JLT Aerospace

# PLANE TALKING

AUGUST SEPTEMBER 2007

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### Editorial

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## Comment

### On a tightrope

As we begin to see the frenetic activity of the last months of 2007, we can sense a 'fine balance' to the market.

Whilst there is ample capacity, which is healthy for the buyer, this capacity is increasingly shy in coming forward.

Rates and premiums are still very much under pressure but as yet leaders are generally continuing to grant significant rate / premium reductions provided that loss records are not poor.

However the following 'vertical' markets are clamouring to be close to lead prices which is placing a strain on margins for the broker and buyer.

Claims look set to reach or exceed last year's totals.

The recent One Two Go loss in Thailand, whilst not financially critical to the market as a whole, just adds more uncertainty to the already precarious balance.

On the plus side for the buyer, the reinsurance market is relatively soft and without any catastrophic losses – accounts that have demonstrated responsible underwriting could show some small reduction at renewal thus lessening some of the pressure on insurers' margins.

Nevertheless, the final quarter has the potential to swing in the buyer's favour this year – but all should be aware of the future.

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# August Renewals

As we expected, August turned out to be a quiet month for airline renewals. The largest by far was Monarch Airlines the UK schedule and charter operator. Their fleet has grown from last year and now stands at about US$1.4 billion which equates to a 7.4% increase. Passenger numbers are also up and increased by 10% over 2006. Fleet renewal plans include the purchase of a number of the new Boeing 787 Dreamliners, the first of which is due for delivery in 2010.

Pegasus from Turkey is the next biggest with a fleet value nearing US$750 million with the inclusion this year of Izair which gives a substantial increase of 68.8% in passenger numbers for the forthcoming year, bringing the new total to over 3.4 million.

The two remaining airlines in our listings include US carrier Gemini Air Cargo which operates DC10's and MD11's and the national flag carrier Bangladesh Biman. The latter has remained static regarding exposure growth.

Although such a small number of airlines will have little bearing on current statistics, exposure levels have increased, average fleet values by 4% and passenger numbers by 26%. The level of premium was affected by two of the airlines receiving increases in premium due to poor loss records, one of them quite substantially. This has resulted in the month seeing an overall increase of 5% in premium but this has to be taken in context with the small number and circumstances of the airlines involved.

# September Renewals

This month was due to be of a similar size to August in airline numbers but one airline that should have renewed this month was Air Sahara of India. The airline was taken over in June by Jet Airways and now forms part of Jet Airways' policy.

This leaves just three others, with the largest by far being Aeromexico. This has extended its policy from June and is now placed separately from Mexicana.

There are two other smaller airlines renewing in September; Lion Airlines of Indonesia and, smaller still, Tampa Cargo of Colombia.

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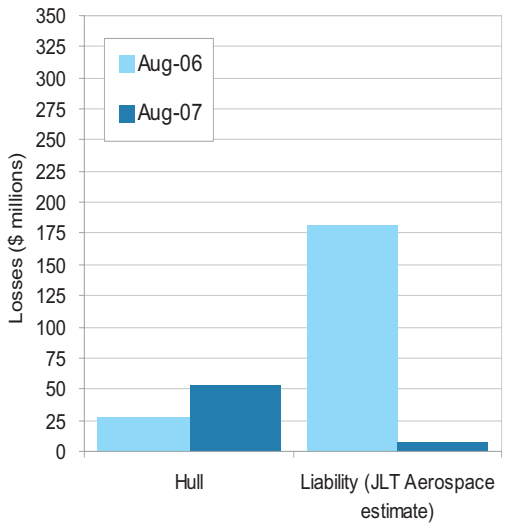
# Loss Analysis

The month of August was blighted by the China Airlines conflagration at Okinawa, luckily without loss of life. This resulted in Boeing issuing a safety alert to all operators of the -800 series of the 737 as a loose washer and nut attached to the wing slat-track was suspected as the probable cause of the accident.

There were 27 passenger fatalities caused by two incidents, one in Polynesia and another in the Congo. The Swiss Avro accident at London City might result in the aircraft eventually becoming a Constructive Total Loss. Selva which is primarily a freight operator based in Colombia managed to write off two of its Russian made aircraft within five days of each other. In both cases the troops they were ferrying managed to escape unhurt.

