

# **Airliners** & Supersonic Jets

These aircraft tend to be omitted from forecasts provided by Honeywell, Bombardier and Embraer but almost certainly there is greater growth than anyone imagined. This is reflected by the interest being taken by air transport giants Boeing and Airbus. With Embraer joining Bombardier in promoting new aircraft based on their regional passenger jets, deliveries of aircraft in this class are projected to total around 200 through 2016 with value of around \$12 billion. The market for supersonic business jets is still untested but there are other manufacturers beyond Aerion working on taking this potential further.

The Dornier 328Jet has been known as the Fairchild Dornier Envoy and the Avcraft 328Jet under its different ownership in the past six years. With more than 60 aircraft parked in the desert, the latest owners are keen to get the aircraft back in the air. Artists: Tim Hall, Giuseppe Picarella, and Tim Brown © Flight International – for more information on cutaways see www.flightglobal.com/cutaways

## **AIRBUS A318 ELITE**



#### HERITAGE

The A318 is the smallest of the A320 family with a reduced cabin length. The concept was announced at the Farnborough Airshow in 1998 with Pratt & Whitney PW6124 engines selected. The first flight was in January 2002. Seven months later a version with **CFM56-5B9/P** engines was flown. The Elite version was launched in 2005.

#### SPECIFICATION

Length	103' 2"	31.45m
Wingspan	111' 10"	34.10m
Height	41' 2"	12.56m
Cabin Length	70' 2"	21.38m
Cabin Width	12'	3.71m
Cabin Height	7' 4"	2.24m
Max Range (8)	4,100nm	7,600km
Max Seating	2 + 18	
Typical Seating	2 + 14	
Powperplant	2x CFM56-5B9/P	23,300lb/103.6kN
	2x PW6124A	23,800lb/105.9kN
Max Cruise Speed	473ktas	876km/h
Max Ceiling	41,000ft	12,500m
Rate of Climb		
Take off Distance	4,429ft	1,350m
Landing Distance	4,396ft	1,340m
MTOW	142,200lbs	64,500kg
Max Landing Weight	126,760lbs	57,500kg
Useful load	65,312lbs	29,625kg
Payload with Full Fuel	26,988lbs	12,242kg
Price	\$45	€35.11m



**THIS** is the newest of the Airbus Corporate Jetliner (ACJ) family, based on the A318 regional jet. It has the same wide cabin as the rest of the Airbus A320 range, and is positioned as an entry-level airliner aiming at the market for flights of up to 4,000nm range.

The A318 entered service in July 2003. Airbus is in partnership with Lufthansa Technik to offer a choice of two cabin layouts seating up to 14 and 18 passengers, respectively, with seats and settees clustered in several lounge areas throughout the cabin.

Both configurations are able to fly non-stop from London to New York, offering true intercontinental capability.

As the youngest, as well as the smallest, member of the Airbus A320 Family, the A318 features several innovations which are being progressively introduced in the rest of the range. These include advanced manufacturing techniques such as laser-beam welding, liquidcrystal displays in the cockpit and an improved cabin-management system for lighting, inflight entertainment and other services.

Like the rest of the Airbus ACJ Family, the A318 offers features that are currently unavailable on other business jets. These include public-transport certification, centralised maintenance, sidestick controllers, fly-by-wire controls, carbon brakes, category 3B autoland and a choice of engines and auxiliary power units.

With a shorter fuselage but the same wing as the other ACJs, the Elite has excellent shortfield take-off and landing performance. The A318 Elite is offered with a steep approach capability of 5.5 degrees – making it suitable for operation from airports with noise or obstacle limitations.



Compared with the A319, the A318 is four and a half frames shorter. Other changes include a tail which is slightly taller than the A319, A320, and A321 variants. There is a reduced size cargo door. The engines are either CFM56-5B9/P or PW6124. Only one emergency exit above wing.

