	1,232.79
Cost Per Statute Mile	4.89



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	375.00
Burn Rate (Gal/hr)	75.00
Maintenance	723.00
Airframe	479.00
Engine/APU	244.00
Total Direct Costs	1,098.00
MPH (average)	252.00
Total Cost Per Statute Mile	4.36

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1971-2005

Serial Numbers: LJ502 - LJ1755

Class: Turboprop

Standard Avionics: Dual Collins

Engine Type: PT6A-20 (21, 28, 34, 35, 135A)

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR C90GT (GTI, GTX)

CHARLIE'S INSIGHTS

Beechcraft's King Air C90GT was first manufactured in 2006. Just a year later, Beechcraft announced the C90GTi, which featured ProLine 21 avionics not found on the GT model. In 2010, Beechcraft announced the GTx model, equipped with factory-standard winglets, strakes, swept-blade props and an increased maximum takeoff weight. The C90GT comes equipped with Pratt & Whitney PT6A-135A engines that improve cruise speed, climb rate, takeoff performance and efficiency, compared to the original C90. Cruise speed was increased to more than 250 knots, and its range remains similar to the C90 at just under 1,100 nautical miles. The GTx has a range closer to 1,200 nautical miles due to its factory-standard winglets, swept-blade props and dual aft strakes.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	35'7"
Height	14'4"
Wingspan	50'4"
Cabin (ft.)	
Length	12'5"
Height	4'10"
Width	4'6"
Typical Configuration	
Passengers	7
Pressurization (PSI)	5.00
Fuel Capacity (lbs & gals)	2,573 lbs 384 gal
Weight (lbs)	
Max Ramp	10,160.00
Max Takeoff	10,100.00
Max Landing	9,600.00
Useful Payload w/ Full Fuel	377.00
Basic Operating	7,020.00
Speed (knots)	
Normal Cruise TAS	253.00
Climb	
Normal (fpm)	2,200.00
Ceiling (ft.)	30,000.00
Takeoff Performance (ft.)	4,406.00
Landing Performance (ft.)	3,060.00
5000' + 20C BFL	3,372.00
Range (nm)	1,068.00

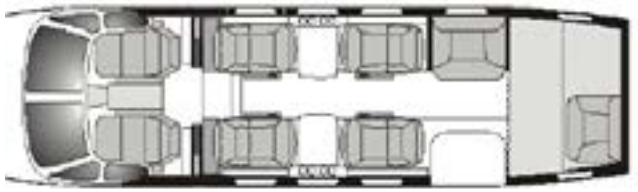
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	23,692.50
Insurance (Hull + Legal Liability)	9,945.00
Training	9,652.50
Total Fixed Costs	111,540.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	687.00
Total Direct Costs	717,915.00
Total Fixed Costs	111,540.00
Total Cost	829,455.00
Cost Per Hour	1,207.36
Cost Per Statute Mile	4.15



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	530.00
Burn Rate (Gal/hr)	106.00
Maintenance	515.00
Airframe	210.00
Engine/APU	305.00
Total Direct Costs	1,045.00
MPH (average)	291.00
Total Cost Per Statute Mile	3.59

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2006-present

Serial Numbers: LJ1727 & UP

Class: Turboprop

Standard Avionics: Collins ProLine 21

Engine Type: PT6A-135A

TBO: 3,600

Hots: 1,800

BEECHCRAFT KING AIR E90 (F90, F90-1)

CHARLIE'S INSIGHTS

Following the C90 was the E90, first produced in 1972. The two planes are very similar, other than the upgraded PT6A-28 engines found on the E90. In 1979, Beechcraft introduced the F90, which is essentially an E90 that features a T-tail, 750-hp engines and a 600-pound increase in useful payload. In 1983, the F90's PT6A-135A engine was placed in redesigned cowls, further decreasing drag and allowing for an increased cruise speed, improved climb rate and takeoff performance. This modified version was dubbed the F90-1. The E90 has a cruise speed right around 230 knots, about 20 knots faster than the C90. Its range is about 1,300 nautical miles, close to 200 miles longer than the C90's. The climb rates for the F90 and F90-1 are significantly better than the E90; about 500 and 600 fpm faster, respectively. Their cruise speeds are faster, as well, by about 10 and 20 knots, respectively.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	35'6"
Height	14'4"
Wingspan	50'4"
Cabin (ft.)	
Length	12'5"
Height	4'10"
Width	4'6"
Typical Configuration	
Passengers	7
Pressurization (PSI)	5.00
Fuel Capacity (lbs & gals)	3,176 lbs 474 gal
Weight (lbs)	
Max Ramp	10,160.00
Max Takeoff	10,100.00
Max Landing	9,700.00
Useful Payload w/ Full Fuel	N/A
Basic Operating	6,825.00
Speed (knots)	
Normal Cruise TAS	228.00
Climb	
Normal (fpm)	1,870.00
Ceiling (ft.)	30,000
Takeoff Performance (ft.)	4,221.00
Landing Performance (ft.)	2,737.00
5000' + 20C BFL	N/A
Range (nm)	1,290.00

