

It means less friction between different areas and departments of the airline and helps to offer clear solutions and commitment to the oil companies.

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that we look at cost cutting not just by cutting headcount but believe in better processes and the quality of personnel. By selecting well educated and motivated people and giving them responsibility you realize much more savings in fuel cost than by lowering salaries. Also, having concentrated all the fuel knowledge including hedging, IT, operations and controlling in one department helps to think in a integrated way. It means less friction between different areas and departments of the airline and helps to offer clear solutions and commitment

to introduce force majeure clauses which have nothing to do with real force majeure but give them the opportunity to withdraw from any responsibility in case the normal supply route is not available.

JFR: With airline industry consolidation, airlines are becoming larger with greater fuel demand. At the same time, major oil companies continue to sell refining assets to companies that may or may not be ratable jet fuel suppliers. What can the industry do to ensure a ratable supply of jet fuel?

Lufthansa Fuel Team



to the oil companies.

JFR: It appears that the jet fuel industry continues to evolve. From Lufthansa's perspective what are your main concerns going forward?

LH: Our main concern is the accelerated departure of oil companies from the aviation business with investment in infrastructure. We have lost numerous oil companies through mergers and now we see oil companies withdrawing from airports, countries and even regions or continents. Oil companies only producing or just trading kerosene without investment in infrastructure lack the commitment to supply if problems arise. We increasingly see oil companies trying

LH: This is really a difficult question and I am afraid that I can't give an easy answer. First, the consolidation in the airline industry is just at the beginning and to reach levels of other industries like the oil industry it will take many years and heavy political efforts to end the protectionist environment of the airline industry. Second, the development in the oil industry has hardly anything to do with the consolidation in the airline industry which is only 5 to 6% of the barrel on a worldwide basis. To secure ratable supply it will need the combined efforts of the oil and airline industry

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Lufthansa has maintained a minimum price scenario of 40 USD/bbl even when prices approached 150 USD/bbl and we structured our portfolio accordingly.

with investment in infrastructure. Unfortunately the economical and political environment is not too favorable in this respect. The relatively low return on investment in infrastructure combined with the risk of antitrust claims in the hundreds of millions makes oil companies question the sensibility of investment into jet fuel. Airlines are usually not able to invest or get the financing at attractive rates for the investment. Also, short term thinking is en vogue when quarterly results seem to rule investment strategies.

JFR: Some believe that relationships between suppliers and airlines are growing more distant. Do you believe that is true? And if so, what can be done to reverse that trend?

LH: Like any other business the jet fuel business is going to become more and more anonymous. Facts and figures seem to be dominating, especially when there are less and less people involved on both sides. If an airline cuts down to the bare minimum, there is no time to build a relationship with more than one or two suppliers. The same is true for suppliers who see their highest return in cutting headcount. I believe that one of the reasons of our success is our ability to built and maintain relationships not only with the major oil companies but also with local suppliers in the various countries the airlines of the Lufthansa group fly to. Also the fact that our buyers speak various languages including French, Spanish and Russian makes a difference. And it pays out to employ enough highly educated and motivated people. Every time we take over the fuel procurement of another sizeable airline we save more money than the whole cost of the Lufthansa fuel department.

JFR: Can you foresee a future in Europe where there are major monopoly suppliers at most airports? If so, what can be done from an airline perspective to create competition to keep many suppliers in markets?

LH: Unfortunately the number of suppliers withdrawing from airports is higher than the number of suppliers building up their business. Strong

airlines can start self supply at bigger airports but for the smaller ones I am afraid we will see more and more monopolies, not necessarily from the major oil companies but also from locals with the best logistic cost.

JFR: After large paper losses on hedge positions, some airlines are no longer using hedging instruments. What is your opinion of this strategy?

LH: Hedging should be used to shield a business from adverse movements in the market. Since the oil price was on a constant move upwards for quite some time many airlines thought it was going to stay this way and believed in the statements of analysts and players in the market who predicted ever higher prices. When the market came down it resulted in huge losses for those who did not take into account the downside risk. Obviously in any financial market you have to analyze your risks and calculate scenarios. Lufthansa has maintained a minimum price scenario of 40 USD/bbl even when prices approached 150 USD/bbl and we structured our portfolio accordingly. As long as future regulations of the US and EU don't require mandatory exchange settlements and margin calls, Lufthansa will follow its hedging philosophy to continuously building up the hedging positions over time with the goal to reduce the variance of the fuel cost.

JFR: The market has countervailing indicators in regard to the future price of jet fuel. On one hand fundamentals appear weak due to a global recession and reports of large floating stockpiles yet oil prices continue higher. From your perspective why is this occurring and how does Lufthansa balance varying opinions where prices are headed?

