

# ARCHIVED REPORT

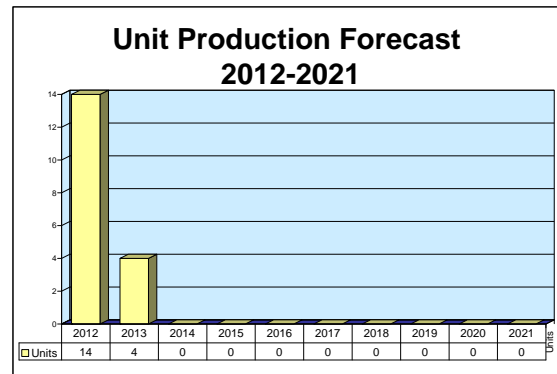
For data and forecasts on current programs please visit

[www.forecastinternational.com](http://www.forecastinternational.com) or call +1 203.426.0800

## Hawker Beechcraft 750/900XP

### Outlook

- Hawker Beechcraft filed for Chapter 11 bankruptcy in early May 2012
- Hawker Beechcraft announced plans in October 2012 to exit the business jet market, leaving the future of the Hawker 900XP in doubt
- Production of the Hawker 750 ended in 2011



### Orientation

**Description.** Twin-turboprop-powered, medium/long-range corporate/executive transport aircraft.

**Sponsor.** Privately sponsored by Hawker Beechcraft.

**Status.** Hawker 900XP in production. Production of Hawker 750 suspended.

**Total Produced.** Through June 2012, 116 Hawker 850XPs, 177 Hawker 900XPs, and 49

Hawker 750s. Production of earlier variants includes an additional 1,365 aircraft.

**Application.** Medium/long-range business/executive passenger transportation.

**Price Range.** Hawker 750, \$13.3 million; Hawker 900XP, \$16.0 million.

## Hawker Beechcraft 750/900XP

Hawker 900XP

Source: Hawker Beechcraft

## Contractors

## Prime

<b>Hawker Beechcraft Corp</b>	<a href="http://www.hawkerbeechcraft.com">http://www.hawkerbeechcraft.com</a> , 10511 E Central Ave, Wichita, KS 67026 United States, Tel: + 1 (316) 676-7111, Prime
-------------------------------	--

## Subcontractor

<b>Aero Space Controls Corp</b>	1050 N Mosley, Wichita, KS 67214 United States, Tel: + 1 (316) 264-2875, Fax: + 1 (316) 264-1639, Email: skeith@aerospace-controls.com (Environmental Control System)
<b>Aerospace Systems &amp; Technologies Inc</b>	3213 Arnold Ave, Salina, KS 67401 United States, Tel: + 1 (785) 493-0946, Fax: + 1 (785) 493-0950, Email: TKSSales@weepingwings.com (TKS Weeping Wing Anti-icing [De-icing] System)
<b>Aircraft Security &amp; Alert Systems</b>	3863 Royal, Dallas, TX 75229 United States, Tel: + 1 (214) 956-9563, Fax: + 1 (214) 956-9960 (Locking Systems)
<b>EADS France SAS, Division HQ</b>	<a href="http://www.eads.com">http://www.eads.com</a> , 37, Boulevard de Montmorency, Paris, 75016 France, Tel: + 33 1 42 24 24 24, Fax: + 33 1 42 24 26 19 (Subcomponent Kits)
<b>Honeywell Aerospace, Engines, Systems &amp; Services</b>	<a href="http://www.honeywell.com">http://www.honeywell.com</a> , 111 S 34th St, Phoenix, AZ 85034-2892 United States, Tel: + 1 (602) 231-1000, Fax: + 1 (602) 231-5713 (TFE731-5B Turbofan)
<b>Rockwell Collins Inc</b>	<a href="http://www.rockwellcollins.com">http://www.rockwellcollins.com</a> , 400 Collins Rd NE, Cedar Rapids, IA 52498-0001 United States, Tel: + 1 (319) 295-1000, Fax: + 1 (319) 295-5429 (Pro Line 21 Avionics System)

Comprehensive information on Contractors can be found in Forecast International's "International Contractors" series. For a detailed description, go to [www.forecastinternational.com](http://www.forecastinternational.com) (see Products & Samples/Governments & Industries) or call + 1 (203) 426-0800.

