

**ARC Advisory Council Meet  
Teleconference/Webinar**



**Agenda**

*November 13, 2009*

**\* 9:30 a.m. – 11:30 a.m. \***

- |       |   |  |
|-------|---|--|
| 9:30  | <b>Call to Order/Roll Call/Agenda Overview</b>                                  | Program Manager                                    |
| 9:45  | <b>Welcome &amp; Introductions</b>  | ARC Principal<br>Investigator & Council<br>Members |
| 10:00 | <b>Program Manager's Report</b>   | Program Manager & P/I                              |
|       | 1) Year 3 Contract Status and Projected Funding                                 |  |
|       | 2) Deliverables Review  |  |
|       | 3) Current Activities   |  |
|       | - Curriculum Development/Delivery   |  |
|       | -- Aviation   |  |
|       | -- Space  |  |
|       | - Marketing and Outreach Plan Projects  |  |
|       | -- Newsletter   |  |
|       | -- Updated Web Site   |  |
|       | -- Outreach activity ideas  |  |
|       | - Broward/Miami-Dade Focus Group Proceedings/Findings (Oct 30, 2009)            |  |
| 10:30 | <b>Advisory Council Operational Procedures</b>                                  | Program Manager                                    |
|       | - Chairman and Vice Chairman Roles and Responsibilities                         |  |
|       | - Executive Board Roles and Responsibilities                                    |  |
|       | - Council Members' Roles and Responsibilities                                   |  |
|       | - ARC Advisory Council Process Flow   |  |
|       | - Recommendations from Council Members  |  |
| 11:00 | <b>Wrap-up/Questions/Action Items/Next Meeting (March 1<sup>st</sup>, 2010)</b> |  |
| 11:30 | <b>Meeting Adjourns</b>   |  |

*Advisory Council Meeting – Web Conference  
November 13, 2009*



**Minutes**

Gene V. Milowicki, Banner Center Program Manager, opened the meeting by welcoming ARC Council members and thanking them for their time and efforts to attend the Web Conference. The Advisory Council meeting was conducted from 9:30 through 11:30 am.

**Council Members in attendance included:**

- Casey Barnes (Enterprise Florida, Inc.)
- Ken Byrnes (Embry-Riddle Aeronautical University)
- Judy Blanchard (Brevard Job Link-Cocoa)
- John Burton (Sun `n Fun)
- Edward Ellegood (SpaceTEC)
- Jorge Guerra (Broward Community College)
- Lawrence Harvey represented by Maria Peterson (SpaceTEC)
- Marshall Heard (Florida Aviation Aerospace Alliance)
- Dr. Cesar Levy (Florida International University)
- Mark Miller (Piper Aircraft, Inc.)
- Eric Owens (Florida Department of Education)
- Craig Reval (Kaman Aerospace)
- John Small (Polk County School Board)
  
- Other Attendees:
  - Tom Baine (Aerospace Resource Center)
  - Julie C. McHenry (Aerospace Resource Center)
  - Paul McNamara (Florida State College at Jacksonville)
  - J.B. Renninger (Florida State College of Jacksonville)

**Call to Order/Roll Call/Agenda Overview**

Program Manager Gene V. Milowicki called the meeting to order with a roll call and reviewed the meeting agenda—which included a Program Manager’s report on year three (3) contract status and projected funding, a deliverables review, and an overview of the ARC’s current activities.

**Welcome and Introductions**

ARC Principal Investigator J. B. Renninger extended opening welcome to attendees with a public announcement that effective COB 13 Nov 09 he will no longer be Director for the Aviation Center of

Excellence. He will be moving to a Dean's position at Florida State College of Jacksonville's Downtown Campus. Gene V. Milowicki will be taking his place as Interim Director of the Aviation Center of Excellence and Principal Investigator for the Employ Florida Banner Center for Aviation and Aerospace effective 16 Nov 09. Also effective 16 Nov 09, Thomas W. Baine will take over as Program Manager for the Aerospace Resource Center. J.B. Renninger discussed Workforce Florida, Inc. (WFI) and the beginning of our new contract year. WFI was able to standup two additional Banner Centers this year and extend the concept with very notable goals for this next calendar year. Gene V. Milowicki, current ARC Program Manager turned the meeting over to all participants for a brief introduction.