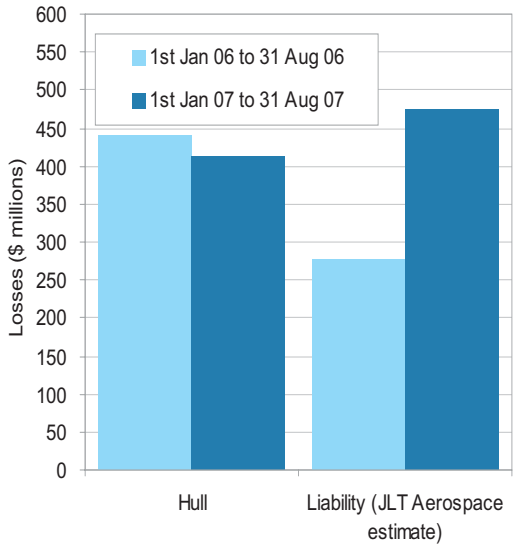
In September we saw the unpleasant incident when Thailand's One-Two-Go MD-82, flight OG-269 from Bangkok to Phuket skidded on landing. The aircraft which was carrying 123 passengers and 7 crew, collided with some trees, broke up and caught fire. The tragedy led to the death of 90 people and happened during heavy rain. According to reports some pilots had reported windshear conditions prior to the crash and there have been questions surrounding the airport's windshear detection equipment. There were no other significant losses.

## August Losses




*Source: JLT database*

## Major Airline Losses for Year to Date




*Source: JLT database*

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# August Losses

| 9th Aug | Air Moorea | Twin Otter Reg F-OIQI | Moorea, French Polynesia | 16 passengers and one crew killed | Insured value US$3,579,000 |
|---|---|---|---|---|---|
| Immediately after take off the aircraft failed to gain height and crashed into the sea about 1.5 miles from the airport. | | | | | |

| 12th Aug | Jeju Air | Dash 8-Q400 Reg HL-5256 | Busan Airport, South korea | 6 passengers injured | Reserve tba |
|---|---|---|---|---|---|
| After the landing run, the aircraft ran onto soft ground where the left main undercarriage collapsed when it hit a drainage ditch. The left hand propeller was also damaged. Conditions at the time were very windy. | | | | | |

| 18th Aug | Swiss | Avro RJ-100 Reg HB-IYU | London-City Airport | No injuries | Reserve tba |
|---|---|---|---|---|---|
| Due to severe winds and turbulence the aircraft suffered a tailstrike on landing causing severe damage to the undercarriage and airframe. | | | | | |

| 20th Aug | China Airlines | B737-800 Reg B-18616 | Naha International Airport, Okinawa, Japan | No injuries | Insured value US$45,000,000 |
|---|---|---|---|---|---|
| The aircraft caught fire soon after the passengers had disembarked and was completely destroyed. A fuel leak from the left hand wing tank is thought to be the cause. | | | | | |

| 20th Aug | Yemenia | A310 | Sanna Airport, Yemen | No injuries | Reserve US$3,000,000 |
|---|---|---|---|---|---|
| During the landing run the aircraft overran the runway | | | | | |

| 22nd Aug | Two Taxi Aereo | EMB 110 Reg PT- SDB | Curitiba, Brasil | Both pilots killed | Insured value US$500,000 |
|---|---|---|---|---|---|
| The aircraft crashed shortly after take off. | | | | | |

| 22nd Aug | Selva | AN-26B Reg HK-4389 | Pasto-Narino Airport, Colombia | 20 passengers injured | Insured value US$600,000 |
|---|---|---|---|---|---|
| During an emergency landing the aircraft ran off the end of the runway and slid down an embankment where it broke apart. The aircraft was carrying 50 soldiers from Cali to Villagarzon when there were unspecified problems. | | | | | |

| 26th Aug | Agefreco | AN-26 | Kongolo Airport, Congo | 11 passengers and 3 crew killed | Insured value US$300,000 |
|---|---|---|---|---|---|
| The aircraft suffered engine problems soon after take off and crashed into trees killing 11 passengers and three crew. | | | | | |

| 27th Aug | Selva | AN-32B Reg HK-4117X | Mitu Airport, Colombia | No fatalities | Insured value US$800,000 |
|---|---|---|---|---|---|
| Soon after landing a fire broke out in the left hand engine which quickly spread and completely destroyed the aircraft. There were 50 military personnel on board, all of whom escaped. | | | | | |

# August Loss Summary

| Hull Losses | Liability Losses (JLT Estimate) | Total |
|---|---|---|
| US$ | US$ | US$ |
| **53,770,000** | **8,050,000** | **61,820,000** |

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# Insurance Industry News

Although we are now in the midst of a period of relative calm in the airline renewal year with August, September and to some extent October being some of the quietest months for underwriters, there are now some distinct murmurings that with the two busiest months of November and December almost upon us, attitudes might be changing.

