Speed and the question of **first-class travel**

In the second part of two columns, **Adam Pilarski**, senior vice-president at Avitas, argues that it will only be a matter of time before passengers are paying more to travel by supersonic aircraft.

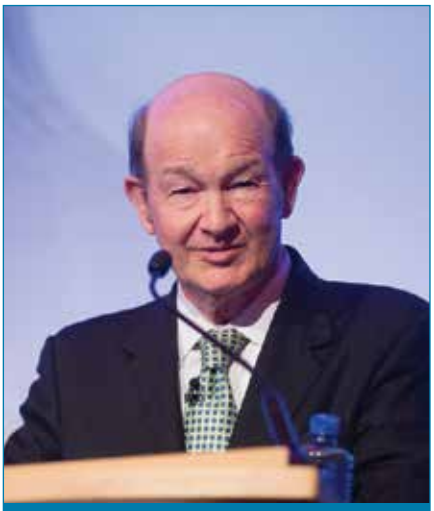
In last month's column, I wrote about the progress experienced in aviation when, after the miracle of flight, humans' talents moved towards safety, distance and comfort. The initial aviators were dreaming of huge aircraft. Gianni Caproni, the Italian aviation pioneer, talked about an aircraft carrying 100 passengers barely 10 years after the initial Wright brothers' flight and, in 1929, the Dornier DoX actually flew 169 people, similar to the average seat-count in service today.

The dreams were all about speed and size. But, for more than 60 years since the introduction of jets, the goal of aircraft designers has been that of increased efficiency in order to give the masses the opportunity to fly. Currently, it looks like much of the progress that has been achieved by airlines lowering costs of flying is levelling off. We fly vast populations in safety but at 1950s' speed.

A new source of future growth could be in increased speed, especially since the world's wealth is rising constantly and a larger part of the population will be able to afford faster, though more expensive, travel. Boeing was recently in the news with talk of hypersonic passenger commercial aircraft. These would fly at speeds of Mach 5, allowing intercontinental flights (Atlantic and Pacific too) making a one-day business trip between continents feasible in about two hours.

Such aircraft are seen as flying in the more distant future, at least 20 years ahead. Other attempts may come to fruition in a shorter timeframe relying on supersonic technology. US supersonic jet company Boom Technology has the support of Virgin Atlantic, and JAL talks about a 50-seater flying in 2023 at a speed of Mach 2.2. There are attempts by Lockheed, Airbus and, separately, by the Chinese to fly supersonic in the next few years. So there is a lot of interest in reviving Concorde, which was grounded in 2003.

Improvements in aircraft can be seen as either affecting everybody on board uniformly or improving the experience for select passengers. When an aircraft experiences less turbulence, every passenger benefits the same way. On the other hand, efficiency improvements allowing more space per passenger can be monetised by charging some passengers more in first class. The question is whether airlines will be able to get a premium for speed because everybody arrives at the destination simultaneously on the same aircraft. So the question is: will we have aircraft flying supersonic versus regular flights and what should the price differential be?



Our author at the 19th Global Annual Airfinance Conference in Dublin.

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> **Adam Pilarski**, senior vice-president, Avitas

Concorde was not a very successful product – only 14 were sold. With the 1973 ban on overland supersonic flights in the US, because of concerns with the sonic boom, its market was limited. Also, it was not a very good aircraft. Its range was limited and it had poor operating economics while also not providing the level of luxury desired by those paying high-ticket prices. With the technological progress made over the past half a century, we may come up with a product capable of flying supersonics within the environmental constraints society will demand.

High speed will come at a price, which, by definition, will lead to higher fares. An important question is: how much are people willing to pay for quicker flights (value of time)? When designing Concorde, some research done by economists assumed (standard economics) that a person's time was worth the value of foregone earnings (meaning hourly wages). The initial calculations postulated 150% value for Concorde passengers, later reduced to 100%. All this was very interesting but the pragmatic approach triumphed and assumed that people would be willing to pay the equivalent of a business fare on regular flights for an economy service on faster flights.

So, paying more to fly faster up front can have two reasons: the traditional higher luxury (beds, sauna, sushi chef) or savings of time meaning saving money. So what will happen to the new supersonic aircraft? To me, it is obvious that in the past few years we have made tremendous advances in ways to deal with the sonic boom and the existing regulations will eventually be overturned. Will we be able to separate the passengers into those willing to pay more for less travel time on separate new aircraft and relegate the back of the bus to flying the traditional subsonic jets while possibly still differentiating service levels by fare class?

In my opinion, this will not work because those up front still want to feel special and superior to others. This is why all business class-only flights do not work. We will definitely move towards supersonic aircraft. At first, with only one (very expensive) class but soon, as average incomes rise, the population will fly on supersonic aircraft with different service levels – the same way colour TV eventually replaced black and white or jets replaced turboprops.