LH: We have long given up predicting fuel price developments. Fundamentals have much less impact on the short and medium term pricing than 10 or 20 years ago. As already mentioned we aim to reduce the volatility of the fuel cost and test the instruments used against scenarios, taking into account also other means of dealing with different fuel price environments. These can be different

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for the various business segments of the Lufthansa group. Cargo has a different fuel price risk profile than scheduled and charter or low-cost. We therefore have to analyze each business on its own and select the hedging strategy depending on their specific risk.

JFR: Has Lufthansa changed its tendering practices? Are more contracts just rolled over and if so why?

LH: Lufthansa has always used a portfolio of mechanisms in its tendering practices. Annual tendering is part of it as well as rollovers or longer term contracts. In order to provide incentives to invest in production and/or infrastructure investment we offer longer term

contracts. However, there are only few suppliers who are willing to enter in more than 2 or 3 year agreements.

JFR: Do you still see competition in the markets in regard to new entrants and if so in what regions?

LH: We have seen the sale of a lot of refineries from majors to independents. Unfortunately in many cases the new owners have not shown a great desire to sell jet fuel directly to airlines. However, we do see banks getting into the business, because they can use the physical positions in their trading and derivative business. Whether this development really creates more competition in the long run remains to be seen. **JFR**



Oiling the Wheels of China's Industry
(Continued from page one)

month successive year-on-year increase. Imports and refinery throughput rates were also down, according to energy analysis experts Platts.

China's August oil demand was 33.02 million metric tonnes, compared to 34.92 million metric tonnes in July. Nevertheless, the August 2009 consumption was still up 3.58% compared with August 2008. Domestic fuel demand is lagging high refinery processing rates, and their storage space is finite. The government's new domestic oil pricing policy implemented since the start of this year also incentivizes high refining volumes.

There is speculation in some quarters that state-controlled refiners Sinopec and PetroChina have landed with big reserves of refined crude but lack of demand. Sinopec and PetroChina were said to be stockpiling reserves 30% higher at the end of July than July 2008, and they had crept up 7% from a month ago.

July oil product sales fell about 6% from a year ago and were down 10% from June. Refiners cut collective crude throughput in August by 1.7% from July to 32.56 million metric tons (7.7 million barrels per day). This was the first monthly reduction since February 2009. Crude imports were

down 5.9% from July to 18.48 million metric tons or 4.38 million barrels per day in August.

Chinese companies demand in August for refined product imports plummeted by 28% from July and boosted exports of their own output by nearly 10%, which sent net products imports plunging to 460,000 metric tons, a level not seen in many years. An International Energy Agency report forecasts that Chinese oil imports will equal those of the USA by 2030.

Priming the Oil Import Pumps

Just as in other areas of the world, China's consumption of oil will make the country almost reliant on imports. The government has worked hard to forge links with oil producing states all over the world to make up the shortfall.

The country is financing exploration and production in Kazakhstan, Russia, Venezuela, Sudan, West Africa, Iran, Saudi Arabia and Canada. Venezuelan President **Hugo Chavez** has just announced China will invest \$16 billion in oil production, as part of Venezuela's strategy to cut economic ties with the USA.

The deal calls for China to invest over three years. Venezuela also

(Continued on page 5)

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announced a similar deal over a joint venture agreement with five Russian companies to spend \$20 billion developing the Junin 6 field.

Chavez said output from Russian and Chinese projects in the Orinoco oil fields combined will produce 900,000 barrels of crude a day. Despite agreements to diversify oil supplies, China remains dependent on the Middle East for 58% of oil imports. This is expected to rise to 70% by 2015.

\$30 Billion War Chest for More Oil Deals

China National Petroleum Corporation, parent of PetroChina, has a \$30 billion state-backed war chest to finance deals like the one with Venezuela. The objective is for Chinese companies to take advantage of rock bottom commodity prices worldwide as companies restructure to cope with recession. Sinopec also went shopping and spent \$7 billion on Canada’s Addax in June.

CNPC has made deals worth \$4 billion this year. They include controlling stakes in two Canadian tar sands projects and the purchase of Singapore Petroleum. **Jiang Jiemin**, CNPC’s president, indicated a buying spree is in China’s national interest. He said: “The credit agreement is of great importance for CNPC to speed up its overseas expansion strategy and secure the nation’s energy supplies.” It recently emerged that CNPC was in talks with Repsol for a controlling

stake in the Spanish group’s Argentinean operations. Talks are thought to have centered on a price of \$13 billion to \$14.5 billion, that would make it China’s biggest overseas takeover.