One of the main factors that has influenced the direction the airline insurance market over the last few years has been the relatively low level and cost of aircraft accidents. For the last five years losses have been an acceptable percentage of premiums, resulting in loss ratios that have been the best for decades. But the pattern is changing and from the huge premium hikes of 2002 a gradual deterioration has occurred. The loss ratio in 2003 was 36%, 2004 37%, 2005 56% and 2006 80%.

This year however, has not only seen premium levels continue their downward slide but losses have every indication of eventually reaching at least the same monetary point at last year-end of approximately US$1.3 billion.

Our loss summary up to the end of August gives a figure of about US$895 million for hull and liabilities (excluding attritionals) which suggests that the time for remedial action will soon be upon us.

August provided over US$50 million of hull losses, the worst incident by far being the much publicised China Airlines destruction of a Boeing 737-800 on the ground at Okinawa, in Japan. The situation could have been very differnet if the 157 passengers had not got off safely, seconds before the aircraft exploded.

The A380 is belatedly set to enter commercial airline service on the 28th October with Singapore Airlines serving the Singapore – Sydney route. Singapore have chosen a seat layout that will accomodate 471 passengers. This is far less than the 525 that Airbus now say is standard having originally classified the A380 as a 555 seater. Qantas has also been advertising its layout for its A380s in layout totalling 450 seats.

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# Arrivals and Departures

Dan Boultwood is due to start with Limit in early October having departed from GAUM when he resigned earlier in the year.

Delphine Favre is leaving La Reunion Aerienne for a new role elsewhere. Brendan Lumb is also leaving La Reunion Aerienne to join Catlin claims at the end of October.

Richard Power has resigned from GAUM and we understand he will be joining CV Starr.

Graham Marshall has joined JLT Aerospace from Marsh.

Brian Russell has left Marsh and will be joining Aon in November working on the European team.

Janet Butler has left GAB Robins to join Xchanging Claims Services (XCS).

Doug Wicks is relocating from Catlin's London Office to their Chicago office.

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# Airline Industry News SPECIAL REPORT

## The Comeback

As Qantas reveals its lush new interior for its new Airbus A380 to coincide with its new livery, this marks the start of an exciting time for the airline industry as the premium operators make a stand in response to the Low Cost Carrier (LCC) phenomenon. The LCC's have dominated our discussions recently but it is now time to turn to the traditional carriers where 'premium' service is very much central to their comeback campaigns.

Over the last decade the LCCs have brought on a huge shake-up to the industry and confronted the incumbents with some significant challenges. While all seemed negative for the 'traditionals' they have had to do some serious lateral thinking in order to come back fighting in response to these intrusive newcomers. While it has become clear that the LCCs are here to stay – a strategy to survive has clearly evolved for the 'traditional' airlines.

The airline industry was wallowing in overcapacity at the start of the millenium and the entrance of the LCCs into the equation began a period of aggressive competition. The events of September 11 coinciding with this evolution only served to exacerbate the contest. However, the 'traditional' airlines, much as the manufacturers have, succeeded in turning a bad situation to their advantage.