## **AIRBUS CORPORATE JETLINER (ACJ)**



HERITAGE		SPECIFICATION	
The ACJ's	Length	111'	33.84m
parent – the	Wingspan	111'10"	34.1m
A319 was	Height	38' 7"	11.76m
launched at the	Cabin Length	78'	23.78m
Paris Airshow	Cabin Width	12' 2"	3.7m
in June 1993	Cabin Height	7' 4"	2.24m
and flew for the	Max Range (8)	6,000nm	11,100km
first time on	Max Seating	2 + 48	,
August 25 1995	Typical Seating	2 + 19	
from Hamburg	Powperplant	2x CFM56-5B7/P	27,000lbs/120.1kN each
in Germany.		2x IAE V2527-A5	26,500lb/117.9kN each
European JAA	Max Cruise Speed	472ktas	874km/h
certification	Max Ceiling	41,000ft	12,500m
and service	Rate of Climb	,	,
entry, with	Take off Distance		
Swissair, took	Landing Distance		
place in April	MTOW	166,500lbs	76,500kg
1996.	Max Landing Weight	137.800lbs	62,500kg
	Useful load		02,0001.9
	Payload with Full Fuel		
	Price	\$55m	€42.91m



**THE** Airbus Corporate Jetliner (ACJ) is based on the A319 airliner and has the widest and most spacious cabin of any single-aisle business jet.

The ACJ was launched at the Paris Airshow in June 1997 and made its maiden flight in November the following year. In November 1999 the first aircraft was delivered to a Kuwaiti customer.

The ACJ is certificated with up to six additional fuel tanks, an increased cruise altitude of 41,000ft and airstairs.

Its fly-by-wire cockpit is identical to all of the other A320 Family aircraft – the A318, A319, A320 and A321. Only one pilot type rating is required to fly the ACJ and any member of the A320 family, while transitioning to the A330, A340, and A380 requires only minimal additional training through Airbus' cross-crew qualification concept. This provides a pool of thousands of pilots who are qualified on Airbus fly-bywire aircraft around the world and ready to command the ACJ.

Pilots operate the aircraft though sidestick controllers, and the fly-by-wire controls allow unrestricted input throughout the flight envelope – protecting against overspeeding, stalling and windshear, while keeping the ACJ well within the structural limits. And with twice as much flight deck volume as typicallysized business jets, the ACJ is designed for maximum pilot productivity.



The A319 is a minimum change, shortened derivative of the highly successful A320. The major difference between the A320 and A319 is that the latter is shorter by seven fuselage frames, while in almost all other respects the A319 and A320 are identical. With the exception of Easy Jet's A319s, the A319 only has one emergency exit above the wing. Easy Jet A319s and all A320s have two.

## **AIRBUS A320 PRESTIGE**



SPOTTER'S		SPECIFICATIO	N
GUIDE	Length	123' 3"	37.57m
	Wingspan	111' 10"	34.10m
Two emergency exits above the	Height	38' 7"	11.76m
wing denotes	Cabin Length	90' 3"	27.50m
the A320 from	Cabin Width	12' 1"	3.70m
its smaller	Cabin Height	7' 4"	2.24m
siblings.	Max Range (30)	4,100nm	7,600km
<b>3</b>	Max Seating	2 + 50	
	Typical Seating	2 + 19	
	Powperplant	2 x CFM56-B4/P	27,000lbs/120.1kN
		2 x V2527-A5	26,500lbs/117.9kN
	Max Cruise Speed	487ktas	903km/h
	Max Ceiling	39,000ft	11,900m
	Rate of Climb		
	Take off Distance		
	Landing Distance		
	MTOW	169,800lbs	77,000kg
	Max Landing Weight	145,500lbs	66,000kg
	Useful load		
	Payload with full fuel		
	Price	\$65m	€50.71m



AS programme based on the A319, it identified demand for more corporate shuttle space and so developed a corporate jet within the frame of the A320.

Dubbed the Prestige – which is also what Airbus calls it VVIP interior option for the A319 ACJ – this aircraft is appropriate for intercontinental shuttle flights with 30 passengers travelling 4,100nm (7,600km) – the same mission that the A318 Elite does with eight.

The Prestige has a number of cabin options and the space for two additional centre tanks for the increased range (the A319 ACJ can take six).

#### HERITAGE

The A320 program was launched in March 1982, first flight occurred on February 22 1987, while certification was awarded on February 26 1988. Launch customers Air France and British Airways took delivery of their first A320s in March that year. The initial production version was the A320-100, which was built in only small numbers before being replaced by the definitive A320-200 (certificated in November 1988) with an increased max take off weight, greater range and wingtip fences.



## **BOEING BUSINESS JET (BBJ)**



#### HERITAGE

The first BBJ rolled out from Boeing's Renton, Washington plant on July 26 1998 and received FAA and JAA certification on October 29 1998. The concept was a joint idea from **Boeing and engine** maker GE - in actual fact it was back in 1995 when GE's then **CEO** Jack Welch recognised the need for more space in his corporate jet that led him to call his buddy, **Boeing chairman and CEO Phil Condit to see** if it was possible ... the rest as they say is history.

