

## ISTAT 14TH EUROPEAN CONFERENCE





## Register Now!

30 September – 2 October 2007 Hilton Vienna Vienna, Austria

Join the International Society of Transport Aircraft Trading for our 14th European Conference to gain access to industry leaders and key insights about tomorrow's aviation environment.

For complete event details, visit our newly redesigned Web site at www.ISTAT.org or call +1.312.321.5169.



#### ISTAT President Michael Platt

has been a year since ISTAT moved to our new headquarters in Chicago! Thanks to the efforts of Immediate Past President Tom Heimsoth along with our board and staff, the transition has moved forward rapidly and smoothly. It has been a year of progress as we venture into our events and activities with a new team at the helm.

ISTAT has experienced unprecedented growth in membership and in attendance at our annual conference as well as the recent Paris Air Show reception ISTAT now has over 1,500 members.

By now I hope that you have all had the opportunity to visit our new and improved Web site, which offers our members the opportunities to:

- update their membership records online,
- register for conferences,
- access information on ISTAT certified appraisers
- view our membership database in real-time, and search the database for members by a wide variety of criteria.

In the near future, www.ISTAT.org will offer chat rooms, a special board member section where we can house meeting minutes, bylaws, and other important documents. The Web site will also offer online membership renewal. If you haven't yet visited our new Web site, I encourage you to see where progress has taken us. Special thanks also to our board member Jay Hancock of American Airlines, who worked with our staff to develop the new site.

Other key initiatives your board is actively pursuing include:

- 1) A review of our appraiser program to enhance visibility and credibility,
- 2) A review of our Bylaws to make sure we have a strong and coherent governance code
- 3) Further enhanced technology to develop a cutting-edge environment, and
- 4) Extension of the global ISTAT brand.

You can expect to hear more on these initiatives as we move forward.

Our future is bright! The ISTAT Board of Directors and our Foundation Trustees are committed to this organization and our role in the commercial aviation industry. The ISTAT Foundation has also begun to implement ideas developed at a recent strategic planning session that will enhance our efforts of educating and assisting our community. Over the past year, the Foundation has initiated the new internship program and fostered new concepts in our scholarship program and grant initiatives.

If you have not already registered for our European Conference in Vienna, I urge you to do so immediately. Mark Pearman-Wright and Tony Diaz, our co-chairs have put together a great line up of speakers and some fun social and networking events that you won't want to miss. With all the recent corporate changes in our industry, it will be a good opportunity to get the latest business cards! I look forward to seeing you in Vienna, where we will explore "Tomorrow's Aviation Environment."

Best regards,





- 5 The Roll-Out By Bert van Leeuwen
- 6 Q + A Dave Bassett

Amerijet International

8 Controlling Aircraft Leases

Data Management By Ron Spek

- 10 ISTAT Paris Reception
- 12 Pleasure Principle vs Reality

Aircraft Values By Bertrand Grabowski

14 2007 Paris Air Show Balancing

Greed + Greed By Bert van Leeuwen

16 Insurance Trends A Bumpy Ride Ahead By David Sales

17 Aircraft Appraisals

1 | Airbus A320 by Phil Seymour, Managing Director, IBA Group Ltd

**2 | Boeing 757** by Jack Feir, President, Jack B. Feir & Associates

19 CORRECTION

A330 vs 767-300 Values

By Scott Hamilton

- 21 P-51 Mustang By Bill Bath
- 23 Airline Investment Analysis
  By Doug Castle
- **24** BIG MOVES
- 25 ISTAT Foundation
- **26** European Conference

Registration form + Preliminary Agenda

President
International Society of Transport Aircraft Trading

# Jetrader

Jetrader is a bi-monthly publication of ISTAT, the International Society of Transport Aircraft Trading. ISTAT was founded in 1983 to act as a forum and to promote improved communications among those involved in aviation and supporting industries, who operate, manufacture, maintain, sell, purchase, finance, lease, appraise, insure or otherwise engage in activities related to transport category aircraft.

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## **ISTAT Calendar**

30 September - October 2 2007 14th European Conference Hilton Vienna

11 November 2007

Dubai Air Show Reception
Dubai Creek Golf & Yacht Club

9 - 11 March 2008 25th Annual Conference

Omni Orlando Resort at Championsgate



"I was a guest of Boeing at the 787 roll-out. I decided to be the first ISTAT appraiser to inspect the 787. When I tell people I inspect aircraft, they often say, "What do you do, kick the tires?" With the help of my worthy helper, Bob Agnew (who became the 2nd ISTAT 787 inspector), I have a photo to prove it."

Neil Whitehouse, ISTAT Senior Appraiser



## 787 | The Roll-Out No longer just a Dream

Dream DVB Bank's Bert van Leeuwen reports on the 787's "roll-in".

**July 8, 2007** became a memorable day in commercial aviation. Contrary to what critics had "predicted" since the launch of the project, Boeing did not suffer any significant delays in the development of their new Dreamliner and spot-on on 07-08-07, the new Dreamliner was presented to the world.

Enough has been written about the new Dreamliner and with 677 orders booked in the years leading to the day of the official presentation, there can be little doubt Boeing has hit a bulls-eye with their new model. Whereas there were hardly any questions about the product, everyone of the 15,000 invited guest present in the Seattle area to witness the roll-out was very curious HOW Boeing would present its new baby.

With the A380 reveal event as the most recent "major" roll-out of an all new wide-body, there was a lot of speculation about how Boeing may attempt to outdo Airbus with maybe even more spectacular song and dance, fireworks, laser-shows or an even larger number of political leaders.

With the partying already starting on Saturday evening with different events for different groups of guests (actual airlines customers, suppliers and financiers/lessors/consultants) Boeing showed itself an excellent host once more. Hotel accommodation and transportation were arranged in advance for arriving guests and the Boeing Transportation Team did a fantastic job; well organized, friendly and efficient.

The main event on Sunday would take place in the actual 787 assembly building in Everett. The thousands of guests arriving by Boeing-arranged coaches could catch a glimpse of several 787s on the production line before reaching their seats. These seats were all placed to face a stage just in front of a giant projection screen masking the huge hangar doors of the Everett plant. Next to the projection screen were two displays that served to emphasize some of the key figures during the afternoon, including 707, 747, 777, 787 as well as 677.

The official festivities started with musicians from all over the world representing Boeing's client and partner nations. Next on the program were various speeches by Boeing leadership, suppliers, partners and clients, some connected by video link from as far away as Japan and Italy. After some more interviews, a presentation about industrial design as well as beautiful piano music, the big moment was almost there.

Flight attendants from all 787 customers (including Qatar Airways) took over the stage and computer animated Dreamliners in various liveries were projected on the giant screen. Gradually, the doors of the hangar opened and in the blinding light of the afternoon sun, against a perfect blue sky, the first 787 in its trade-mark



Dreamliner livery appeared. No fireworks, no smoke and mirrors, and thank heaven, no politicians.

#### Just a simple "here she is".

Boeing clearly had elected not to try to turn this "roll-in" into a big spectacle but rather had taken a more down-to-earth business-like approach, emphasizing the international character of the 787 and the importance of its innovative design features for the future of air travel.

After the roll-in, Boeing allowed all present to go out and see, touch and feel the aircraft (is it real, is it made out of composite, where are the temporary fasteners ?) and thousands of guests took this opportunity.

First impression; a beautiful aircraft, especially the nose and wing tip design differentiating it from any other wide-body on the market. Maybe from the exterior point of view lacking the "wow" factor of the A380 or the initial 7E7 "sharkfin" design, but certainly a good looking aircraft that has the potential to revolutionize the industry once more.

With the first flight scheduled for end of September, there are still a few weeks for the critics to maintain that there will be significant delays in the project, weeks that Boeing will clearly need to bring the prototype in an airworthy condition and that will be testing the 787 team to the limit.

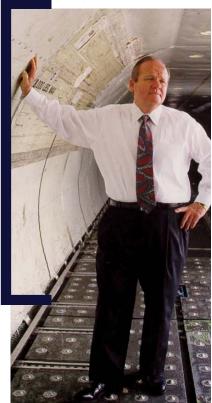
Whatever the future brings, congratulations to Boeing with a beautiful new member to its Jetliner family and a well organized, very enjoyable and tasteful roll-out event.

## Q + A

#### David

## **Bassett**

Chairman and CEO Amerijet International, Inc



#### J: Is Amerijet becoming a Freight Forwarder or is it a Cargo Airline offering other specialty services?

DB: Well, Amerijet has been evolving for many years. We started off as a 135 Charter Operator and in the 1970s evolved into an ACMI operation. When Emory finally acquired Purolator we were their largest operator. We reorganized in 2001 after the US Postal Service pulled its contract with Emory, which lead to its shut down almost at the same time of 9/11. At that point I said that Amerijet would no longer be in the ACMI business but focus on a business model where we could sustain ourselves or at least control our own destiny. From an ACMI perspective, you are only as good as yesterday's flight. Amerijet today is a mini logistics company. We look a little like FedEx, UPS and DHL as we do air, ocean, trucking and logistics. So yes, we are a bit of a different beast than the rest of the industry.

#### J: What is Amerijet's competitive advantage?

**DB:** Well, I really spend my time thinking about what makes Amerijet work. The one thing that makes us really different is that we are so broad based in everything we do. We offer scheduled service on our airside from over 42 stations worldwide. On the ocean side we are an NVOCC\*, we don't own ships but we have about 42 on line stations and our agents are spread all over the world in Asia-Europe-Middle East. With our interline relationships and our on line relationships in air and ocean we go to over 550 destinations worldwide.

#### J: Is Amerijet more than just an air cargo company?

**DB:** Our early beginnings were aviation but in the last few years we have reinvented ourselves to be a multi faceted logistics company. We want to be a mill wheel with many aspects to the business and overall difficult to stop. So if airfreight slows, ocean will provide balance or if ocean slows we lean towards logistics. I suppose this diversity is our competitive advantage. We don't want one customer or one industry or one country to dictate our business. Our largest customer represents just two per cent of our business.

#### J: Does your foundation, as a multi service provider based on International trade must give you flexibility not available to a pure air cargo operator?

