

careers

AEROSPACE JOB FORECAST: SKIES ARE CLEARING

Long-term contracts buffer the aerospace-engineering market

CONSTRUCTION CREWS are working on the first commercial spaceport, in New Mexico. Start-ups are rushing to launch tourists and cargo into space. Google wants to put robots on the moon. The commercial space race is on—and it's helping the broader aerospace industry.

It can use the help. The layoffs that followed the economic crash have left fewer jobs for engineers than there were in 2008. But a backlog of orders combined with an increasingly urgent need to replace an aging workforce has cushioned the blow.

Multiyear contracts are why aerospace withstands recessions better than other tech sectors. Current aerospace projects date from several years ago, and many have years to go, says Jeremiah Gertler, assistant vice president of defense policy at the Aerospace Industries Association (AIA). “That’s why there’s still lots of work and big backlogs.”

The low point came in 2003, as the commercial side of aerospace dipped in the wake of the 9/11 attacks. By 2008, the industry had added back 70 000 jobs as increases in defense spending kicked in. “We’ve had record orders for commercial aircraft, plus

we’re at war,” says Carole Hedden, who conducts a workforce survey for *Aviation Week & Space Technology*. Numbers decreased slightly in the last quarter of 2008 because of a 57-day Boeing machinist’s strike that started in September. And, Hedden warns, the effect of the general economic downturn on the sector’s job market hasn’t been measured for 2009 yet.

Private space enterprise, the development of commercial aircraft like the Boeing 787, and NASA’s



FLYING HIGH? Record orders for commercial aircraft are helping the aerospace industry weather the current recession.

PHOTO: TOM SHEPPARD/GETTY IMAGES

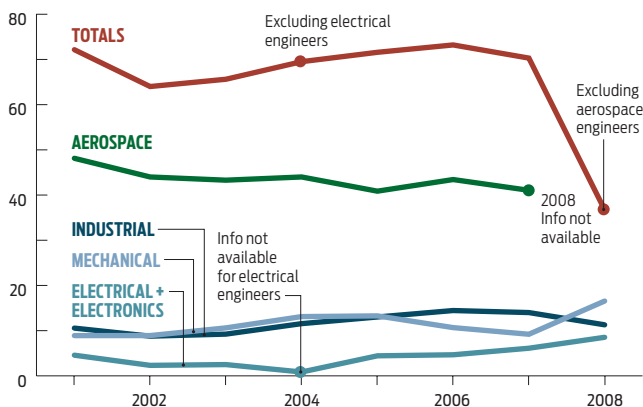
aeronautics and astronautics school, in West Lafayette, Ind., says that in his program’s 2007 graduating class, the ratio of corporate job takers to those who took government or military jobs was 3 to 1.

There is a desperate need for fresh talent. In 2005, 55 percent of working aerospace engineers were over 45 years old, Shyy says. *Aviation Week’s* 2008 workforce survey reported that 19 percent of engineers and computer scientists in the industry qualified for retirement in 2007. Similarly, Matthew Knowles, spokesperson for the Society of British Aerospace Companies, says that in the United Kingdom’s aerospace and defense market—the second largest in the world—there are many skilled engineers approaching retirement age, yet demand is undiminished.

The sector’s delayed reactions to current events make it tricky to find the right time to change jobs. In any case, your skill set may ultimately determine how easy it is to get hired. Last year, engineers with radio-frequency expertise and hardware- and software-engineering skills were in especially high demand. But for all engineers, aerospace is a sector worth exploring. “Neither the government or private aerospace industry is getting the people they need,” says the AIA’s Gertler. “There are plenty of jobs out there we still need to fill.”

—PRACHI PATEL

ENGINEERING JOBS IN AEROSPACE PRODUCTS AND PARTS (THOUSANDS)



Source: Bureau of Labor Statistics

moon-to-Mars mission have added job opportunities, says Wei Shyy, chair of the aerospace engineering department at the University of Michigan, in Ann Arbor. Jobs in government have increased, he says, but “the number of new hires doesn’t seem to come close to that in the private sector.” Marc Williams, associate head of Purdue University’s

Aerospace companies are now looking for engineers—particularly aerospace engineers, only half of whom work for companies making aerospace products. But according to the Bureau of Labor Statistics and the AIA, demand within the aerospace sector for electrical and electronics engineers has increased even more in the last five years.