Slick Work to Keep Daqing Open

China’s largest homeland oil producer Daqing Oilfield has plans to keep outputting crude and gas for at least 50 years. **Wang Yongchun**, general manager of Daqing Oilfield Company, said the oilfield remains an important energy source and will continue to contribute to China’s energy supplies until 2060. Wang also said underground reserves; technical advances and well-trained workers would keep the field open.

A sustainable development plan for the oilfield projects crude and gas outputs equivalent to 20 and 25 million tonnes from the wells each year. Daqing Oilfield started producing oil in 1960 and has so far produced more than 2 billion tonnes of crude, accounting for 40% of the national total for the same period. The oilfield produced 40.2 million tonnes of crude oil and 2.76 billion cubic meters of gas (equivalent to 2.76 million tonnes of oil) last year. The oilfield’s proven oil reserves total 6.36 billion tonnes.

China is suffering from its own success. The country is willing to get greener, but will take time to develop a sustainable oil strategy. In the meantime, it is working hard to protect its reserves. **JFR**

Softening the Fuel Spike

Liz Moscrop Reporting

Fuel buyers, airlines, and supply intermediaries are bracing themselves against the anticipated rise in oil prices. Inflated jet fuel overheads and a shrinking supply infrastructure are prompting both major airlines and corporate operators to adopt inventive measures to stop their profits from sliding further.

The increasingly thorny issues of cost and supply of jet fuel is cutting deep. Airlines, oil companies, and

financial institutions are in agreement over the complexities surrounding the provision of reasonably priced jet fuel in the context of the current recession. The fallout from shrinking jet fuel demand in developed Western regions is damaging domestic refining capacity. The subsequent growth of overseas refineries in emergent “BRIC” economies (Brazil, Russia, India and China) will likely make for

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The fallout from shrinking jet fuel demand in developed Western regions is damaging domestic refining capacity.



The lack of investment and liquidity in oil markets has forced many airlines to secure their jet fuel needs by other means.

expensive imports of jet fuel into both Europe and the US further pressuring the margins of their domiciled carriers.

The picture is made grimmer by the prospect of government taxation, unstable dollar parity, competition from alternatives or biofuels, and the inevitable cost to aviation for downsizing its carbon footprint. Airlines large and small along with corporate jet operators are feeling the pinch as dependable oil companies are exiting the middle distillate Jet-A refining business in growing numbers.

The lack of investment and liquidity in oil markets has forced many airlines to secure their jet fuel needs by other means. Furthermore the emphasis is on conserving fuel and driving down costs, and many carriers are consolidating their operations with former rivals or forming alliances to drive their businesses through efficiencies.

Airlines Get Into the Oil Business

Fuel hedging served airline operations well at the height of the oil price boom until 2008. Carriers hoped that investing in futures and options to offset their jet fuel costs. The billions accrued by Southwest Airlines enabled it to withstand the oil price shock through to the recession. Lufthansa Airlines also continues to maintain healthy profits from its prudent hedging tactics

However, hedging works best for more effective risk management in a buoyant market. With the price of oil hovering at a steady \$70 a barrel and forecasted demand to likely remain low, hedging portfolios are being displaced in favor of more direct action.

Recognizing the diminishing refining capacity in Europe, Lufthansa Airlines has taken steps to prevent the Jet-A pumps from running dry at its four hub airport locations. Commenting on the need to secure fuel supplies, **Helmut Fredrich**, vice president of corporate fuel management, Lufthansa said: “How can airlines live with less and less companies selling fuel at airports and fewer new entrants to plug the demand

gap? The answer is to look into self supply which is more challenging in Europe than in the US as the latter possesses a more open pipeline infrastructure.”

The carrier has little faith in merchant or ‘pure play’ refiners tying their capacity to whichever distillate that offers the greatest return without going to the expense of investing in dedicated airport pipelines. Lufthansa replenishes its Vienna, Munich, Frankfurt, and Zurich airport hubs by means of train, barge, and the use of the strategic NATO pipeline.

Fredrich stressed the pressing need for commitment to the supply of jet fuel to European airports. He said: “Imports will increase. The bigger airlines can establish self supply schemes to secure their jet fuel but what do small airlines do? And what about the small airports?”

Unlikely Bedfellows

United Airlines uses Wall Street investment bank Morgan Stanley to cater for all its fuel needs. The bank has been involved with the physical supply of jet fuel to the carrier since 2003. Morgan Stanley employees are adept at chartering barges, leasing pipeline space and scheduling tanker trucks to deliver over two billion gallons of competitively priced jet fuel to the airline.

Extolling the virtues of a much reduced operating capital figure tied into inventories, **Robert Sturtz**, United’s head of fuel purchasing said: “We need about \$850 million dollars worth of fuel a year to keep flying, but Morgan Stanley takes the credit risk and secures the pipeline space without us having to pre pay for fuel.”

