

# Grant Thornton Corporate Finance

## mergers & acquisitions

Grant Thornton 

### Aerospace Components M&A update

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- Strategic and financial buyers
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## Aerospace components: Convergence of positives drive M&A to new heights

### Another record year of M&A activity with a confluence of factors:

- **Record profits – as commercial and military demand expand in unison**
- **Strategic and financial buyers compete for acquisition targets**
- **Founders and families divest – a realignment of industry ownership**
- **Acquirers are comforted by industry prospects, while sellers recall past cycles**

### Record year of M&A activity

2007 saw another record year of M&A activity, with an almost 70% increase in the number of aircraft component manufacturer transactions. Strong activity continued in the second half; activity was lower than in the first six months, but still showed a more than 30% increase over the same period in the prior year.

### Diverse buyers

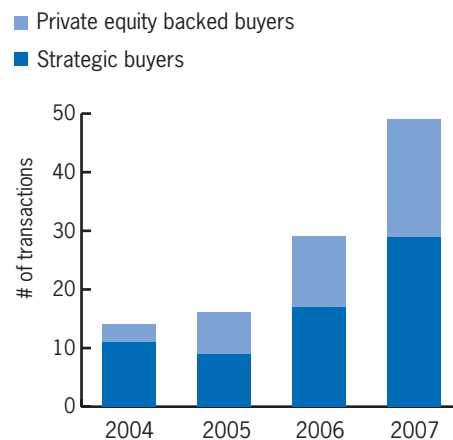
Both strategic and financial buyers have been active. Acquirers are broadly based and fragmented, with no one company from our transaction list buying more than three aerospace component manufacturers during the year.

Strategic buyers are responsible for 60% of recent transactions, using acquisitions to accelerate growth, build out systems, fill gaps in product offerings, enhance capabilities, and

simplify customer supply chains.

Overseas buyers, primarily from the UK, have been active, attracted by the opportunity to build their position in the world's largest market, secure U.S. >

Number of M&A transactions  
U.S. aerospace components



Source: Capital IQ, company filings, press releases

## Illustrative Aerospace Components transactions - 2007

Date	Target	Description	Acquirer
<b>Private equity backed buyers</b>			
Nov-07	Firth Rixson	Metal components for aerospace	Oak Hill Capital Partners
Nov-07	Three Thermal Mgt. Co.s	Thermal management components & subsystems	Thermal Solutions (Arlington Cap.)
Oct-07	AmSafe	Safety & securement aerospace equipment	Berkshire, Greenbriar
Sep-07	MacLean Molded	Thermoset & thermoplastic components	Kurz-Kasch (Monomoy Cap.)
Sep-07	A-1 Machining Co	Precision machining of large parts for jet engines	Lionheart Ventures
Aug-07	Genesee Group	Light & medium gauge precision components	Kachi Partners
Aug-07	Synchronous Aerospace	Machined parts, sheet metal, & integrated kits	Littlejohn & Co.
Jul-07	Sequa Corp.	Aerospace turbine engine components	The Carlyle Group
May-07	Future Tech	Machines aerospace components	Firth Rixson Limited (Carlyle)
May-07	Global Design Tech.	Metal connectors & tools	Bridgepoint Capital Limited
Apr-07	BAE SYSTEMS Inertial	Inertial sensors, reference & navigation systems	J.F. Lehman & Company
Apr-07	Western Pneumatic Tube	Welded tube products for aerospace	Tinicum Capital Partners
Apr-07	Palmer Manufacturing	Highly complex machined close-tolerance parts	American Capital Strategies
Apr-07	Remmele Engineering	Custom equipment for aerospace & defense	Goldner Hawn
Mar-07	Nex-Tech Aerospace	Structural components	Highland Capital Mngt
Mar-07	Precision Machine Works	Component assemblies & machined parts	Platte River Ventures
Mar-07	Vitron Manufacturing	Value added manufacturer of OEM parts	Graham Partners
Mar-07	Atlas Aerospace	Precision machine parts, assemblies, & spares	Graham Partners
Feb-07	Smith West	Precision machined components for jet engines	American Capital
Feb-07	Griffith Enterprises	Aerospace components & assemblies	Republic Financial
<b>Strategic buyers</b>			
Dec-07	Capo Industries	Engineered aerospace components	Senior PLC
Dec-07	Composix Co.	Advanced composite armor solutions	TenCate Aerospace (Royal Ten Cate)
Dec-07	Alliance Spacesystems	Robotics, composite structures & mechanical	Macdonald Dettwiler & Associates
Dec-07	Absolute Manufacturing	CNC machining & machine shop services	Senior PLC
Nov-07	R.J. Metals Company	Aircraft parts & auxiliary equipment	Sionix Corp.
Nov-07	SUMMA Technology	Precision machined components & subsystems	AAR Corp.
Nov-07	Celtech Corporation	Integrated systems for military customers	Aero Systems Engineering
Nov-07	Automated Controlled Env.	Aerospace electronics & robotics	Andrews Space
Nov-07	Shaw Aero Devices	Fuel, oil, & water/waste systems & components	Parker Aerospace
Oct-07	Avon Bearings	High precision large-diameter turntable bearings	Kaydon Corporation
Sep-07	The Purdy Corporation	Precision machined parts	Timken Co.
Jul-07	Survival Engineering	Pneumatic controls & inflations systems	CIRCOR Aerospace
Jun-07	International Motion Control	Industrial motion control components & systems	ITT Corporation
Jun-07	Fortune Manufacturing	Ribs, hinges, & fitting assemblies	Sheffield Manufacturing
Jun-07	Hermach Machine	Machined components & assemblies	Sheffield Manufacturing
Jun-07	Hamilton Precision Metals	Precision metal strips & foil	Ametek
Jun-07	Advanced Industries	Aerospace components	AMETEK Hughes-Treitler
Jun-07	B & S Aircraft Parts	Valves, actuators, hydraulics, & gearboxes	AMETEK Hughes-Treitler
May-07	Clifford-Jacobs Forging	Forged gears, rings & valves	IMT Partnership
May-07	Precision Metal Products	Closed die forged & machined parts	HBD Industries
May-07	TSS Technologies	Equipment, components, & assemblies	Standard Aero (Dubai Aerospace)
May-07	Armor Holdings	Security products & vehicle armor systems	BAE Systems
Apr-07	Comtek Advanced Structures	Interior aircraft components & MRO services	Avcorp Industries
Mar-07	Aerotron AirPower	Air cycle replacement parts & MRO services	Fokker Services (Stork Aerospace)
Mar-07	Welding Metallurgy	Metallurgical manufacturing, engineering & welding	Air Industries Group
Mar-07	K&F Industries Holdings	Aircraft wheels, brakes, & flexible fuel tanks	Meggitt plc
Feb-07	FastenTech	Engineered components	Doncasters Group
Jan-07	Smiths Aerospace	Aerospace systems and equipment	General Electric Co.
Jan-07	Aviation Technologies	Electrical & electro-mechanical components	TransDigm Group

