

# AEROnews

**Aero**  
**VODOCHODY**  
CZECH REPUBLIC

AERO Vodochody a.s.

September 2007



*"Our main priorities are support of production and development of aircraft and aircraft parts, especially in aerostructures, support of the L-159 and L-39 aircraft in service with the Czech Air Force and other customers, including placing the L-159 aircraft on foreign markets, and development of the Vodochody Airport."*



*Dear business partners,  
dear colleagues,*

Let me inform you about notably positive changes, which occurred in the AERO Vodochody a.s. Company (further referred to as Company) in the first half of the year 2007.

The new owner, Penta Group, who on January 4, 2007 obtained 100% of the shares of the Company, started a project of the overall strengthening of the Company, a so-called project of changes, increasing the equity of the Company by almost USD 400 million (March 22, 2007).

We can already confirm that the project steps helped us considerably increase efficiency in all Company's activities (by June 30, 2007, we managed to save more than USD 17 million) – this year, the year-by-year increase in the revenue of the Company will reach almost 40% up to USD 205

million (2006: USD 140 million) and we expect profit in the amount of approx. USD 10 million (2006: loss of USD 46 million).

In 2008, we plan to reach annual savings in the amount of approx. USD 25 million (in year-by-year comparison), revenue at least in the same amount of the year 2007 and profit of approx. USD 20 million.

AERO Vodochody a.s. begins to recreate resources for further development and increase in its competitiveness. We will raise our capacity in the near future mainly by (i) production of small and middle-sized composites and (ii) production of fuselages of middle-sized military as well as civil aircraft.

We are convinced that these circumstances will help us access new aerostructures orders in the same volume as the current production of almost the whole Sikorsky S-76 helicopter or newly introduced production of the Alenia C-27J Spartan center wing box.

Aerostructures programs with high value added represent great potential for AERO Vodochody a.s.

in the future. This is supported by the recently realized capital entrance of the Company into one of its traditional subcontractors, the British composite producer Rotortech Composites Ltd., which will help us meet the outlined development objectives.

Dear partners and dear colleagues. I believe that the stable and fully competitive AERO Vodochody a.s. Company will represent a reliable supplier and customer, who will more flexibly than so far be able to respond to all your requirements, suggestions and proposals, and to ensure necessary long-term perspective along with deliveries and services related to our aerostructures programs.

Enjoy reading this newsletter, issued on the occasion of every significant event, we will be glad to share with you.

*Yours sincerely*

*Peter Ondro  
President  
AERO Vodochody a.s.*



*"We are the employees, who daily participate on the Sikorsky S-76 helicopter production in AERO Vodochody a.s."*

## READ INSIDE

- AERO EXPANDS ITS POTENTIAL BY PRODUCTION OF COMPOSITES
- AERO WILL DELIVER FIRST C-27J CENTER WING BOX IN OCTOBER
- AERO HAS EXPEDITED 150<sup>TH</sup> SIKORSKY S-76 HELICOPTER
- F-18 GUN BAY DOOR – DELIVERIES FOR BOEING



## AERO EXPANDS ITS POTENTIAL BY PRODUCTION OF COMPOSITES

### WE HAVE STARTED LARGE-SCALE MODERNIZATION AND RESTORATION OF TECHNOLOGY AND MACHINERY

"Successful completion of the first stage of the project of changes targeted especially on stabilization, increasing efficiency and on cost reductions represented a key condition for us to recreate resources necessary to retain and increase competitiveness of AERO Vodochody a.s. (further referred to as AERO). We will practically immediately invest all resources into a large-scale modernization of our technology and restoration of our machinery. We have launched a next stage of the project of changes," said Peter Ondro, President of AERO. The objective of AERO is to advance to a higher level – to create conditions, which will help us acquire new complex aerostructures orders, extensive in volume, with higher value added, which will fully utilize our broad potential, including systems installations, design stages and other spheres. "What we need most at the moment is to introduce the production of composite parts for our aerostructures programs and assemblies of mid-sized aircraft fuselages," stated President.