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; [rich.pettibone@forecast1.com](mailto:rich.pettibone@forecast1.com)

## Hawker Beechcraft 750/900XP

## Technical Data

## (Hawker 900XP)

**Design Features.** Low-swept-wing design with semi-T-tail; retractable, tricycle type landing gear with twin wheels on each unit; and two empennage-mounted medium-bypass-ratio turbofan engines with thrust reversers.

	<u>Metric</u>	<u>U.S.</u>
<b>Dimensions (External)</b>		
Length overall	15.6 m	51.15 ft
Height	5.51 m	18.1 ft
Wingspan	16.56 m	54.3 ft
<b>Dimensions (Internal)</b>		
Cabin internal width	1.83 m	6 ft
Cabin height, max	1.75 m	5.7 ft
Cabin length	6.50 m	21.3 ft
Baggage capacity	1.4 cu m	49.5 cu ft
<b>Weight</b>		
Basic operating weight	7,484 kg	16,500 lb
Max takeoff weight	12,701 kg	28,000 lb
Max payload	885 kg	1,950 lb
Useful load	5,271 kg	11,620 lb
<b>Performance</b>		
Maximum cruise speed	861 kmph	465 kt
Long-range cruise speed	744 kmph	402 kt
Takeoff field length at MTOW	1,513 m	4,965 ft
Range, four passengers	5,219 km	2,818 nm
Range, full fuel with available payload	5,054 km	2,729 nm

**Propulsion**

Hawker 900XP (2) Honeywell TFE731-50R turbofans, flat-rated 20.73 kN (4,660 lbst) each.

**Seating**

Seating for crew plus nine passengers.

## Variants/Upgrades

**DH.125-1/3, HS.125-400/600.** These are Rolls-Royce Viper-powered aircraft. A total of 358 were built between 1962 and 1978. They were replaced by the Garrett TFE731-powered Dash 700, a straight re-engined version of the HS.125-600. 358 produced.

**HS.125-700.** Introduced in 1974. A total of 215 TFE731-3-powered models were delivered from 1975 to 1984.

**Hawker 800.** Originally the BAe 125-800, it was redesignated after Raytheon bought BAE Corporate Jets in 1993. The second major airframe stretch of the basic Model 125, it offers ranges of about 2,600 nautical miles due to increased fuel capacity and use of higher-thrust TFE731-5AR turbofans. U.S. military

designation is C-29A. Total of 258 built from 1984 to 1995, including 51 for military customers.

**Hawker 800XP/XPi.** Announced in 1995, the improved XP featured increased weight, a more comfortable cabin, and updated TFE731-5BRs for a 14-knot speed increase over the 800. Also offered faster climb, higher payloads, shorter takeoff field lengths, and longer ranges. Raytheon introduced the 800XPi model, featuring improved and updated cabin interior and avionics, in mid-2005. The aircraft features the Rockwell Collins Pro Line 21 suite with a number of available options. Total of 470 delivered.

**Hawker 850XP.** Certificated in March 2006, features Raytheon-designed winglets for improved performance.

## Hawker Beechcraft 750/900XP

The aircraft also introduces improved scheduled maintenance intervals – from 300 hours to 600 hours. Also incorporates upgraded avionics introduced in 800XPi model. Deliveries began in March 2006.

**Hawker 750.** Essentially a lightly modified Hawker 800 series aircraft without winglets and with the ventral fuel tank removed and replaced by a heated external baggage compartment. The added space adds 32 cubic feet of baggage capacity at the cost of range, for a total of 91 cubic feet. Hawker Beechcraft delivered the first 750 in May 2008.