## **Program Manager's Report**

- Year 3 Contract Status and Projected Funding:
  - The contract was signed on 11 Sept 09.
  - Projected funding is \$300,000 pending successful completion of all eight deliverables.
- Year 3 Deliverables Review
  - Deliverable 1 - Implementation Plan
    - The implementation plan is a detailed schedule of activities the ARC will deploy as well as executed memoranda of agreements or other agreements.
    - Completed and submitted to WFI on October 5, 2009.
    - \$10,300
  - Deliverable 2 - Advisory Council
    - Designate and organize a statewide aviation and aerospace industry advisory council of industry representatives to meet at least three (3) times during the term of the contract.
    - First meeting on Friday, November 13, 2009, via teleconference/webinar.
    - Second meeting on Monday, March 1, 2010, via teleconference/webinar.
    - Third meeting on Friday, April 16, 2010, in Lakeland, Florida, at Sun N' Fun. Live meeting as well as teleconference/webinar.
    - \$2,500 per meeting, not to exceed \$7,500.
  - Deliverable 3 - Marketing & Outreach Plan
    - Develop a broad marketing and outreach plan to expand visibility of the Banner Center to strategic groups, business organizations, and individuals throughout the state.
    - Website and two e-newsletters are to be published.
    - Website is published; first e-newsletter will be completed in early December with the second in February (possibly monthly).
    - Marketing and Outreach Plan: \$10,000; E-Newsletters: \$2,500 each / 2 for \$5,000; Website: \$7,500.
  - Deliverable 4 - Entry-Level and Advanced-Level Jobs and Skills Upgrade Training
    - We will provide flexible training programs to candidates in formats preferred by industry partners and future students.
    - Training programs must be recognized and accepted as industry-driven by the advisory council.
    - At least 298 of 310 enrolled individuals must complete the training.
    - Entry-Level: \$40,950 for 78 completers (\$525 each); \$9,000 for 12 job placements (\$750 each).
    - Advanced-Level: \$23,625 for 45 completers (\$525 each); \$15,750 for 21 job placements (\$750 each).
    - Skills Upgrade: \$91,875 for 175 completers (\$525 each); \$36,000 for 48 employee retentions (\$750 each).
    - Completion Statistics as of 06 Nov 09:
      - Enrollments
        - 56 of 310 required training enrollments, or 18.1%