**DB:** Yes that is true. We try to master the art of shifting air to ocean and vice versa. In international transportation, you need this flexibility otherwise you become the victim of a single economy whether it is a money issue, an economic issue, international relations or a recession. We want to be broad based enough so while we have fluctuations in air or ocean fluctuations may affect us but not kill us.

## J: Does Amerijet focus on specific areas of expertise in the air cargo side?

**DB:** Yes we do. Hazardous material is one where we keep a top notch HazMat expertise. We find it very important because on the airside we deal with countries that are in the oil business and that industry has a lot of hazardous product. We are one of the top companies permit-



ted to carry explosives, We are the guys who get to park an airplane in the middle of nowhere and load blasting caps and haul them to where they need to go. We also handle standard HAZMAT such as radioactive, corrosive, magnetics to name a few and haul it all over the place.

We also do a lot of work in fresh produce. You have to think what does a third world country have to offer the US? Third world countries generate trade from agriculture, fishing, tourism and US goods manufactured abroad. Produce is a big deal although we are not much into the flower business. Produce gives us the round trip from many of our foreign destinations. This fills planes coming home and it produces dollars in a country that needs dollars to buy our stuff. This has always been the number one transportation problem since the old Mayflower days, how do you get traffic going both ways so the ships and the aircraft are full. This is especially true with Latin American trade where the trade is predominantly south bound and in the Asian Market where the trade is predominantly west bound.

#### J: Where is your core business?

**DB:** Our core markets are in Latin American and Europe. This is our back yard. We are developing markets in the Middle East and Asia as we go forward and expect to have strong growth there.

## J: How does Amerijet compete with the established legacy cargo carriers?

DB: Legacy carriers are predominantly combination carriers. Their routes are structured around passengers and they have big bellies in which they carry freight. There are some, particularly European carriers, that have dedicated freighters. My competition is more carriers such as American and Continental. Our real advantage is that they are restricted in what they can do. When an airplane is full, it is full. They have planeloads of passengers and their baggage and they have to deal with extra baggage that restricts their space. Secondly, when a shipper needs to move cargo, especially the ugly, bad cargo, or large and bulky cargo, they can't wait around for an American 767 or a Lufthansa 777 to become available, so a dedicated cargo fleet helps the cargo market and the freight forwarders. Our advantages are consistent service and focused marketing, which attracts those products that are not easily placed on passenger aircraft. The new security issues have also worked in our favor, as a dedicated cargo carrier is a little better able to handle those problems. I like to say we co-exist well.



## J: Where do you see the growth in aviation cargo over the next 24 months?

**DB:** Trade between Europe, South American and the Caribbean Basin is growing and we expect to see much more activity. Our agents in Europe are feeding us traffic and we see much going back that way. As to deeper South America, Columbia and Ecuador flower markets are looking to expand to Europe to diversify away from the US. Other than these special areas we predict air cargo growth in Latin and South America as being fairly flat largely due to the impact of fuel prices. Cargo carriers can surcharge for fuel while passenger carriers have a more difficult time to pass through fuel price increases. This has flattened growth in Latin America and the Caribbean. I see more of our customers use us on the ocean side as they try to reduce their transportation and logistic costs. This is very cyclic reaction and we see this in periods of uncertainty. Air cargo happens to be a leading indicator of what is happening in the general economy. And I see this happening over the next 12 to 24 months.

## J: What is your view of fuel prices over the next couple of years?

**DB:** What a tough question! I don't see fuel coming down at all. In the near term, I expect it to remain where it is and over the longer term it will increase. This is a very Dave Bassett position that until society starts thinking differently about fossil fuels and doing something about it, we are in for a tough ride. I don't see it slacking off in the near term. I think it is already affecting the world economy.

## J: With most of the Cargo conversion slots filled through 2011, how will this affect air cargo growth and pricing?

**DB:** This is a complicated question. I would have answered it differently 6 months ago. I think that cargo market has quite a bit of capacity at the moment. As cargo slows and fuel prices increase I expect we will not see all of the conversions that are anticipated. What Amerijet sees is a tougher market for cargo; we won't struggle for more cargo capacity so we aren't looking for conversion slots.

## J: How long will you continue to fly the 727-200 and the Super 27 (Valsan Conversion) and what is your replacement horizon?

**DB:** The 727 is the best airplane in my market. As long as fuel does not kill us, my 727s are going to fly for a very long time. The airplanes are perfectly suited to what we do. We work at a maximum 3 -4 hours flight time and we carry up to 60,000 lbs. Only fuel price increases

will make this aircraft uneconomical. But if fuel behaves reasonably well then we will have this aircraft around for a long time. I told my folks that the day might be coming back to us where we will look at some of our airplanes and say we can no longer afford to BER (Beyond Economic Repair) them. We may find ourselves doing more repairs on our fleet than we would in the past because we have no good substitute for what they are capable of doing. As far as Amerijet's future is concerned we will look at a medium wide body as our next airplane. We think an earlier model 767 is the next stage for us because it is not a huge airplane but it is bigger than our airplanes. We are looking at payloads of 100,000 pounds with reasonable fuel burns.

## J: When do you see the next aviation recession arriving? What will it look like?

**DB:** This market is nothing but a sine wave. I have been through half a dozen of them in my carrier, maybe even a dozen. One of the leading indicators of a market is slowing cargo. I see a market that is going to have to adjust to higher fuel prices and I don't think it has done that yet. And I don't think the economy is ready to support that yet either. Until we arrive at a point where the world accepts the cost of fuel being more expensive, we are going to see a slow down in the market. At one time we were horrified at fuel at \$2 per gallon; today we would be dancing in the streets if we saw those prices again. While we adapt I see a slowing. Until we get our hands around it our customers are going to be looking for the cheapest way out. Back a few years nobody had a problem putting ugly freight on overnight airplanes. Today they are going by 2 and 3-day trucks because customers can save money.

J: So are we at the beginning of a slowdown?

**DB:** My opinion is that we are part way in.

## J: How is Amerijet responding to the increasing interest in Green solutions to the Aviation business?

**DB:** Today it is not a challenge and I am not sure how we respond on a go forward basis. We are a fairly small industry and when we get nailed it costs us a huge amount of money in what always seems like a short period of time. In the 90s we had to convert all of these airplanes from Stage 2 to Stage 3 at mega bucks in a short period of time. On our dollar. It became a significant challenge to our industry. So much more progress could be made on our environment if governments could get together and address ground transportation. They have the size and they pollute the most. So far it has not affected us but sooner or later someone will remark that we are putting all of this kerosene in the air and we have to do something about it.

## J: How is the retiring of the Baby Boomers going to affect Amerijet in the next few years?

**DB:** The aviation business is a sexy business and people love airplanes and they love to be in the aviation business. I see lots of young people who want to be part of the industry. We hired Elizabeth Halsmer who received a scholarship from Vito LaForgia and ISTAT because she was a talented person and one we needed. Right now my people tell me that the market for pilots today is as good as the middle '60s. I never run out of people who want to be part of Amerijet. We, as an industry, need to continue marketing the benefits of an aviation career.

#### J: What role does ISTAT play in the industry?

**DB:** The role you always play. The appraisal group brings a lot of value to the industry as it gives all of us a forum to understand movements in value of aircraft. The Foundation's mentorship program brings a lot of value to the market place. I think that the very fact that the Society exits and that people can get together and talk about these issues at a high level has an important role. I think ISTAT could play a bigger role as to the quality of regulations as it affects the industry. Why are we removing perfectly healthy, extremely experienced Captains from the cockpit because they have just turned 60? I am losing good captains today and they are becoming hard to replace. ISTAT has a real opportunity on these types of issues.

## J: What are the major challenges facing the industry in the next 24 months?

**DB:** Fuel

## Data Management

## Controlling Aircraft Leases—A data issue

o be successful in pro-actively securing the benefits of leasing, effective and efficient management and control of aircraft and their lease contracts are required. What are the key indicators which owners, lessors and managers need to take into consideration and control prior to and during their relevant ownership and management period?

Managing data comprises two sides of the story; i) data managed and created by the owner/manager of an aircraft to control the lease and ensure all obligations are met and ii), data (records) produced by the operator which represent aircraft value. The interesting issue here is how to obtain and manage these in the most efficient and effective manner.

The fundamental question to be answered when putting the controls, procedures and organization in place is the required level of detail needed to satisfactorily manage both aspects. Control of exposures and cash flows is one key issue for which a complex data structure from technical and financial nature needs to be gathered, ordered and processed. And this is where databases and intelligent software can assist an organization in a great manner.

Gathering copies of aircraft records and storing copies of these is becoming more and more common practice since these provide backup information to the owners and ease remarketing of aircraft. A few companies have made it their business by indexing scanned images and allowing full search capabilities. Eventually presenting aircraft records in digital format will become standard practice for aircraft deliveries. However, how efficient are you in gathering data

and retrieving the information from operators and how do you form an opinion on the operators' capability to return the aircraft to you in the configuration and status as agreed?

The standard practice of gathering and recording data is time consuming and expensive and in some cases just the resources are lacking to conduct the desired data gathering analysis work. Wouldn't it be great if your systems could be fed with operator data in a controlled manner? What bottle neck needs to be conquered in order to arrive into that era?

Ways and means to solve the issue

Significant efficiencies could be achieved if the various inputs fit a uniform system and reports drawn from a common data

Although electronic documentation is becoming more and more the standard, regular practice, it is still the usage of spreadsheets, documents and paper which lack integration, leading to duplication and time being spend on layout, formulas and finding the source information. Some organizations have successfully developed their in-house application by either further developing one of the departments' system into a "lead" system and to submit all the other departments data into this "lead" system or by linking spreadsheets such that data needs to be feed once.

This may work very well in a stable fixed environment. When they are developed from a basic use for the purposes of one department it might not fulfill the needs and requirements of other departments, those have to compromise for the use and presentation of their data. A second disadvantage is the laborious nature to keep the system up to date and to adapt to the requirements of the various department and maintaining the balance of inputs and reporting requirements. These systems might work excellently in a small portfolio environment without too many changes, however, they are very labor intensive for larger portfolios or actively traded portfolios. How do these systems cope with changes in the portfolio, aircraft/



engines from different manufacturers, other financing structures, a different set of contractual obligations, new maintenance schedules and maintenance reserves calculations, end-of-lease compensations, and how swift are you able to analyze the different scenarios?