Many of the major oil suppliers have stalled in the supply of credit to airlines given the industry’s financial plight. This has opened up opportunities for the most unlikely of fuel suppliers such as the merchant banks. United only pays the bank for the fuel it uses the next day thereby reducing the company’s overheads and risk exposure. “The credit benefit for United amounts to a saving of \$30-\$40 million dollars each year,” said Sturtz.

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“How can airlines live with less and less companies selling fuel at airports and fewer new entrants to plug the demand gap? The answer is to look into self supply which is more challenging in Europe than in the US as the latter possesses a more open pipeline infrastructure.”



Representing 30% of the total fuel used in commercial aviation, Star Alliance members with their collective fuel purchasing power and experience share their initiatives for securing favorable terms at major airport locations.

Using financial institutions that have access to physical pipelines and storage facilities is one of many options for large carriers in the fight to drive down costs. Leveraging supply through strategic partnerships also pays dividends.

Star Alliance consists of a 24 strong consortium of major long haul airlines with a further four carriers waiting in the wings to join. It has a combined annual fuel bill of \$25 billion dollars. Representing 30% of the total fuel used in commercial aviation, Star Alliance members with their collective fuel purchasing power and experience share their initiatives for securing favorable terms at major airport locations.

Star Alliance, fuel director **Keith Carter** said: "All member airlines face the common challenge of jet fuel price volatility. The problem is maintaining healthy cash flows and effective risk management can help here. Almost 25% of fuel operating costs can be shielded against through risk management."

Bigger is Usually Better

What works for the big airlines can also be scaled down to the private jet operator. Commercial carriers have the benefit of economies of scale given the volume nature of their business. The recent Asian Aerospace conference in Hong Kong threw up some interesting facts, particularly in relation to corporate jet operators. Some fleet operators closer to emerging markets have access to cheaper imported oil from export refineries in China and are consequently weathering the recession well. A combination of buying power, prudent flight planning, and the help from technology has blunted the edge of excessive fuel bills.

Large fleet operators with the muscle to leverage discounts are able to negotiate favorable terms with both individual FBOs (fixed based operators) and fuel suppliers when purchasing fuel. Hong Kong based Metrojet, for example, operates both its own modern fuel-efficient fleet in addition to managing the jets of other operators.

CEO **Chris Buchholz** said: "The experience of managing our own jets means we're very cost conscious and we also care about managing the jets of others. We negotiate fuel prices that are best for both our aircraft and our customers, we're unique as we have our own fleet and so are better at understanding the need for limiting the fuel price exposure to our customers."

Metrojet has a strong thirty-year history in corporate aviation and offers a diversified portfolio of services from maintenance and repair facilities to fleet management. As the largest tenant at the Hong Kong Business Aviation Centre FBO site, the company has the financial clout to negotiate the best fuel contract deals.

The majority of Metrojet flights are long haul; hence its volume fuel requirement demands prudent flight planning. Planning ahead of each trip enables the company to get the best fuel price from the destination FBO. Buchholz said: "We talk to the FBO a week before the flight to get the most competitive price. The pilot knows the agreed price in advance as the 'walk in fuel price' would be a lot higher."

Buchholz also indicated that the size of Metrojets' operation gets it closer to the major fuel suppliers. He said: "Building relationships is key in Asia, and we negotiate at a senior level with the headquarters of the fuel providers to get the best direct price. The individual FBOs are aware of this and so are eager to bid for our business to offer the lowest fuel price." Metrojet also ensures that fuel suppliers are paid without delay thereby keeping the door open for future discounts.

Metrojet also flies a young fleet; Teflon covered, and well maintained, which ensures the highest efficiency in fuel burn. Modern aircraft with full FADEC (Full Authority Digital Engine) controls on board create greater fuel economies.

Tankering and Easing Back on the Throttles

Tankering is another useful tactic. Essentially, a plane lifts additional fuel at cheaper locations as

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opposed to expensive stop over points in one journey. This requires a flight plan that considers the relative price differentials between the cheapest and the dearer FBOs; the distance traveled, the type of aircraft; payload carried and crucially if no fuel is available at some destinations. Such variables make tankering a complex balancing act. However if undertaken correctly operators stand to save between 1-5% of their fuel costs.

Metrojet uses both tankering and speed management to attain optimum fuel economies. Buccholz said: “The jet may have a top speed of mach.85, but slowing down to mach .8 adds perhaps 12 minutes to a journey which translates into thousands of pounds of fuel being saved over a year.”