#### SPECIFICATION

Length	110' 4"	33.6m
Wingspan	117' 5"	35.8m
Height	41' 2"	12.5m
Cabin Length	79' 2"	24.13m
Cabin Width	11' 7"	3.53m
Cabin Height	7' 1"	2.16m
Max Range (50)	6,000nm	11,482km
Max Seating	10 + 149	
Typical Seating	3 + 19	
Powerplant	2x CFM56-7	27,300lbs/91.19kN each
Max Cruise Speed	469ktas	868km/h
Max Ceiling	41,000ft	12,497m
Rate of Climb	3,300fpm	1005 mpm
Take off Distance	6,085ft*	1855m
Landing Distance	2,905ft	885m
MTOW	171,000lbs	77,565kg
Max Landing Weight	134,000lbs	60,780kg
Useful load	15,724lbs	34,665kg
Payload with full fuel	11,907lbs	26,250kg
Price (green)	\$48m	€37.55m



**BOEING'S** <sup>BBJ</sup> was created to business aircraft that has the subtle presence of a traditional airliner on the ramp but the space within for a custombuilt interior literally fit for a king.

The BBJ is a high performance derivative of the Boeing's Next Generation 737-700. Using the 737-700 fuselage with the strengthened wings and landing gear from the heavier and larger 737-800

Other changes from the airlinerconfigured 737 include blended winglets specially designed by Airline Partners of Seattle for additional fuel economy (5-7% improvement); self-contained airstairs for landing at airports with limited ground support. Additional fuel tanks boost the BBJ's range to 6,200m (11,482km), giving it intercontinental capability. It also has ETOPS-180 certification. Another great sales advantage to the BBJ is its lineage. The 737 is the most successful airliner in the world today, with more than 3,500 aircraft flying. Boeing officials say a 737 lands and takes off somewhere in the world every 4.6 seconds.



The very early BBJs were without the winglets – but the very beauty of the aircraft is that there is little to tell it apart from other 737s at the airport other than tasteful paint jobs.

## **BOEING BBJ 2**



SPOTTER'S		SPECIFICATION	
GUIDE	Length	112' 6"	34.3m
Almost 20 feet longer than the BBJ 1 with Aviation Partners blended winglets fitted as standard. There are underwing CFM-56 turbofans and the familiar	Length Wingspan Height Cabin Length Cabin Height Max Range Max Seating Typical Seating Powerplant Max Cruise Speed Max Ceiling Rate of Climb Take off Distance	112' 6" 117' 5" 41' 2" 107' 2" 11' 7" 7' 1" 4,765nm 10 + 189 3 + 8-25 2x CFM International CFM 56-7 471ktas 41,000tt 3,100fpm 7,000tt	35.8m 12.5m 33.66m 3.53m 2.16m 8,825km
737 swept tailfin with dorsal fin and low set tailplane.	Landing Distance MTOW Max Landing Weight Useful Ioad	2,475ft 187,700lbs 157,300lbs 77,700lbs	754m 85,130kg 71,350kg 35,244kg
	Payload with full fuel Price *2009Price/Green – No	14,200lbs \$58m* 2 exterior paint or interior furnishir	6,441kg €45.37*



**THE** Boeing Business Jet 2, is an evolution increase in cabin volume and 100% increase in cargo volume compared to the BBJ. The aircraft's long range capability allows direct non-stop flight from New York to London, Moscow or Dubai, or from London to Rio de Janeiro, Johannesburg, Singapore or Tokyo

The aircraft is in service with government and corporate customers including the Abu Dhabi Amiri Flight and the government of Belarus.

The cabin has more than a thousand square feet of floor area (over 93m<sup>2</sup>) and can seat up to 78 passengers in addition to an executive lounge and private suite. Germany's Lufthansa Tecknik has a wealth of experience in completions of the BBJ types, having incorporated an executive office, conference rooms, private offices and bedrooms into their BBJ designs. In addition to staff or family sleeping or seating areas, variations

#### HERITAGE

The BBJ 2 is derived from the 737-800 airframe design, which provides improved performance in terms of higher range and speed, lower noise levels and lower emissions than previous members of the Boeing 737 family. BBJ 2 was announced in October 1999 with production beginning in September 200 and entry to service in February 2002.

can also be created using for example a living room, dining room, a master bedroom and bathroom, or two bedrooms and two bathrooms.

The aircraft is always ordered green (eg without interior) with completions to order from suppliers in Europe and the USA.

