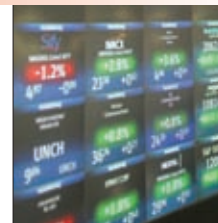


# Industry's strength offers options in downturn



THE GENERALLY STRONG POSITION OF U.S. aerospace companies is giving them the flexibility they need to deal with a deep worldwide recession and with the beginning of a stagnation and potential downturn in defense spending.

The impact of the downturn varies by sector. Business jet manufacturers, through their connection with corporate profits, are the most vulnerable aerospace sector and have been hardest hit. The commercial airliner market has been hit more slowly, although it is also feeling the bite. Defense companies are in the strongest position of all—having the government as their customer gives them the firmest backlogs in the industry, and any downturn will be felt in future years as they begin to work off those large backlogs.

### The boom years

In recent years, companies have benefited from a simultaneous boom in commercial aviation and defense. Military spending has been in the midst of the largest period of defense spending growth since WW II. Since 2001 the defense budget has risen by 38% in real terms, reaching \$534 billion in the proposed 2010 base budget. If supplemental budget requests are included, the increase has been even more substantial, reaching 52% real growth to \$664 billion in the proposed 2010 defense budget.

There was also a strong boom in commercial jet transports, which grew from \$39.66 billion in deliveries in 2003 to \$55.16 billion in 2008. Business aircraft deliveries have more than doubled in five years, increasing from \$9.5 billion in 2003 deliveries to \$21 billion in 2008.

Leading U.S. defense and aerospace companies were able to generate considerable profits. For the five largest U.S. aerospace and defense contractors, operating income increased to \$15.3 billion combined, up 120% in five years. During the same period, industry operating

profit margins were up more than 50%.

Backlog is at record levels. For major defense companies it represents two years of sales. It is even greater in commercial aerospace, but that backlog is now of more dubious quality because of the difficulties customers are having in financing their purchases.

The leading prime contractors have used that money well. Long-term debt for the five aerospace and defense prime contracts fell 45% over the period, to \$19.9 billion.

Consider the position of Boeing, the world's largest aerospace contractor. In the proposed FY10 defense budget, the company faces threats from the proposed termination of the C-17 strategic transport, a scaling back of the Future Combat System, and cutbacks in its missile defense programs. It is also struggling from delays in its 787 program and from problems with customers obtaining financing for commercial airliners.

Yet despite these problems, Boeing is in a much stronger position than it was five years ago. Its long-term debt has declined from \$14.4 billion in 2003 to \$7.4 billion in 2008, a 49% reduction. Net earnings grew from \$1.9 billion in 2003 to \$2.7 billion in 2008.

Cash conservation is now a top priority for most companies, particularly for those with significant exposure to the commercial market. The pace of acquisitions has slowed considerably, in part because tight capital markets make it difficult to obtain financing, and in part because of the need to maintain a strong balance sheet in the downturn. EADS stopped a significant acquisition in the U.S. late last year because of concerns about its need to preserve cash.

### Targeting R&D

The strong financial position of prime contractors gives them a wide range of options for dealing with the current

downturn. The rapid growth in expenditures on plants and R&D means there is room to cut.

Commercial aerospace companies have been rapidly increasing their R&D spending. Boeing's \$3.8 billion in 2008 was up \$2.2 billion from 2003. That increase of approximately 140% reflected the costs of the 787 development program and the 747-8 widebody. Boeing Commercial Airplanes spent \$2.8 billion of the \$3.8 billion of company-wide R&D spending in 2008.

Major commercial aircraft subcontractors followed suit in their research and development. United Technologies' \$1.7 billion in company-funded R&D

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spending in 2008 is up \$600 million, or more than 50%, in the past five years. Honeywell's company-wide \$1.5 billion of research spending in 2008 was up \$700 million over five years, in part because of increasing expenditures on products for new aircraft.

This aggressive growth in commercial R&D spending will be a prime target as companies seek to retain strength during the downturn. Companies are making unannounced moves to go more slowly in development programs and taking other steps to stretch their research dollars.

### Laying off and selling off

R&D is only one of the cost-cutting targets companies are using to stop the bleeding.

Layoffs are increasing rapidly. Boeing has announced that this year it will cut 10,000 workers, or 6% of its workforce, largely in commercial aircraft but

also in defense. Other major aerospace companies also have announced cutbacks, including GE Aviation, with 1,000 layoffs, and United Technologies, with 11,600 layoffs company-wide.