Supporting organizations offering flight planning and/or ground handling facilities also allow jet operators to tap into their extensive regional expertise when shopping for the best fuel price. Hong Kong’s ASA Group is a specialist ground handler operating throughout South East Asia. The company often negotiates or buys fuel on behalf of international clients. **Joe Wilson**, managing director said: “We often make route recommendations to our clients, especially for alternate technical stops. We know which airports are cheaper for fuel, for example when people go to Thailand we recommend they go to Don Muang rather than Bangkok International Airport (Suvarnabhumi). There are several others around the region that are more economical for operators.”

Dedicated trip planners also manage fuel costs. Crossing continents is a complex business involving stringent over flight regulations, customs clearances, en route weather needs and security in addition to the flight planning logistics. Trip planners ease the burden on the pilot by working out the best and most cost effective solution when circumnavigating the globe.

Canny jet owners can also join fuel card and fuel purchase programs providing members with the benefit of bulk discounts on fuel purchases. Avcard, for example, offers a charge

card working in conjunction with a web interface permitting customers to check the fuel price at their destination before setting off. Most fuel card providers negotiate discounted fuel prices on behalf of members from major oil supply companies.

Profits Will Tighten, But at What Price?

Jet fuel prices are likely to remain unpredictable given that viable drop-in alternatives are still decades away. Until then commercial and private enterprises can mitigate their exposure to inevitable high prices through the expertise of specialized companies such as financial institutions and implementing proven fuel saving measures. Consolidation and forming alliances can also help in the short term.

Oil prices are only one variable in an airline’s fuel budget. Falling demand and airline frugality have increased the momentum for a dynamic shift in the fuel supply infrastructure. Reducing margins from jet fuel has led to a fall in refining capacity with airlines struggling to secure dependable sources. The only candidates that can plug the supply gap are the likely to be the airlines themselves, taking them away from their core business.

Airline profitability is set to return post 2010 as the recession cobwebs are blown away. However, the difficult questions surrounding oil prices and the supply of available jet fuel to ensure healthy returns have yet to be addressed.

With the major oil producers shedding many of their downstream refining assets, it remains to be seen who will provide the capital expenditure necessary to return the airline sector to full capacity. Recovery is in sight, but at what cost? **JFR**

Practical Fuel Saving Solutions

Airlines and operators have also taken many practical measures to reduce fuel burn, such as single engine taxiing, greater use of auxiliary power units and periodic engine washes to flush out deposits. These methods all conserve fuel and minimize overheads.

Even cleaning up the exterior can help, for example stripping off paint from a Boeing 747 to bare metal reduces about 200kg of weight and can net a saving of \$195,000 in fuel costs. Cathay Pacific is in the process of removing all paint with the exception of minimum liveries embellishing its freighter fleet.

The company is also introducing lighter baggage and cargo containers on all its aircraft in an attempt to further reduce operating costs and fuel burn.



Interview...

British Airways Taps Into New Talent

Sanjay Rampal Reporting

Add to this the price of internationally sourced fuel, which could be costly, and British Airways had to absorb the mounting overheads for the sake of scheduled routes.

British Airways (BA), like so many international carriers, is facing some tough choices in an increasingly challenging market. Buying fuel for an international airline with a fleet of 200



aircraft flying disparate routes represents a complex and finely tuned balancing act. The price of jet fuel is just one factor, with supplier relationships

and logistics making for a well-oiled operation. JFR's Sanjay Rampal caught up with Alan Blanchflower, who has just joined BA's fuel team.

JFR: How long have you been working for the fuel procurement division?

Blanchflower: Just over nine months on the fuel buying side, before that I worked in parts and procurement with BA. It has been a steep learning curve, but certain elements of procurement practices are applicable to fuel buying. The product is different, and then there is the act of actually fueling the aircraft.

JFR: What is the process of buying fuel for such a large carrier?

Blanchflower: There exists two primary ways of purchasing fuel for the airline. One involves buying large volumes and then determining the logistics of how to get it to the airports, but this requires large integrated pipeline networks and on-airport storage to work efficiently. This does exist in the US where there is an extensive pipeline network serving the hubs, which facilitates the cost effective supply of jet fuel.

In Europe, pipelines are a little less accessible so there is little benefit to BA from buying in bulk. So in this instance it is better to implement into-

plane arrangements, which involves buying the fuel at the wingtip.

JFR: With Heathrow being the focus of BA's transatlantic operations how do you keep such a large fleet of aircraft fueled?

Blanchflower: Heathrow is served by three pipelines and has its own storage areas catering for all airlines there, with an extensive hydrant system serving each stand. This is important since a single Boeing 747 would need five tanker trucks to fill its fuel tanks to capacity.

JFR: To what extent did the Buncefield refinery disaster impact BA's operations?