Like the BBJ there are built-in airstairs to give self-sufficiency at airports with reduced ground support.

The cargo holds are easily loaded, with a maximum cargo volume of 34.7m<sup>3</sup>.



SPOTTER'S		SPECIFICATI	ON
GUIDE	Length	129' 6"	39.5m
Again, the	Wingspan	117' 5"	35.8m
blended	Height	41' 2"	12.5m
winglets,	Cabin Length	98' 4"	29.97m
non-airline	Cabin Width	11' 7"	3.53m
livery and	Cabin Height	7' 1"	2.16m
airstairs	Max Range (8)	5,580nm	10,334km
denote the	Max Seating	2 + 50	
BBJ from the	Typical Seating	2 + 8	
commercial	Powerplant	2x CFM56-7	27,000lbs/120kN each
737s.	Max Cruise Speed	470ktas	871km/h
	Max Ceiling	41,000ft	12,497m
	Rate of Climb	3,100fpm	944mpm
	Take off Distance	8,560ft	2,609m
	Landing Distance	2,500ft	762m
	MTOW	187,700lbs	85,140kg
	Max Landing Weight	157,300lbs	71,350kg
	Useful load	70,980lbs	32,196kg
	Payload with full fuel	998lbs	452kg
	Price	\$64m*	€50.07m*
	*2009Price/Green – N	o exterior paint or	interior furnishings



**ARAB** demand for more space beyond the "standard" BBJ, saw the announcement at Dubai Air Show in November 2005 of a new addition to the BBJ fleet – a derivative of the 737-900ERmade the BBJ 3.

The aircraft has 1,120ft<sup>2</sup> (104m<sup>2</sup>) of cabin space, or 11% more than the 737-800-based BBJ 2.

With up to five auxiliary fuel tanks it has a maximum range of 4,765nm (8,815km). Boeing says 26% of the BBJ worldwide fleet is based in the Middle East, and more than 50% of the fleet in the region is made up of the larger BBJ 2. The company opted to offer the increased capacity-derivative of the stretched 737 model after rejecting a BBJ variant based on the shorter-fuselage 737-600.

## HERITAGE

Boeing says it will extend plans to include wide body aircraft like the 787 Dreamliner to the BBJ range. The current range makes use of the 737 "next generation" family with its high life devices and greater speeds over the original 737-100 family of "baby Boeings". The maiden flight of the first NG 737 was in February 1997.

## **BOMBARDIER CHALLENGER 800 SERIES**



#### The Challenger 850

SPECI	FICATION (CHALLEI	NGER 850)
Length	87' 10"	26.77m
Wingspan	69' 7"	21.21m
Height	20' 5"	6.22m
Cabin Length	48' 5"	14.76m
Cabin Width	8' 2"	2.49m
Cabin Height	6' 1"	1.85m
Cabin Volume	1,990 cu.ft	56.35m3
Max Range (5)	3,044nm	5,637km
Max Seating	2 + 19	
Typical Seating	2 + 15	
Powperplant	2x GE CF34-3B1	8,729lbs / 41kN
Avionics	Collins Pro Line 4	
Max Cruise Speed	M 0.80	459 KTAS / 850 km/h
Max Ceiling	41,000ft	12,497m
Rate of Climb	3,395fpm	1,034mpm
Take off Distance	6,305ft	1,922m
Landing Distance	2,910ft	887m
MTOW	53,000lbs	24,040kg
Max Landing Weight	47,000lbs	21,319kg
Useful load	18,833lbs	8,546lbs
Payload with full fuel	778lbs	354kg
Price	\$28.95	€22.59m



**THIS** flag carrier is the Challenger 850, a business jet based on the Bombardier CRJ200 regional jet platform and comes in two variants – the executive business aircraft and the corporate shuttle.

The latter variant was launched at EBACE, Geneva in May 2005 and Bombardier outlined a shuttle series to include modification of the CRJ 700 and CRJ 900 to become the Challenger 870 and 890 in due course.

Although manufacturing of the CRJ 200 has ended for regional jet programmes it is continuing for the business aircraft division

and in its business jet format. The 850 combines Challenger performance and customer service and style with the dependability and reliability of a regional jet. Its large cabin – similar in size to a Global Express – can accommodate 15 passengers for missions of around 2,500nm and it can exceed 3,000nm with five passengers giving true transcontinental performance.

The standard interior includes the inflight mapping system from the Rockwell Collins Airshow 410.

