

Airlines in Rest of World Better Prepared for \$60 Oil

“We have always believed that fuel hedges are as important to our business model as fares and employee compensation, said one senior European airline manager.

It may come as a surprise to some in the U.S. but there are airlines making money even with record fuel prices. Most industry observers are acutely aware that **Southwest Airlines** has weathered high jet fuel prices while its U.S. competitors continue to beat a path to bankruptcy courts. But most airlines outside of the U.S., including some of the world’s largest carriers, have done remarkably well managing their costs even with record fuel prices. An examination of airline risk management decisions over the past few years reveals a deep divide on how airlines in the rest of the world view fuel costs versus those in the U.S. “We have always believed that fuel hedges are as important to our

business model as fares and employee compensation,” said one senior European airline manager. “We watched as airlines in the U.S. rolled out of their positions believing that prices would come down. In hindsight it was a mistake.”

The **Air Transport Association of America (ATA)**, is projecting an increase in U.S. airline fuel costs of about \$7 billion in 2005, to more than \$28 billion compared to the \$21.4 billion paid in 2004. Presently, a spike in crude prices, chronic petroleum product shortages caused by hurricanes and an antiquated infrastructure has jet fuel prices hovering around \$2 per gallon.

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Environmental Challenges/Costs Hinder Both Clean-Up And New Investment

The **Heathrow Airport Fuel Company**, a consortium of oil companies that operate at London’s **Heathrow Airport**, are putting the final touches on a state-of-the-art fuel facility to serve the airport. But even as that facility comes on stream, a battle is brewing over how to address the mess left behind from the previous facilities.

The redevelopment meant four individual fuel depots will be dismantled and a new centralized facility will serve the needs of the entire airport, according to **Tony Astor**, **BAA**’s head of fuel strategy. **BAA** owns the land, but the consortium will own and operate the new facility. “We now have

something like 50-60 million liters of jet fuel storage, and that replaced four quite old fuel depots,” Astor says. “Each one had quite a large footprint but didn’t actually use the ground upon which they sit very efficiently. We’ve now got more storage on less space.

So far so good. Those old facilities, however, are creating huge problems for airport operator **BAA** and for the oil companies. Like at many other airports around the world, the suspicion is that there is some level of soil contamination at the former fuel depot sites. As **BAA** plans to redevelop that land for other uses,

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“For us it is just part of doing business,” said one European airline manager.

For the second quarter of 2005 most U.S. airlines reported a 50% increase or better over the same period in 2004 and that was before two major hurricanes hit the Gulf Coast refineries. Yet, in the U.S. only Southwest Airlines was sufficiently hedged to take most of the sting out of higher prices.

While the industry reported a 50% increase in prices for the second quarter, Southwest was able to limit their upside exposure to just a 7% increase due to fuel hedges. Contrast that with the almost 60% increase for **Delta Air Lines** and **Northwest Airlines** who just filed for bankruptcy protection last week.

In Rest of World - Just a Cost of Doing Business

Overseas, airlines have adopted a much more aggressive approach to hedging. The top three European airlines - **Air France**, **Lufthansa** and **British Airways** - have had programs in place for almost ten years. “For us it is just part of doing business,” said one European airline manager. Air France has also been hedging their price risk for more than 10 years. Currently, the