Blanchflower: The Buncefield event severed one direct pipeline to Heathrow, so the explosion meant a third of the fuel supply was instantly cut. This meant that all airlines were subjected to fuel rationing and restricted supply. BA coped with the shortfall by tankering in fuel, which is carrying extra fuel from other locations to avoid the need to refuel at Heathrow. All airlines were forced to pursue this measure to keep routes open.

In most cases this practice represented a costly compromise. Tankering in fuel from overseas locations means more fuel is burned because of the additional weight. Add to this the price of internationally sourced fuel, which could be costly, and British Airways had to absorb the mounting overheads for the sake of scheduled routes.

In addition, the activity led to immense de-icing problems as aircraft arrived with more fuel than normal with excessive volumes being exposed to sub zero high altitude temperatures. This meant that the fuel remained colder than the surrounding airframe, causing ice to form on the wings and leading edges when the aircraft were on the ground. So BA and other airlines were forced to implement expensive de-icing measures at the height of summer. Luckily at the time

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In addition, the activity led to immense de-icing problems as aircraft arrived with more fuel than normal with excessive volumes being exposed to sub zero high altitude temperatures. So BA and other airlines were forced to implement expensive de-icing measures at the height of summer.



Supply is carefully balanced and it takes just one disruptive event in the infrastructure to upset the equilibrium.

of the incident in 2005 the price of jet fuel was below the historical peaks seen in 2008.

JFR: Then the rationing and tankering strategy must have shored up BA's contingency plans if fuel supplies are compromised again?

Blanchflower: It was unprecedented. British Airways had not experienced anything like this before and the loss of a pipeline was never anticipated. But the airline has the experience now and would employ tankering measures again. If supplies had been really squeezed or planes had arrived with low fuel then aircraft would have been pulled from service rather than risking flying with less fuel. As it happened the tankering process ensured that no service had been cancelled and BA maintained its flight operations from Heathrow. But obviously any such disaster pushes up the price of fuel given the demand and as a consequence of the increased cost of supply to make up the shortfall. Supply is carefully balanced and it takes just one disruptive event in the infrastructure to upset the equilibrium.

JFR: How has BA coped with the soaring price of jet fuel as seen during 2008?

Blanchflower: The soaring price of fuel is an industry issue, which has led to the failure of a number of carriers, made worse by the economic downturn. While hedging portfolios are still the main instruments for shielding against oil price spikes allowing carriers to budget for the price of fuel against income forecasts, they cannot protect an airline against rising fuel costs. Bulk volumes offer economies of scale if the supply need is high, such as at Heathrow. At low fuel demand locations into-plane agreements with fuel suppliers assist in the logistics, but mean the high cost of fuel is passed directly to carriers.

The pricing components of jet fuel also need to be considered. The global marketplace determines the cost of fuel. However, the final price includes additional costs such as storage, hydrant costs, local authority levies, and airport fees, which can vary. Also tagged on is the differential premium set by the fuel supplier and this covers the company's risk

exposure on possible defaulted contracts and the profit it needs to make at each airport location to remain viable. The differential also incorporates the expense of paying somebody to truck the fuel to the plane and the act of filling the plane.

So taking the argument further, some European domiciled carriers may be in a position to protect themselves against the high cost of jet fuel though bulk fuel pumped through pipelines. However, it depends upon the logistical effort and who owns the pipeline space as well as access to cost efficient storage facilities to make such volume purchases worthwhile.

The price of jet fuel can vary also across one region such as the US due to the markets in which the commodity is traded. The Gulf might offer cheaper fuel, but then logistics make tankering in fuel more expensive thereby eroding the cost benefits.

JFR: Presumably fuel procurement is structured to have a global reach?

Blanchflower: I look after Europe, the Far East, Africa, and the Indian sub-continent. Another colleague is focused on London while another specialist deals with the Middle East and the Americas. The cost of fuel may be similar, but I'm interested in the differentials and extra charges to ensure that our supplies are competitively priced.

Our operations team looks after decisions relating to tankering jet fuel. It manages how we use fuel and moves what bulk supplies we have around. The buyers work closely with this team as they supply the ongoing and future demand picture we use when sourcing fuel. Their experience is crucial in dealing with operational disruption, which can arise anywhere at any time in an operation like BA's

JFR: How does BA plan for its cyclic fuel requirements?

Blanchflower: Forecasting plays a large part with variables such as aircraft types, routes flown and the volumes of fuel required based upon seasonal demand. Longer-term plans factor in newer fuel-efficient aircraft and analyzing data to determine the most profitable routes. I get the results

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At low fuel demand locations into-plane agreements with fuel suppliers assist in the logistics, but mean the high cost of fuel is passed directly to carriers.