- 54 of 298 required training completions, or 18.1%
- Completers
  - 17 of 78 required entry-level completers, or 21.8%
  - 26 of 175 required skills upgrade completers, or 14.9%
  - 11 of 45 required advanced-level completers, or 24.4%
- Placements
  - 2 of 12 required entry-level placements, or 16.7%
  - 0 of 21 required advanced-level placements, or 0%
- Retentions
  - 26 of 48 required skills-upgrade retentions, or 54.2%
- Deliverable 5 - Curricula Development
  - Develop a comprehensive curriculum for the aviation and aerospace industry.
    - Web based component
    - Modular so that trainees have flexibility to participate in needed components of the program
    - Preferably lead to industry recognized certifications
    - Incorporates non-traditional teaching methods
    - Contains specific industry accepted competencies to be assessed at the end of training
    - Can be updated, replicated, and effectively marketed to create revenue to support sustainability of the Center
  - One (1) complete curriculum before April 30, 2010
  - \$18,000
- Deliverable 6 - Focus Group Meetings
  - Conduct three (3) focus group meetings with industry to determine current and future hiring needs of the aviation/aerospace industry in Florida
  - Three (3) focus groups.
  - Meeting 1 was completed on October 30, 2009
  - Meeting 2 on or about December 08, 2009
  - Meeting 3 on or about February 18, 2009
  - \$2,500 per meeting; \$7,500 total
- Deliverable 7 - Sustainability Plan and Leveraged Funds Documentation
  - Provide a sustainability plan for the Banner Center that includes state-wide outreach.
  - Highlight the industry's projected needs over the next 5 years.
  - Determine how the Center will offer value to the industry.
  - Provide strategies for sustenance beyond the term of the contract.
  - Plan to continue and expand upon existing academic partnerships.
  - Action plans to create new products and services of value to the industry.
  - Identify specific outcomes to be achieved in the year following the contract:
    - New programs to develop.
    - Student projections.
    - Number of jobs anticipated.
    - Number of incumbent upgrades anticipated.
    - Number and type of industry certifications to be attained.
  - \$6,000 for Sustainability Plan; \$4,000 for cash contributions funds documentation.
- Deliverable 8 - Inter-Institutional Agreements
  - Develop agreements with academic institutions and employers to expand delivery of training to areas of the state not previously served.
  - Partnerships should enhance training throughout the state to fulfill the needs of employers, the regional workforce board, educational facilities, et al, to deliver quality products of value to create sustainable income.

- Two (2) agreements at \$7,000 (for both).
- Current Activities
  - Curriculum Development/Delivery
    - Aviation
    - Space
  - Marketing & Outreach Plan Projects
    - Newsletter
    - Updated Web Site
    - Outreach Activity Ideas
  - Broward/Miami-Dade Focus Group Proceedings/Findings (October 30, 2009)
    - Current outlook not promising, but considerable potential in a rebounding economy for new aviation/aerospace job types in South Florida.
    - Potential for new subsectors of maintenance and service job opportunities.
    - Knowledge and skill sets identified to be in demand include composites, advanced avionics, computer skills, and soft skills where gaps and needs currently exist.
    - Knowledge of new and developing technologies and processes will be required of the new workforce.
    - Certification and education were reaffirmed as critical in making individuals competitive and marketable for jobs in the industry.
    - Industry-specific and proprietary certifications are cited as growing need as advanced technologies are implemented.
    - Maintenance and repair of advanced navigation and communication avionics suites were cited as growing needs.
    - Current ARC curricula were validated for their relevance, but there are many additional possibilities for new offerings.
    - Possibilities for new curricula offerings include:
      - Unmanned aerial systems (UAVs).  
(discussion to follow)
      - Business-class flight attendant training.
      - Aircraft-specific familiarization/systems training.
      - Synthetic Vision Technology (SVT).
      - Wide Area Augmentation System (WAAS) enabled avionics suites.
      - Other transformational NextGen programs such as Automatic Dependent Surveillance Broadcast (ADS-B).
      - Biofuels and other alternative fuels for jet and reciprocating engine aircraft.  
(discussion to follow)
    - Certifications such as the Airframe and Powerplant (A&P) mechanic certifications are important, but only provide the bare minimum to enhance a worker's value to a company.  
(discussion to follow)
    - A&P mechanics increasingly need proprietary, industry-specific certifications which are generally expensive to acquire, come from such companies as Hawker, Falcon, Cirrus, Robinson, Schweizer, Bell, Gulfstream, etc.
    - Advanced avionics came up as a gap in that proprietary certifications from companies such as Garmin or Avidyne are required for technicians to repair those products.
    - Without the proprietary training on those units, technicians are limited to merely installing, removing, and replacing them.
    - All were in agreement that Associate or Baccalaureate level degrees enhanced potential employees' appeal to employers.
    - Industry representatives confirmed that they are willing to pay for certification for their employees.
    - The ARC currently has 10 curricula, and is currently delivering in Northeast Florida:

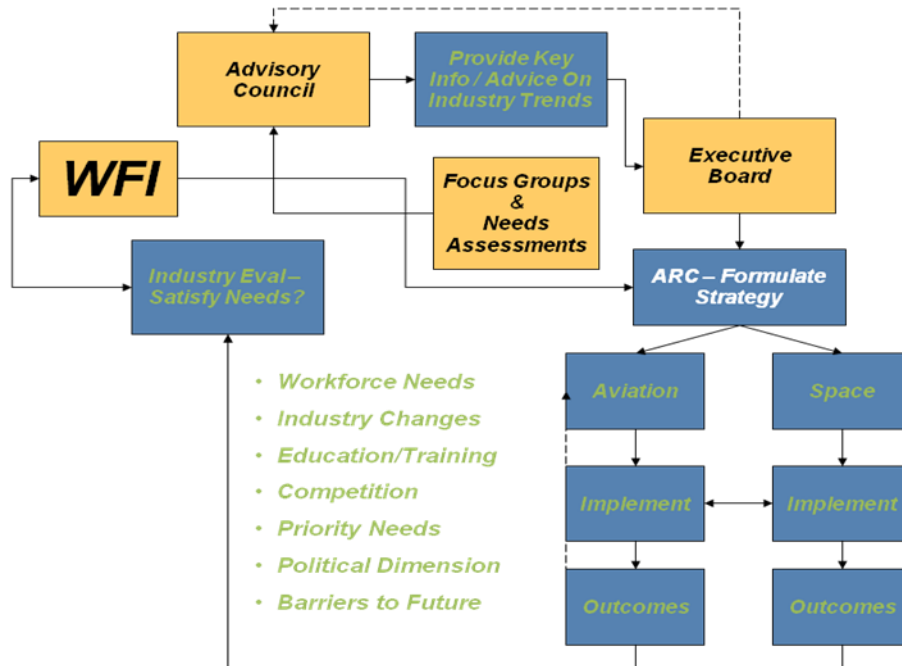
- Maintenance Human Factors
- Aviation Sheet Metal Technician Training
- New curriculum ideas brought forth include:
  - Introduction to Unmanned Air Systems (UAS)
  - Corporate Flight Attendant Preparatory Training
  - Commercial Airlines (Part 121) Flight Attendant Preparatory Training
  - Flight Simulator Technician Training  
(Discussion to follow)
  - Flight Dispatcher Training
  - Reduced Vertical Separation Minimum (RVSM) training for pilots
  - Minimum Navigation Performance Specifications (MNPS) training for pilots
  - Terrain Avoidance and Warning Systems (TAWS) training for pilots
  - Advanced Avionics Systems Maintenance Courses for the A&P and Avionics Technician:
    - Garmin G1000
    - Garmin G600
    - Avidyne Flight Management Systems
    - Garmin 430(W) and 530(W) NAV/COMM Suites
    - Others
  - More offerings for aircraft-specific familiarization training

### **Advisory Council Operational Procedures**

*\* The list of Advisory Council candidates is subject to WFI approval and has been submitted. It is pending approval based upon requests for additional membership in NW Florida.*

- Roles and Responsibilities
  - Chairman & Vice Chairman
    - In addition to their council member roles, the Chairman and Vice Chairman will be full members of the executive board.
    - Authority to direct actions and convene meetings as they see fit.
  - Executive Board
    - Duties include making decisions to be executed by the ARC.
      - Principal Investigator, Gene Milowicki
      - Chairman, Adrian Laffitte
      - Vice Chairman, John Small
      - Larry Harvey, Spacetec
      - Marshall Heard, Florida Aviation Aerospace Alliance
  - Council Members
    - Work with Workforce Florida's designated governance team on advisory council structure and operations to include:
      - Terms of service
      - Responsibility and accountability towards sustainability
      - Participation in a scheduled on-board meeting

- ARC Advisory Council Process Flow



### Wrap-up/Questions/Action Items/Next Meeting

- Discussion Items

- Unmanned aerial systems (UAVs).

