

New members boost EU aerospace industry

On May 1, 10 new countries joined the European Union (EU), providing a major boost to aerospace companies in the region. Of the 10, Poland and the Czech Republic have relatively substantial aerospace industries. But smaller aerospace production facilities also exist in Slovakia, Croatia, and Hungary.

New links

Over the past five years, Western European companies—especially helicopter and maintenance, repair, and overhaul firms—have been developing links to low-wage, high-skilled manufacturing plants in Eastern Europe. These links will grow further in the next few years as the economies of the new EU members become integrated with those of the Western European partners. For example, at the start of March, U.K. engineering company GKN—which has a 50% share in the AgustaWestland joint venture—announced it will switch 20% of its production of automobile components to low-wage countries such as Poland.

According to Kevin Smith, chief executive of GKN: “We have developed a global manufacturing strategy for our Con-

stant Velocity Joint (CVJ) business. ...Over the next three years we will migrate about 20% of our global production from high-cost to low-cost economies, so that by 2007 over 50% of our CVJ manufacture will be sourced from low-cost locations. This will require a significant realignment of our manufacturing network.”

But the wholesale export of large tracts of aerospace and other manufacturing industries to the East is not going to happen—the 10 new countries may be regions of high skills and low wages, but they are also regions of low productivity.

Investments on the rise

Despite lower productivity, the importance of Eastern Europe as both a potential new manufacturing base and an area of euro-rich customers has encouraged many Western European aerospace firms to consider major new investments in the region. Poland, the Czech Republic, and Hungary are all members of NATO; Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia became NATO members on March 29—all will require considerable investment to bring their military equipment to NATO standards.

It will probably take at least 10 years for them to achieve this, according to NATO sources. Spain, which joined the organization in 1982, finally achieved full NATO compatibility in 1995.

According to NATO Secretary General Jaap de Hoop Scheffer, speaking in March: “Today we need forces that are light and mobile. Forces that can be deployed quickly and over long distances—and that can stay in the field for as long as needed. Such forces will be able to carry out the full spectrum of missions.... We have created the new Allied Command Transformation, to make sure that all allies participate in the transformation of our forces. And all the NATO allies are committed to making improvements in key areas such as strategic lift, command, and control, or precision-guided munitions.”

Early lead for Poland

Of the new EU entrants, Poland, perhaps, offers the most potential as a supplier and customer. The country's draft defense budget for this year includes a 16% increase in funds over 2003 for equipment modernization, although defense spending remains at just 1.95% of GDP.

But if Western European aerospace companies had hoped that Poland would favor EU suppliers in the drive to update their military systems, they have been proved wrong. In December 2002 the government dashed the hopes of several European aircraft manufacturers by announcing the purchase of 48 F-16s from Lockheed Martin in a \$3.5-billion deal.

Since then, however, BAE Systems has won a \$200-million contract to update Mi-24 attack helicopters to NATO standards—an important deal as it gives the company a foothold in the “Visegrad” market (Czech Republic, Hungary, and Slovakia), where a common solution to attack helicopter upgrades is being sought.

It now appears clear that, following the enlargement of the EU, there will be a

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slow but gradual drift of East European aerospace industry toward Western Europe rather than the U.S. The Polish aerospace industry—which employs around 11,000 staff in 21 companies—is expecting a major boost from EU membership. In October 2003 its trade organization—the Association of the Polish Aviation Industry (APAI)—joined the European Association of Aerospace Industries (AECMA). “With the membership in AECMA, we wish to increase our partnerships and business within Europe, and also our participation in the EU research programs,” says Miecyslaw Majewski, president of APAI.

Majewski is chief executive officer of PZL-Swidnik, a company where 50% of the work is subcontracted from Western European concerns. It has made fuselages for both the AgustaWestland A109 Power and A 119 Koala, cockpit modules for the Dassault Mirage 2000-5, components for Ratier-Figeac, and passenger doors for the Airbus A319/A320/A321 family. It also works with Boeing, Bell, and Cessna.

Other Polish aerospace concerns are more closely tied to West European partners:

In October 2001 EADS CASA took a 51% share in PZL Ockie as part of a contract to supply eight C-295M transports to the Polish air force. The integration of the company into EADS will extend its aerostructures work; the company makes wings, loading doors, seats, and electric harnesses for the CASA C-295 and is developing the PZL-130 TC-II ORLIC advanced trainer.

Meanwhile, PZL-Polskie Zaklady Lotnicze (Polish Aviation Factory), the former WSK-PZL Mielec, undertakes subcontract work for the BAE Systems Hawk, the Boeing 757, GKN Westland, Saab, and Pratt & Whitney.

Czech aerospace prospects

The Czech Republic is the other major aerospace power to join the EU. That country has begun a sweeping overhaul of its armed forces to create a smaller but more mobile force to support NATO operations. It has plans to increase



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defense spending this year to \$1.8 billion—around 1.9% of GDP. The country, like Hungary, has opted to lease Gripen fighters from BAE Systems/Saab and is due to conclude a contract for 14 of the type at the end of this month.