Both airline and the jet fuel supplier are dependent upon one another in making sustainable profits and are always looking at a range of opportunities from credit terms to reducing fuel burn.

of all such forecasts and liaise with the oil companies and local suppliers to draw up the contracts to secure future supplies.

JFR: Does being a major carrier give you better security when trying to get credit in the procurement of fuel?

Blanchflower: As a large scheduled carrier BA, is able to provide volume stability at some locations, which is of benefit to some suppliers. However, when considering credit terms, fuel companies judge according to financial viability and track record on payment performance, which is another important element in this mix. It is also about building relationships with suppliers by being open and honest with one another. Both airline and the jet fuel supplier

are dependent upon one another in making sustainable profits and are always looking at a range of opportunities from credit terms to reducing fuel burn.

JFR: The One World alliance between BA, Iberia and American Airlines must offer some fuel buying synergies?

Blanchflower: That depends on airport locations - volume bulk fuel buying can have its advantages and disadvantages. There is the overriding logistical concern that one supplier may not be able to meet the volumes demanded by the alliance. Each location is evaluated according to its own commercial merits such as logistical infrastructure, pricing differentials and the volumes required.
JFR

BA's Brave New Move

The tumultuous fall of the banking sector has cut the once flowing supply of business class customers to a trickle. This has reduced airlines' profitability since most of their revenue streams came from enticing business executives with premium rate service and seating.

BA's situation is far from unique since the gloom is affecting all industry participants. Suppliers, airframe and aero-engine manufacturers are all feeling the pinch from falling demand as a consequence of the dramatic drop in passenger numbers. Even the accompanying slide in oil prices has failed to revive the fortunes of the commercial aviation sector. Jet fuel supply and cost still remains an overriding concern for carriers such as BA given the oil price volatility burning through operating margins.

Recently the International Air Transport Association (IATA) doubled its forecast as to losses to be expected by airlines during 2009. It estimates that on average the industry is losing \$1bn a month as a result of falling passenger demand and cargo traffic. Furthermore this recession is a little stickier due to the lack of available credit stifling business growth and the belief that the downturn will lumber through the financial quarters of 2010.

Cost cutting measures such as slashing unprofitable routes, reducing headcount and streamlining operations appear to be the norm among struggling airlines. British Airways has steadily introduced a raft of money saving measures to protect its reserves including cutting capacity, grounding aircraft and reducing external spending. It has also reduced manpower through reduced overtime, increased part time working and targeted voluntary redundancy.

The City Premium?

Thrifty initiatives and leaner operations are in vogue; however British Airways still views the business class customer as a lucrative source of income. The carrier has recently launched a premium service operating from London City to New York, in effect playing its part towards revitalizing the global economy. Busy executives have a brief fuelling stop at Shannon in Ireland since the London City runway is too short to accommodate a fully loaded Airbus A318. The stopover enables those on board to clear US customs and immigration before resuming course to the Big Apple.

The new all business class service gives the airline access to a niche segment and provides an indication of its future growth related strategies. A key factor contributing to the success of the new premium priced route is the need for reliability, particularly securing adequate fuel supplies at Shannon airport.

Tankering

Tankering is a key part of several airlines' fuel strategy. BA, like many other airlines, has a tankering team, which may decide for some short haul flights that it is cheaper to pick up extra fuel in London since the price is higher in Paris due to the differential premium. The extra cost of differentials could be anything from an additional 50 cents to a dollar on each gallon consumed. However, efficient tankering depends upon the weather. Extra fuel could freeze and this means the ancillary de-icing overhead could undermine the cost benefit of tankering.

Tankering is also influenced by logistical facilities at the destination airport. For example if de-icing services are absent in some African locations then tankering extra fuel would not be practical for quick turnarounds. There are also risk factors to evaluate such as the plane landing heavy if actual fuel burned during tankering is lower than anticipated. **JFR**



South American Oil Producers Overview...

Brazil's Booming

Liz Moscrop Reporting...

On top of a series of other major finds in mile-deep waters off Brazil, the Guara discovery – among the worlds biggest this century....

A Brazilian oil bonanza of billions of barrels of offshore liquid gold looks set to transform both the way the country does business and the balance of political power in Latin America.

Brazil's potential to become one of the world's biggest oil producers and to use its newfound wealth to tackle rank poverty at home, was highlighted when BG – the former exploration arm of British Gas – recently reported a deep-sea “supergiant” field with up to two billion barrels of recoverable reserves.

On top of a series of other major finds in mile-deep waters off Brazil, the Guara discovery – among the worlds biggest this century – dwarfs rival strikes such as Tiber, proudly trumpeted by BP, in the US Gulf. The find by BG came as the Brazilian government proposes laws to

barrels of oil off its Atlantic coast in the so-called “pre-salt” belt. This is an 800km strip containing a series of vast oil reservoirs, 6,000m under sea water, rock and compacted layers of salt.