**Hawker 900XP.** A Hawker 850XP that has been upgraded with new Honeywell TFE731-50R engines and winglets. Honeywell says that the -50R operates at a cooler internal temperature than other TFE731 engines and will give Hawker 900XP operators mature engine reliability the moment it enters service. The engine uses

a scaled wide-chord damperless fan to deliver 7 percent range improvements for ISA-day takeoffs when flat-rated to the same thrust as the TFE731-5BR. Along with other improvements, the result is an aircraft with greater range (150-250 nm, depending on the number of passengers aboard), reduced fuel burn, better takeoff performance in hot-and-high conditions, and lower anticipated maintenance costs. The 900XP superseded the 850XP in the Hawker Beechcraft lineup. It achieved certification in 2007.

**Hawker 1000.** Originally the BAe 1000, it was redesignated when Raytheon acquired BAE Corporate Jets in 1993. Major changes from the 800 included a 33-inch fuselage stretch, more fuel capacity, an extended ventral fuel tank, the addition of vortex generators on the upper wing to reduce field length and stall speed, a modified tail section, and P&WC / MTU PW305 turbofans. Total of 60 produced.

## Hawker Beechcraft 750/900XP

## Program Review

**Background.** The original, first-generation 125 business jet was developed by de Havilland in the early 1960s. That company was acquired by Hawker Siddeley, itself incorporated into BAC (now BAE Systems) in 1977.

BAE built about 360 Viper turbojet-powered 125s in several series, then switched to the TFE731 turbofan-powered 125-700. BAE built 215 of this model, then launched the transcontinental-range 125-800 in 1983.

The BAe 1000 was announced in 1989, featuring a stretched fuselage, more internal fuel, and new P&WC/MTU PW305 turbofans. BAE and Raytheon (see below) delivered 60 units between late 1991 and 1997.

BAE sold many 125s for use by military customers, including six C-29 versions to the U.S. Air Force for flight inspection duties. Japan bought three -800s for a similar need and bought 27 800XPs for the HX-1 search-and-rescue (SAR) requirement. These versions are designated U-125A.

Brazil bought several 125s for calibration duties, and received four 800XPs, designated EU-93A, as replacements in 2000-01.

The Republic of Korea ordered four 800XPs for the signals intelligence (SIGINT) role and four for surveillance duties, taking deliveries from 1998 to 2001.

In August 1993, Raytheon bought BAE Corporate Jets Ltd for approximately \$372 million and redesignated the 125-800 and 1000 models the Hawker 800 and 1000, respectively. Assembly of the 800 and 1000 was transferred to the U.S. in 1997.

Raytheon introduced the 800XPi model, featuring improved and updated cabin interior and avionics, in May 2005. The aircraft featured the Rockwell Collins Pro Line 21 suite with a number of available options.

The 850XP was launched the same year. It achieved certification in March 2006, and deliveries of the 850XP followed shortly thereafter. The new aircraft superseded production of the 800XP on the Raytheon line. It did not have a long production history, however, as Raytheon was soon to move toward two new models to replace it.

The company launched the Hawker 750 and Hawker 900XP models in October 2006. The 750 competes with the Cessna Citation XLS+ and Bombardier's Learjet 45XR. The 900XP was designed to supersede the 850XP on the Hawker Beechcraft line. The 900XP was certificated by the U.S. Federal Aviation Administration (FAA) in August 2007 and deliveries began soon after. Certification by the European Aviation Safety Agency (EASA) and by the authorities of 10 nations had been achieved by March 2008.

The 750 achieved FAA certification on February 8, 2008. The first delivery followed soon after.

### *Raytheon Sells Aircraft Business*

Raytheon announced in December 2006 that it was planning to sell its aircraft business to Hawker Beechcraft Inc, a new company formed by GS Capital Partners (an affiliate of Goldman Sachs) and Onyx Partners. The sale closed in March 2007.