Lack of systems also encourages individuals to maintain their own stand alone data which makes an organization not only depending on the individual professional but also on access to data managed by that person.

The leasing business is mature and we start realizing that asset managers should not spend their valuable time and skills in building control tools.

Being capable of transparently managing portfolios is just one of the issues the industry is now fully aware of and software tools are becoming more and more important to assist these managers to demonstrate their capabilities to financiers. In particular with the arrival of new investors and financiers, affordable and highly effective standard tools specifically developed for the aircraft and engine leasing industry will benefit the users

However, having the ability to know exposures at a single click, does not automatically mean that control follows. Human skills and experiences assessing the changing business situations is still of utmost importance for successful leasing. But the right tools will provide additional and faster insight allowing better control of any situation.

To avoid the burden of imbalance between the data needs, input and reporting requirements and suitability of the application for the whole organization one should take a different approach. Start with a clean sheet of paper. Look at the aircraft business life cycle. Look at the (lease) contract obligations. And start defining your system requirements from there.

We asked Jaap van Dijk of Aircraft Management Solutions B.V. the developer and distributor of ALCA Software to share his view on this subject. "We started with that integrated view point and developed our application from the lease and asset managers' perspective. We wanted to prevent the scattering of information and to make managers life easier. This gives users and management a clear view of lease obligations and status. We also wanted to avoid situations where information was received from operators and processed in the 'legacy systems', requiring significant effort for the production of management reports, maintenance reserve cash flow and end lease compensation forecasts and to find answers to questions such as what is the impact of an early termination or lease extension on End Lease compensations. Why let a consultant spends his time and your money on reporting aircraft configuration status while that information is already in the hands at the owner? We want that essential data to be available real time to users. Following these guidelines and broad user input we arrived at a comprehensive modular application."

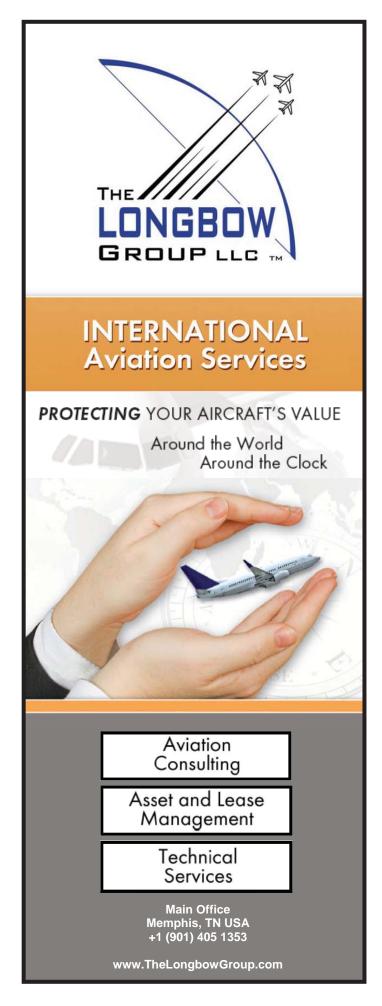
The industry is growing and new investors and managers are arriving and lessons have been learned from previous down turns. Investors are looking for cost reductions, better protection of the value of the assets, quicker response times and optimization of the (re-)marketability to enhance their return on investments. Aircraft Management Solutions B.V. is very pleased to be a leading service provider in this field.

Since it is essential to have control on aircraft records, integration with data and records management systems is required and necessary. Aircraft Management Solutions partnered with the France based records imaging and management system of ADS France to provide this element of security.

We foresee that in the near future data retrieved from scanned images will be fed to applications automatically. Automated verification of compliance with Airworthiness Directives and MSG3 based maintenance programs is just an example.

Are you in control?

Ron Spek, McBacon International – Aviation Consultant: mcbacon@planet.nl; Jaap van Dijk may be reached at Jaap.van.dijk@amsbv.com



## ISTAT Reception Paris















# Javes







# ISTAT Hosts a Grand Event in Paris

The 47th Annual International Paris Air Show was not the only big event held in Paris in June. While the race was on for the industry to showcase and sell the newest and best of the best in aircraft with a full trade show, and daily flying demonstrations, ISTAT provided an evening of networking for over 1,000 ISTAT members and guests.

Despite a heavy rain prior to the event, ISTAT along with our Sponsors provided a great setting for a grand event held at the historic Le Pré Catelan.

Reception sponsors were Bombardier, GA Telesis, LLC., Guggenheim Aviation Partners and Pratt & Whitney.



## Pleasure Principle vs Reality Principle



DVB was established in 1923 as the Transportation Finance Unit of the German Railways. This was the start of a fascinating story which leads us to where we are today, a Hybrid Institution, lending and investing in the Aviation Industry. DVB has survived a few ups and downs, maintained and even expanded its presence through the bad times, and today still delivers to our clients the right cocktail of Capital and Services that they need at any point of the cycle. But that same year, in 1923, an interesting man named Sigmund Freud published 'The Ego and the Id' which for the first time provided for the basis of most of today's digression on the unconscious. One of the fundamentals of his theory was to explain that an individual can only grow if he/she achieves the right balance and control between the Pleasure Principle - defined as the desire for immediate gratification versus the deferral of that gratification - and the Reality Principle. If he/she does not, them he/she will simply collapse in various forms of disruptive behaviour.

Applying the theory to today's situation, it is obvious that the Airfinance market is not driven by the Principle of Reality but by the Principle of Pleasure. Francis Fukuyama was telling us shortly after the fall of the Berlin Wall that History had come to an End, and I see with pain and sorrow the same (wrong) posture infesting our Airfinance Market. "Apparently" we have moved to a 'different world' and some highly regarded professionals are telling us that the cyclicality of the Industry has disappeared, or that we are moving to a 'super' cycle (Not too sure what Super Cycle means but this is probably to the 'Cycle' what Superman is to the Man ....?). This theory is built on evidence that we are all too pleased to accept and share in the Industry today: long overdue deregulation in the EU market that has finally created more profitable legacy carriers and has eliminated the others, the emergence of a new business model with the Low Cost Carriers, the opening of new frontiers and momentum in India and China, and as a cherry on the cake, even US carriers seem to be moving away from their Chapter 11 nests where they had continued to operate for too long at the expense of others. Even those who predicted turbulence following the devastating hikes in fuel price must confess that in essence, the industry has done a remarkable job in weathering this challenge through hedging and surcharges (And maybe benefiting from a capacity shortage, resulting from lack of post 9/11 ordering). In this environment and after the post 9/11 trauma, no one should be blamed for taking pleasure in this good news.

It goes even beyond the next few years: for the macro long term picture, the whole community of economists is telling us only good things about the Air Transportation Industry in the next 25 years, except for external shocks. On that point, we even see Airbus and Boeing in close - but still platonic - brother-hood.

As a result, money is flocking to Aircraft and Airlines. At the last Boeing Annual financier's presentation in London, 72% of the audience voted for an increase of exposure to the Industry. Those investors who bought A320s two years ago could have sold last year with a solid profit, and those who bought the same aircraft last year can still find another incoming Investor to give them a bonus for their smart move 12 months ago. Same goes for A330s, 737NG and many others and can even be extended to slots of the 787 that has not yet flown.

On the Lending side, Basel II is helping Banks to limit Capital consumption on all 'secured financing' creating a perception that this type of Lending is safer. European banks have forgotten about the excess of the previous downturn and Asian based Institutions have not yet learnt it. Japanese banks, after years of penitence, want to grow again. Across the Banking Industry, the need to grow, either to provide for a nice IPO story or simply to eat your neighbour before he eats you has fuelled a tsunami of liquidity with margins going south in every compartment of Lending. In Asia, one heart of this growth engine, a

new generation of Entrepreneurs has emerged, and memory of mistakes from the Asian Crisis, ten years ago, fades away.

For the Banks, the new paradigm has a sweet name: Asset Based Finance. It allows banks to explain the mistakes of the past and justify all the excesses today in terms of valuation. Appraisers are delivering a consistent message from the data they collect from the market, reflecting back to the market actors the value inflation that the same parties are fuelling.... And Banks competing for business are pushing the LTVs just a little higher next time around in a relaxed atmosphere where there seems no need to confront clients with improved maintenance reserves and return conditions. At DVB, as an Investor in Aircraft and Lender to the Industry, we believe playing the asset value requires a risk and business culture that takes a lot of time and effort to build. At DVB, we have a team of four 'metal' analysts that have built an in house rating model for every single 'western' aircraft in operation. Every quarter the team reviews current values and future values. Earlier this year, we created a Lease Management and Remarketing Team. This just enhances our first hand data collection and analysis.

This is why DVB is unlikely to buy new A320 or B737-800s at current 'market' prices, not because we don't like the aircraft but rather because we are not aware of any viable airline business model which will allow the Lessor/Investor a decent return of capital at such inflated price levels. Of course, we are also able to take 'short' term views and also play on the wave of incoming liquidity, but never at the expense of fundamentals and we believe at current trading levels, for many of the most popular aircraft, Pleasure Principle seems to govern our world.

Whether or not the current inflation of asset values is fuelled by positive fundamentals, the temporary need for interim lift, or rather the result of massive liquidity is not a relevant question. We know that

25 years from now, there will be more aircraft flying more people, and we know roughly by how much, this is hardly news. The question is how we go from here to there. If a Lender or an Investor is prepared to take a 25-year view on the market, or even a 10-year view, and build the infrastructure that goes with it, then money will be made, but the liquidity I see today in this market is, for the most part, less experienced, uncritical, and driven by short term volume pressure and short term goals.

The CFO of a very large Airline in Asia was telling me one day how much he 'dislikes' us, Bankers and Investors, who were flushing liquidity to one of his competitors, admittedly a loss making airline with weak management and a truly deficient business model. All of which was being done on the grounds of an 'Asset Based' approach. 'Those guys should have died ages ago' he said, complaining about the indecent level of lending proposed by some and skyrocketing offers on Sale-and-Lease-Back from others.

This gentleman was telling us a very important point: extra liquidity does not rescue an airline from failing; it just delays it and makes the consequences more damaging.

The current significant book order may sound 'reasonable' in regards of the percentage of the total fleet operated today. But the financing needs are enormous for an Industry that has been, for the last 25 years, destroying capital. When Lenders and Investors realize this, then Reality Principle will prevail, and will trigger a brutal withdrawal of liquidity that would be extremely disruptive on Aircraft Values.

