

FACTS &
FIGURES

\$530
billion
U.S. defense budget
(2007)

7th
leading oil producer
worldwide: Mexico

80,000
Canadians work
in the aviation industry

Safran's presence in North America primarily focuses on the aviation and security markets.

SAFRAN IN AMERICA

A PIVOTAL MARKET
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CONTEXT. Although the North American economy is sluggish these days, it continues to play a major role worldwide.

NORTH AMERICA: A PIVOTAL MARKET FOR SAFRAN

Over the last three years, the international civil aviation market has shown relatively good health, which has benefited all aircraft and equipment makers. But over and above the record-setting figures (2,800 main-line commercial jets sold in 2007), two major concerns have emerged: the subprime crisis in the United States, impacting credit availability, and especially skyrocketing oil prices, which have considerably increased airlines' operating costs.

The U.S. Department of Defense is also feeling the effect of these developments, according to David Berteau, senior advisor and director of the Defense-Industrial Initiatives Group at the Center for Strategic

and International Studies (CSIS) in Washington, D.C.: "Each ten dollar increase in the price of a barrel of oil adds nearly one billion dollars to the DoD's operating costs." Already, the crisis has resulted in orders being cancelled or postponed.

This climate of deep uncertainty has yet to hit the business aviation market, which is governed by different economic rules. Clients in this market – large corporations, wealthy individuals, and fractional ownership users – continue to enjoy good economic health, and the market shows no sign of losing steam. However, North America's traditional domination of this market is starting to slip. The region accounted for nearly half of all global orders in 2007, while it is still home to 70% of the global business aircraft fleet.

In the space market, upcoming transatlantic programs will undoubtedly offer excellent opportunities for companies in this sector.

Hefty spending on defense and security

The North American defense market, primarily driven by the Pentagon,

MEXICO AND CANADA: OTHER FACTORS

- Mexico is a hefty market, as well as an impressive industrial base. Labor is skilled and relatively inexpensive, while this country of 110 million inhabitants offers a large domestic market, despite considerable social inequality. Like Washington, the Mexican federal government, its states and various legal institutions have expressed a growing requirement for identification and security systems.
- The Canadian market is more mature, but it has a highly developed aircraft industry, which offers excellent sales opportunities for equipment manufacturers.

VIEWPOINT



RICHARD ABOULAFIA,
VICE PRESIDENT, ANALYSIS,
TEAL GROUP CORPORATION

USA, still the leader in military markets

The market forecast is still buoyant for 2008, but what happens if oil prices stay high?

If the price of fuel stays at \$130+/barrel, the effect on jetliner demand will be profound. We will likely see the same "hockey stick" effect we saw after 9/11, although that turned out to be short lasting.

Is North America still a driving force in the international market?

The U.S. airline industry won't take many new planes any time soon. Dreams of a U.S.-driven jetliner deliveries "super-cycle" are truly dead. U.S. business jet demand remains stable, but is diminishing in relation to international customers.

The only market where the U.S. is the most important customer is the military market, both fixed-wing and rotorcraft. This, of course, explains why all European contractors want access to this healthy business.

Do you see any reason for a possible downturn in the booming bizjet market?

The economic downturn and high fuel prices do not seem to be affecting the top end of society. There are no rumors or hints of a business jet downturn, although there are some early indicators of a mild softening. Also, business jet demand is finally globalizing, insulating the market from the effects of the US downturn.

has been at record levels since the beginning of the Iraq war. According to David Berteau, however, "Today, the question is what share of the overall budget should go to military spending, and how this amount should be allocated between research and procurement."

The security market, which encompasses both services and high-tech products, seems to be more of a long-term proposition. The U.S. alone accounts for about 45% of the global security market, and annual growth

is estimated at 8 to 10%. Today, the sector is well established, with a clear legal framework and growing awareness of its importance by multinational technology corporations.

One thing is sure: companies that have established a solid presence in the United States will be in the best position to meet global demand. The worldwide security market will undoubtedly follow the development path blazed by the United States, although lagging a few years behind. ■



Five Safran companies provide systems or equipment for the Bombardier CRJ200, especially the landing gear and wiring.

POSITION. Safran has set up operations in North America to meet several needs: production capacity in the U.S. dollar zone, a commitment to earning recognition as a local manufacturer, and closer contact with customers. Good results reflect the success of this strategy.

SAFRAN'S STRATEGY BEARS FRUIT

Seven thousand five hundred employees, three billion dollars in sales... North America is the Safran Group's largest market outside Europe, accounting for 20% of consolidated revenues.

Most Safran companies already operate in the United States, with 3,500 employees providing development, production and support services. But North America is more than just the USA, since both Canada and Mexico are major markets. Canada is home to Messier-Dowty and Turbomeca (Safran Group) production units, with about 1,000 employees. Mexico is also a major production base for the Group, in particular through wiring specialist Labinal, which employs about three-fourths of the 3,000 or so Safran employees in the country.

"In 2005 Labinal had 1,200 employees in Mexico, and this figure has now risen to 2,400," says Jorge Ortega, Chairman and CEO of Labinal North America. "Mexico offers significant advantages, since it's in the dollar zone, with highly qualified labor, but still offers the production costs of an emerging country."