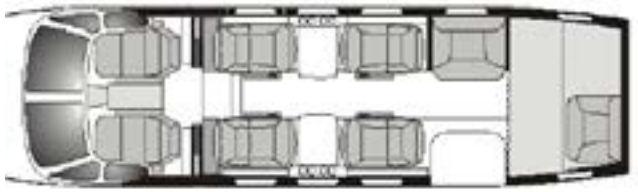
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	23,692.50
Insurance (Hull + Legal Liability)	6,038.00
Training	9,750.00
Total Fixed Costs	107,730.50

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	762.00
Total Direct Costs	935,736.00
Total Fixed Costs	107,730.50
Total Cost	1,043,466.50
Cost Per Hour	1,369.38
Cost Per Statute Mile	5.22



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	430.00
Burn Rate (Gal/hr)	86.00
Maintenance	798.00
Airframe	518.00
Engine/APU	280.00
Total Direct Costs	1,228.00
MPH (average)	263.00
Total Cost Per Statute Mile	4.67

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1972-1985

Serial Numbers: LW1 - LW347 (LA2 - LA236)

Class: Turboprop

Standard Avionics: Dual Collins

Engine Type: PT6A-28 (34, 35, 135, 135A)

TBO: 3,600

Hots: 1,800

CESSNA 208B GRAND CARAVAN

CHARLIE'S INSIGHTS

Cessna's 208 Caravan has been in production since 1982, with the 208B Grand Caravan making its first appearance in 1987. The 208B Grand Caravan was stretched by 4 feet, compared to the original Caravan I and comes equipped with more powerful PT6A-114A engines. The 208B Grand Caravan EX was certified in 2012, equipped with PT6A-140 engines that significantly improve its climb rate. The Super Cargomaster is the "pure cargo" version of the aircraft, which FedEx uses heavily. The 208B Grand Caravan is Cessna's largest single-engine aircraft to date. The 208B holds 340 cubic feet of cargo, and has an optional "belly pod" that you can add for an additional 111 cubic feet of cargo space. Speed is clearly not its strong suit, with a 177-knot cruise speed and 1,275-fpm climb rate. It comes equipped with 14 passenger seats, though the FAA allows a maximum of nine passengers and two crew members on board a turbine aircraft. It also comes equipped with four doors, one for each crew member, an airstair door and a cargo door.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	41'7"
Height	15'6"
Wingspan	52'2"
Cabin (ft.)	
Length	16'9"
Height	4'6"
Width	5'4"
Typical Configuration	
Passengers	9
Pressurization (PSI)	N/A
Fuel Capacity (lbs & gals)	2,224 lbs 332 gal
Weight (lbs)	
Max Ramp	8,842.00
Max Takeoff	8,750.00
Max Landing	8,500.00
Useful Payload w/ Full Fuel	1,259.00
Basic Operating	5,138.00
Speed (knots)	
Normal Cruise TAS	177.00
Climb	
Normal (fpm)	1,275.00
Ceiling (ft.)	25,000.00
Takeoff Performance (ft.)	2,360.00
Landing Performance (ft.)	2,005.00
5000' + 20C BFL	3,604.00
Range (nm)	1,162.00

ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	28,762.50
Insurance (Hull + Legal Liability)	12,285.00
Training	8,580.00
Total Fixed Costs	117,877.50

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	989.00
Total Direct Costs	492,522.00
Total Fixed Costs	117,877.50
Total Cost	610,399.50
Cost Per Hour	617.19
Cost Per Statute Mile	3.05

Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	270.00
Burn Rate (Gal/hr)	54.00
Maintenance	228.00
Airframe	106.00
Engine/APU	122.00
Total Direct Costs	498.00
MPH (average)	204.00
Total Cost Per Statute Mile	2.44

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1987-present

Serial Numbers: 208B45 & UP

Class: Turboprop

Standard Avionics: Dual Garmin

Engine Type: PT6A-114 (114A, 42A, 140)

TBO: 3,600

Hots: 1,800

PIAGGIO AVANTI P180 (P180II, EVO)