When will that come? Well, industry panels in Geneva and London think we are still good for another couple of years. But even for this short term horizon, I would remain cautious.

Passenger Load Factors are at a record high, but we don't see across the industry a solid and sustainable improvement of yields. China has a tremendous growth potential, but like India, Airlines are still loosing money there. Fuel has not fully taken its toll and Hedges arranged two years ago will come to an end soon. Airlines in the Middle East increase their capacity by double digits every year but high fare passengers will have to be taken from legacy carriers all along the Kangaroo route which will pull yields further down. LCC's in Europe are doing great, but some are hardly making money while this summer may see extra pressure on yields. On top of this, we have little idea today how disruptive for the Industry the new environmental passion will be, that has inspired a growing flock of politicians.

Pessimistic? No, rather inspired by experience and Reality Principle. The Air finance and Leasing Industry is a fascinating Industry, pulsed with battles between giants, big egos and enormous money at stake. But for those who like to ride along, better fasten your seat belt.

By Bertrand Grabowski



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# Balancing Creek Control of the Contr

DVB Banks' Bert van Leeuwen once more reports on his experiences in Paris 2007 (thanks to Patrick Creely for his contribution)

Between June 18-25, the small French "Le Bourget" airport became the centre of the global aerospace industry as it once more hosted the 2007 Paris Air Show. Arguably, the Paris Air Show is still the most important commercial aviation event of the year, despite attempts from the Middle East and Asia to organise similar events.

A good benchmark for the commercial importance may be the number of orders announced at such an event, and by this measure Le Bourget 2007 could not have disappointed anybody. Using Flight International's statistics, just Airbus and Boeing alone announced 550 orders and 303 other commitments. Including Embraer, Bombardier, Sukhoi Superjet and Ilyushin as well as orders for turboprops, the total comes very close to 1000.

Of course the "newness" of a number of orders announced at Le Bourget should be taken with a pinch of salt. Manufacturers seem to have found creative ways to boost order totals at air shows, by re-announcing previous orders, counting type changes as new orders, putting names to previously booked orders for "unannounced customers" and by including Lols, options and various other forms of "commitments".

The weather during this year's Paris Air Show didn't give much reason to complain and was certainly more pleasant compared to last year's heat-wave at the Farnborough Air Show in the UK. The trade-days in Paris were generally sunny, although some guests arriving at the ISTAT reception hosted on the Monday evening may have been surprised by a short burst of heavy rain in the early evening. Whereas the weather was OK, getting to the air show and back again proved to be a challenge. Despite being located close to the main motorway from Paris to Charles de Gaulle airport, the local road system around Le Bourget still has difficulties coping with the flow of traffic in the mornings and evenings. Anticipating this problem we booked a small hotel about five miles away from the main gate of the air show and left early in the morning to make the most of the busy days at the show. The plan, which looked good on paper, miserable failed as at almost every intersection or roundabout driving from the hotel to the air-show between five and ten local "gendarmes" tried to impress the rest of the world, resulting in a complete gridlock.

Once having cleared the hurdle of the public road system, parking was the next challenge. Whereas during the 2005 air show parking went quick and efficient, this year the situation was rather confusing. Whereas on Monday the system worked flawlessly, on Tuesday and Wednesday, despite "press" and "trade" badges and even some basic French language skills, confusion reigned and the parking lots assigned to "press" and "trade" visitors were blocked by some "Parking Lot Generals" with egos larger than even the A380. After a nice long walk from the public parking, actual entry to the show however was easy and — as always - local air-show staff were

very friendly, which can not be said of some of the security staff hired by some exhibitors not to be mentioned.

Apart from the manufacturers greedy to pick as many orders as possible under the currently very favourable— if not overheating—market conditions, another theme emerged in Paris, one that is not likely to go away anymore. With aviation increasingly moving into the limelight when it comes to environmental issues, there was a strong emphasis on "creating a greener image" at this years show.

Boeing appeared to be taking a fairly rational approach, with a strong emphasis on noise and fuel efficiency of its next generation of aircraft, and especially its 787. Commercial Airplanes president Scott Carson called for the aviation community to "share our story with the public", alluding to the point that the general public

hold many "erroneous" facts when it comes to aviation and its impact on the environment.

Airbus appears to be taking a slightly different approach to Boeing, with the emphasis being on emission per seat statistics (clearly favouring the giant A380 as the greenest of all jetliners). Magazine pages and billboards across Le Bourget depicted A380 silhouettes filled with green related images such as rainforests, trees and dolphins.

By far the best strategy in terms of green marketing during the week had to be that of engine manufacturer CFMI, who reportedly ensured that a fresh carpet of turf adorned their engine exhibit for every day of the show (the carbon foot-print for the digging and delivery of this turf we'll never know).

Back to business. As always, the Paris Air Show offers a range of attractions. First of all there are the flight displays. The only major jetliner doing daily demo-flights was the A380. As always, very impressive and as such already making a trip to Paris worthwhile. The second "metal" attraction is the static show, essentially aircraft on the ground during the entire show that can be seen from the outside and occasionally from the inside as well. This year the number of new aircraft on display was limited. The Airbus A380 (007 and 009) once more dominated the platform. With the 787 Dreamliner not even "rolled out" at the time of the show, Boeing had to do with a 777-300ER on display. As such an impressive aircraft, but not really "new". This was compensated by the impressive interior design that operator Jet Airways had selected for there new flagship. Especially the first class cabin looked comfortable enough to make a long flight to or from India an attractive prospect. As no other Boeing jetliners were on display, Airbus took the bronze medal in the wide-body cat-





egory with its A330-300 in Qatar livery.

In the narrow-body / regional jet category, the new Bombardier's CRJ900 "Next Generation" in NWA livery stood out. In the intensely competitive segment of larger regional jets, Bombardier improved the interior of its CRJ900 (including larger windows) to the same standard as the proposed CRJ1000 and renamed it "NG". Although CRJ's are generally seen as efficient aircraft, most industry observers agree the passenger comfort is limited by the narrower cross section of the CRJ fuselage. Clearly the NG is an attempt to address this issue.

Embraer, arguably the leader in the larger regional jet market today, had a "170" on display in Egyptair Express livery. The other new regional jet designs, the Sukhoi Super Jet, the Bombardier C-Series, the AVIC I ARJ21 and Mitsubishi Heavy Industry's MRJ were only represented by cabin mock-ups that could be found in the various exhibition halls, the third and final "metal" section of the air show.

Apart from the flying "metal", Le Bourget also offers many presentations, press-events, lunches, dinners and cocktail parties etc. where the table silver is the only metal present. Despite having a somewhat scaled back presence compared to Farnborough last year (clear evidence of the company's Power8 cost cutting program) and having lost its own chalet (Airbus now being confined to the sometimes impenetrable EADS chalet) Airbus stole the show in Paris with its record order announcements; 425 firm orders from 19 custom-

ers and 303 further commitments. By the end of the week Airbus' total order book for the year (so far) passed the 600 mark, whereas Boeing totalled 510.

The 425 firm orders (at catalogue prices) represent an estimated U\$\$62 billion. On the opening day alone, a grinning John Leahy was only too pleased to wave the signed contracts for 339 aircraft orders in front of the press' eagerly watching lenses. Airbus' day one orders represented some U\$\$45.7 billion at list prices!

Substantial orders seemed to raise confidence in the manufacturer's new A350XWB, which received 154 firm orders, and 78 commitments, the majority coming from Qatar Airways. Oddly enough a week later Flight International quoted the airline's CEO as having stated that "for a launch customer we have been provided with remarkable limited information on the evolution of the A350XWB design", which confirms that Airbus still has to educate most of the industry (including the financial community!) about the specs and performance of their new design.

Insisting that it would not accumulate its order announcements for the air show, Boeings orders for the week seem relatively low compared to their rivals in Toulouse, having booked just 152 firm orders against Airbus' 425. Of these, only 66 had not already been listed on Boeing's order books.

By mid-week (Wednesday) Boeing's orders reached just US\$15.9 billion at list prices compared to Airbus' staggering US\$75.7 billion. (Although a higher proportion of Boeing's orders were firm).

Boeing's biggest customer during the show was ILFC which among other types placed an order for 52 787s. To the surprise of some, this was to be the only Dreamliner order announcement of the show

Much of the talk was dominated by the 787 with emphasis definitely on the 787's fuel efficiency and the company's recognition of the need to produce greener airplanes. Scott Carson also mentioned to the potential 737 replacement product, stating that current technology (particularly engine technology) would not be sufficient to give a next generation narrow body the minimum required reduction in direct operating costs of 15% (against current models) making a new aircraft program unviable. Therefore, it was stated that a 737 replacement would not be available until 2015 at the very earliest.

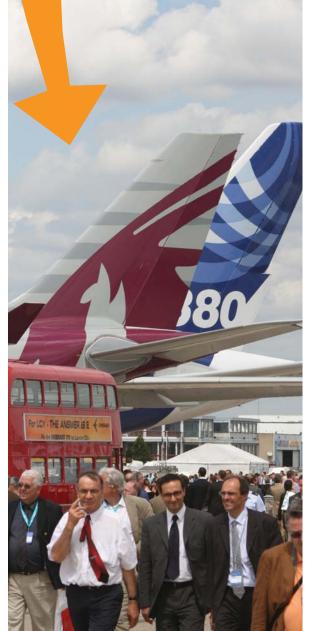
Embraer booked over US\$1 billion worth of orders on the opening day. Lufthansa placed an order for 30 of the manufacturers E-190s, and signed an LOI for 30 more.

Bombardier once more revealed its plans for the new CSeries 100-seater regional jet but no engine details were made public. In the run up to the show, the CRJ-900 NextGen won a firm order from Libyan Airlines for 3 aircraft. Sukhoi was proud to announce its first western order for its new Super-100 series regional jet in front of a hot and flustered media gallery. ItAli Airlines (an Italian charter operator, by no coincidence) signed an order for 10 SSJs.

Conclusions from this year's Paris Air Show? Just a few. The market was already very hot last year at Farnborough and is not cooling off as it seems new order totals will continue at similar high levels after the 2005 and 2006 "boom". Lessors and equity investors are back and are prepared to place large orders with deliveries stretching many years into the future. Used equipment is selling at record prices. How long can the party continue? Nobody knows and while some experts are fastening their seatbelts for the next downturn, equally knowledgeable players believe the geographical diversification of the industry as well as the range of different business models will protect the industry from another rollercoaster ride down.