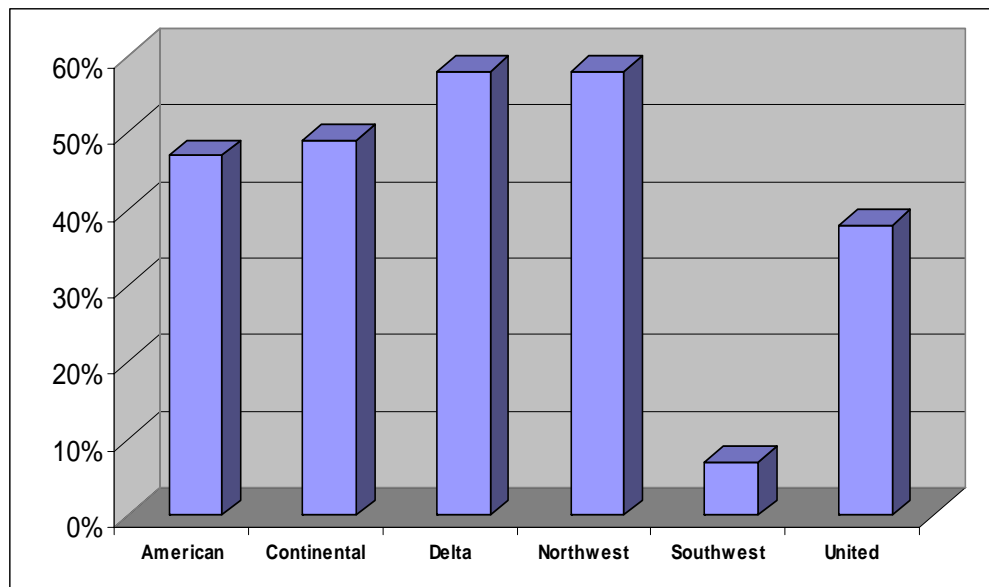
program which started in early 1990 and has been constantly followed and developed since then,” said **Helmut Fredrich**, General Manager, **Deutsche Lufthansa AG**. According to Fredrich, Lufthansa hedges on a regular basis 24 months out in crude and builds up the portfolio gradually. For the period from October 2005 through March 2006 the airline has 90% of its volume hedged.

Overall, while some refused to comment due to confidentiality, a survey by **AAG** of most Asian and European airlines found carriers were hedged on average 50% or better of their volumes in 2005 with reduced levels in subsequent years. **SAS Group** is 50% hedged for the next 12 months using call options in Jet CIF Cargoes Northwest Europe. The average price for the remainder of 2005 is \$450 per metric ton with an average of \$620 per metric ton in 2006.

U.S. Airlines Lacked Resolve and Liquidity

According to airline financial filings and ATA reports, several major U.S. airlines have some of their volume hedged for 2005 (see table below). That

Top Six U.S. Airline Jet Fuel Cost Percentage Increases (2Q2005 vs. 2Q2004)



airline has 90% of its volume hedged at the equivalent of \$36.7 per barrel Brent crude. Air France has instituted a 48 month rolling hedge program with the back 73% of volume hedged at \$39 per barrel Brent crude.

“We have an ongoing hedging

ranges from Southwest with 85% of their 2005 volume hedged at \$26 per barrel to American and Northwest with just 6% of their volume hedged. However, only three major U.S. airlines – **Alaska**, **America West** and

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“Under such a liquidity crisis the best you can do is 10% out of the money calls, anything closer like collars, if the market goes down it could consume all of your capital and put you out of business.”

Southwest - had any significant hedges reported for 2006.

Delta, which entered bankruptcy last week blamed high fuel prices and a weak fare environment for its filing. Delta’s average fuel price per gallon was \$1.51 in the six months ended June 30, 2005, a 51% increase over the same period in the prior year. According to a statement from Delta, “fare increases implemented during the

money calls, anything closer like collars, if the market goes down it could consume all of your capital and put you out of business.”

Yet some European airlines say that is exactly what has happened to the U.S. airlines. “They risked their future when they made the decision to look at the markets and not stay with a strategy.” Off the record some airline managers in the U.S. agreed, “To be

Sampling of World Airlines with Percent of Volume Hedged through 2005

Air France/KLM	90%	Japan Airlines	80%	Qantas	60%
All Nippon	90%	Lufthansa	90%	SAS	50%
British Airways	80%	MAS	75%	Southwest	85%

six months ended June 30, 2005 in response to rising fuel prices offset only a small portion of these cost increases. We have no hedges or contractual arrangements to reduce our aircraft fuel costs below market levels, and the forward curve for crude oil currently implies that aircraft fuel prices will remain at historically **high** levels beyond the near term.”

United Airlines which hopes to re-emerge from bankruptcy in the first quarter of 2006 has hedged approximately 8% of their remaining 2005 projected fuel requirements at an average price of \$1.24 per gallon, excluding taxes. The contracts will expire in December 31, 2005. The airline plans to continue to hedge future fuel purchases as circumstances and market conditions allow and has a hedging strategy built into its new business model.