With offset contracts reported to be worth around 150% of the value of the contract over 10 years, one of the major beneficiaries of the deal should be Aero Vodochody, the troubled Czech manufacturer of advanced trainers and regional passenger aircraft. Until recently the firm had sought partnership deals with U.S., rather than Western European, concerns. But in February, the Czech government announced it would buy back the 35%

WAGE RATES AND LABOR PRODUCTIVITY IN THE NEW EU

	Hourly labor costs,* euros 2000	Labor productivity per person employed,** thousands of euros, 2002	Weekly working hours, 2002
EU 15	22.21	57.6	38.7
Czech Republic	3.90	16.9	42.4
Estonia	3.03	12.0	40.8
Cyprus	10.74	-	40.9
Latvia	2.42	12.0	43.6
Lithuania	2.71	10.7	39.4
Hungary	3.83	17.0	41.2
Malta	-	-	-
Poland	4.48	16.9	42.7
Slovenia	8.98	25.4	41.3
Slovakia	3.06	13.3	42.1

*Hourly labor costs: total annual labor costs divided by the total number of hours worked.

**Gross value added at current prices per person employed.

Source: Eurostat



The Czech Republic has opted to lease Gripen fighters from BAE Systems/Saab.

stake held by Boeing in the company for \$360 million, following a dispute between the two sides over loan guarantees.

Sales of the company's L-159 trainer/light combat aircraft—which features around 50% U.S. content by value—have not matched expectations, and now the future of Aero Vodochody could well depend on Gripen offset agreements. Talks on funding a new strategic partner were reported to be under way at the start of the year with BAE Systems and Airbus.

Further expansion

EU expansion will not stop this month. Bulgaria, Romania, and possibly Croatia could join in 2007. Albania, Macedonia, Bosnia-Herzegovina, and Serbia-Montenegro are also likely candidates; Turkey may possibly start membership negotiations in 2005. Beyond that, Belarus, Moldova, and Ukraine are also potential EU candidate states, as are Armenia, Azerbaijan, and Georgia.

Romania's aerospace industry is already closely tied to that of Western Europe. In December 2002 Eurocopter gained a 51% stake in Romania's IAR Brasov and is now overhauling Pumas for the U.K. Ministry of Defence.

Although the new entrants may have relatively small aerospace sectors, their joining will lead to some major longer term changes in the continent's defense aerospace businesses. Their membership will alter the nature of the EU, diluting, for example, Franco-German influence on foreign and security policies. And with the EU's borders now stretching to Russia, there is suddenly a new market on the doorstep with even greater possibilities.

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Following the editorial, **As a door opens, a window may close**, in the March issue, I am offering a strong opinion that the NASA decision not to service the Hubble Space Telescope is seriously flawed. My information is based on that available from the public press.

I believe I am on safe ground by suggesting the HST is a valuable and significant part of NASA's space science program. The data from the telescope is, and would continue to be, of fundamental importance to astronomers and cosmologists.

My opinion to continue the HST upgrade and repair missions is based upon the following argument: First, human spaceflight is inherently risky. Second, the astronaut corps are a group of dedicated professionals who understand and accept the risks of manned spaceflight.

Third, should General Stafford's Return to Flight Committee conclude that the actions recommended by the Gehman

Commission, when properly implemented, reduce the risks associated with flights by the shuttle fleet to an acceptable level, then the risks of shuttle repair mission would seem to be acceptable, even though the ISS cannot be a safe haven in the event of an emergency. Fourth, the replacement for the HST is not likely to be launched for at least seven years.

Finally, the investment has been made. The level of funding needed is a few percent of the total NASA budget. I think a prudent manager or investor would plan to exploit the sunk costs in the shuttle fleet and the HST to the utmost by extending the life of the HST as long as possible.

The risk assessment, the technical and the fiscal aspects of the logic clearly suggest that using the shuttle fleet for HST repair and upgrade missions continues to be viable.

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All letters addressed to the editor are considered to be submitted for possible publication, unless it is expressly stated otherwise. All letters are subject to editing for length and to author response. Letters should be sent to: Correspondence, Aerospace America, 1801 Alexander Bell Drive, Suite 500, Reston, VA 20191-4344, or by e-mail to: elainec@aiaa.org.

Events Calendar

MAY 9-12

Twenty-second AIAA International Communications Satellite Systems Conference and Exhibit, Monterey, Calif.

Contact: 703/264-7500.

MAY 10-12

Tenth AIAA/CEAS Aeronautics Conference, Manchester, U.K.

Contact: 703/264-7500.

MAY 17-21

SpaceOps 2004, Montréal, Québec, Canada.

Contact: Michelle Robitaille, spaceops2004@nrc-cnrc.gc.ca; www.spaceops2004.org

MAY 24-26

Eleventh St. Petersburg International Conference on Integrated Navigation Systems, St. Petersburg, Russia.

Contact: www.elektropribor.spb.ru

JUNE 2-4

International Federation of Nonlinear Analysts' ICNPAA 2004, Mathematical Problems in Engineering and Aerospace Sciences, Timisoara, Romania.

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