The Guara announcement resolved some key questions about how Brazil will develop its latest treasure trove, which proved, as Lula put it, that “God is Brazilian”. Brazil has been celebrating an unexpected oil boom since November 2007, when its state oil company and operator Petrobras discovered Tupi off its southeast coast. It was the biggest discovery in the Americas in more than 30 years. Chavez has joked the Brazilian president should be renamed “Sheikh Lula”.

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If Brazil's hopes are realised by 2020, the part-public part-private Petrobras will, with foreign partners, produce 5.7m barrels of oil and gas a day – more than double the output of Venezuela.



tighten its grip on reserves through a state-owned management company.

Guara also threatens to upset the region's political balance, where Venezuela's President **Hugo Chavez** has dominated as the continent's major energy provider. Brazilian President **Luiz Inácio Lula da Silva** revealed details of how his country intends to tap between 60bn and more than 150bn

produce 5.7m barrels of oil and gas a day – more than double the output of Venezuela.

BG chief executive **Frank Chapman** was understandably excited about the latest results of appraisal drilling in the Guara area. He said well -test results were excellent and underscored again the potential in BG

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News Briefs

"This milestone flight is the first step in making this alternative fuel available to airlines," he said.

Qatar Airways Makes World's First Gas-to-Liquid-Fuelled Flight

Doha... Last month Qatar Airways made the world's first revenue flight powered by gas-to-liquid (GTL) kerosene on an Airbus A340-600. The aircraft flew on a synthetic fuel demonstration flight from London Gatwick, operating the airline's regular QR076 service to Doha with a full load of passengers.

All four of the Rolls-Royce Trent 500 engines powering the A340 used a 50/50 blend of GTL and Jet A1 kerosene. In addition to fare-paying passengers, who understood the nature of the flight, Qatar Airways chief executive, Akbar Al Baker was onboard. "This milestone flight is the first step in making this alternative fuel available to airlines," he said.

The flight was the culmination of a two-year intensive study into synthetic fuel technology, announced at the Dubai air show in November 2007 by a team comprising Qatar Airways, Qatar Petroleum, Shell, Airbus, R-R, Qatar Science & Technology Park and Woqod (Qatar Fuel Company).

Qatar aims to be world's leader in the commercial production of GTL, with Qatar Petroleum and Shell having created a multi-billion dollar integrated GTL "Pearl" plant. This will come fully on line in 2012, producing large quantities of GTL. The first phase of the Pearl GTL facility being built at Ras Laffan Industrial City is scheduled for completion by the end of next year. The plant will produce around one million tons per annum of GTL kerosene from 2012, enough to fuel a commercial aircraft for 500 million kilometers. "Qatar's position as the GTL capital of the world has been further enhanced," Abdulla bin Hamad Al-Attiyah, Qatar's deputy prime minister and minister of energy and industry said in a statement.

Approval for the 50% blend was earned in September, and the ultimate goal is to achieve approval for 100% blend of GTL with other synthetic fuels. GTL is clean burning – therefore it produces fewer

particulates, thereby reducing sulfur and nitrate emissions - and provides up to 5% higher energy density per weight. Qatar Airways intends to use the fuel for all its regular operations.

Last year Airbus operated an A380 on a three hour flight between Bristol and Toulouse with one of its four Trent engines fuelled by a 40% blend of GTL kerosene provided by Shell.

A number of airlines, including Virgin Atlantic, Continental Airlines (CAL) and Air New Zealand (AIR.NZ), have been testing biofuels on commercial flights. Last December, Air New Zealand successfully flew a test flight powered by second-generation biofuel. It was the world's first test flight using jatropha biofuel and followed a Virgin Atlantic test flight earlier in the year using a blend including coconut oil and babassu nut oil.

Alaska Air Enjoys Best Quarter in "Years"

Anchorage... Alaska Airlines parent Alaska Air Group reported what it said were its "best quarterly results in years" in October, thanks to sharply lower fuel prices.

Net income was \$87.6 million, or \$2.46 per share, compared with a net loss of \$86.5 million, or \$2.40 per share in the comparable period last year. Chief Executive Bill Ayer, said in a statement that the third quarter results were "our best quarterly financial performance in many years."

Although operating revenues fell, fuel prices also dropped from \$575 million last year to just under \$200 million in the June-September period.

Low Fuel Prices Boost US Airline Revenues

Washington D.C... U.S. airlines in August benefited from fuel prices that were sharply lower than a year earlier and continued to trim staffing, according to reports from the Department of Transportation.

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