According to **John Kilduff** of **Fimat USA**, most U.S. airlines had

successful requires line discipline and it requires you to not look at the market. Our airline said it was hedging in a discipline action without looking at the market, but I’m afraid that was not always true. There were times when they should have been hedging when they were not; and times when they were that they did. It looks too much like speculation and not risk management”

At least one European airline manager agreed that some U.S. airlines may have allowed market forecasts to dictate their risk management strategies. “Somewhere along it appears that the U.S. carrier’s decided that prices would not go higher and decided not to renew positions,” said one European airline manager. “Our airline has always taken a forward view that we would not be totally exposed. Once you try to out guess the market that’s a very dangerous game,” he added.

Estimate of Major U.S. Airline Hedge Positions 2005 - 2007

Airline	2005		2006		2007	
	% Hedged	\$/ Barrel	% Hedged	\$/ Barrel	% Hedged	\$/ Barrel
Alaska	50	\$30	43	\$40	20	\$45
American	6	\$40				
America West	50	\$55	12	\$60		
Frontier	17	\$51				
JetBlue	22	\$30				
Northwest	6	\$42				
Southwest	85	\$26	65	\$32	45	\$31

“It looks too much like speculation and not risk management”

little recourse available to them. “They really had no way to access the derivative markets due to lack of liquidity. At least one airline manager agreed, “Under such a liquidity crisis the best you can do is 10% out of the

European and Asian Airlines Hold Certain Advantages

According to a few U.S. airline managers, the rest of the world’s
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“When you have Lee Raymond of ExxonMobil saying these prices are unsustainable it probably had an impact on the airlines, said Kilduf.

airlines enjoy sizeable monopoly rights to numerous locations that U.S. airlines don't enjoy. “U.S. airlines do not enjoy the pricing power that a great many Asian and European airlines enjoy. That allows them much more pricing power than in the U.S. where we have stiff competition particularly on domestic routes,” offered one U.S. airline manager.

Additionally, Europeans also enjoy a favorable currency rate where income is generated in strong Euros and fuel is paid in weaker dollars. This provides Europeans a natural hedge. Such is not the case for the US carriers where the major expense and revenue are both in dollars.

Some say U.S. airlines can hardly be totally at fault for their hedging strategies since many analysts including several oil company CEOs openly talked about markets coming down. “When you have **Lee Raymond of ExxonMobil** saying these prices are unsustainable it probably had an impact on the airlines, said Kilduf.

Crack Spreads Expose Basis Risk

If airlines didn't have enough to worry about with spiraling jet fuel prices, finding the appropriate hedge marker can also be problematic. When some airlines purchased risk protection they used crude oil as a price marker. At that time, crack spreads (the

difference, between the price of crude oil and the prices of refined products) may have averaged 7 cents but today those spreads have blown out to almost 50 cents per gallon. As a result, airlines who used crude to hedge are exposed to significant basis risk than those that used diesel (heating oil) or gasoline as hedge markers.

The recent explosion of the crack spread has caught many airlines by surprise, especially those who placed their hedges on the underlying crude oil. In the best of times and certainly over the long term, the gasoil and jet fuel price do move in tandem with the crude. Such is not the case at present where refining capacity has become a major bottleneck in the supply of products. The more mature airlines have learned to add timely hedge covers for the cracks and spreads to get complete protection for their jet price exposure thereby eliminating the basis risks.

Several airlines have incorporated crack spreads into their hedge considerations. Lufthansa build up hedges for the crack between crude and jet kero starting 6 month out up to 45% of their volume. As of June 2005, Southwest's remaining 2005 hedges were in the form of unleaded gasoline-based and heating oil-based option contracts. **JFR**

Partners for a Better Future

The challenges confronting the aviation industry are enormous. It is time that industry segments unite in partnership to create a better future. The AAG conference and exhibition will enable joint action from airlines, airports, operators, suppliers and distributors to work together for the common good. No one group has all the answers and the time for turf wars are over.