CHARLIE'S INSIGHTS

The first thing you'll notice about the Piaggio Avanti P180 is its unique design, featuring "pusher" configured propellers mounted behind their respective engines. It also features a unique three-surface design, incorporating a t-tail and a pair of forewings with landing flaps located near the nose of the aircraft. Piaggio obtained certification on the P180II in 2005, which includes more powerful, more efficient PT6 engines and upgraded avionics. Piaggio also developed a P180Evo, featuring an extra fuel tank, composite props, winglets and other aerodynamic improvements. The P180's 345-knot cruise speed is easily the best among turboprop competitors, rivaling the cruise speed of some light jets while operating at a significantly lower hourly cost. Its climb rate is far and away the best among turboprops, as well, at 3,650 fpm. Its range, however, isn't incredibly impressive at 1,440 nautical miles. Piaggio improved upon the P180's range with the Evo model, which is able to fly about 1,500 nautical miles.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	47'4"
Height	13'2"
Wingspan	46'0"
Cabin (ft.)	
Length	14'11"
Height	5'10"
Width	6'1"
Typical Configuration	
Passengers	7
Pressurization (PSI)	9.00
Fuel Capacity (lbs & gals)	2,633 lbs 393 gal
Weight (lbs)	
Max Ramp	12,150.00
Max Takeoff	11,550.00
Max Landing	10,945.00
Useful Payload w/ Full Fuel	778.00
Basic Operating	7,800.00
Speed (knots)	
Normal Cruise TAS	345.00
Climb	
Normal (fpm)	3,650.00
Ceiling (ft.)	41,000
Takeoff Performance (ft.)	3,023.00
Landing Performance (ft.)	3,475.00
5000' + 20C BFL	4,170.00
Range (nm)	1,440.00

ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	25,837.50
Insurance (Hull + Legal Liability)	10,627.50
Training	31,395.00
Total Fixed Costs	136,110.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	504.00
Total Direct Costs	657,720.00
Total Fixed Costs	136,110.00
Total Cost	793,830.00
Cost Per Hour	1,575.06
Cost Per Statute Mile	3.97

Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	655.00
Burn Rate (Gal/hr)	131.00
Maintenance	650.00
Airframe	270.00
Engine/APU	380.00
Total Direct Costs	1,305.00
MPH (average)	397.00
Total Cost Per Statute Mile	3.29

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1990-present

Serial Numbers: 1001 & UP

Class: Turboprop

Standard Avionics: Collins ProLine II

Engine Type: PT6A-66

TBO: 3,600

Hots: 1,800

PILATUS PC-12/45 (PC-12/47)

CHARLIE'S INSIGHTS

The single-engine Pilatus PC-12 took its first flight in 1991, and made its first delivery in 1995. 10 years after the first PC-12/45 was delivered, the PC-12/47 made its debut in 2005. Both the PC-12/45 and PC-12/47 models come equipped with Pratt & Whitney PT6A-67B engines, but the 47's max takeoff weight was increased by about 500 pounds, and its cabin noise was decreased significantly. Pilatus' objective with this aircraft was to create the first single-engine turboprop capable of carrying large volumes at high speeds across long distances. Both models have a cruise speed of about 254 knots and a range of about 1,420 nautical miles, which are pretty average compared to competing turboprops. The fact that is has a single engine significantly decreased its maintenance and fuel costs, though, so its operating costs are the lowest among its competitors. With a very loyal customer base, Pilatus aircraft typically sell quickly and hold value better than competitors.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	47'4"
Height	14'0"
Wingspan	53'4"
Cabin (ft.)	
Length	16'11"
Height	4'9"
Width	5'0"
Typical Configuration	
Passengers	7
Pressurization (PSI)	5.80
Fuel Capacity (lbs & gals)	2,704 lbs 403 gal
Weight (lbs)	
Max Ramp	9,965.00
Max Takeoff	9,920.00
Max Landing	9,920.00
Useful Payload w/ Full Fuel	1,195.00
Basic Operating	6,401.00
Speed (knots)	
Normal Cruise TAS	254.00
Climb	
Normal (fpm)	1,920.00
Ceiling (ft.)	30,000.00
Takeoff Performance (ft.)	2,389.00
Landing Performance (ft.)	2,126.00
5000' + 20C BFL	3,770.00
Range (nm)	1,416.00

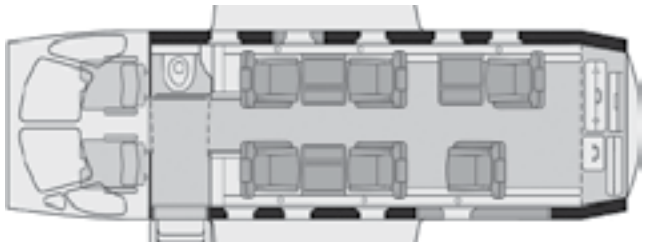
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	33,442.50
Insurance (Hull + Legal Liability)	9,886.50
Training	7,312.50
Total Fixed Costs	118,891.50

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	683.00
Total Direct Costs	520,446.00
Total Fixed Costs	118,891.50
Total Cost	639,337.50
Cost Per Hour	936.07
Cost Per Statute Mile	3.20