Long-term commitment

Safran companies continue to open new facilities to meet the production needs of major plane-makers in North America, such



Labinal's plant in Chihuahua, Mexico now has 2,400 employees.



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The Messier-Bugatti USA plant in Walton, Kentucky makes wheels and carbon brakes for the American market.

as Boeing, Hawker Beechcraft, Gulfstream and Bombardier: Sagem Avionics in Grand Prairie, Texas, Turbomeca Manufacturing in Monroe, North Carolina, and a new facility at the Messier-Bugatti USA plant in Walton, Kentucky.

Other facilities have been expanded, or will be shortly to cope with growing business volume: Turbomeca USA in Grand Prairie, and Labinal in Mexico, which is doubling the floorspace at its plant in Chihuahua and will add another 300 employees by the end of the year. Several engineers will join the Labinal design department.

"Our selection for the Boeing 787 should help us enhance our expert-

VIEWPOINT



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PATRICK HAYWOOD,
CEO OF MESSIER-BUGATTI USA

Messier-Bugatti expands

WITH THE OPENING OF A NEW FACILITY AT ITS PLANT IN WALTON, KENTUCKY EARLY THIS YEAR, MESSIER-BUGATTI IS DEPLOYING THE RESOURCES NEEDED TO EXPAND ITS SHARE OF THE WHEEL AND BRAKE MARKET FOR MAINLINE COMMERCIAL JETS.

Messier-Bugatti USA opened its new production unit in Walton, Kentucky in January 2008. Covering some 10,000 square meters (108,000 sq ft), the new building doubles the plant's total floorspace. About 50 people are now working in this highly automated facility, which manufactures wheels and brake piston housings and handles final assembly of wheels and carbon brakes. According to Patrick Haywood, CEO of Messier-Bugatti USA, "By increasing our production capacity, we can keep pace with the steady growth in our business, especially in the U.S. market and for Boeing, since we provide wheels and brakes for most of their current line of commercial jets."

In addition to supplying wheels and carbon brakes for U.S. Air Force C-17 and KC-135 planes, Messier-Bugatti also offers these items on the longer-range Boeing 777 models, the 767-200/300 and the 787 Dreamliner, which will soon enter revenue service. In addition, Boeing now offers Messier-Bugatti carbon brakes on its 737 Next-Generation family. "This new facility in Walton also allows us to add production capacity in the dollar zone, which helps offset the impact of the unfavorable dollar/euro exchange rate," adds Haywood. "Messier-Bugatti now has 43 percent of the wheel and carbon brake market for mainline jets with more than 100 seats, and this new production unit will enable us to continue expanding our share of the market."

ise,” adds Jorge Ortega.

These new production units clearly reflect a long-term commitment to the region, although joint ventures, subsidiaries and the acquisition of local companies can also support growth.

Local presence, a key

“Our development in North America is very pragmatic, based on economic considerations, market expectations and emerging opportunities. We are not closing any doors,” notes Emeric d’Arcimoles, Executive Vice President for International Development at Safran.

In the United States alone, Safran has 30 companies with no less than 42 industrial and commercial facilities. This broad presence is the fruit of long years of work, and reflects a successful understanding of market trends by Safran and its companies. As Emeric d’Arcimoles points out, “Turbomeca,

the world’s leading supplier of helicopter turbines, has been operating in the United States for thirty years. This constant focus on internationalism is a real competitive asset – and it’s also a prerequisite if we want to submit proposals for American military contracts.”

Through Labinal USA in Pryor, Oklahoma, Safran already contributes to prestigious American military aircraft such as the V-22, F-22 and F-16.

“The United States is an open market, but you still have to be ‘local’ to compete for military contracts,” explains d’Arcimoles. “Our operations in North America are also a response to customer demand for greater domestic presence, spanning both production and support. Furthermore, we have to produce in the U.S. dollar zone if we want to sell in this zone.”

At the same time, Safran’s international development does not penalize

its drive to maintain and modernize its production facilities in France or other home markets.

Industrial credibility

Recent contracts won by Safran companies have validated this strategy: engines for the U.S. Army’s UH-72 Lakota helicopters, wheels and carbon brakes for the U.S. Air Force’s C-17 transports (see page 23), wiring for the Boeing 787, and cockpit modernization programs by Sagem Avionics.

“Safran enjoys excellent industrial credibility in North America,” says Emeric d’Arcimoles. “Our high-quality investments, commitment to growth, and careful development of production facilities go hand in hand with our reputation for professionalism and technical expertise. Safran has earned the respect of customers, employees and shareholders alike, because we meet our commitments.” ■



Safran’s site at Grand Prairie, Texas groups facilities for Turbomeca, Sagem Avionics (above) and Microturbo.



In 2005 Turbomeca won the reengining contract for the Coast Guard’s HH-65 helicopters, covering 225 Arriel 2C2 CG turboshaft engines.

MARKETS. Because of its extensive partnerships and investments, Safran has become a major player in the aviation and security markets in North America.

