## 5<sup>th</sup> Symposium on Jet Engine and Gas Turbines

Thursday, November 3, 2005 (9:00-17:00), Seminar Hall (Room 235) Faculty of Aerospace Engineering, Technion, Haifa

## **Schedule:**

08:30 – 09:30 Registration

09:30 – 10:00 Opening:

Prof. Dan Givoli/ Dean Faculty of Aerospace Engineering

Dr. Avi Vaynrob/ Ramah Matar, Mafaat

Colonel Dr. Kobi Bortman/ Ramah airplanes, IAF

10:00 – 12:10 First Session –Diagnostics in Jet Engine

chairman: lieutenant colonel Roni Gordana, Maatar, Mafaat

- 1. Aurel Lazar and Abraham Lavie/ IAI/ Application of a laser CMM for measurment of overhauled blades.
- 2. Konstantino Kouris/ Pratt & Whitney/ Diagnostics, Prognostics and Health Monitoring for Operational Gas Turbine Engines.
- Michael Yahalom/ RSL Electronics Ltd./ Turbine Engine Diagnosis On the Reconstruction of Performance Parameters from Engine and FADEC Measurements.

11:20 – 11:30 Break (10 minutes)

- 4. Dr. Michael Lichtsinder and Prof. Yeshayahou Levy/ Faculty of Aerospace Engineering, Technion/ Jet Engine Component and Transducer Fault Diagnosis Using Component Map Replacement by the Maps Evaluated During Transient Operation.
- 5. Isaac Greenberg & Dr. Savely Khosid/ Manor-RAFAEL/ Thrust measurement and data analysis for a turbojet in altitude chamber.

12:10 – 17:00 Second Session: Systems and performance

chairman: major Aviad Branshtein, Propulsion Branch, IAF

6. Matthew E. Thomas/ CFDRC/ Addressing Emerging Tactical Missile Propulsion Challenges with the Air-Turbo-Rocket.

## 12:50 – 14:50 LUNCH

- 7. Mr. David Lior<sup>1</sup> & Mr. Abraham Ofir<sup>2</sup>/ Beker Ltd. 2005 Inc<sup>1</sup>, IDE<sup>2</sup>. Intermediate Cooling of Gas Turbine.
- 8. Amichay H. Gross/ Manor-RAFAEL/ Examining the Use of Air Injection in Surge Tests for Small Turbo-Jets.
- 9. lieutenant colonel Baruch Bar/ Optimization of Engine Cycle and Jet Fuel Consumption Per Flight Hour Rate in F16 Aircraft.
- 10. Yuri Berlin/ Bet-Shemesh Engines/ Residual Thermal Deformation of the Jet Engine Exhaust Nozzle.
- 11. Dr. Valery Sherbaum and Prof. Yeshayahou Levy / Faculty of Aerospace Engineering, Technion/ Investigation of the Jet Engine Nozzle Flow by CFD Simulations.
- 12. Dr. Ram Evron, Mr. Albert Levi & Dr. Moshe Shapira/ Bet-Shemesh Engines/ Micro Structural fractures in a Turbojet Engine Combustion Chamber.

17:00 – 17:20 discussion and concluding remarks