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	345.00
Burn Rate (Gal/hr)	69.00
Maintenance	417.00
Airframe	219.00
Engine/APU	198.00
Total Direct Costs	762.00
MPH (average)	293.00
Total Cost Per Statute Mile	2.60

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1995-present

Serial Numbers: 101 & UP

Class: Turboprop

Standard Avionics: Dual Bendix/King

Engine Type: PT6A-67B (67P)

TBO: 3,500

Hots: 1,750

PILATUS PC-12NG

CHARLIE'S INSIGHTS

In 2008, Pilatus delivered the first PC-12NG (stands for "next generation") model, with improved PT6A-67P engines, slightly increasing range and cruise speed. It also comes equipped with a glass cockpit featuring Honeywell's Primus Apex avionics system, an upgrade from the Bendix/King system found on the earlier models. The upgraded engines and modified winglets increase the PC-12NG's cruise speed to just over 260 knots, and increase its range to more than 1,600 nautical miles, a 200-mile increase from the PC-12/45. The biggest draw to the NG, however, is its improved avionics system, which includes automatic pressurization control and cursor controlled inputs to the navigation system. Earlier PC-12 models were considered some of the only "high end" models without flat-panel avionics. As a company, Pilatus controls production well and introduces few new products, which helps the planes retain value in comparison to competitors who often sabotage existing lines with upgrades.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	47'4"
Height	14'0"
Wingspan	53'5"
Cabin (ft.)	
Length	16'11"
Height	4'10"
Width	5'0"
Typical Configuration	
Passengers	7
Pressurization (PSI)	5.80
Fuel Capacity (lbs & gals)	2,704 lbs 403 gal
Weight (lbs)	
Max Ramp	10,495.00
Max Takeoff	10,450.00
Max Landing	9,921.00
Useful Payload w/ Full Fuel	984.00
Basic Operating	6,612.00
Speed (knots)	
Normal Cruise TAS	261.00
Climb	
Normal (fpm)	1,920.00
Ceiling (ft.)	30,000.00
Takeoff Performance (ft.)	2,389.00
Landing Performance (ft.)	2,126.00
5000' + 20C BFL	4,450.00
Range (nm)	1,608.00

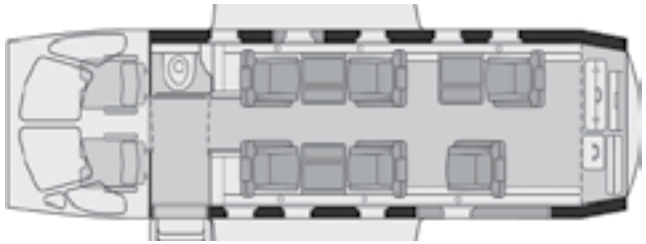
ANNUAL FIXED COSTS

Crew Expense	68,250.00
Hangar Cost	33,442.50
Insurance (Hull + Legal Liability)	21,766.88
Training	10,920.00
Total Fixed Costs	134,379.38

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	665.00
Total Direct Costs	492,100.00
Total Fixed Costs	134,379.38
Total Cost	626,479.38
Cost Per Hour	942.07
Cost Per Statute Mile	3.13



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	375.00
Burn Rate (Gal/hr)	75.00
Maintenance	365.00
Airframe	167.00
Engine/APU	198.00
Total Direct Costs	740.00
MPH (average)	301.00
Total Cost Per Statute Mile	2.46