SAFRAN, A NORTH AMERICAN MANUFACTURER

Nothing could better symbolize the collaboration between Safran and the United States than the exceptional success of the CFM56 engine, the fruit of over three decades of teamwork with General Electric through CFM International. Some 19,000 CFM56 engines have been sold to date, and they now power 7,000 aircraft. The CFM56 is today’s best-selling engine for mainline jets (over 100 seats), and more than 2,000 of these engines power U.S. military tankers and special-mission aircraft, making the U.S. Air Force CFMI’s leading customer.

“You could even say that the Pentagon is Safran’s leading customer in North America,” notes Bernard Teychené, North America territory director at Safran’s



DAVID BOHIGIAN,
U.S. ASSISTANT
SECRETARY
OF COMMERCE

FOREIGN INVESTMENTS, A KEY GROWTH FACTOR

Safran's presence in the United States reflects a global trend towards investments in the world's leading economy. "Foreign investment is a leading growth factor for the American economy," said U.S. Assistant Secretary of Commerce David Bohigian when he visited the Messier-Bugatti plant in Walton, Kentucky for "Invest in America Week". Despite a significant drop in the relative share of foreign direct investment in the last 20 years, due to the emergence

of new economies, the United States is still the leading destination for international investors. Nearly \$200 billion was invested in the United States in 2007, twice as much as in China (including Hong Kong). These foreign investors are primarily motivated by the size and energy of the domestic market, as well as by highly qualified local labor. "More than five million Americans work for foreign companies, and these international investors contribute some 15 percent of our R&D expenditures," noted Bohigian. "These investments have a profound impact on the American industrial fabric, because 30 percent of the jobs they create are in the manufacturing sector, versus only 10 percent for the economy in general."



Messier-Dowty provides the nose landing gear for the F/A-18F Super Hornets deployed by the U.S. Navy.

International Development division. Safran contributes to American military programs, for instance as supplier of engines for T-45 Goshawk trainers and landing gear for F/A-18E/F fighters deployed by the U.S. Navy; engines for the U.S. Army's UH-72A helicopters; and it also reengineered the U.S. Coast Guard's HH-65 helicopters.

Safran enjoys an equally prominent role in the North American civil aviation market, with its customer list including all major airplane and helicopter manufacturers: Boeing, Bombardier, Gulfstream, Cessna, Lockheed Martin, Sikorsky, American Eurocopter and Bell. Just about all airlines in North America call on the Group's engines, nacelles, electronic power controllers, wiring, landing gear and braking systems.

Solid positions

Safran's presence in the security market also goes back a long way, with the purchase 15 years ago of North American Morpho Systems, now Sagem Morpho (part of Group company Sagem Défense Sécurité). Reflecting this booming mar-



The C-17 Globemaster III military transport features Messier-Bugatti wheels and carbon brakes.

ket, Safran has considerably expanded its operations, with a focus on fingerprint, facial and iris recognition and identification systems.

"Security is a real growth market in the United States," says Bernard Teychené. "Sagem Morpho enjoys an excellent reputation for its biometrics expertise, innovative products and service offerings." This solid position has resulted in a growing number of contracts from governments and government agencies, including airports, the FBI, Department of Homeland Security, etc., as well as

with SNSP (national public security system) of Mexico. For example, the FBI's Fingerprint ID system stores more than 70 million fingerprints and provides identification in less than 20 minutes.

Along with this broad industrial presence, Safran's operations in North America include research and training. For instance, Group companies have signed agreements with prestigious universities, such as Stanford and Virginia Tech, while French regional centers of aerospace excellence have formed partnerships with their North



MICHAEL MOSELEY,
FORMER U.S. AIR
FORCE CHIEF
OF STAFF

MESSIER-BUGATTI GIVES THE C-17 A BRAKE

General Michael Moseley, former U.S. Air Force Chief of Staff, points out that the American armed forces are making increasing use of the Boeing C-17 Globemaster III strategic transport. A total of 198 C-17 airlifters have been ordered to date by the USAF, but "at least eight more are needed to meet steadily growing requirements" according to General Moseley. In addition to its well-known role as a transporter of people and equipment, the C-17 is also used as a flying hospital, outfitted with an intensive care unit that wouldn't be out of place in a fancy hospital. Thanks to a seamless medical transport chain, including the C-17, a majority of wounded U.S. soldiers in Iraq are saved. Furthermore, despite being much larger than the legendary C-130 Hercules, the C-17 can carry out the same spectrum of tactical missions. Its high-tech landing system comprises wheels and carbon brakes manufactured by Messier-Bugatti USA. Carbon brakes by Messier-Bugatti are lighter and more effective, and have enabled the C-17 to increase its maximum takeoff weight (MTOW) by 5%, to about 613,000 lb.

American counterparts.

"Our aim is to ensure the long-term presence of Safran in North America, by creating a real industrial hub with a network of local partners and suppliers," concludes Teychené. "But Safran already has enough economic weight so that we are considered to be a major player in the North American aviation and security markets." ■



Sagem Morpho ID Systems are used by many customers in North America, including the FBI.