#### PRODUCTION OF COMPOSITES

At the beginning of September, the Czech-and-Slovak private equity group Penta, owner of AERO, concluded its first acquisition in Western Europe by purchasing the British company Rotortech Composites Limited, which manufactures composites for the aircraft industry. The newly established company will be called Rotortech Aero Composites, and after restructuring, it will probably become part of AERO. Immediately after the contract was signed, a new management team was established in Rotortech, comprising of representatives of Penta and AERO.

"The acquisition of Rotortech confirms Penta's long-term interest in the aircraft industry. AERO is ready to increase the volume of production and compete with leading suppliers in the aircraft industry. Acquisition of the composites technology through Rotortech will boost AERO's position on the world's market of aerostructures and help acquire new contracts," said Marek Dospiva, partner of Penta. "Increasing the share of composites in the aircraft technology is a global long-term trend. This capability represents a key condition for us to win new aerostructures programs. We have thus gained the know-how of this advanced technology, which we had not had before and which will make it easier for us to introduce production of composites directly in AERO. At the same time, the deliveries for the S-76



Rotortech Composites Ltd. was established in 1977. The Company deals mainly with development, production and repairs of composite parts. Rotortech owns one of the largest autoclaves in Great Britain (width 3, length 10 meters). For the S-76 helicopter, the Company produces a composite part, complicated in shape, consisting of carbon fibers exposed to high temperatures. The inner space of the cover is protected from the heat by a nickel alloy coating. The parts also contain a pair of exhausters made of a titanium alloy, which ensure the venting from the Arriel 252 engines. The part is connected to the upper segment of the aircraft on dumper arms and restrained by two pairs of locks. This type of connection enables easy access to the engines and reducer for easy maintenance.

Program will improve," said President Ondro. The costs on the composite plant assembly, which should be completed in Vodochody in 2008, are estimated in the amount of USD 10 million.

The main advantage of composite parts is its combination of strength and weight compared to classic sheet metal parts used in the production of primary aircraft assemblies. Composites are made of an organic metal or ceramic matrix strengthened by fibers or suspended solids and belong to advanced materials more and more often used not only in the aircraft industry.

#### FURTHER INVESTMENT

"This year's investment in AERO will reach up to approximately USD 7,5 million. The main part will be targeted on modernization and completion of our current technology and machinery. Progressive fundamental modernization and consolidation of our production workplaces and other facilities, launched in 2007, should enable e.g. to double the volume of production in the Detail Part Fabrication Center, keeping almost the same number of employees," said Josef Kadlec, AERO Vice-president for Operations.

This year's investment covers above all modernization of machine tools (3 and 5-axe machining) and heat treatment oven, profile hot joggling extrusion, tube production, testing devices for wire harnesses, machine riveting, composite machining, concentration of the fabrication center, etc. The investment program also includes expenditures on the work environment, including construction works at the Vodochody Airport.

#### NEW DEVELOPMENT PROJECTS

The Company management at the same time decided on the continuation of current and launching new development projects. "We do not want to comment on this topic for the moment," concluded President Ondro.

#### MAIN DATA

- Purchase of Rotortech Composites – over USD 5 million
- 2007 Investment program – ca USD 7,5 million
- Composite plant in AERO – ca USD 10 million

#### RESULTS OF THE 1<sup>ST</sup> STAGE OF THE PROJECT OF CHANGES

- Stabilization of AERO – increase in equity by almost USD 400 million
- Turnover in economy – net profit in 2007 reaching USD 10 million
- Increase in revenue by 40% compared to 2006 up to USD 205 million (not significantly increasing number of employees)
- Total economies in 2007 will reach counter to plans USD 17 million
- Total economies in 2008 will reach counter to plans USD 26 million
- Increase in efficiency in all activities
- Retaining technological minima for L-159/L-59/L-39 and Ae 270 aircraft

#### ASSIGNMENT FOR THE 2<sup>ND</sup> STAGE OF THE PROJECT OF CHANGES

- Forming new strategy of the Company
- Extending the overall potential of the Company
- Modernizing and restoring technology and machinery of the Company
- Developing current and new aerostructures programs

*"Increase in revenue through deliveries with high value added as prime contractor or first subcontractor is our vision for aerostructures."*

## AERO HAS EXPEDITED 150<sup>TH</sup> SIKORSKY S-76 HELICOPTER

S-76 helicopter landing at Vodochody Airport. In-house designed AERO Ae 270 and L-159 aircraft at the back.