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2008-present

Serial Numbers: 1001 & UP

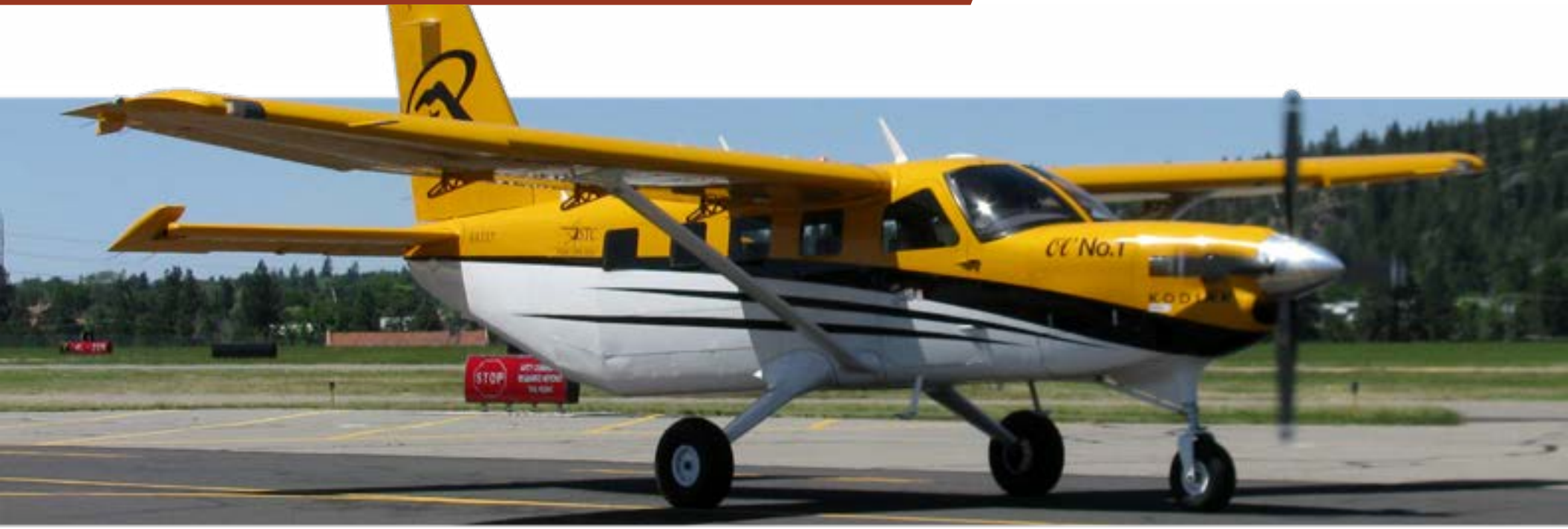
Class: Turboprop

Standard Avionics: Honeywell Primus Apex

Engine Type: PT6A-67P

TBO: 3,500

Hots: 1,750



QUEST KODIAK

CHARLIE'S INSIGHTS

Although the Quest Kodiak didn't enter production until 2008, design of the aircraft began in 1999, and its first flight took place in 2004. One of the major draws to the Kodiak is how easily its configuration can be changed to fit your mission, thanks to the easily removed track-mounted passenger seats. Its cargo door makes it easy to load and unload for utilitarian purposes, and an executive interior with club seating is available, as well. Not known for its power, the Quest Kodiak has a normal cruise speed of 150 knots and a climb rate of about 1,370 fpm. Its range is a modest 1,000 nautical miles. Its runway performance, however, is the best in its class, requiring only 1,700 feet for takeoff and 1,500 for landing. It's also one of the cheapest turboprops to operate.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	33'10"
Height	15'4"
Wingspan	45'0"
Cabin (ft.)	
Length	15'6"
Height	4'6"
Width	4'9"
Typical Configuration	
Passengers	9
Pressurization (PSI)	N/A
Fuel Capacity (lbs & gals)	2,144 lbs 320 gal
Weight (lbs)	
Max Ramp	7,305.00
Max Takeoff	7,255.00
Max Landing	6,690.00
Useful Payload w/ Full Fuel	1,190.00
Basic Operating	3,876.00
Speed (knots)	
Normal Cruise TAS	150.00
Climb	
Normal (fpm)	1,371.00
Ceiling (ft.)	25,000.00
Takeoff Performance (ft.)	1,677.00
Landing Performance (ft.)	1,476.00
5000' + 20C BFL	2,396.00
Range (nm)	1,005.00

ANNUAL FIXED COSTS

Crew Expense	79,219.00
Hangar Cost	19,987.50
Insurance (Hull + Legal Liability)	11,553.75
Training	8,580.00
Total Fixed Costs	119,340.25

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	1,157.00
Total Direct Costs	568,087.00
Total Fixed Costs	119,340.25
Total Cost	687,427.25
Cost Per Hour	594.15
Cost Per Statute Mile	3.44

Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	245.00
Burn Rate (Gal/hr)	49.00
Maintenance	246.00
Airframe	105.00
Engine/APU	141.00
Total Direct Costs	491.00
MPH (average)	173.00
Total Cost Per Statute Mile	2.84