## 21st Century 'Obsession' with Fashion

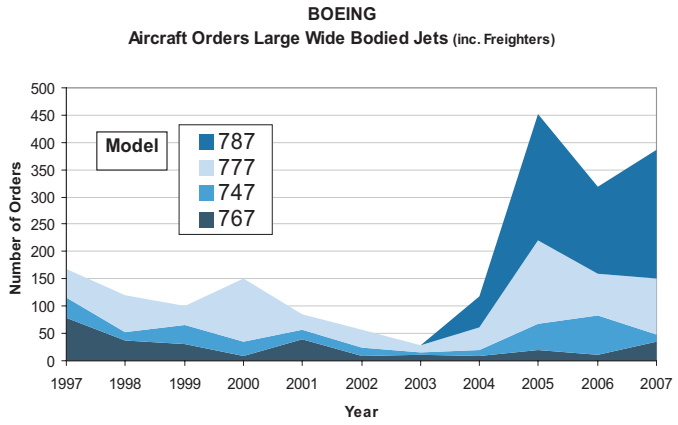
In the aftermath of September 11th a slump led to some 2,000 aircraft being sent to the 'desert graveyard' in the USA and in spite of this, the manufacturers, in order to survive, had to convince the airlines they still needed to buy new aircraft. Fuel saving technology has clearly been the biggest influence, especially as the price of oil has more than doubled since 2000. In addition however, the manufacturers sought to play the airlines off against each other, playing on their insecurities for a need for a 'new flying experience' for those valued customers. Ironically this tease has very much assisted the airlines rather than hinder them in turning their businesses around. In the throwaway world of fashion we live in today, the customer is 'oh so' influenced by the aesthetics of their surroundings and when it comes to flying, the psychology behind the aesthetics of a cabin can have many knock on effects. Does a 1980's or 1990's style cabin give a poor impression, feeding the consumer's impression of the airline, its service, its safety..? The more informed industry specialists are confident that a 15 year old Boeing 747 is perfectly reliable and should be considered no worse than the latest Boeing 777 and would be more concerned about the quality and experience of the pilots and maintenance personnel. Seemingly many customers appear more concerned with little gadgets and creature comforts.

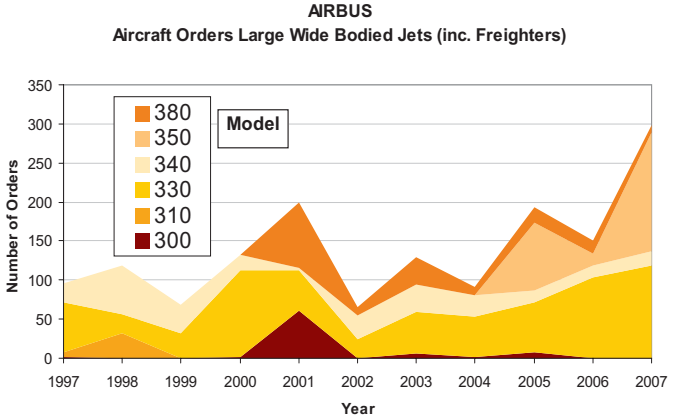
The Western World is almost obsessed with having to have the latest in technology and fashion and that is where the 'premium' operators have placed their appeal. Singapore's latest slogan is 'a class beyond First' describing the interior of its Singapore Airlines Suites on board its A380 in anticipation of the arrival of its new aircraft. Airbus have described the A380 as 'unrivalled comfort' and 'Greener, Cleaner, Quieter, Smarter'. The term 'premium' itself is a new expression when it comes to describing airlines (not to be confused with insurance premium).

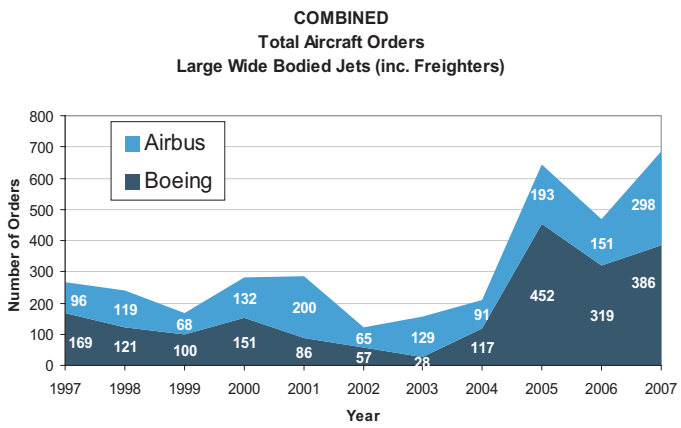
This in a way has been conducive to the traditional carriers' strategy – it seems both manufacturers and airlines have led each other in a positive direction – where they have found a mutual benefit.

The 'traditionals' have shifted their strategy away from being the most comprehensive provider (a service that the flag carriers were traditionally obliged to provide) and have been axeing their lower profit making short haul routes - British Airways (BA) has largely closed down its financially draining, European services from Gatwick– the areas that the LCCs have stepped into. Premium services appear to have now become the focus of their strategy, effectively evolving from the 'jack of all trades' to the more exclusive operator.