One thing seems clear, though. Whereas the environmental issue currently seems to be seen as mainly PR material, it is unlikely to go away and without the concerted efforts of the entire commercial aviation industry, this time our industry's party-pooper may be wearing a green mask.

Continuing on the theme of the environment, and especially global warming, it is always interesting to note that at Farnborough as well as Le Bourget, almost everybody (including junior parking assistants) is wearing business suits and ties, whereas at serious ISTAT events, dress code generally is "business casual". Any hope of a more comfortable dress code at Farnborough 2008?



## appraisal

## Airbus A320 Appraisal. Phil Seymour, Managing Director, IBA Group Ltd.

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**Background ::** The Airbus A320-200 is a twin-engine single-aisle short-medium range aircraft that forms the centre of the successful A320 family. Officially launched in 1984, the shorter range A320-100 prototype was rolled out in February 1987, before entry into service with Air France in March 1988. Only 21 of the A320-100 variants were ever produced, all being delivered to Air France, British Airways (ordered by Caledonian premerger) and Air Inter. The more popular A320-200 variant, capable of greater range thanks to a wing-centre section fuel tank was first delivered to Ansett in November 1988. The A320 fleet currently comprises a choice of four core engine types from two manufacturers, CFM International and International Aero Engines. The earlier design CFM56-5A and V2500-A1 engines have since been superseded by the superior and strongly supported CFM56-5B and V2500-A5 family of engines. Both manufacturers provide upgrade kits to improve reliability and fuel burn.

### Current Fleet + Backlog by Region As of April 2007

Region	No of One	Total Fleet	%	Orders	Stored
•					Jillicu
Africa/Middle East	19	94	5.6%	37	1
Asia/Pacific	40	408	24.5%	476	0
Europe	77	594	35.6%	243	5
Latin America/Caribbean	8	143	8.6%	80	0
North America	12	419	25.1%	230	19
Private/Gov't/Military/Mf	g N/A	6	0.4%	4	0
Undisclosed	N/A	4	0.2%	28	0
Total	156	1668	100.0%	1098	25

## Current Fleet + Backlog by Engine

Engine	Total Fleet	%	Orders	Stored
CFM56-5A1/3	377	22.6%	2	10
CFM56-5B4/6	515	30.9%	359	11
IAE V2500-A1	136	8.2%	4	1
IAE V2500-A5	630	37.8%	425	3
Undecided	10	0.5%	308	0
Total	1668	100.0%	1098	25

Current and Future Market Outlook :: The A320 has effectively become a core type in the medium-haul arena in the sub-200 seat sector, along with the 737-800. As operators have integrated the A320 into their intensive schedules they have proved that the economics, performance and reliability of the type are suited for short to medium-haul routes. By April 2007, Airbus had delivered 1,668 A320 aircraft, with an order backlog of 1,098 aircraft. With 156 operators worldwide, the A320 has an impressive operator base which should provide ample scope for re-marketing opportunities. The A320 strongest markets are Europe, followed by North America and the Pacific Rim; recently there is strong demand for the type from Asia which should help to ensure its continued prosperity. This level of market penetration tends to promote stability in the secondary market for a type and helps to ensure a healthy level of aircraft trading in the future. It is worth noting that the current situation of 25 parked aircraft is misleading. Of this number, 9 aircraft are due to enter service with Virgin America after their AOC has been granted, and at least 5 aircraft are currently in transition between lessees.

As the oldest A320 nears its 20th birthday, it is important to consider what the next step from Airbus will be with regard to replacement of this type. The two main factors that will most likely affect Airbus' decision to launch a new narrowbody is partially down to the popularity of the current A320 family and the design of a new engine family that will be able to provide the 15-20% fuel saving that will be necessary to prevent higher fuel costs and emission penalties. As the current situation stands, it is unlikely that an A320 replacement aircraft will be delivered prior to 2015. For those aircraft that are too young for retirement by this time, and provided values do not rise too much, it is likely that some will find their way into Airbus' freighter conversion programme. The first A320/A321 Airbus converted freighters are expected to enter into service in 2011.

## Basic Specs ::

Wing Span - 111 ft 10 in Fuel Capacity - 6,300 U.S. Gallons
Length - 123 ft 3 in Range - 150 passengers - 3,000 nm
Maximum Takeoff Weight - 162,000 to 169,800 lbs Passenger Configuration:Maximum Landing Weight - 142,200 to 145,500 lbs 150 Seats - 2 class
Maximum Zero Fuel Weight - 134,500 to 137,800 lbs 164 Seats - single class
Operating Weight Empty -93,500 lbs Average Fleet Age - 7.9 years

## Appraisal Values: Airbus A320-200, CFM56-5B/V2500-A5, 162,000 lbs Year of Delivery + CMV Base Values - Inflated at 2.5% per annum

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	CWA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2007	45.225	45.00	42.29	39.80	37.49	35.34	33.33	31.45	29.68	28.01	26.44	24.95
2005	39.130	38.59	36.41	34.38	32.49	30.72	29.05	27.49	26.01	24.61	23.27	22.00
2003	35.503	34.67	32.82	31.10	29.48	27.95	26.51	25.14	23.84	22.60	21.41	20.27
2001	31.377	30.46	28.94	27.50	26.14	24.85	23.62	22.45	21.33	20.24	19.20	18.18
1999	28.615	27.67	26.36	25.12	23.94	22.81	21.72	20.67	19.66	18.68	17.72	16.78
1997	25.015	24.10	23.02	21.98	20.98	20.02	19.09	18.19	17.30	16.44	15.59	14.75
1995	22.580	21.67	20.74	19.83	18.96	18.10	17.27	16.46	15.65	14.86	14.08	13.30
1993	20.836	19.92	19.09	18.27	17.48	16.69	15.92	15.16	14.41	13.66	12.92	12.18

"CMV" = Current Market Value. Projected Base Values have been inflated at 2.5% per annum. The Base Value of an aircraft assumes its physical condition is average for an aircraft of its type and age, and its maintenance time status is at mid-life, mid-time (or benefiting from an above-average maintenance status if it is new or nearly new, as the case may be). All values have been determined in accordance with ISTAT definitions of Base Value and Current Market Value

The aircraft values stated herein are work product of independent third parties sources, and ISTAT neither approves or indorses the information contained herein or the use thereof for any purpose whatsoever.

## opraisal

Boeing 757 Appraisal . Jack Feir, President, Jack B. Feir & Associates tele +1 215 345-9009 - email jackfeir@aol.com

**Background ::** The Boeing 757 has had a long history. Much of the initial design work was done during the late 1970s and early 1980s, which was the period of time when the price of jet fuel doubled so many times that it went from 10 cents per gallon in the early 1970s to over \$1.00 by the early 1980s. It was also the time when new noise regulations were being formulated, so when the 757 emerged in 1981 it was one of the quietest and most fuel-efficient models ever developed. These attributes, along with the two-man cockpit configuration, allowed production to continue for over 20 years without the need for major modernization or redevelopment. The 757s came in four main variants: the standard 757 200, the ETOPS-capable 757 200ER, the stretched 757 300, and the package freighter 757-200PF. In total, 1,050 were manufactured, with last two being delivered in early 2005.

## Estimated Current and Future Values (Millions of US dollars)

Typically equipped aircraft in mid-time, mid-life condition Future values include 2.5% annual inflation

Current and Future Market Outlook: The operator base of the 757 is very much dominated by the US. More than 60 percent of the Boeing 757s are with US operators, where there are large fleets with American, Delta, United, Northwest, Continental, US Airways and UPS. These seven operators have an average of over 85 Boeing 757s each. There are far more operators outside the US, but most of them have much smaller numbers of 757s.

Two engine manufacturers are represented on the 757 program. Their market shares of the world-wide in-service fleet are split roughly 60:40 between Rolls-Royce and Pratt & Whitney, with a large portion of the Pratt & Whitney fleet in the US.

Very few 757s have been retired or lost in accidents, so over 98% of the original 1,050 are still in operation. In the past few years, the numbers in storage or being listed for sale or lease have accounted for only one or two percent of the fleet. Passenger-to-freighter conversions have been long anticipated, and the pace of conversions is now picking up as Federal Express and others are finally retiring their 727 freighters in wholesale lots. These conversions will probably soak up any surplus of passenger gircraft that might grise.

As for the future, their low noise and good fuel efficiency, plus the prospect for large numbers of freighter conversions, should help to sustain the market values of 757s. We expect most will remain in service for many more years before we begin to see appreciable numbers of retirements.

				Boeing 7 Year of E	Build	Year of I			
us dill	Mid-Year	1990	1995	2000	2005	1990	1995		
	2007 2008	12.3 11.4	18.2 16.9	23.5 21.7	30.2 27.2	17.8 17.0	24.1 23.0		
	2009	10.6	15.7	20.0	24.5	16.2	23.0		
	2010	9.7	14.5	18.5	22.1	15.4	20.8		
	2011	8.9	13.4	17.0	19.9	14.6	19.7		
	2012	8.2	12.3	15.6	17.8	13.9	18.7	46	
	2013	7.4	11.3	14.3	15.9	13.1	17.7	and the state of t	
	2014	6.6	10.2	13.0	14.2	12.4	16.8	- 34 A	
	2015	5.9	9.2	11.8	12.6	11.7	15.8	X X AU	
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## CORRECTION A330 vs. 767-300 Values

By Scott Hamilton

In a piece for Jetrader (June 2007), we interviewed appraisal firms, Airbus and Boeing over the future values of 1998-manufactured Airbus A330-200s and Boeing 767-300ERs. Appraisal firm Avitas was quoted as concluding A330s had better future values than the 767; and Aviation Specialists was quoted saying the opposite.

When the article was published, Aviation Specialists said its conclusions were not quoted correctly. In backtracking, it was discovered that a formula error in an Excel spreadsheet provided by Aviation Specialists gave the incorrect mathematical conclusion. Below is a corrected chart of future values based on a percentage of the replacement cost of a 1998 Year of Manufactured airplane.