Source: Company filings, press releases

customers, capitalize on a weak dollar, and align their manufacturing bases with dollar-denominated revenues.

Private-equity players continue to enter the industry, totaling 40% of buyers. These acquirers, often previously unknown to sellers, are drawn by the opportunity to play a part in the consolidation of a fragmented industry. Fund raising by U.S. private-equity groups (the fuel for these acquisitions) continues to reach new heights, with a 19% increase in funds raised during 2007 (to over \$300bn)<sup>1</sup>.

**Businesses outgrow financial capacity of founders**

The majority of sellers are the founders of aerospace component businesses and their families. They are attracted to a transaction by a combination of factors, including reaching retirement age, receiving approaches from an active group of buyers, their businesses demonstrating strong earnings, and seeing appealing valuation multiples.

A transaction also relieves founders of the pressures associated with growing the business – particularly the financial demands of expanding a capital-intensive

operation. The funding required to expand a business from say, \$30m to \$60m in revenue is beyond the risk appetite and capabilities of many founders and their families. This is particularly true later in their careers, when owners are frequently forced to choose between expanding the business or saving for retirement. Rather than constrain the growth of their businesses, founders are choosing to sell to well-financed buyers. This in turn becomes self-feeding as other founders, concerned by their future ability to compete with deep-pocketed competitors, also choose to pursue a transaction.

**Commercial and military markets expand in unison**

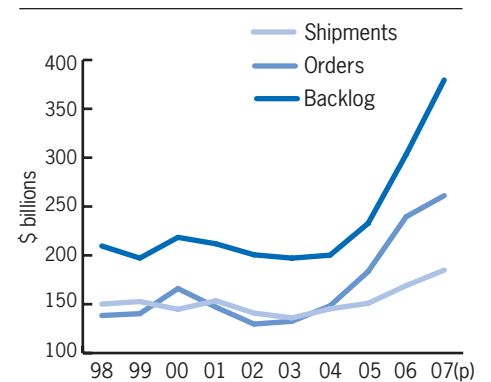
Acquirers are comforted by strong fundamentals with record orders and backlog. Orders again outstripped shipments in 2007, each growing by 9%, while backlog increased 19%. The Aerospace Industries Association expects growth of 6% in 2008, and industry executives are optimistic: 90% of AIA-member CEOs expect revenue growth rates in 2008 and 2009 to surpass or stay the same as last year.

Until recently, civil and military markets have rarely moved in unison, but since 2002 both have expanded in lockstep – military shipments have risen 44% over the five years, while civilian shipments are up 29%.

On the commercial side, there are several reasons for acquirers to be optimistic:

- Long-term growth of air travel both in the United States and overseas – U.S. passenger miles have risen 26% since 2002.
- Availability of new fuel-efficient aircraft in the face of escalating energy costs – efficiency improvements of 20% are provided by new planes.