As a result of these developments we can see how well the manufacturers have done. Illustrated in these graphs we have identified the surge in orders for wide bodied jets in recent years as airlines look to move to the 'next generation'.



We can see how popular the Boeing 787 Dreamliner and the Airbus A380 have been, both of which have led the way in new look interiors that have been a prime appeal to the 'traditional' carriers. On reviewing the orders for the A380 orders the customer base is mainly made up of the 'traditionals' and flag carriers. While it's logical that the 'traditionals' would be the majority customer in view of their size and routes, it appears clear that the 'premium' factor for which the aircraft caters, is also important. Amongst the customer base there are a few exceptions to the 'traditionals' such as Kingfisher and China Southern which can be explained by the vast populations these airlines are servicing and at that the rapidly expanding flying populations of these two countries. Etihad may not necessarily be considered a 'traditional' but its choice of the A380 represents the preference of the Middle Eastern passenger for 'premium' service rather than true 'budget' that has done so well in the rest of the globe.

| Airline | EIS | Type A380-800 | Type A380-800F | Options |
|---|---|---|---|---|
| Air France | 2009 | 12 | | 2 |
| China Southern | 2008 | 5 | | |
| Emirates[5] | 2008 | 55 | | |
| Etihad Airways | 2013 | 4 | | |
| ILFC | 2013 | 10 | | 4 |
| Kingfisher Airlines | 2010 | 5 | | 5 |
| Korean Air | 2008 | 5 | | 3 |
| Lufthansa | 2009 | 15 | | 10 |
| Malaysia Airlines | 2008 | 6 | | |
| Qantas | 2008 | 20 | | 4 |
| Qatar Airways | 2010 | 5 | | 2 |
| Singapore Airlines | 2007 | 19 | | 6 |
| Thai Airways | 2010 | 6 | | |
| Virgin Atlantic | 2013/9 | 6 | | 6 |
| Unidentified VIP customer | | 1 | | |
| Total | | 174 (firm: 173) | | 42 |

In view of our comments it seems unusual that the market is so buoyant for the Airbus A330 which it seems will fill the gap before the new generation aircraft are fully in service and swift turnarounds for the latter become the norm. Airbus recently introduced the A330-200 freighter which has proved to be popular having already booked 68 orders since it was officially marketed at Farnborough 2006 and due to enter service in 2009. One might suggest that while it would not be filled with all the latest gadgetry to entice the passenger it is quite sufficient for the needs of cargo, not least by its lesser price tag per capacity unit than other new generation aircraft may demand. In these early stages the tried and test aircraft should be more cost effective not only by its purchase price but also in view of established maintenance, repair, overhaul operations and parts manufacture.

### British Airways on a Limb?

British Airways (BA) has just revealed a substantial order for new aircraft and both Boeing and Airbus are the beneficiaries. The industry has been waiting for BA to make its move in this period of change and finally they have confirmed commitments for 12 A380's and options for 9 more and 24 B787s plus 18 options.

British Airways has been an interesting case. The British flag carrier's traditional competitors quickly reacted to the advent of the LCC's and mostly ordered many of the new generation of aircraft when they first came onto the market. BA has, it seems, determined to 'weather the storm' and the bad press and not to invest hugely in the early stages where business has been pretty bad anyway and criticisms abound. They have resisted a 'knee jerk reaction' mentality but opted for a simple survival strategy and in the meantime have been watching the others, almost like 'guinea pigs'. The British airline has been through rough times, and can be criticised for a lack of investment and possibly too many job losses resulting in the baggage handling chaos that has been particularly damaging to its current status.

The airline has had to cut its fares to survive in the advent of the LCC but meanwhile, at least it hasn't been making huge investments to bankrupt itself in this interim period. Now BA has launched its comeback campaign with a huge new upgrade for its transatlantic services, and a new terminal at Heathrow at the centre of its turnaround. Their choice of a substantial number of 787's shows a clear strategy of reducing the capacity per flight across the Atlantic but increasing the frequency. The A380, on the other hand will fit the bill perfectly for an increased

capacity for the longer haul routes to the Middle and Far East and Australasia.