On a dollar basis, the A330 retains its value favorably until 2024; on a percentage basis, the 767 has the advantage from 2020.

#### REPLACEMENT COST \$87.0 \$82.0

	ψο,	<b>402.0</b>			
DOM June	1998				
A330-2	200	767-300ER	A330-2	200	767-300ER
2007	\$46.3	\$40.9	2007	53.2%	49.9%
2008	\$44.0	\$38.9	2008	50.6%	47.4%
2009	\$41.7	\$36.9	2009	47.9%	45.0%
2010	\$39.5	\$35.0	2010	45.4%	42.7%
2011	\$37.3	\$33.2	2011	42.9%	40.5%
2012	\$35.2	\$31.5	2012	40.5%	38.4%
2013	\$33.2	\$29.8	2013	38.2%	36.3%
2014	\$31.2	\$28.2	2014	35.9%	34.4%
2015	\$29.4	\$26.7	2015	33.8%	32.6%
2016	\$27.5	\$25.2	2016	31.6%	30.7%
2017	\$25.7	\$23.8	2017	29.5%	29.0%
2018	\$23.9	\$22.3	2018	27.5%	27.2%
2019	\$22.2	\$20.9	2019	25.5%	25.5%
2020	\$20.5	\$19.5	2020	23.6%	23.8%
2021	\$18.8	\$18.1	2021	21.6%	22.1%
2022	\$17.1	\$16.7	2022	19.7%	20.4%
2023	\$15.5	\$15.2	2023	17.8%	18.5%
2024	\$13.7	\$13.9	2024	15.7%	17.0%
2025	\$12.0	\$12.5	2025	13.8%	15.2%
2026	\$10.3	\$10.9	2026	11.8%	13.3%
2027	\$8.3	\$9.5	2027	9.5%	11.6%
2028	\$6.3	\$7.9	2028	7.2%	9.6%
2029	\$4.3	\$6.3	2029	4.9%	7.7%
2030	\$2.1	\$4.8	2030	2.4%	5.9%
2031	\$0.0	\$3.2	2031	0.0%	3.9%
2032		\$1.0	2032	0.0%	1.2%

# oumpy ride al

n more than 30 years working in Aviation insurance, I have yet to meet any insurance buyer who feels that the premiums they pay are reasonably priced or fair.

However, now actually seems to be as good a time as any to be buying insurance and, unless they have had a big increase in exposure or a poor claims record, any insurance buyer should have seen a significant reduction on their aviation premiums over the past year.

Why is this? Well, in simple terms the aviation insurance market tends to react only to 2 key factors; Catastrophic Losses and Capacity; and both of these factors are particularly favourable at the moment from an insurance buyer's point of view.

Although major accidents unfortunately continue to occur, underwriters' loss experience recently has been significantly below average and none of the losses over the past 5 years would have been termed catastrophic from an insurers prospective. This is mainly because these losses have tended to involve older, lower-valued aircraft and have occurred in areas of the world that traditionally have lower court awards for passenger claims. Although, recent experience has resulted in forum shopping by claimants in more favourable jurisdictions with higher awards.

As a consequence, almost all aviation underwriters have made very healthy profits over this period.

Underwriters have the dilemma going forward of deciding whether this better loss experience is here to stay because the aviation industry is genuinely becoming safer or whether it is just a statistical blip.

Nevertheless, many insurance capital providers seeing the profits presently being made in aviation, have started to try and shift more capacity into this sector. This has resulted in significant new capacity entering the aviation market over the past couple of years which has had the inevitable effect of exerting a downwards pressure on premium levels in all areas of the aviation market as this new capacity scrambles to buy its way on to business.

The airline sector of the market includes insurances for lessor's possessed aircraft and contingent coverages, and it is this airline sector that has traditionally seen the most volatile year to year swings in premium levels. Although the other aviation sectors have followed its lead, the premium fluctuations elsewhere have tended to be less dramatic.

Following the tragic events of 9/11 the total worldwide premium for airlines reached around USD3.75 billion at its peak in 2002 but has been steadily declining ever since.

Last year the total world-wide airline premium income is estimated to have dropped to just around the USD2 billion mark, and for 2007 it is likely to plunge further and finish up at around only USD1.4 billion. This translates into individual premium reductions averaging around 20% for airlines.

Premiums in the MRO sector have stayed relatively high over the past couple of years

premium at a single stroke.

but, even here, premiums are coming under pressure with reductions of around 5% not being unusual. This is in spite of the fact that the MRO book of business continues to be a cause of concern with many underwriters as a result of the large and frequent loss activity.

At the current premium levels it is difficult to see going forward how aviation underwriters will manage to make an adequate return even in an average year of losses especially as increasing regulation of the sector is resulting in higher operating costs. In fact, it could only take one major accident involving a B747-400 fully laden with US passengers to wipe out the entire years global

Many within the market, therefore, feel that we are nearing the bottom of the cycle. But with the level of surplus capacity currently running so high, unless there is a major loss, or maybe even a series of major losses, the downward pressure on premiums is likely to prevail for the foreseeable future.

I guess that Underwriters and insurance buyers alike would all prefer to see pricing stability at an appropriate level. But sadly this idyllic state of affairs still appears to be a long way off.



David Sales

Aerospace Team Benfield Corporate Risk

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# P-51 MUSTANG

Much like the early Formula One racing car's suspension and engine designs led to improved automobiles, so did the development of combat aircraft pave the way to improvements in commercial aircraft performance.

"Make it the fastest airplane you can and build it around a man who is 5 feet 10 inches tall weighing 140 pounds; two 20-mm cannons to be fitted in each wing, and it should meet all design requirements of the United States Army Air Corp".

Edgar Schmued North American Aviation Chief Designer Did you know that the North American P-51 Mustang, one of the best and certainly the best known U.S. fighter airplane of World War II, was the result of the British trying to purchase Curtiss P-40s in their desperation for aircraft to replace losses battling the German onslaught against England in 1940? Because of their highly regarded mass production skills, North American Aviation was asked to set up an assembly line for what the Royal Air Force (RAF) already realized was an obsolete design. Naturally North American was not too happy about the prospect, especially as the chief designer, Edgar Schmued, a German immigrant, had already made some sketches of his own ideas for an interceptor. In March 1940, the president and general manager, "Dutch" Kindelburger, told Schmued that he was going to England in two weeks and wanted to give the British specifications for a fighter with some detailed gun installation drawings.

Here is the full design specification for the P-51 as given to Schmued at that meeting: "Make it the fastest airplane you can and build it around a man who is 5 feet 10 inches tall weighing 140 pounds; two 20-mm cannons to be fitted in each wing, and it should meet all design requirements of the United States Army Air Corp". That was it; the sketches were retrieved from the desk drawer and taken to England. Kindelberger came back from the meeting with the British with a letter of intent for 400 P-51s.

Early on during the design stage, two engineers from the National Advisory Committee for Aeronautics (NACA), the forerunner of NASA, visited Ed Hartman, North American's sole aerodynamicist, about some highly classified research the NACA was doing on laminar-flow airfoils, which resulted in a 30 percent reduction in drag over current airfoil shapes. Hartman did not adopt the actual NACA airfoil shape directly but used their theoretical technique to design a thinner laminar-flow airfoil specifically for the P-51 wing. A standard airfoil shaped wing was also designed as a back up. However, when both shapes were tested in the University of Washington's 8 X 12 foot wind tunnel, the maximum lift, low drag and stall characteristics of the laminar-flow wing were so superior over the standard design, it was adopted forthwith for the airplane. In combat the laminar-flow wing's higher critical Mach number gave the P-51 superior performance at high speeds over its opponents, even though laminar-flow was soon reduced by wing surface irregularities caused by the rigors of operations from desert strips and grass airfields with expanded metal temporary runways. Its zero lift drag coefficient was 0.0163, the lowest of all WW II propeller-driven airplanes.

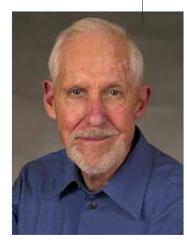
Another important innovation was that massive belly radiator for the engine's coolant and oil. The duct throat to the radiator converged, thus increasing the intake air's velocity and lowering its pressure; heat from the coolant and oil added energy to the air which was exhausted through the duct's divergent nozzle. The net result of this exhaust thrust offset radiator drag completely.

#### Aviation **History** continued

One hundred days after the start of design work the prototype airframe was rolled out, but the Allison V-1710 F engine was not ready. It flew for the first time on October 26, 1940; just six and a half months after the British had signed the letter of intent to buy 400 of them.

With the Allison engine having only a single stage supercharger, the P-51 had a very poor performance at altitude against the Luftwaffe, and was soon relegated by the RAF to low altitude photo-reconnaissance work. Meanwhile Rolls Royce took five of the aircraft and replaced the Allison engines with Merlin 61s taken from Spitfire Mk. IXs as a proof-of-concept lash-up, (RR's description). With the Merlin's two stage, two speed, intercooled supercharger the change in performance was spectacular. Rolls

Royce sent the engine drawings to the Packard Car Company, (Ford turned down the offer), and it was the American built Merlins that powered the P-51 B, which with under wing drop tanks and a third fuselage fuel tank, could escort the Eighth Army Air Force bombers all the way to Berlin to overcome what had been devastating losses of B-17 and B-24 aircraft from enemy fighter attacks. Prior to the advent of the fighter escorts, the favorite tactic employed by the Focke-Wulf FW 190s, was to dive as a group in line astern on the rear bombers in the formation and overwhelm the rear gunners with shear numbers, (some eighty percent of the US crews were not completing thirty operations over Germany). The American fighters with their turbo supercharger (P-47 Republic Thunderbolt) and the P-51s Merlin 61 engine, could match the FW 190's performance at high altitudes.



In 1944-45, Hitler launched a blizzard of VI ram-jet flying bombs against London. The RAF P-51D was one of the few fighters that could catch the 400 mph plus weapon and either shoot it down or tip it around back to where it came from, (as a thirteen year old, on a summer's evening I saw a Hawker Tempest do just that).

Although it had the same engine, the P-51B had a larger wing than the Spitfire and three times the fuel capacity. Even so, without the wing tanks and empty fuselage tank, it was faster than the Spitfire at all altitudes and had a lower fuel consumption per air-mile than the other escort fighter, the shorter range Republic P-47 Thunderbolt with the Pratt and Whitney R-2800, which had a lower specific fuel

consumption per brake horse power. Go to the Reno air races today and you will still see superbly restored and tuned P-51s battling McDonnell F-85 Bearcats and Hawker Tempests at speeds up to 500 m.p.h.