Heading up the **8th Annual Jet Fuel Conference & Exhibition** will be **Keith Carter**, Managing Director, AAG International. Carter's vast experience in dealing with international jet fuel issues promises to create a lively exchange of ideas that will foster industry action to address today's pressing problems. No less important will be the attention to airport technical and operations issues that will be headed up by **Ravin Appadoo**, Vice President of AAG Technical Operations. **John Goglia**, Chairman, Airport Operations Safety Panel (AOSP) will continue to examine the efforts of those in the industry that seek to improve efficiency and safety of airport operations. Together, the team brings a reputation of accomplishment that will permeate throughout the conference proceedings.

The conference will set the bar high. But the times demand action. They say “What happens in Vegas stays in Vegas.” But with cooperation from the industry **“What happens at the AAG Vegas conference will reverberate throughout the industry.”**

Hope to see you there.

Environmental Challenges/Costs Hinder Both Clean-Up And New Investment
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the sites will likely need attention.

“There is definitely some level of jet fuel in the soil,” says Astor. “We don’t actually have puddles of jet fuel in the sub-soil but what we do seem to have – and this requires confirmation – is some jet fuel in the soil. As the water level rises and falls through the soil that jet fuel smears itself through the different layers of soil.”

How best to address the situation will be the subject of some debate over the next few months. According to Astor, the lease with BAA held by the oil companies clearly states that in the case of contamination the lessees would need to indemnify the landlord against any costs incurred. But defining contamination is not straightforward, nor is how best to handle any contamination that has occurred.

“There is this real difficulty in determining what is and what is not contamination,” notes Astor. “This really is where we as the airport operator have had one view and the fuel companies have had a different view.” **Jon Drapkin**, general manager of the fuel consortium, declined to comment for this article, citing ongoing discussions with the airport operator.

Astor says BAA’s goal is to emerge unscathed. “We do not want to be subjected to any prosecutions,” he says. “We don’t want to have any additional costs incurred in future development or future building or operating costs as a result of any contamination.”

“My opinion is that the fuel companies may acknowledge the existence of jet fuel in the soil but they could argue a case that although there is jet fuel in the soil it doesn’t need to be cleaned up, it could be dealt with in a different way,” he continued. According to Astor, the argument comes down to whether mitigating for any contamination, rather than treating it directly, is the overriding issue.

One thing both parties have agreed on is to jointly fund an extensive survey into the actual conditions of the ground. “Once we’ve got the results of that survey we’ll sit

down with the oil companies, together with our environmental experts and their environmental experts, and we will agree what actually needs to happen,” Astor says, noting that both sides are keen to avoid litigation if at all possible.

Playing Fair

While the Heathrow situation is high profile due to the size and importance of the airport, similar situations crop up throughout the world regularly. Industry executives say fuel facilities built in the 1950s, 1960s and even 1970s had far fewer safeguards in place and soil contamination is almost a given. So when airports or oil companies or airlines look to build new facilities or upgrade existing ones, older facilities will likely present roadblocks.

Assessing how best to address any problems and figuring out who will pay for remediation is one of the most divisive issues the industry faces. In nearly all locations, laws require that if you are aware of contamination you have to deal with it. The problem comes in identifying who has to deal with it, and how.

“The main issues are establishing responsibility and liability for the original source of contamination,” says one industry consultant. “Is the fuel coming out of a tank or hydrant system, or is it coming out of an aircraft that has just landed and has a problem? You’ll probably never be able to establish that.”

However, that’s just what is called for when cleanup is required. In most European airports, oil companies operate the fuel facilities so they would likely take joint responsibility. But that assumes all the oil companies have been operating at the location for the same period of time and none have left before cleanup – and costs – begin. The same is true for airlines in the United States. Since they come and go from airports at a more frequent pace, it is often extraordinarily difficult to divvy up the blame. And in certain

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cases where airports own the fuel facilities, they usually try to indemnify themselves through their contracts with tenants, with varying levels of success.

Kyriakos Gennadis, operations manager at **Olympic Fuel Company**, which runs the **Athens Airport** fuel facility, says it is crucial for companies such as his to have clear-cut explanations of who is responsible for what in each contract. "The contract should address all the environmental liabilities," he says.

