

## *Minutes*

### **Aerospace Resource Center (ARC) of Florida**

The second meeting of the ARC Advisory Council was convened on July 27, 2006 in the Partnership II building, Central Florida Research Park, Orlando, FL. The meeting commenced at 9:00 a.m. in room 112.

Council Members present: Adrian Laffite (Lockheed Martin Space Systems), Tommy Mack (National Aeronautics and Space Administration)

Others present: J. B. Renninger, Dr. Al Koller, Marshall Heard, Tom Shiner [WFI Director, Special Projects], Frank Margiotta, Doug Howse, Tom Cavanagh, Tom McGurk, Robert Ward, Juanita Curtis, and Amber Harrell

Council Members absent: Dave Morrow, Paul Bartlett, Traver Gruen-Kennedy, Richard DeMarco, Harry Brandon, George Hauer, Casey Barnes, Glen Vera, Samuel Durrance, Cesar Levy, Francis Ayers, Scott Openshaw, Andy Anderman

#### **Welcome**

Program Manager Mitch Kozak extended opening welcome to attendees—summer vacations and work commitments impacted council member attendance. Adrian Laffite, recommended by the Executive Board to serve as Chairman of the Advisory Council for the ARC's initial stand-up year, made an opening statement expressing the ARC's potential for addressing the many significant workforce issues facing the aerospace industry. After self introductions by all attendees, the Program manager reviewed the meeting agenda—highlighting the aerospace industry needs assessment presentation as the main order of business.

#### **Program Manager's Report**

- Two items from the initial Council meeting—minutes from the 31 May Council meeting and Operating Procedures for governing Advisory Council meetings—were introduced for any discussion and subsequent approval by the council. Both of these items were tabled for later approval due to a lack of a quorum of official council members.
- Council was briefed that the initial curriculum development submissions by the Space and Aviation Training coordinators—Composites Technology and Aviation Sheet Metal Technology, respectively—had been approved by WFI. Planning has commenced in each community to schedule initial classes for delivery in the August timeframe.
- Industry needs identified by the aerospace industry assessment as well as requirements identified by local industry will serve as the basis for additional curriculum development efforts.

## Aerospace Presentation

Robert Ward, Vice President of Flight Operations, provided an informative briefing on Zero Gravity Corporation (ZERO-G), a privately held space entertainment and tourism company headquartered in Fort Lauderdale, Florida. The mission of ZERO-G is to perform as the premier space entertainment and tourism company offering a wide range of compelling programs, products, and services that enable the general public to personally experience the excitement of space. The central theme of his presentation covered their commercial, weightless flights aboard a specially modified Boeing 727-200 aircraft. This product offering typifies ZERO-G's intention of making the excitement and adventure of space accessible to the public in a safe, fun, and cost-effective fashion. The parabolic flight maneuvers between approximately 24,000 and 32,000 feet altitude designed to achieve the state of “weightlessness” are the same type of flights used by NASA to train their astronauts.

The Zero-G program illustrates the value of exposing tomorrow's workforce to the experiences and challenges of future industries. The objectives of the Zero-G flights support an overall ARC goal of encouraging industry and academic efforts to impact the early stages of the workforce pipeline process by introducing students and teachers to the promise and achievement possible in a career in the aerospace industry.

## New Business

Indigo Key was contracted in June to conduct a survey of aviation and space companies to determine the workforce development needs of the aerospace industry. The major portion of the council meeting centered around a presentation by Tom McGurk, Indigo Key, to the Advisory Council on the process, findings, conclusions, and recommendations stemming from their analysis. A copy of the slides, Report to the Advisory Committee—Needs Assessment” is attached. The briefing stimulated much discussion—during as well as after the presentation. A summary transcript of the presentation and discussion has been compiled and can be found on the Aerospace Resource Center website ([aerocenter.org](http://aerocenter.org)) at the Advisory Council link.

A listing of **recommendations** offered by meeting attendees is itemized below:

- The Conclusions section of the report tilts heavily towards the space side. Recommendation made that the report give the aviation industry fair coverage and treatment, especially regarding economic impacts. In the real world, the aviation industry dominates in workforce size and fiscal contributions to the state's economy.
- As reflected by analysis and discussion of survey results, for much of industry, “strategic plans” are one year in length. Near term issues prevail—how am I going to meet payroll? Recommendation was made to meet with consultants and/or companies with 500 or more who can afford staff who do research on how future trends affect industry. While short-term needs should certainly not be ignored, this type interaction would be helpful assessing long-term industry requirements--as opposed to surveying companies focused on meeting payroll.
- Meeting discussion came to general consensus that the ARC might want to consider aerospace industry interests in different time horizons. For the near term—ARC should continue the current focus on addressing educational and training needs. Long term is where

the world starts to change--5 to 10 years down the road. This is the lead time the industry needs to identify/package education and training to prepare the future aerospace workforce. Accordingly, the ARC strategic plan should contain short- and long-term goals.

- It was noted during discussions that many of the conclusions offered by this study are similar to conclusions from prior studies and analyses. However, attacking all issues identified in this assessment is not a solution. A recommendation was made to focus on initiatives that are germane to the startup of the ARC to gain the support of industry people who will help bring the aviation and space sectors together. This is a key element to resolve at this early stage of defining the ARC.
  - The ARC needs to have formal communications paths that are documented and reach into existing structures and simply communicate—“this is what we see; do you see the same picture?”
  - The ARC needs to be selective in what it pursues at this early stage. What activities can be pursued to achieve early wins that will help industry?
- The Aerospace Resource Center should consider developing a contingency plan to handle consequences of a catastrophic loss of the space shuttle—that’s 15K workers at KSC without an enduring mission. The effort should focus on designing a contingency plan should a disaster occur and being ready to implement that plan.
- There should be a conclusion in the final study report recognizing that space facility construction requiring billions of dollars will be a significant investment in the near term—there are vital cultural changes that the workforce will need to learn and understand to operate safely and efficiently in that high-tech environment.
  - There’s a role to be played by education to provide these construction workers with cultural indoctrination into the space business—a need for space General Familiarization courses.
  - A similar capitalization dynamic may exist for DayJet/Eclipse at their planned facility in Gainesville.
- With regard to using “trends” information to guide follow-on curriculum efforts, the Executive Board expressed the importance of recognizing short-term as well as long-term needs. However, with regard to initial year start-up efforts, the ARC should focus on short-term industry-driven needs and not spend resources on as yet ill-defined long term issues. It is important, however, to remain attentive to, and ultimately respond to, long-term needs because they may yield the greatest overall benefits to future industry growth and profitability.

Next Meeting: Various options were discussed regarding the time and location of the third Council meeting, which was tentatively planned for the end of September-early October timeframe. Location at this time is still to be determined—there was general support for the third Advisory Council meeting to be a teleconference.

The meeting was adjourned around 2:00 p.m.

MITCH KOZAK, Program Manager  
Aerospace Resource Center of Florida