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2008-present

Serial Numbers: 100-0003 & UP

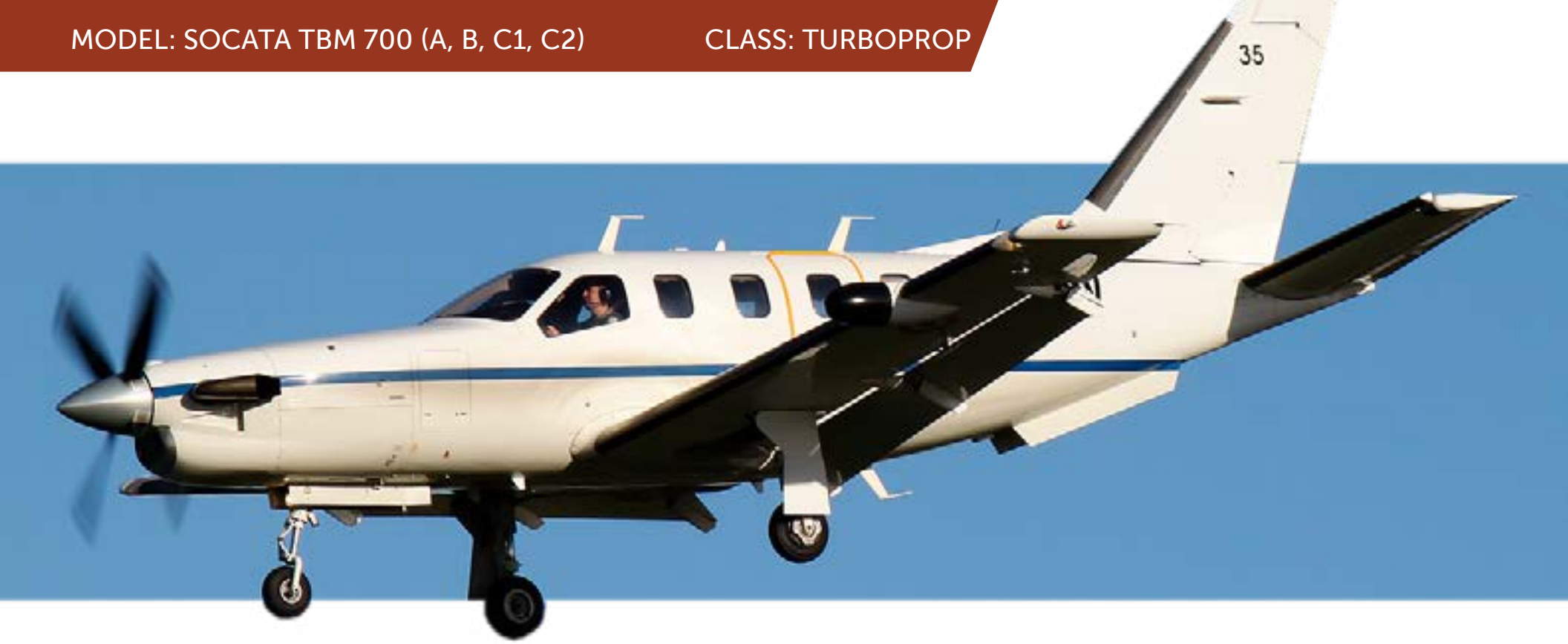
Class: Turboprop

Standard Avionics: Garmin G1000

Engine Type: PT6A-34

TBO: 4,000

Hots: 2,000



SOCATA TBM 700 (A, B, C1, C2)

CHARLIE'S INSIGHTS

Socata's single-engine TBM 700 was first introduced in 1991, and was the basis for the 700A, 700B, 700 C1, 700 C2, 850, 900, and 930 that followed. The five-passenger 700 model and its variants were produced from 1991 through 2005 with a Pratt & Whitney Canada PT6A-64 engine. The 700B is equipped with a wider entrance door and increased maximum zero fuel weight, the 700 C1 comes with a rear unpressurized cargo compartment, reinforced structure, and a new air conditioning system, and the 700 C2 has an increased maximum take-off weight in addition to the C1's upgrades. The TBM 700 has a normal cruise speed of 282 knots, which is among the upper echelon of its single-pilot turboprop competitors. Its 1,200-nautical-mile range, however, is among the shortest in its class.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	34'10"
Height	14'4"
Wingspan	41'7"
Cabin (ft.)	
Length	15'0"
Height	4'0"
Width	3'11"
Typical Configuration	
Passengers	5
Pressurization (PSI)	6.2
Fuel Capacity (lbs & gals)	1,884 lbs 281 gal
Weight (lbs)	
Max Ramp	7,430.00
Max Takeoff	7,394.00
Max Landing	7,024.00
Useful Payload w/ Full Fuel	637.00
Basic Operating	4,767.00
Speed (knots)	
Normal Cruise TAS	291.00
Climb	
Normal (fpm)	1,570.00
Ceiling (ft.)	31,000.00
Takeoff Performance (ft.)	3,022.00
Landing Performance (ft.)	2,864.00
5000' + 20C BFL	4,282.00
Range (nm)	1,378.00

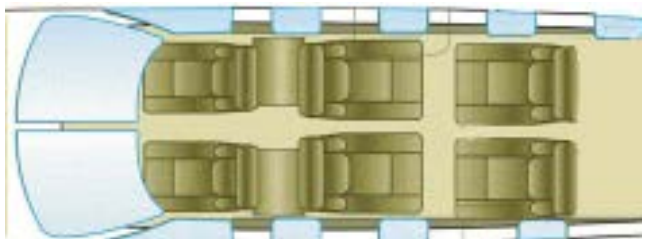
ANNUAL FIXED COSTS

Crew Expense	79,219.00
Hangar Cost	16,575.00
Insurance (Hull + Legal Liability)	14,650.00
Training	6,678.00
Total Fixed Costs	117,122.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	597.00
Total Direct Costs	383,274.00
Total Fixed Costs	117,122.00
Total Cost	500,396.00
Cost Per Hour	838.18
Cost Per Statute Mile	2.50