Given the seemingly inevitable disagreement on who is responsible for what, the consultant suggests one approach might be to start an environmental fund at each airport that is designated for cleanup efforts. "At the end of the lifetime of an airport, or after so many years or after a certain contingency may have occurred, the money in the fund would be used to clean up any contamination," he says.

"The fund could accrue over time based on the charges the users are paying," the consultant says. "After 20-25 years there may be enough to clean up any contamination. That clears up a lot of problems because it doesn't depend on who was originally liable for the contamination and the money is there for clean up or for another purpose, such as expanding the fuel facility."

Of course, such an approach is fraught with difficulty given that airport tenants and users come and go. Companies would be hesitant to pay into a fund when they might not be there to reap the benefits later. And companies late on the scene would be reaping benefits without paying much into the fund over the years.

Grant Smith, director of environmental programs for US firm **Burns & McDonnell Engineering**, says another less divisive approach is to attempt to budget in anticipated clean up costs in advance and allocate costs as fairly as possible among users, letting them know in advance what will be expected. "A lot of times what we'll do is a cost allocation to the multiple parties and try to make it fair to avoid delays in the project and avoid litigation," he says. **San Francisco**

International is a great example, he says, where a fuel consortium (SFO Fuels) was formed several years ago that embarked on a \$120 million project to connect systems and add a fuel transfer system.

"SFO Fuels hired our firm to deal with all the contaminated material that was encountered, but none of it was (attributable to) SFO Fuels because it was a brand new entity," Smith notes. "Based on location and parties involved we allocated costs. A lot of them were airlines or oil companies or rental car agencies." The firm had an \$8 million budget in advance, spent far less and billed out \$1.7 million to parties it determined were responsible. Smith says 100% of the bills were paid in full.

"That was an unusual experience in that it was all pre-planned," he says. "Prior to that we've been involved in projects where we start construction then find environmental stuff and everybody starts pointing fingers at each other. I've learned to try to pre-plan as much as possible and allow enough contingencies for those type things, then even push to have a budget for it."

Cleaner Future

There's no getting around the fact that contamination exists at many airports and will have to be addressed in some way at some point in time. But the good news for both the industry and the environment is that contamination is far less likely to be caused today than it was 30 or 40 years ago. Industry executives say environmental safeguards really began making headway in the late 1980s and today there are many environmental requirements that must be met, which in turn make contamination much less likely.

"Going back at least 10 years, the standards for environmental pollution are extremely high," notes Gennadis, who is a former Mobil oil executive. "That means that underground pipes have so many

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"I am not expecting to see a major leakage at the airport due to material problems."



"The government should encourage the location and development of refineries across the US, not just in the Gulf Coast region."

Third, May urged Congress to consider adding refinery capacity. "In the long term, if we do not build new refineries and grow overall refining capacity we are fated to suffer even higher prices for all refined products, including home heating oil," he testified. "The government should encourage the location and development of refineries across the US, not just in the Gulf Coast region."

Finally, May urged more oversight of oil trading markets "to ensure that markets are driven by consumer demand and market forces, not speculation," he said. "Even prior to the run up of oil prices after Katrina, there were calls for the Government Accountability Office to examine the Commodity Futures Trading Commission's oversight of domestic petroleum trading. Consideration should be given to whether measures in place to limit the impact of speculative trading are adequate. Likewise, the dramatic growth in the premium charged for refining crude into jet fuel merits review," May added.

**Global Jet Fuel Bill
Near \$100 Billion for 2005**

Geneva... The **International Air Transport Association (IATA)** said commercial airlines will pay more than \$97 billion in fuel costs this year, about 25% of their total expenses. IATA also unveiled revised projections for the year saying the global aviation industry will lose a collective \$7.4 billion this year, up from its previous prediction of a \$6 billion loss made last May. IATA director general **Giovanni Bisignani** said: "Oil is once again robbing the industry of a return to profitability. Each dollar added to the price of a barrel of oil adds US\$1 billion in costs to the industry. Cost reduction and efficiency gains have never been more critical." Despite soaring fuel costs, IATA did predict Asia Pacific carriers will generate about \$1 billion in profits, with European airlines collectively should break even. But North American airlines will lose more that \$8 billion this year, the group said. Bisignani suggested the oil industry was exacerbating the crisis faced by