### S-76 IN NUMBERS

- 1<sup>st</sup> S-76 was completed in AERO on December 21, 2000
- 100<sup>th</sup> S-76 was completed in AERO on March 13, 2006
- 150<sup>th</sup> S-76 was completed in AERO on May 30, 2007
- 8,500 components are used in each S-76 helicopter
- 2,800 components are produced by AERO
- 200 business partners participate in S-76 production

S-76 Program runs in AERO since 2000.



AERO Vodochody a.s. has already completed 150 helicopters for Sikorsky Aircraft Corporation (SAC). The anniversary 150<sup>th</sup> S-76 helicopter (s/n 760674) was expedited on May 30, 2007. AERO is the only producer of practically the whole S-76 helicopter, excluding dynamic parts and final interior installations, since 2000.

"The volume of the S-76 Program production increases every year by dozens of per cent, and although AERO is currently going through a tough period of changes, we committed ourselves to deliver more

than by 30% more units this year compared to the year 2006. The increasing interest proves that SAC is satisfied with the quality of our deliveries, which we are really pleased about," said President Ondro.

SAC displayed a S-76 helicopter in the first flight demonstration of the aircraft in the Czech Republic at the Vodochody Airport on June 29, 2007. "Today's flight demonstration represents an important sign of success in this collaboration, especially for our employees participating in the production of the S-76 helicopter," said Ondro.

"SAC plans to locate the production of the new S-76 helicopter, D version, also in AERO," said on the occasion of the demos Bruce McKinney, SAC Vice-president, adding that SAC is interested in cooperating also in other aerostructures programs. "We are very satisfied with the quality and delivery terms of AERO," explained McKinney. "The D version should be certified in 2009 and we already have 52 orders," he specified. AERO has produced airframes for the D version for further development works and determination of the final configuration.

## AERO WILL DELIVER FIRST C-27J CENTER WING BOX IN OCTOBER

The first center wing box produced by AERO for the C-27J Spartan advanced tactical transport aircraft will be delivered to the customer, Alenia Aeronautica, Italy, member of Finmeccanica in October 2007. The contract on the delivery of the C-27 center wing box (CWB) was signed on September 2, 2006 and in the same month, AERO obtained the first orders.

"The production of the CWB for the Italian customer represents a delivery with high value added as well as high labor input, which exactly corresponds to the potential of AERO and its development aims. We expect that this program will be as important as the dominant Sikorsky S-76 production regarding revenue and profit," said President Ondro.

The assembly line was completed in AERO on June 15, 2007, just two days after the C-27J Spartan had been selected by the US Army and Air Force as the new tactical transport aircraft for the Joint Cargo Aircraft program. In a ten-year period, Alenia Aeronautica should deliver up to 145 units to the US Armed Forces in a total value of USD 6 billion. "For AERO, such volume of deliveries could represent an increase in the planned

production capacity by 100%, in some peak periods even 200%," stated Monika Vajnerova, AERO Vice-president for Aerostructures. "Furthermore, the US success made the market forecast for the C-27J even more promising than planned, with 500 aircraft sold on the international market in the next 20 years," said Paolo Pozzessere, Alenia Aeronautica Senior Vice President International Sales on the occasion of this year's Air Fest CIAF.

"The C-27J Program includes complete assembly, including integration of tanks, suspension of flaps and engines, wing fuselage, leading edge with deicers, wire harnesses as well as systems installation and surface treatment," said Ludek Vitezniak, AERO C-27J Program Manager.