References: Graham White, Allied Aircraft Piston Engines of World War II, Society of Automotive Engineers, 1995.

John D. Anderson Jr., The Airplane, A History of its Technology, American Institute of Aeronautics and Astronautics, 2002.

Ferenc A. Vajda & Peter Dancey, German Aircraft Industry and Production, Society of Automotive Engineers, 1998.

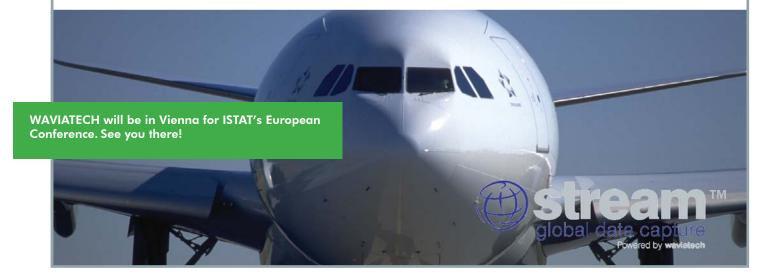




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## Some Helpful Rules of Thumb Tools For Making

## **Intelligent Decisions**

By Douglas Castle

enerally speaking, I have always been one to avoid making decisions based upon popular anecdotal "rules of thumb," and have often dismissed them heavyhandedly as being the unsophisticated person's only alternative to intellect and technical analytical skills. As I have grown older, however, I have learned that despite their generalized nature and occasional inflexibility in a changing world, Rules Of Thumb have applicability in two situations: 1) making fast estimates, and 2) ruling a tentative decision out categorically. Rules Of Thumb may be the first tests used to determine whether or not a proposed transaction is worthy of further, more thorough examination.

An additional comment may be in order, as well. Rules Of Thumb are primarily applicable in dealing with decisions involving pre-owned aircraft, as the new aircraft market is largely governed by various non-economical psychological, marketing and consumerism forces that are often seemingly at odds with rational, economically-based transactional decision making.

A Different Perspective A pre-owned commercial aircraft is simply an income-producing asset. Lease payments are an annuity stream and upon the maturity date of the lease, the asset may be re-sold, re-leased, or parted-out. In some cases the asset may appreciate in value owing to the market forces of supply and demand; conversely, and for the same reasons, the asset may decline in value. While theories abound regarding the valuation of aircraft, I believe that an aircraft's intrinsic value (assuming proper care, maintenance, recordkeeping, regulatory compliance, and the like) is a function of two things: 1) its current income-generating potential, and 2) its value upon maturity.

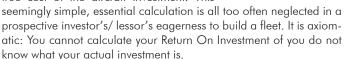
Relative Standards The Rules Of Thumb must be adjusted in accordance with the prospective investor's/ lessor's individual standards and economics. For example, if I am able to borrow limitless funds at a consistent rate of 4% per annum from my lender at an advance rate of close to 100% (we all have our fantasies, and this is one of my personal favorites – or at least one of the only ones that I can write about in this forum), it might indeed be a sensible investment for me to purchase an aircraft that generates a lease income stream of an anemic 6% per year (e.g., 0.5% per month of the acquisition cost of the aircraft), whereas my less fortunate colleagues, who have to borrow at a rate of 15%, could not even consider entertaining the same acquisition. Rules Of Thumb must be modified to suit individual financial dynamics.

The Fundamental General Rule About Rules Of Thumb: If the application of any purported rule requires fancy computer algorithms, a special calculator (on special license from any obscure but powerful governmental agency), the use of the number Pi, the Golden Ratio, particle physics or repetitive incantations of any sort, you are not dealing with a Rule Of Thumb – you are dealing with ulcerative colitis in the making. If you need anything more complicated than a dime store calculator, a pencil and a cocktail napkin (refer to Oscar Madison's First Law Of Simplicity) to arrive at a decision, you are defeating the whole purpose of this approach. Simplicity and broad applicability are both essential. The most important purpose served by any good Rule Of Thumb is it can be used to determine if it is worthwhile to spend the time and the resources in order to do a more detailed analysis. A good "quick and dirty" preliminary evaluation can save a great deal of wasted time and resources.

The **First** Rule: Always Calculate The Actual Total Cost: It requires a rudimentary knowledge of addition, as well as a quick checklist, in order to calculate the actual cost of acquisition of

a commercial aircraft asset. The costs to be factored in include, but are not necessarily limited to, those itemized in the following list: The purchase cost; The costs of inspections and checks; The costs of accumulated maintenance and necessary refurbishment; The costs of logistics (i.e., storage and delivery); Professional fees and other costs associated with closing the transaction; The cost to service any debt if the aircraft will not be leased (and therefore will not be servicing the debt through the generation of any income) as of the purchase date; The fees incurred in obtaining financing; The fees incurred in procuring a lessee; The costs of any insurance required immediately upon closing of the transaction.

If you add all of the above components together, then you will know the true cost of the aircraft investment. This



The Second Rule Of Thumb: Assess The Timing And Amount Of Cash Inflows From Your Lessee: As surely as the road to hell is paved with good intentions, the road to economic ruin is paved with unrealized "potential" earnings. Unless you are purchasing a commercial aircraft asset with a view toward an immediate resale, you will need to generate cash inflows to service your debt and/or to pay your investors a fair return (Q: Is it ever truly "fair"?) on their capital deployed at risk. Here are the points to be looked at, assuming a simplistic dry lease:What are the lease terms (e.g., start date, length of term, monthly rental payment)?; Do you have an alternative lessee or lessees who would readily accept the same lease terms in the event that your lessee defaults? Generally, the broader your prospective lessee market, the more secure you can feel about the asset's ability to earn its way out of debt and furnish a return on any equity invested in the acquisition.

What percentage of the aircraft purchase cost will the sum of the lease payments recover, without giving effect to interest or discount rates (or Internal Rate Of Return) -- just based upon the "old school" Payback Method?

(Refer to Illustration A-1)

In the optimal situation, you could invest \$20.0 million in a commercial aircraft asset, and have a well-secured 60-month lease with monthly payments of \$399,999.00...this would recover your entire investment in less than 60 months (actually closer to 50 months) — a terrific deal, even disregarding the value of the asset remaining after the lease has ended, which would simply be an unconscionably rich bonus.

In a slightly less than optimal situation, the same asset could generate an 84-month lease stream with monthly payments of \$285,600.00 (less of a premium lease payment because the lessee has committed itself to a longer lease obligation)...in which case your entire investment would be recovered in 70 months – a less desirable deal, because the payback takes longer, but certainly not a bad one. Intuitively, the return on investment is less, because a longer-term income stream has been guaranteed by the lessee. Yet still, all of the investment is recovered during the initial lease term, with the



## BIG Moves

Odgers Ray & Berndtson announced the appointment of Robert Bray as a senior consultant in the Aviation Practice. Prior to joining Odgers Ray & Berndtson, Robert spent 3 years in executive search as a Practice Head and he has considerable international experience, having lived and worked in North America, Europe and the Asia-Pacific regions. With a Masters from Trinity College Dublin, Robert will be based at the company's head office in London and will work directly with Susan Thompson, Partner & Head of the global Aviation Practice.

## A J Walter appoint new Sales Director for Central and Eastern Europe

**Pierre Bonnichon**, has been appointed Director for European Sales by A J Walter Aviation, the aircraft support specialist. Strategically located in the Bratislava office, Bonnichon will have primary responsibility for all Central and Eastern European customers including airline operators and maintenance companies. AJW have recently announced a strategic focus on the region and have set up a new support hub in Prague to service their powerby -the-hour agreements with airlines such as Travel Service, Air Via, B H Air and, most recently, Air Moldova.

A native Frenchman and fluent English speaker, Bonnichon studied law at Rennes University and specialised in international negotiation at the graduate business school - Ecole de Gestion et de Commerce de Bretagne. He joined A J Walter in 2002 to develop sales within France and this was followed by a sales management role within EADS Sogerma Services (France).

# Deutsche Bank Equipment Leasing Announces 2 Appointments and Relocates

its West Coast Office With a growing portfolio of operating leases and expanding debt financing business, Deutsche Bank Equipment Leasing announces two key appointments to its technical staff. **Earl Sepulveda**, VP Technical, joins from Cascade Aviation where he was Director of Quality, Liason Engineering, Training and Safely. Prior to Cascade, Earl was at Aloha Airlines in Hawaii for 16 years, leaving as the Director of Maintenance and Engineering. Earl's experience and skills will add new dimensions to the DB Team in relation to transitioning aircraft to operators around the world.

Jack Kotani, VP Technical, joins from Mitsui Bussan Aerospace Corp. where he has been employed for 11 years, most recently as the VP of Technical, DAR. Prior to Mitsui, Jack was with ING Aviation Lease and worked in the Aircraft Acquisitions Group at Continental Airlines. Jack's experience and skills will be a great addition to the DB team, where he will be responsible for evaluating aircraft transactions and assisting with aircraft transitions, where Jack's DAR designation will bring invaluable experience to the DB team. DBEL welcomes these two fine gentlemen to the team!

With the addition of Earl and Jack, DB will be relocating its West Coast office to John Wayne/Orange County Airport. The new address is: 3000-C Airway Avenue, Suite 150, Costa Mesa CA 92626.

value of the asset remaining after the lease has ended (probably less than it would have been in the preceding case) is still a bonus, albeit a more conscionable one.

The first corollary is that the longer it takes to recover your investment, the poorer the investment, given the same creditworthiness of the lessee, the same treatment and maintenance of the aircraft, and the same (or temporally pro-rated) lease-end value of the aircraft. If you have to patch together several leases in order to recover the full amount of your investment, then you are engaging in a more speculative transaction, which should be reflected in your negotiations of the cost and terms of purchase. This type of transaction requires closer analysis, and some considerable thought to the residual value assumption.