## Timetable

<u>Month</u>	<u>Year</u>	<u>Major Development</u>
Aug	1962	Prototype first flight
Sep	1964	Initial production deliveries
Jun	1976	First flight of -700 variant
Mid	1977	U.K./U.S. certification, initial deliveries of -700
Jun	1983	125-800 announced
Apr	1984	Initial -800 shipments
Jan	1985	Final -700 delivery
Oct	1989	BAE unveils new Model 1000 at NBAA Convention in Atlanta
Late	1991	Model 1000 certification, first deliveries
Aug	1993	Raytheon Co acquires BAE Corporate Jets Ltd
Oct	1995	Initial 800XP deliveries
Late	1996	Hawker Horizon announced
	1997	Final Hawker 1000 delivered
	2005	Model 850XP launched
Mar	2006	Model 850XP certificated

## Hawker Beechcraft 750/900XP

<u>Month</u>	<u>Year</u>	<u>Major Development</u>
Oct	2006	Launch of Model 750 and 900XP
Aug	2007	FAA certification and initial deliveries of 900XP
Feb	2008	Certification of Model 750
Mar	2008	European certification of 900XP
May	2008	First customer delivery of Model 750
May	2012	Hawker Beechcraft Inc files for bankruptcy and begins restructuring

## Forecast Rationale

Hawker Beechcraft filed for bankruptcy under Chapter 11 of the U.S. Bankruptcy Code on May 3, 2012. The company is undergoing restructuring and will receive \$400 million in Debtor-in-Possession financing to enable it to continue operations, including paying employees, suppliers, vendors and others in the normal course of business. Restructuring in Chapter 11 will allow the company to eliminate \$2.5 billion in debt, resulting in savings of \$125 million of annual cash interest expense.

The company announced in October 2012 that it planned to emerge from bankruptcy as a new standalone company after a potential deal to sell the company to China's Superior Aviation Beijing Co fell through. The company said at the time that its new business plan would focus on its turboprop, piston, special mission and trainer/attack aircraft product lines. The company said that it was evaluating the potential sale of its Hawker jet lines and would terminate production of its business jet models, including the Hawker 900XP, if it did not receive any "satisfactory bids."

It is possible that a buyer could emerge to buy the Hawker jet line, but with the business jet market still weak relative to its pre-recession state, the more likely outcome is that production of the 900XP will be terminated after the company completes aircraft still in

the order pipeline. This may occur before the end of 2012, but the forecast assumes production will run into early 2013.

The 900XP competes against Cessna's Sovereign, the Gulfstream G150, and the Learjet 60. Two new competitors will enter service within a few years: the Embraer Legacy 500 and the Learjet 85, the latter of which will replace the Learjet 60 as Bombardier's entrant in this highly competitive segment.

The Hawker 750 was designed to give Hawker Beechcraft a presence in the light medium jet segment. The 750 was created by taking the 850XP and removing the aircraft's ventral fuel tank. This made way for a new heated baggage compartment, increasing luggage capacity at the cost of 600-700 nautical miles of range, depending on the payload/fuel mix. Also, the 850's lush cabin appointments were streamlined and simplified to reduce the price of the aircraft. The 750 cost almost \$3 million less than the 900XP while offering the same level of performance and interior room.

Demand for the 750 declined in the wake of the last recession, and after delivering only five aircraft in 2010 and seven in 2011, Hawker Beechcraft suspended production of this model.

## Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION												
Designation or Program	Thru 2011	High Confidence				Good Confidence			Speculative			Total
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>Hawker Beechcraft Corp</b>												
<b>Hawker 900XP &lt;=&gt; TFE731 -50</b>												
	167	14	4	0	0	0	0	0	0	0	0	18
<b>Total</b>	167	14	4	0	0	0	0	0	0	0	0	18