Continued overleaf

## **BOMBARDIER CHALLENGER 800 SERIES (CONTINUED)**

Lufthansa Technik is completing the interiors and painting the aircraft. The agreement marks the first time a North American business aircraft manufacturer has entrusted an entire program of completions to an overseas company. It also marks an extension of Lufthansa Technik's capabilities to smaller-size business aircraft.

The shuttle version of the 800 series looks particularly attractive to European customers and reflects Bombardier's extensive research into companies already operating shuttles.

In a standard configuration the Challenger 850 shuttle can fly 1,472nm with its full load of 50 passengers in a 2+2 (airline) seating configuration.

The 2,189-nm-range split-cabin version

carries 32 passengers–six in a separated executive cabin and 26 in the aft cabin, or there is a deluxe version for 27 passengers in 2+1 (business-class) seating using a similar seat to those found on Challenger 300s.

The standard Challenger 870, which has a range of 1,662nm, holds 70 passengers in airline seating; the split-level version has a range of 2,199-nm-and can carry 44 people –eight executive sections and 36 in the aft cabin. In the deluxe version there is range of 2,232nm with 42 passengers in the business-class-style seating.

With a range of 1,669nm, the standard Challenger 890 can accommodate 90 passengers. The split-cabin edition holds 52 (12 executive) and the deluxe version has 52 in business-class seating, with a range of 1,971nm.

> Interior view of The Challenger 850 shuttle.





Interior view of

#### Airliners

#### HERITAGE

For several years Bombardier has been offering the Challenger 800-a shuttle also based on the CRJ200-on an ad hoc basis. But has now decided the time is right to offer a more cohesive shuttle solution because companies are increasingly finding it harder to transport employees efficiently on the airlines. Interestingly the whole CRJ fleet are derivatives of the Challenger 601 business jet. The three CRJ models and the Challenger 601/604 are also powered by the same engine-the General Electric CF34. This now brings the airframe back to its roots.



The Challenger 870



## **DORNIER 328JET (ENVOY)**

## HERITAGE

This aircraft has had a troubled history. Launched by Fairchild Dornier as a jet powered development of the Dornier 328 turboprop regional aircraft at the Paris Airshow in 1997 the company soon realised its executive jet application. **Built in Germany and** marketed in the US the 328 first flew in January 1998 and was certified and delivered in June 1999. **Certification for the Envoy 3** business iet followed later in the month. **Fairchild Dornier went** bankrupt in late 2002 and Avcraft purchased the company. Then Avcraft also collapsed. Now Corporate Jet Service, has acquired the Dornier 328 type certificate from the AvCraft Aerospace administrators. They do not manufacture, but provide support for the 230 aircraft worldwide.

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## **SPECIFICATION**

Length	69' 10"	21.28m
Wingspan	68' 10"	20.98m
Height	23' 9"	7.24m
Cabin Length	33' 11"	10.34m
Cabin Width	7' 2"	2.18m
Cabin Height	6' 2"	1.89m
Max Range (10)	1,900nm	3,519km
Max Seating	2 + 33	
Typical Seating	2 + 14	
Powerplant	2x P&WC PW306B	6,050lb/26.9kN each
Avionics	Honeywell Primus 2000	
Max Cruise Speed	400ktas	740km/h
Max Ceiling	31,000ft	9,449m
Rate of Climb*	1,938fpm	590mpm
Take off Distance	4,535ft	1,382m
Landing Distance	4,285ft	1,306m
MTOW	33,047lb	14,990kg
Max Landing Weight	31,724lbs	14,390kg
Useful load	12,227lbs	5,569kg
Payload with full fuel		
Price	\$14.5m (2004)	€11.31m



THE Dornier 328Jet was based on a jet version of the 30-seat Dornier 328 turboprop. Called the Envoy 3, the aircraft was priced in the range of a mid-sized jet, but with a cabin size similar to that of large business jets costing twice as much. Range can be extended to 2,000nm (3,700km), from the basic 328Jet's 918nm(1,700km), by adding fuel tanks although generally it is a little less.



Owners Corporate Jet Service subsidiary, 328 Support Services, has been converting jets to the 14-seat executive layout or the 19-seat corporate shuttle as demand grows...and at a very low cost.





#### SPOTTER'S GUIDE

The E190 on which the Lineage derivative is formed has a low swept wing and blended winglets, with twin underwing podded GE **CFE34-10E7** turbofan engines. It has a clean swept tailfin with a small dorsal fin and a swept tailplane.