Industry backlog, orders & shipments 1998 - 2007



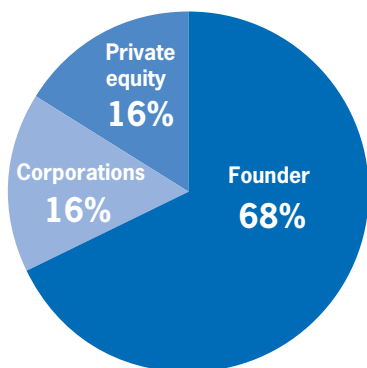
Source: U.S. Census Bureau, "Manufacturers' Shipments, Inventories, and Orders," and AIA estimates

- Aircraft production is largely sold out to 2011 – with the bulk of backlog (75% of large commercial aircraft) from customers outside the United States.
- Cautious expansion of capacity at major aircraft manufacturers, to manage supply.
- An aging U.S. fleet that will need to be replaced starting in 2012.

Acquirers are also optimistic regarding military spending because of the following:

- Ballooning supplemental reset spending to repair, replace and modernize equipment used in Iraq and Afghanistan – and thereafter to restore the military to full operational status.
- Expansion in core spending – the lengthy budgeting process secures expenditures until at least 2010. Thereafter shifts may emphasize conventional warfare over futuristic programs such as missile defense.
- Favorable outlook for exports following a 2006–2007 surge in foreign military sales notifications for U.S. government approval.

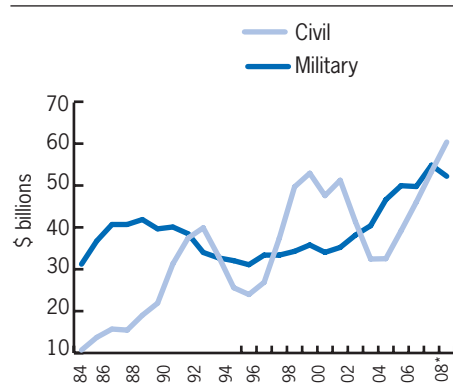
Sellers by ownership type - 2007



Source: Capital IQ, company filings, press releases

<sup>1</sup> Source: Dow Jones Private Equity Analyst

Aerospace shipments 1984 - 2008



\*Estimate excludes military replacement and repairs  
Source: Aerospace Industries Association

- The aging U.S. Air Force fleet – with an average age of 23 years, it is operating the oldest planes in its history.

### Breaking the cycle?

Participants have traditionally viewed commercial aircraft as a 10-year cycle, with five years of feast followed by five years of famine. An index of public aircraft component manufacturers has more than quadrupled since 2002, and enterprise values have risen almost 2½-fold. These increases are a result of greater revenue and a rise in valuation multiples attributed to public companies:

- EBITDA has increased 70% over the last five years (for companies in our index).
- Public company valuation multiples have almost doubled over the same period, with the Enterprise Value/EBITDA multiples of public companies rising from 6x to 11x over the five years.

Private company M&A transaction multiples have also risen and are significantly affected by deal size. \$20m businesses are frequently changing hands – around 6x EBITDA; \$100m businesses – nearer 8x EBITDA; and \$500m businesses approach the 11x multiples awarded to public companies. This valuation differential is a significant attraction to private equity groups pursuing consolidation strategies.

### Conclusions

It has been an exceptional time for the aerospace industry, and particularly for founders exiting their businesses. Founders have benefited from a convergence of positive factors, including record profits from growth in both commercial and military aircraft; an abundance of strategic and financial acquirers, and attractive

valuations; and a realignment of the industry from individual to institutional ownership.

While industry prospects and fundamentals look strong, it is important to remember M&A activity also goes in cycles, fueled by executives' confidence and the availability of capital. Greater caution among acquirers could be introduced by a number of elements, including a weakening economy and reduction in air travel, a pullback in military spending, or some external event.

### A five-year view 2002-2007

Industry drivers:	% change
Civil shipments (\$)	29%
Military shipments (\$)	44%
Total shipments (\$)	36%
Backlog (\$)	80%
Orders (\$)	100%
Passenger miles	26%

Aerospace index:	% change
Market cap	470%
Enterprise value	240%
Revenue	75%
EBITDA	70%
EBITDA margin	12%
Public EV/EBITDA multiple	100%

Source: Aerospace Industries Association, Origin and Destination Survey of Airline Passenger Traffic, Capital IQ, company filings

### About Grant Thornton Corporate Finance LLC

Grant Thornton Corporate Finance LLC provides investment banking and ownership consulting services to middle-market companies in the United States and around the world. For additional information or to discuss: ownership transition issues; acquisitions, divestitures and capital raising strategies; please feel free to contact: Ian Cookson, Director, at 617.848.4982 (ian.cookson@gt.com) or Jack DiFranco, Principal, at 248.233.6913 (jack.difranco@gt.com).

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