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	295.00
Burn Rate (Gal/hr)	59.00
Maintenance	347.00
Airframe	159.00
Engine/APU	188.00
Total Direct Costs	642.00
MPH (average)	335.00
Total Cost Per Statute Mile	1.92

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 1991-2005

Serial Numbers: 002 - 345

Class: Turboprop

Standard Avionics: Dual King

Engine Type: PT6A-64

TBO: 3,500

Hots: 1,750

SOCATA TBM 850

CHARLIE'S INSIGHTS

Socata's TBM 850 followed the TBM 700 and its variants, beginning production in 2006. Compared to the 700 model, the 850 has an increased maximum cruise speed and climb power by way of an improved PT6A-66D engine. The 850's increased power gives it a normal cruise speed of just over 300 knots, about 20 knots higher than its predecessor. Its climb rate was improved from 1,570 feet per minute to 2,000, and its range was increased by close to 200 nautical miles over the 700 model. Beginning in 2008, the TBM 850 came equipped with Garmin's G1000 integrated flight deck as standard equipment.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	34'10"
Height	14'3"
Wingspan	41'7"
Cabin (ft.)	
Length	15'0"
Height	4'0"
Width	4'0"
Typical Configuration	
Passengers	5
Pressurization (PSI)	6.2
Fuel Capacity (lbs & gals)	2,017 lbs 301 gal
Weight (lbs)	
Max Ramp	7,430.00
Max Takeoff	7,394.00
Max Landing	7,024
Useful Payload w/ Full Fuel	908.00
Basic Operating	4,474.00
Speed (knots)	
Normal Cruise TAS	320.00
Climb	
Normal (fpm)	2,000.00
Ceiling (ft.)	31,000.00
Takeoff Performance (ft.)	3,023.00
Landing Performance (ft.)	2,864.00
5000' + 20C BFL	4,282.00
Range (nm)	1,520.00

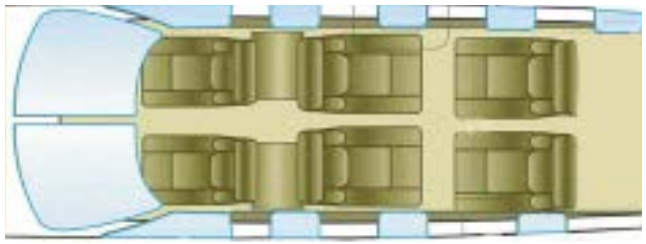
ANNUAL FIXED COSTS

Crew Expense	79,219.00
Hangar Cost	16,575.00
Insurance (Hull + Legal Liability)	22,000.00
Training	8,700.00
Total Fixed Costs	126,294.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	543.00
Total Direct Costs	391,503.00
Total Fixed Costs	126,294.00
Total Cost	517,797.00
Cost Per Hour	953.59
Cost Per Statute Mile	2.59



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	390.00
Burn Rate (Gal/hr)	78.00
Maintenance	331.00
Airframe	143.00
Engine/APU	188.00
Total Direct Costs	721.00
MPH (average)	368.00
Total Cost Per Statute Mile	1.96

*Does not include catering, expenses, or pilot fees.