"Our focus will now be on investigating the many issues associated with the problem."

carriers, noting that refinery margins worldwide have grown from \$6 in 2003 to \$17 this year. "We fully understand the principles of supply and demand," he said. "But it is difficult to see this as anything other than a US\$14 billion cash grab by the oil industry that is pouring salt into the wounds of a global crisis. Moreover, the impact of Hurricane Katrina on fuel supplies and refinery capacity will only ensure that relief will not come soon. To cope, urgent structural change across the industry's value chain is essential."

Sydney Jet Fuel Rationing Ends

Sydney... Supplies of jet fuel returned to normal after an early September glitch that left the airport critically short of fuel. Sydney's **Joint User Hydrant Installation**, which includes jet fuel suppliers **BP, Caltex, Mobil** and **Shell**, had begun rationing to 40% of normal demand after contaminated fuel was discovered and had to be removed from the system. JUHI chairman **Fred Funnell** said the group will now focus on what went wrong. "On behalf of all the fuel suppliers we regret that this situation arose but are pleased that through working closely with our airline customers, there has been limited impact on our traveling public," Funnell told reporters. "Our focus will now be on investigating the many issues associated with the problem."

**Swissport Finds
Cyprus-based Company**

Zurich... **Swissport International** has teamed up with the Cypriot-based **G.A.P. Vassilopoulos Group** to found Swissport Cyprus, a new ground handling company that will start to operate in Larnaca and Paphos this month. According to Swissport, Cyprus has about 10 million passengers a year, about 60% of which travel on scheduled air carriers. Swissport & G.A.P. Vassilopoulos Cyprus aims to establish itself as the preferred ground handling provider in Cyprus. The new company will offer the full range of ground services including passenger handling, cargo handling and GSA (general sales

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World Jet Fuel Prices

Spot Cargoes Trend

Rotterdam			Mediterranean			Middle East			New York			US Gulf Coast		
9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9
655.8	621.0	694.8	647.3	615.9	690.3	78.7	75.8	79.1	216.0	197.2	227.6	216.5	190.4	222.0
Chicago			Los Angeles			Pacific NW			CIF Japan			Singapore		
9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9
215.9	195.1	226.8	205.1	191.0	223.7	205.6	191.7	225.0	82.1	78.0	82.4	79.2	76.1	80.6

Futures/Differentials Trend

IPE Gasoil*			NY Heating Oil			WTI Crude			Brent Crude			Rott Jet/IPE Gasoil		
9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9
602.6	582.4	598.6	200.1	186.2	207.5	64.19	63.00	65.96	64.02	63.57	63.40	53.20	38.60	96.20
NY Jet/Heating Oil			Gulf Jet/NY 2 Oil			Gulf/Los Angeles Jet								
9/23	9/16	9/9	9/23	9/16	9/9	9/23	9/16	9/9						
17.70	12.00	13.25	18.85	5.92	8.44	11.40	-0.55	-1.80						

Key: U.S. weekly averages cents per gallon, WTI Crude, Asian jet in \$/barrel, Europe, Medd \$/Ton

Sources: Opus Jetfax, JFR

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agent) services. Swissport Cyprus will thus be playing a key and active role in the current liberalization of the Cypriot ground handling market, the company said.

ASIG Names VP Sales, Customer Service

Orlando... ASIG named **David L. Aschenbach** as vice president sales and customer service. He replaces **Leif Andersson**, who is

set to retire later this year. Aschenbach previously was vice president of airport services for ATA Airlines.

Servisair/GlobeGround Wins More BA Business

United Kingdom... **Servisair/Globeground** has expanded its relationship with **British Airways**. The company has won passenger and ramp handling business in Amsterdam, Lyon and Toulouse, and the ramp handling contract in Nice. Servisair/GlobeGround also renewed its existing

contracts for full handling in Marseille and passenger handling in Nice. **JFR**