Business aircraft manufacturers have been hit particularly hard. Since November Hawker Beechcraft has announced plans to cut 2,800 positions, more than a third of its workforce. Cessna plans to cut its workforce by 45%, to 8,900, by the end of this year. It is closing its Oregon single-engine facility and consolidating five leased facilities into other Wichita sites. General Dynamics' Gulfstream is laying off 1,200 workers and furloughing another 1,500 for five weeks this summer. Bombardier has announced two rounds of cutbacks amounting to 4,360 jobs out of a 30,000-person workforce.

Some of the hardest hit companies, because of their exposure to financing arms, have opted to sell assets to raise cash. For example, in April General Electric announced that it would sell an 81% stake in its homeland security business to French aerospace manufacturer Safran for \$580 million.

While the sale fit with GE's need to raise cash, it also reflected its long-standing desire to exit the business that provides technology to detect hazardous or illicit materials in checked baggage. An earlier proposed sale of the business to Smiths Group fell through after the two companies failed to agree on its final valuation. The business has been a rare disappointment for GE. Its sales have actually declined since it purchased InVision in 2003 for approximately \$900 million. GE Homeland Protection, which combines both Ion Track and InVision, reported sales of \$260 million in 2008. InVision alone reported sales of \$417 million at the time of its 2003 acquisition. Combined InVision and Ion Track made \$460 million in 2004.

Textron has been the hardest hit by possible problems in its financing arm and by the business jet downturn. The company announced in February that it would sell HR Textron, a supplier of actuation systems for aircraft, guided weapons, and vehicles, for \$365 million to Woodward Governor, and would sell

its Fluid and Power business in November. In May it made public offerings of 23.8 million shares of common stock at \$10.50 each, and \$540 million worth of convertible senior notes. The offerings, which raised \$821 million, served to quiet reports that Textron might be sold in its entirety.

### Building portfolios

Defense companies less exposed to the commercial sector can even take advantage of the current downturn to build their portfolios in growth areas of the future. Strong balance sheets are critical in the present environment because financing is difficult to arrange. Defense firms often are able to make niche acquisitions without resorting to capital markets thanks to the strength they have built up over the past several years.

Homeland security has been a particularly active area for acquisitions this year. In addition to their prospects for continued growth in the coming years when the defense budget will be stagnant or declining, defense companies are comfortable with their ability to apply their expertise in systems integration to another federal market. Safran, for example, has not only proposed the acquisition of a major stake in GE Homeland Protection, but has also made another homeland security purchase of Motorola's biometrics business. The two acquisitions give Safran a major presence in the U.S. homeland security business. Harris agreed in April to make a \$675-million acquisition of Tyco Electronics Wireless Systems. The purchase is intended to bolster Harris's position in the public safety radio network market.

Intelligence and cyber security represent key growth areas in which defense companies can apply their expertise. Intelligence agencies tend to be loyal customers because of their need for contractors with large numbers of security clearances. They also tend to offer higher profit margin work because of difficulties in finding qualified companies.

In intelligence, General Dynamics purchased one company earlier this year

for \$170 million. The transaction, disclosed only in a filing to the Securities and Exchange Commission, was so secret that General Dynamics never released even the name of the company acquired.

Cyber security alone is expected to be at least a \$10-billion market over the next five years as the White House undertakes new initiatives designed to blunt Chinese and Russian advances in cyber warfare capabilities. QinetiQ announced in May that it would purchase Cyveilance for \$40 million to bolster its cyber security position. The company provides Internet threat and risk analysis. Harris also purchased a company called Crucial Security. Its expertise involves defense against outside attacks and enables customers to launch attacks against their own systems to detect vulnerabilities. It also has computer forensics expertise for the extraction of counterintelligence and counterterrorism evidence.

UAVs are a prime area for acquisitions. The Teal Group's 2009 UAV forecast estimates that UAV spending worldwide will total \$62 billion in 10 years. U.K.-based BAE Systems announced in March that it would purchase U.S.-based Advanced Ceramics Research, manufac-

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turer of three small UAVs. Northrop Grumman built up its portfolio with its purchase of the Killer Bee UAV line from Swift Engineering earlier this year. In July 2008, Boeing purchased Insitu, manufacturer of the Scan Eagle UAV.

Obviously aerospace and defense companies are showing that they can use the financial strength they have built up in the past few years and take steps to buffer the current downturn. A few losers are emerging, but generally the industry remains in sound condition.

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