The first CWB is currently in the phase of a finalized structure, just before installation of systems. The first two units are assembled out of parts fully delivered by Alenia Aeronautica and AERO has already started production of parts for further six units out of raw material delivered by Alenia. Starting with the ninth CWB, which should be delivered in August 2008, AERO will take over responsibility for the complete process, including material purchase.



C-27J Spartan. First CWB will be completed in AERO in 10/2007.

Alenia Aeronautica and AERO are discussing future expansion of mutual industrial collaboration aimed to other aerostructures programs.

### C-27J IN NUMBERS

- 1<sup>st</sup> CWB will be completed in AERO in October, 2007
- 3,200 components are used in each CWB
- 2,000 components are produced by AERO
- 34 business partners participate in CWB production

"AERO Vodochody a.s. premises accommodate all equipment necessary to carry out world-class aerostructures programs."



## F-18 GUN BAY DOOR – DELIVERIES FOR BOEING

### AERO HAS STARTED PRODUCTION FOR THE NEW F/A-18 G VERSION

AERO delivers a complex assembly of the F/A-18 Super Hornet gun bay door for one of the world largest aircraft technology producers – The Boeing Company. On January 15, 2007, AERO completed the first unit for the new F/A-18 G version. AERO has been producing gun bay door for the Boeing F-18 aircraft since 2001, including part fabrication, special processes as well as painting and has already delivered more than 250 units, all in 100% quality.



F/A-18 gun bay door production in AERO – E/F version (front), G version (back).

F/A-18 Super Hornet.



## AERO WILL INCREASE PRODUCTION FOR EADS

This year, AERO should double its deliveries for EADS Augsburg. Since 2005, AERO has been producing subassemblies for the A320/A340 aircraft. "The program covers ca 20,000 working hours a year and should double up to 40,000. In this stage, the subassemblies are set up out of parts delivered by EADS. In the second stage, assembly as well as production of parts should be performed solely by AERO," said Zdenek Hlaciak, AERO Program Manager for EADS. By the EADS Program, AERO joint the important environment of European aircraft technology producers, awaiting more complex deliveries in the near future.



AERO produces subassemblies for Airbus A320/A340.



Airbus A320.

## AERO IN GENERAL

AERO Vodochody a.s. is the largest aircraft producer and defense company in the Czech Republic, and one of the oldest aircraft producers in the world (\*1919). Total revenue of the Company in past 30 years reached USD 4.5 billion, the export reaching USD 2.5 billion. In total, AERO has produced more than 11,000 units of aircraft of various types, out of which 6,500 were in-house designed jet trainers (L-29/39/59 and L-159) and 3,700 license MiGs (MiG-15/19/21). Since January 2007, the 100% holder of the Company is the Czech-and-Slovak private equity Penta Group.

The Company is active in development and production of military and civil in-house designed aircraft as well as in complex aerostructures deliveries.

## LEADING AEROSPACE MANUFACTURERS ENTRUSTED AERO WITH ORDERS

- Sikorsky Aircraft Corporation - S-76 helicopter complete manufacture, excluding dynamic parts and final interior installation
- Alenia Aeronautica – C-27J Spartan center wing box
- Boeing Company - F/A-18E/F/G Super Hornet gun bay door assembly
- BAE Systems - B767 fixed leading edge assembly kits
- EADS Augsburg - A320/A340 subassemblies
- Vought Aircraft Industries - B747 fuselage sheet metal parts
- AIRCELLE - A340 transport jigs
- MT Aerospace - Ariane 5 Rocket skins, etc.

## AERO OFFERS A VARIED PORTFOLIO OF POTENTIAL COOPERATION

- Airframe Assembly, including Installations and Testing
- Development and Testing
- Detail Part Fabrication, esp. Machining, Sheet Metal Forming, Electrical Wire Harnesses
- Special Processes, esp. Heat and Surface Treatment and Non-destructive Testing
- Tool Design and Manufacture
- Executive Aircraft Painting
- Overhauls and Upgrades
- Airport Services, etc.

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