



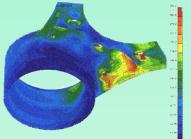
# PZL-Świdnik in European Projects Challenges and Opportunities for Polisch Industry and Science

#### Aeronet – Aviation Valley – Rzeszów, 2-3 March 2009

M.Sc. Eng. Paweł Chojnacki – Chief Expert for European Projects M.Sc. Eng. Zenon Witkowski – Chief of Design Departments, R&D Centre

### **PZL-Swidnik capabilities**





Design ~ 100 designers Analysis ~20 enginiers Manufacturing – light alloys and composite "clean" structures >3000 employees (~500 engineers)

Testing ~40 engineers/employees (ground) and ~70 pilots/engineers/mechanics (flight) Trening Center













## **PZL-Swidnik International Co-operations**

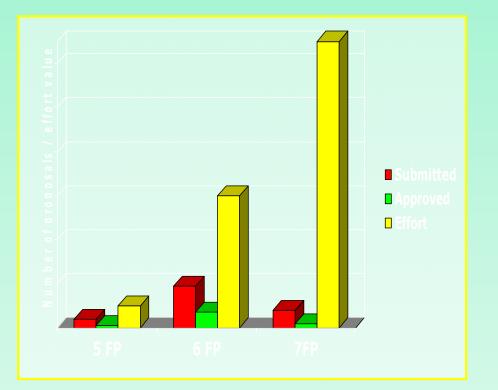






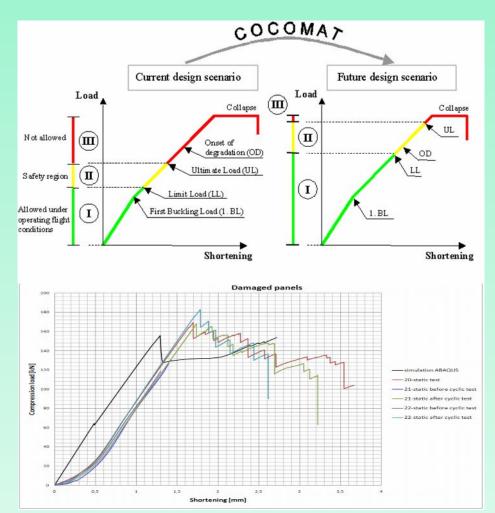
# **PZL-Swidnik Effort in Framework Programmes**

- 5-th FP 3 submitted, 1 realised project (1999-2001) [MALVINA]
- 6-th FP 19 submitted, 7 realised (2002-) [COCOMAT, FOREMAT, FRIENDCOPTER, HELISAFE TA, ADVICE, KMM-NoE, AVALON]
- 7-th FP 8 submited, 2 realised [JTI CleanSky, TRIADE], 3 new expected in 2009



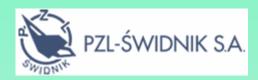




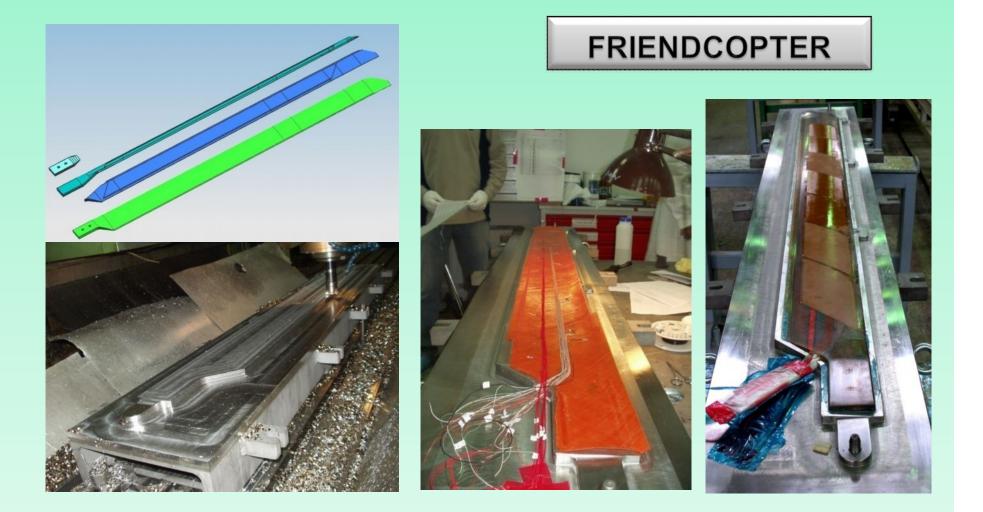










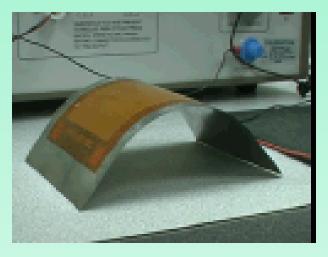








"Multifunctional textile structures driving new production and organizational paradigms by textile SME interoperation Across high-added-VALue sectOrs for knowledge-based product service creatioN "



On the basis of Smart Materials – HOPPER SM







### TRIADE

"Development of technology building blocks for structural health monitoring sensing devices in aeronautics" GRC1 "Innovative Rotor Blades"

**GRC2** "Drag Reduction"

**GRC3** "Innovative Electrical System"

GRC4 "Installation of a Diesel Engine on a LH"

**GRC5** "Friendly Flight Paths"

GRC6 "Eco-Design"

GRC7 "Technology Evaluator for Rotorcraft"

#### Total budget: >8M€









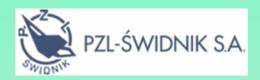
#### **PZL-Swidnik in EP - Challenges & Opportunities**

New materials (including smart materials) application on aircrafts

 Application of new advanced numerical simulation methods alowing to increase part fatigue life and critical surface determination more efficiently

- Advanced structure monitoring system application on aircrafts
- Ecological product life managing and its utilization
- Application of new materials changing the aerodynamical surfaces
- Application of new advanced technologies of overhauls and repairs

 Number of European projects focused on composite and smart structures very quick increase to meet new challenges in safety, environmental and performance areas





#### **PZL-Swidnik Challenges & Opportunities**







# PZL-Swidnik takes part in National Projects – FORESIGHT Poland 2020 and FOREMAT

PZL-Swidnik is open to international cooperation and collaboration in European projects





# Thank you for your attantion

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