The second corollary is that there is a general formula for the easily, instantly approvable transaction (e.g, your banker takes you to lunch and insists on getting a flaming dessert made at tableside for you to share):

If the lease term is less than 48 months, this corollary should probably not be applied; If the lease term is 48 months, each monthly lease payment should be at least 2.50% of the investment amount (although this might be perceived by the lessee as an excessive premium to pay for the flexibility of a shorter-term lease commitment); If the lease term is 60 months, each monthly lease payment should be at least 2.00% of the investment amount; If the lease term is 72 months, each monthly lease payment should be at least 1.67% of the investment amount; If the lease term is 84 months, each monthly lease payment should be at least 1.43% of the investment amount; If the lease term exceeds 84 months, this corollary should probably not be applied. (Refer to Illustration A-2)

In the parlance of the New York, this type of transaction is "fully self-amortizing". When the lease is finished, your banker has recovered at least all of his principal (although he will invariably refer to much of it as interest), and still has a valuable piece of collateral to liquidate to recover any outstanding balance at the end of the loan.

The third corollary is that here is an alternative formula for the easily, almost instantly approvable transaction (e.g., no flaming dessert, but possibly cappuccino), where certain assumptions regarding residual value (e.g., between 40% and 50% of purchase cost at lease-end) are made in order to permit the lender to be less forceful on the issue of amortization: Simply use the following percentages in place of those set forth in the second corollary, above: 48-month lease, use 1.49% of the investment amount; 60-month lease, use 1.38% of the investment amount;

72-month lease, use 2.69% of the investment amount; The third corollary approach should probably not be used on leases shorter than 48 months, or in the case of any lease longer than 72 months.

When we continue this article in the next issue of *Jetrader*, we will discuss three more key Rules Of Thumb to assist you in making better, more expedient business decisions. These rules will incorporate realworld aspects of financing terms, assumptions about resale and residual values, and the use of third-party

opinions to obtain financing at better terms. And once again, while Rules Of Thumb are never flawless, and their exact parameters may be subject to adjustment, their greatest virtue may be in their ability to help you to avoid wasting time on deals that should easily be ruled out. And your time is precious. Please stay tuned.

An Important Note Please bear in mind that this article represents the author's point of view, and should not be regarding as containing any type of financial, economic or investment advice. What follows are merely ideas for your consideration, and any examples are presented for the purpose of illustration only.

#### Illustration A-1

Assumptions: The acquisition cost is \$10,500,000; The lease is a 60-month "dry' lease, with the lessee being all significant costs; Lease payments are \$225,000 per month, or \$2,700,000 per year; The net (dry) lease payments are as set forth below;

There is no debt service, as the aircraft asset was purchased using 100% equity; Payback is computed without applying any discount factors.

Description	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Lease Income	\$2.7*	\$2.7	\$2.7	\$2.7	\$2.7
Cumulative Lease Income	\$2.7	\$5.4	\$8.1	\$10.8	\$13.5
% Acquisition Cost Recovered/year	t 25.71	25.71	25.71	25.71	25.71
Cumulative % of Acquision Cost Recovered	25.71	51.42	77.13	102.84	128.55
Capital Recovery Point	N/A *Millions	N/A	N/A	By 3rd quarter Year 4	Income in excess of Capital Recovery

#### Illustration A-2

Instantly "Bankable" (Self-Amortizing) Lease Terms Assumptions: No residual value; Fixed, regular,monthly "dry" lease payments

Minimum lease term  Monthly lease payment expressed as a % of the asso purchase cost	et
48 months 2.50%	
60 months 2.00%	
72 months 1.67%	
84 months 1.43%	

Douglas Castle is Director of Strategic Planning and Programs for Mojave Jet Group. He may be reached at dcastle@mojavejet.com

## ISTAT FOUNDATION Stephen Rimmer, Chairman

trust everyone is enjoying the summer vacation period. Whilst activities related to the Foundation reflect the typical business seasonality, there is a great deal of groundwork being laid in respect to existing and new projects.

In the new few days, letters will be issued to the various Schools and Colleges seeking applications from scholarship candidates. The growing exposure of the Foundation will undoubtedly result in an



increase in the number of applicants. The Scholarship Committee has extended its reach geographically and we anticipate an increase in international applicants which will more closely reflect the global reach and membership of ISTAT. It has also been agreed that we should amend the current restriction whereby domestic US schools and colleges are required to possess certain accreditation to qualify for scholarship award. This, we believe, will diversify the candidate base with more schools and colleges qualifying for the Scholarship program.

The feedback from this year's internship programme is now trickling in and without exception, the intern candidates are finding on-the-job experience invaluable. We will include a more detailed report in a future issue of *Jetrader* which will also include an employer perspective. We look forward to expanding this programme next year.

In order to continue the growth of the Foundation and to ensure its continued relevance to the aviation community as well as the larger global community, I and a number of other colleagues, feel that we should explore the potential to contribute in whatever way to the challenges that our industry face. It seems that every date via every media, the issue of the environment is raised as one of, if not the most important challenge that we as a human race face, and also one where people perceive that our industry needs to be at the forefront of advancements. We have seen some major industry players take a lead in supporting specific avenues of research to address environmental issues.

From the perspective of the ISTAT Foundation, I would like to explore the possibilities that may exist to use the funds and resources at our disposal to provide support, scholarships and grants to those who may be able to advance the cause of environmental awareness and change within our industry. It is with this in mind that I would encourage all of you to think of ways that we may expand the role of the Foundation in this field and to revert to me with any ideas that you may have.

By keeping the Foundation relevant in today's society and assisting with progress via research, etc., I believe we will also be successful in raising incremental funds from sources that may not otherwise consider the Foundation in their regular giving strategy.

I hope everyone enjoys the remainder of the summer and look forward to hearing from you and meeting you all in the not too distant future.

Best wishes,

) -. xmm

## CONFERENCE REGISTRATION



## **Conference Registration Form**

ISTAT 14th European Conference 30 September – 2 October 2007 Vienna, Austria

Presented by the International Society of Transport Aircraft Trading

Registration form must be received by 21 September; after that date please register onsite.

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All registration fees must be paid in advance to gain entrance to the conference. Membership dues must be current to receive member rate. Attendee must be listed on corporate membership to receive member rate. Substitutes must be members to receive member rate.

**CANCELLATION**: \$200 processing fee for cancellations after 5:00 p.m. EDT 10 September 2007. No refunds for registrations cancelled after 5:00 p.m. EDT 17 September 2007. *Cancellations must be faxed or emailed for refunds to be issued. Telephone cancellations NOT accepted for refunds. Hotel reservations must be cancelled by the individual in addition to conference registration cancellation.* 

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## Preliminary CONFERENCE AGENDA

ISTAT 14th European Conference | 30 September - 2 October | Hilton Vienna | Vienna, Austria

#### **Tomorrow's Aviation Environment**

Sunday, 30 September

10:00 – 14:00 Guided Vienna Walking Tour and Lunch

Visit the Hofburg Palace—previous residence of the Imperial family the Hapsburgs—and view the Imperial Apartments to see how Emperor Franz Joseph lived. Then, eat lunch at the Galcis beisl, an Austrian beer garden that offers a modern interpretation of traditional Viennese and Austrian cuisine.

16:00 – 18:30 Arrival / Registration 18.00 – 20:00 Welcome Reception

Monday, 1 October

08:45 – 09:00 Welcome / Opening remarks Michael Platt, ISTAT President

09:00 – 10:30 Session 1: The Impact of Aviation on the Environment

• An Environmental View Jeff Gazzard, Director – Greenskies Alliance

An Industry View Philippe de Saint Aulaire, Vice President –Airbus Environmental Affairs

A Climate Research View
 Dr. Andreas Waibel, Adviser – Lufthansa Environmental Affairs

10:30 - 11:00 Coffee Break

11:00 – 12:30 Session 2: Tomorrow's Environment

Euro Control – The Way Forward
 Carbon Emissions Trading
 Gerhard Wagner, Austro Control
 Craig Windram, CEO – CarbonSim

Market Forecast
 Bert van Leeuwen, SVP Head of Aviation Research – DVB

12:30 - 14:00 Lunch provided by ISTAT

14:00 - 15:00 Session 3: Tomorrow's Technology

Bio-Fuels
 Virgin Atlantic Airways

• The Manufacturers' View Helga Griesbeck, Marketing Director – Boeing

• Airline View EasyJet 15:00 – 16:30 Session 4: Tomorrow's Engines

Pratt & Whitney
 Robert Saia, VP Product Marketing

Stephan Garson, General Manager Product Marketing

Rolls-Royce Robert Nuttall, VP Marketing

17:00 - 18:30 Cocktail Party

Tuesday, 2 October

09:00 – 10:00 Session 5: Environment Issues for Airlines

Ryanair's View
 Howard Millar, Deputy Chief Executive

Icelandair
 Sigthor Einarsson, COO

10:00 - 10:30 Coffee Break

10:30 – 12:00 Session 6: Financing Tomorrow's Aircraft |

Moderator Birgitt Garitz - Managing Director and Global Head of Transportation Finance - WestLB

CIT Jeff Knittel, President
 BOC Aviation Robert Martin, CEO
 AWAS Franklin Pray, CEO

GECAS Declan Harnett, Sr Vice President & Region Manager for Europe

12:00 – 13:30 Lunch provided by ISTAT 13:30 – 15:00 Session 7: Airline Trends

Virgin Atlantic Airways
 Vueling Airlines
 JetBird
 Willy Boulter, Commercial Director
 Richard Mundon, Fleet Director
 Dómhnal Slattery, Chairman

• Sky Europe Jason Bitter, CEO

15:30 – 16:15 Session 8: Appraisers' Panel

Ascend

 AvITAS
 BA Group

 Les Weal, Head of Valuations and Appraisals

 Steve Jarvis, Managing Director, AVITAS Europe
 Phil Seymour, Managing Director

• AVAC Paul Leighton, Editor, Aircraft Value News

19:00 Dinner at Historical Casemates, Palais Coburg

Please note this agenda (current 8/08) lists invited speakers and is subject to change.



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We approach every assignment by reminding ourselves to look at everything from fresh perspectives and to assume absolutely nothing. We call it thinking outside the fuselage. It allows us to focus our experience, expertise and creativity to find elegantly practical solutions that uncomplicate the complicated and make the impossible possible. And it's why the financial and technical professionals at SkyWorks Capital and JetWorks Leasing have earned a reputation for innovative problem solving that consistently maximizes value for our clients.



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