

aerospace



Are you sitting comfortably?



With new and bigger aircraft taking to the skies, more people will be flying than ever before. Adrian Stokes takes a look at the inside of these new aircraft and comments on what passengers can expect

Having just read the contents of a report entitled 'Peak Oil and the fate of Humanity' I think all those working in this industry would be well advised to consider their futures. But we're human, which means tomorrow never comes and happens to someone else anyway.

In case you were wondering, by the end of this decade, demand for oil will have outstripped supply to such an extent that mass transit by air will already be a fond memory for most. On the up side, if you have an interest in a sustainable replacement you could be onto something, because without it we'll all starve so demand will be quite keen.

Back to the present day and the news from the airlines and the airport authorities is that demand will spiral upwards over the next God knows how long and the future for the aerospace industry and air travel is one of uninterrupted growth. This might be good news for some however, I lived two miles from Heathrow once and on the ground it's no fun. But I moved and as a designer it is one of those areas that I would like to work in; we've designed office seating, luggage, in flight entertainment gear, check in desks, aircraft lighting systems, but as yet the exterior and interior projects have not come knocking.

It has always seemed to me that transport divides neatly into two camps, those items that go fast and the rest. The ones that go fast look beautiful. Who can forget the Mallard steam train, or J Class yachts or 30 years of Concorde - figure following fantasy in pursuit of performance. The latest generation of mainstream flying machines includes the Airbus A380 which will lumber around the skies delivering travellers in vast quantities... eventually, but no doubt often half empty and spraying the world with CO². In contrast, Boeing's 787 Dreamliner whilst still heating up the atmosphere, has chosen to fly less people more quickly. The exteriors of both tell the interior stories.

For industrial designers the outside influence will sensibly be limited to livery. The shapes may look stunning but these are examples of substance over style and like the trains and boats of old, do their job efficiently and won't fall out of the sky trying. Inside, however, it's a different story and whilst the vast majority of us travel with our knees in our mouths cursing the person in front who uses the recline button, the talk

aerospace

at the sharp end is of passenger psychology and the air travel experience.

Some six years ago UK design group Tangerine designed the Club World seat with British Airways. A product that has been the benchmark for all subsequent efforts to provide some passengers with a long haul “air travel experience” that didn’t maim, or worse, finish them off altogether. A number of design groups, home and abroad, seized the moment and set up specialist teams to target the growth in premium, passenger centred travel.

At that time we were working with a US/UK consortium Rockwell Collins /MBM on a new generation of IFE (in flight entertainment) handsets; the aim being to provide not only a comfy seat but something to do whilst you were strapped to it. Since that time the industry has experienced two big events, 9/11 and Ryan Air, both of which set the cause of “passenger calmness and well being” back to the days of the stagecoach.

However, collective amnesia has meant that whilst blue and yellow shiny plastic seats has become many punters preferred method of flying from here to there; the airlines are once more vying for the well heeled and putting them up in near luxury. It was with some anticipation that earlier this year I visited the Aircraft Interiors Show in Hamburg. This had to be the leading edge of our business, Aircraft Interiors magazine was full of hopeful signs where swish meets swoop in an attempt to put “business, leisure, infrequent and non-frequent” customers’ bums on their seats.

And that is the first surprise - it really does for the most part boil down to the design of seats, not the design of the interior; that happens rarely at the start of the process and subsequently the various airlines do with the large left over space what they think fit. Some do of course deck out the space like a luxury yacht but essentially the business is to attract the largest number of flyers from the different sectors of the flying public onto your aircraft and that is the design challenge.

I am always troubled by research; those who can do and those who can’t research. Well unfair, but in so many areas of product when the researchers move in, instinct moves out and compromise take’s its place. An area in which I have a great deal of first hand knowledge is office furniture where research at its various stages has mislead generations of designers to corral and organise hapless office



workers into environments that must have cost companies countless millions and the staff their sanity.

Sit enough ist’s around a table and the resultant inertia is sure to ground any bright sparks that might try and get off the ground or am I being a tad cynical here? Well, the visit would help clear the fog and I am a new boy who has dabbled around the edges but not engaged fully with the challenges.

First impressions? The feel was a little amateurish and reminded me of the boat show where high-tech exterior, meets caravan interior, or to put it another way, good taste meets no taste. In the six years since Tangerine caused a stir, the quality of design detail has not obviously progressed and there are some extraordinary sights; many downright unsightly, some hilarious and all seem to be the sorts of manufacturing lash ups that would do credit behind the scenes on a Hollywood set. This was not what “aircraft interiors” promised. So, to the in flight entertainment area and Rockwell Collins, still showing the same phone we designed eight years earlier, except they didn’t know who ASA were; ah well must do some PR.

Up onto the cabin mock-up of the new Airbus; more smoke, mirrors and suits and then a meeting with an aircraft maker (who? mind your own business) and the latest concepts hot off the Pentium IV; what do you



think Mr Stokes? Um...what software did you use for the drawings? By this time I'm thinking fondly of CES (consumer electronics show) and Orgatec (office furniture show) and the comparative good taste and sophistication. A meeting with a seat maker who thinks I will be impressed with foot thick slabs of foam covered with white leather and including an integral AV system and surround soundI'm ready for the off.

It's rather like watching "Grand Designs", when one beautiful building is created with little regard for cost and another with constant regard for the same; one has soul, the other none and by now I'm covering as much space as I can in the time that remains hoping to find some soul on show. Finally I run into two noble attempts. One a seat by B/E Aerospace called ICON which is aimed at my end of the plane and will ensure that the inconsiderate B who reclines the moment the seatbelt signs come off, won't skin my knee caps. It's upholstery is awful, but the idea clever. The other, a concept for a seat by a company called Thompson Solutions which neatly rearranges the floor plan to give everyone elbow room whilst increasing the number of seats by 15 per cent and decreasing the seat weight by six per cent. Good design? Well good intentions which is something.

It is this conundrum that the industry hasn't quite worked out yet.

Lots of work is going into seating. The lucky few and the great unwashed, ahem, pray they get to their destination before DVT gets to them.

The Club World seat was a wonderful piece of industrial design, end-user in mind and setting the standard at a price. It does seem though, that for all the exploration into "customer insights and behaviour" (what people want) the majority, who presumably keep most of the aircraft flying, are mere commodities and the "emotional experience of flying" they have, is most likely to get them committed.

Technically, it occurs to me, that whilst aerospace is very much at the leading edge, it's really the flying equivalent of Formula 1 with the essential parts being made to improbably high specifications and incorporating a level of technical know how that I couldn't get a hand on. Most of what we see as passengers is a veneer and that when this is stripped away what's underneath is alarmingly crude but non the less incredible, in that despite the pressures the machines themselves keep on going.

The passengers? Well, despite the moans and boy do I moan, how else could I get from here to New York in five hours for £139. Just pay up or shut up. |

Adrian Stokes is principal of asa designers