Having given the flying population a chance to try out the low cost operator one might suggest that a percentage of these have decided that actually they'd rather pay a bit more for a better service (with the exception of baggage handling!) with a few more creature comforts, more accessible airports, greater flexibility and avoid those stealth costs that arise when flying low cost. The extra costs started with food and drink but have widened to baggage and now the latest development from Ryanair which is charging for check in facilities. And would it be fair to suggest that customers might have that little bit more faith in the traditional, established carriers. For BA the time is right to start making the investment, when customers are again appreciating the traditionals for what they are and not just choosing an airline on the price of their fares.

The press is awash with the 'traditionals' latest upgrade plans. Lufthansa is really breaking the mould by considering an economy sleeper cabin for its long haul destinations. Both Virgin and British Airways have voiced their intentions to start business only operations and Singapore Airlines has suggested they may start an all business operation between Singapore, New York and Los Angeles. Branson was quoted as referring to the 'mood change in the last five years' among passengers and the psychological desire for business class passengers wanting to be on aircraft with other 'working' people - a 'status thing'. This can only emphasise how much the quirks of passengers need are to be pandered to on a psychological level.

We only have to look at the number of 'all premium' services being set up such as Maxjet, Silverjet and Eos to see that there is huge scope in this area.

While British Airways has not had the marketing status of "the launch airline for…" it does have the position of hindsight where other airlines do the proving for the next generation of aircraft. Examples include that of the excessive cost of aftermarket support, that has only just come to light, for the Boeing 787 in comparison to the established aircraft. This is just one aspect for consideration as an 'all new' aircraft is introduced into a fleet. Other issues such as training, airport infrastructure (the different requirements of the A380, albeit a factor that has been well considered by Airbus) maintenance and sourcing parts and the cost implications of all of these. It is all very well that the aircraft is a huge fuel saver but if these savings are eaten up elsewhere, some may wonder what is the point? That said, environmental issues are at the forefront and the catalyst of global debate on the aviaton industry. These are all hidden factors that, British Airways, in deferring any decisions as to how to plan its future, has benefitted.

**The Proof is in the Eating**

The next stage in this process of evolution is the rollout of these 'next generation' aircraft and as we will watch the first commercial flight of the A380 take place this month we also hear the news of the stumbling Boeing 787. After the delay to its first flight until December experts are understandably sceptical that the new aircraft will succeed in fully testing the 'all new' aircraft in the remaining five months window before its delivery due date to All Nippon of May 2008. This ambitious target can be put into context when considering the test timetable of the Boeing 777. This took a year and the aircraft was largely an evolved version of previous Boeing models. The 787 is a completely new design largely employing composite material – which is itself a very new and untested material in the form that it is being employed. The construction of the aircraft is also a new method. Boeing is saying that it could still be possible to test the aircraft in time by using all the hours that are available. This doesn't however make any allowances for unusual results that are likely to be discovered during testing and they are accepting that they may have to delay their first delivery by a few months.

There are individuals who think that the Federal Aviation Administration (FAA) shouldn't license the new aircraft at all. An ex-employee of Boeing has been voicing his concerns in a television interview, the contents of which have been receiving some extensive press coverage. The ex-employee, that was dismissed from the company under controversial circumstances, had stated that in his opinion, should an incident occur, the composite fuselage would not protect passengers as well as aluminium and therefore diminishes the chance of survival. His argument is based on the impact of a crash on the composite structure which he suggests will shatter. In contrast, a metal frame will bend and crumple, softening the pace of impact and also remaining intact. He suggests that an impact on a composite will make a hole through which fire could easily be transmitted to passengers attempting to escape and that should the composite catch fire, toxic shards will be inhaled by passengers as well as other hazardous fumes. Other doubts rest on the strength of the material to withstand lightning strikes.

To add to their woes Boeing are suffering from supplier shortages of fasteners and not just a shortage of fasteners of the same type but there are thousands of different types.

**Exposure - the 'Next Generation'**

While there have been a spate of recent losses, the last decade has seen overall safety improvements as an established part of airline operating culture and this should only get better with the advent of a new generation of aircraft…unless there are some major flaws that are yet to be discovered. Bearing in mind the new technology involved this is an interesting consideration. The airline insurance market can only wait…

## Competition in the Wings?

China is picking up the pace in its march towards becoming a viable force in Jet manufacturing in line with its booming airline passenger and cargo industry. It is expected that the region will be putting huge demands on manufacturers in the coming decade and what better way to service the industry than to design and build their own real alternative. In contrast to its already established production line, one of the key factors to their new offering, the ARJ21, is to build something that will be approved by the US' FAA and relevant international aviation authorities and therefore can be used for access to international destinations throughout the globe. While at present the ARJ21 is only the size of a regional aircraft the long term plan is to stretch it further and therefore working on achieving international status is very much key to its development.