- **J. B. Renninger, Florida State College at Jacksonville** –There is a need to look at the integration of UAVs in the national airspace system. It could be an effort of the ARC to collaborate with the FAA in that integration. Having manned and unmanned vehicles in the same space is a real problem.
- **Ken Byrnes, Embry-Riddle** – We are working on a project right now, we are creating a minor in the program and we are working with the FAA to put UAVs, or aviator speed displays, in the system so the look like they are in the system but they are not really there so we can learn about this and figure out how to work through these issues with the FAA.
- **Marsh Heard, FAAA** – We are also going to have to accommodate space tourism in the airspace as well. The first actual fee paying trip will be in 2012.
- **J. B. Renninger** - Cecil Field will be designated as a commercial spaceport.
- **Casey Barnes, Enterprise Florida, Inc.**-UAVs have exceeded those of piloted aircraft and will only continue. Any curricula that we can help develop geared toward UAVs will be very exciting and wanted. Not only in NE Florida but also on the West coast of FL.
- **J. B. Renninger**- WFI wants representation in NW Florida for this reason.
- **Casey**-If you need any connections I'll be happy to do so. Alabama and Mississippi will be included for aviation recruitment and development. They are very keen in the aviation sector as well and will find the ARC as a welcomed partner.
- **Gene Milowicki**-Casey do you have any particular ideas on the exactly what type of curriculum we could develop and field? Maybe no longer than a 40-hour/5 day?
- **Casey**- Pending budgets, the intro course is good from a very basic stand point. Most folks have a working knowledge of avionics and working knowledge of other things. But the difference between remotely piloted or UAVs is significant and how to deal w/ that world vs. the pilot world is important as well and something I'd be happy to help work on. WFI/Workforce Boards could help determine the skills needed.

- Flight Attendant Training Program
  - **J. B.**- I've always wondered why each airline prefers to train their own flight attendants with the uncertainty of the business cycles. We could, or an outside entity could, could feed all the airlines with the basic airline skills. If we could provide that opportunity the airlines might welcome that in the long run.
- Biofuels and other alternative fuels for jet and reciprocating engine aircraft.
  - **J. B.** – We've had summer camp here over the years at Florida State College and one of our students has developed a project for competition on biofuels.
  - **John Burton, Sun N Fun** - We introduced an area called Green Space at our Sun N Fun Fly in Event. It's an area for environmentally related projects to be featured. We could feature that this year to spark interest.
  - **J. B.** – Kevin Simmons lives and breathes these types of things. We will put him in contact with you.
  - **Marsh Heard, FAAA** – I've spent a lot of time looking at biofuels and to the best of my knowledge almost every engine that runs today on biofuels starts up using JP4, JP5 or some conventional fuel and before it shuts down it runs conventional fuel through it as well. It leads me to believe we have to make sure people understand that they're going to have to have dual systems because biofuels don't sit well in the engine.
  - **J. B.** – It could be the ethanol problem where seals weren't manufactured with that in mind.
  - **Marsh Heard, FAAA** – We will transition to biofuels over a long period time. We will have dual fuel approach for another 10 or 15 years.
  - **Ken Byrnes, Embry-Riddle** – Biofuels are coming rather quickly and the EPA is going to regulate it and make it mandatory. There is one fuel made that has shown real promise. The wear in tear is better than tradition fuel. We are planning on researching it and testing it as much as we can to see if it's sustainable.
- Certifications such as the Airframe and Powerplant (A&P) mechanic certifications are important, but only provide the bare minimum to enhance a worker's value to a company.
  - **Casey Barnes** – Is the A&P the standard foot in the door a worker would need to be qualified to be hired and retrained for specifics?
  - **Gene** – It's desired
  - **Craig Reval** – We at KAMAN, we don't require the A&P license per say but we do look at the specific skills they acquire during the A&P class, gravitating toward the Airframe side of course. We are looking toward just the basic skills.
  - **J. B.** - The A&P is the basic level of mechanical understanding that the FAA will acknowledge and then any additional training has to be airframe specific. At some point the certification is required to sign off on the maintenance action..
  - **Casey** – my question was geared toward particular skill sets. If there are common skill sets to 80% of the industry certifications maybe we concentrate on them.
  - **J. B.** – That defines the FAA A&P mechanic certification.
- Flight Simulator Technician Training
  - **J. B.** – Gorge how do you deal with that down in Miami.
  - **Jorge** – As far as simulators?
  - **J. B.** – Yes, techs. We had a technician, known as an expert, walked of the job because he didn't know how to fix it. How do you deal with that?
  - **Jorge Guerra** – we have partnerships with Aerosystems down here. Normally the individual is an avionics technician. On occasion we require our students to become a simulator technician.
  - **J. B.** – for you it's a combination of OEM technician and internal organic type tech.
  - **Jorge Guerra** – Yes, you're going to go to Frasca or the manufacture OEM or someone who is certified on it through the OEM.