118' 11"	36.2m
94' 2"	28.7m
34' 8"	10.6m

Length	118' 11"	36.2m
Wingspan	94' 2"	28.7m
Height	34' 8"	10.6m
Cabin Length	85'	25.9m
Cabin Width	8' 10"	
Cabin Height	6' 6"	
Max Range (8)	4,200nm	7,778km
Max Seating	2 + 19	
Typical Seating	2 + 18	
Powerplant	2x GE CF34-10E7	18,500lbs/82.3kN each
Avionics	Honeywell Primus Epic	
Max Cruise Speed	469KTAS	869km/h
Max Ceiling	41,000ft	12,497m
Rate of Climb		
Take off Distance	6,900ft	2,100m
Landing Distance		
MTOW	120,150lbs	54,500kg
Max Landing Weigh	nt	
Useful load		
Payload with full fue	el	
Price	\$40.95m	€31.95m



**EMBRAER** is thinking big with its latest business aviation offering. The Lineage is developed from the Embraer E-190 regional jet although with a maximum take off weight of 121,250lbs, the Lineage is closer to the weight of the 118-seat E195 airliner.

The Lineage's 615cu.ft baggage compartment is to be positioned above the floor level to make space for additional fuel tanks below to give additional range.

The available cabin space - in excess of 4.000cu.ft (115m<sup>3</sup>) - offers five zones which can be outfitted as work centres and meeting spaces, or for gathering, dining and sleep, with seclusion for VIPs.

Two private lavatories, an optional third, and an optional stand-up shower complete the picture.

Surprisingly the aircraft is longer than both its BBJ and ACJ competitors.

The Lineage 1000, is to be powered by two 18,500lbs (82.3kN) thrust GE CF34-10E7 engines, will feature a five-screen Honeywell Primus Epic integrated avionics suite.

It will have a maximum operating speed of Mach 0.82 and a ceiling of 41,000ft.

## HERITAGE

Based on the Embraer 190 commercial iet platform, the Lineage was announced on 2nd May 2006 at EBACE in Geneva. The E190 is itself a derivative of the E170 commercial jet which rolled out in October 2001 with first flight in February 2002. The stretched 190 first flew in March 2004. The Lineage 1000 is expected to enter service in mid 2008.



#### SPOTTER'S GUIDE

It could be some years before there is anything to see but when the SBJ does make the ramp, it will be hard to miss with the laminar flow wings way back from the long nose. The twin Pratt & Whitney engines are mounted to the rear of the fuselage with a swept tail fin and mid mounted tailplane set behind the tail fin.

#### SPECIFICATION

Length	135' 7"	41.3m
Wingspan	64' 2"	19.6m
Height	21' 2"	6.5m
Cabin Length	30'	9.1m
Cabin Width	6' 7"	2.0m
Cabin Height	6'	1.8m
Max Range (8)	4000nm	7408km
Max Seating	2 + 12	
Typical Seating	2 + 8	
Powerplant	2 x P&W JT8D-219	19,600lb/ 87.2 kN
Max Cruise Speed	Mach 1.6	915ktas/1,695km/h
Max Ceiling	51,000ft	15,545m
Rate of Climb	n/k	
Take off Distance	<< 6,000ft	1,829m
Landing Distance	<< 5,000ft	1,524m
MTOW	90,000lbs	40,823kg
Max Landing Weight	n/k	
Useful load	45,100lbs	20,457kg
Payload with full fuel	n/k	
Price	n/k	

## **Airliners and Supersonic**



#### HERITAGE

With billionaire Robert Bass as Chairman and former Learjet president Brian Barents as vice chairman, Aerion is being taken seriously. Added to the top team is aerodynamicist Dr **Richard Tracey known for his** work on the X-30, the Global Hawk and the design of the carbon composite Lear Fan. The company is based in Reno, Nevada and was created to pursue the development of supersonic transport. There are no dates for certification or flight yet.

## SUPERSONIC air travel holds a

special place in the hearts of travellers everywhere. Especially since Concorde hung up its wings in November 2003 there has been much speculation about a potential supersonic business jet.

Aerion's unveiling of a workable concept at NBAA in 2004 was the first and work is progressing on the design and testing. The aircraft's supersonic laminar flow wing reduces airframe drag by as much 20% over a delta wing such as Concorde and will allow efficient sub-sonic cruise speeds on routings where supersonic flight is prohibited.

The cabin is planned to be comparable to super mid-size jets and will accommodate eight to 12 passengers. A typical mission from New York to Paris will be reduced from today's seven and a half hours to four hours 15 minutes.