It is also interesting to learn that the China Aviation Industry Corporation (AVIC 1) which is responsible for the development of the ARJ21, is proposing to launch its own airline and is putting pressure on China Eastern Airlines to enter into a Joint Venture with them. The aim is for the airline to utilise AVIC 1's 50 seat MA60 turbo-prop which seems a good way of ensuring the utilisation of its own aircraft, almost as a demonstrator airline for the type. In addition this is in the context of no other airlines in China using the MA60.

Not to be left in the shadows the regional jet manufacturers, Bombardier, at the fore and Embraer in second, are enjoying a three-fold increase in orders for the first six months of the year compared to last year, for their jets. Turbo-prop sales are also steadily picking up for ATR and Bombardier.

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# Space News

The Space Market has enjoyed a period of relative stability in recent times but was hit this month with the failure of a Proton M as it was launched from the Baikonur Cosmodrome. The satellite destroyed was a Japanese telecommunications satellite and the launch was managed by International Launch Services (ILS). The environmental impact of failures from this land based launch site are increasingly becoming an issue and this time the Kazakh Government have placed a ban on all future launches taking place while an investigation takes place. The Russian / US joint venture ILS rents the site for US$115 a year from the Kazakhs and there have been intensifying criticisms in the light of the highly toxic nature of the propellants being employed for these rockets and the environmental impact when a failure occurs. A failure last year of the Dnepr rocket, which utilises similarly toxic fuel, resulted in damages being paid by Moscow to Kazakhstan of US$1.1million for environmental reasons.

The Satellite was insured in the Russian Insurance Centre for US$300million and it is understood that London insurers paid out some US$180 million in reinsurance towards the failure. This is expected to put upwards pressure on the cost of launch insurance rates to the tune of some 3 to 4%. With respect to the impact on the cost of launches on the Proton M it is considered that it will push these down by 10 to 15%.

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# And Finally...

## Passenger gets into hot water

The cabin crew were startled when they discovered an air passenger in China taking a sponge bath in the toilet. Passengers on the flight from Nanning to Chongqing complained that the man was spending too much time in the toilet. An air attendant knocked on the door, and then noticed water flowing out from underneath it, reported the Chongqing Morning News.

"We had to open the door with a key, and saw that the man was half naked," said the attendant.

"When he saw me, he said he was bathing, and asked me if I had some shampoo."

The man, Jin Sheng, said it was his first time on a plane.

"I discovered the bathroom had hot water, so I thought of taking a bath, since I hadn't had one for nearly a week," he explained. There is nothing in the regulations to prohibit passengers from having a mid-flight bath so the airline could not punish or charge Jin.

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# Launch Log

## September Launches

**Sept. 2**

Launcher: GSLV •

Payload: INSAT 4CR

Launch time: 1250 GMT (8:50 a.m. EDT)

Launch site: Satish Dhawan Space Center, Sriharikota, India

**Sept. 5/6**

Launcher: Proton •

Payload: JCSAT 11

Launch time: 2243 GMT (6:43 p.m. EDT)

Launch site: Baikonur Cosmodrome, Kazakhstan

**Sept. 13/14**

Launcher: H-2A •

Payload: SELENE

Launch time: 0131:01 GMT on Sept. 14 (9:31:01 p.m. EDT on 13th)

Launch site: Tanegashima, Japan

**Sept. 14**

Launcher: Soyuz •

Payload: Foton M3

Launch time: 1100 GMT (7:00 a.m. EDT)

Launch site: Baikonur Cosmodrome, Kazakhstan

**Sept. 18**

Launcher: Delta 2 •

Payload: WorldView 1

Launch time: 1835 GMT (2:35 p.m. EDT)

Launch site: Vandenberg Air Force Base, Calif.

**Sept. 18/19**

Launcher: Long March 4B •

Payload: CBERS 2B

Launch time: 0326 GMT on Sept. 19 (11:26 p.m. EDT on 18th)

Launch site: Taiyuan, China

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