Years Manufactured: 2006-2014

Serial Numbers: 346 - 999

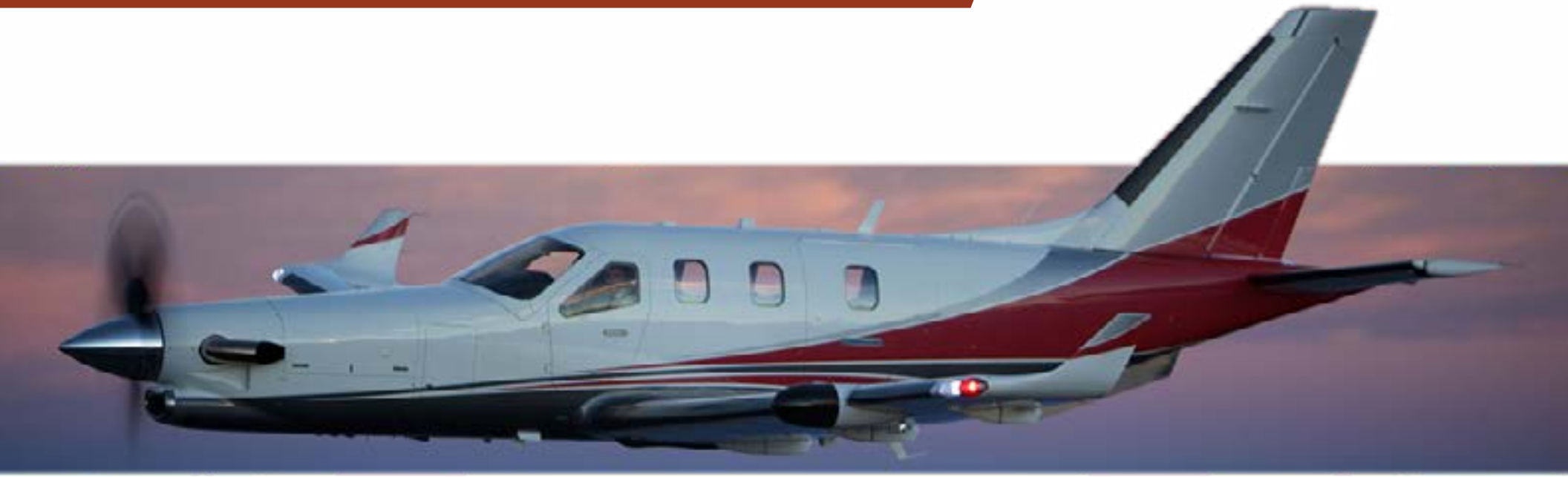
Class: Turboprop

Standard Avionics: Garmin G1000 ('08+)

Engine Type: PT6A-66D

TBO: 3,500

Hots: 1,750



SOCATA TBM 900 (930)

CHARLIE'S INSIGHTS

The TBM 900 model, introduced in 2014, is nearly identical to the 850, apart from improved aerodynamic inlet and performance optimization, giving it a higher maximum cruise speed and an increased range. It also comes equipped with an upgraded five-bladed carbon fiber Hartzell propeller to increase performance and reduce cabin noise. The 900 has a normal cruise speed of about 308 knots, a slight increase over its predecessor, as well as an improved range of just over 1,700 nautical miles. Where its improved performance is really noticable is in hot and high conditions, due to its 850-hp flat-rated engines.

BASIC CONFIGURATION

Fuselage (ft.)	
Length	35’3”
Height	14’4”
Wingspan	42’2”
Cabin (ft.)	
Length	15’0”
Height	4’1”
Width	4’0”
Typical Configuration	
Passengers	5
Pressurization (PSI)	6.2
Fuel Capacity (lbs & gals)	2,017 lbs 301 gal
Weight (lbs)	
Max Ramp	7,430.00
Max Takeoff	7,394.00
Max Landing	7,024.00
Useful Payload w/ Full Fuel	910.00
Basic Operating	4,829.00
Speed (knots)	
Normal Cruise TAS	330.00
Climb	
Normal (fpm)	2,005.00
Ceiling (ft.)	31,000.00
Takeoff Performance (ft.)	3,000.00
Landing Performance (ft.)	3,500.00
5000' + 20C BFL	3,475.00
Range (nm)	1,730.00

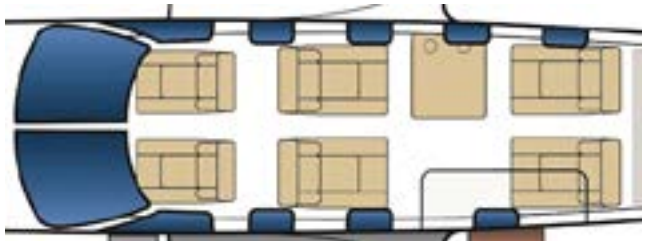
ANNUAL FIXED COSTS

Crew Expense	79,219.00
Hangar Cost	16,575.00
Insurance (Hull + Legal Liability)	28,500.00
Training	8,700.00
Total Fixed Costs	132,994.00

*Costs calculated on US averages; will be different in other world regions

ANNUAL BUDGET

Miles	200,000.00
Hours	526.00
Total Direct Costs	373,986.00
Total Fixed Costs	132,994.00
Total Cost	506,980.00
Cost Per Hour	963.84
Cost Per Statute Mile	2.53



Costs are calculated in U.S. dollars, printed courtesy of Aircraft Cost Calculator.

DIRECT COSTS PER/HR

Fuel (at $5/gal)	375.00
Burn Rate (Gal/hr)	75.00
Maintenance	336.00
Airframe	148.00
Engine/APU	188.00
Total Direct Costs	711.00
MPH (average)	380.00
Total Cost Per Statute Mile	1.87

*Does not include catering, expenses, or pilot fees.

- Years Manufactured: 2014-present
- Serial Numbers: 1000 & UP
- Class: Turboprop
- Standard Avionics: Garmin G1000
- Engine Type: PT6A-66D
- TBO: 3,500
- Hots: 1,750

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