- **Ken Byrnes** – We have a close relationship w/ FRASCA. I have 3 fully trained technicians that only service the fleet. They come from avionics background for the most part.

- Questions

- **Q. Jorge Guerra** – When you mentioned leveraged funds for sustainability of the ARC, what exactly are you talking about as far as leveraged funds? Where do you get those funds from?  
**A. Gene Milowicki** – In our proposal we had to answer a question from WFI with regard to where funds would be leveraged from different partners. Some of the funds are from Florida State College at Jacksonville and some of those funds are from in-kind contributions. For example, George T. Baker Aviation School gave us the use of their facility for day and provided lunch free of charge for our Focus Group Meeting. That's considered a leveraged fund in-kind contribution. As articulated in the proposal: Florida State College at Jacksonville contributed \$85,000; WorkSource Region 8 and Region 13 contributed \$30,000; Regional Workforce Boards, Colleges, and Industry Partners such as Kaman Aerospace, Naval Fleet Readiness Center Southeast, Flightstar Aircraft Services, Alenia, Piper Aircraft, Inc., etc (through letters of support) contributed \$12,500;  
**A. J. B. Renninger** – To set the overarching goal at WFI, they are looking at a plan for self sustainability. They are looking to a plan for the ARC to migrate to a self sustaining form of funding. It could be grants from industry; they would love for industry to support this as other industries do. One of our goals has been for when training occurs there would be a royalty fee to return to the ARC for maintaining curriculum. It's a myriad of funding sources, gifts, or a fee for service to deliver the course. Some of the MOAs we have incorporate a kick back to the ARC.  
**Q. Jorge Guerra** – You spoke of sustainability after the grant is over, even though there may be a renewable, if you're looking at being sustainable what plan or strategy do you have how do you plan on generating those funds?  
**A. J. B.** – A fee for service. I look back on this effort by WFI and what they're trying to do is create an efficient training environment in the state of Florida. It's up to the ARC to develop and deliver this training.
- **Q. Jorge Guerra** – How does Delta/American feel about outsourcing their training for flight attendants?  
**A. J. B.** – We haven't approached them, but probably feel they could do it better themselves. It's like a question I posed last week, The FAA trains no mechanics, no pilots; but yet they train all attendants. Why is that? It's a hurdle we have to get over.  
**A. Tom** – we could focus on charter carriers that don't have their own facilities.  
**Q. Casey Barnes** – Is there a requirement from WFI to keep targeted training within the targeted training industry list? I wanted to let the group know what Flight Attendant training is not a targeted industry in Florida. I'll be happy to speak with the group off-line if needed.  
**A. J.B.** – it's been my experience that WFI looks at the job postings and that's a lagging indicator. If I'd used that criterion while developing Air Traffic Control I would have missed the boat. Three schools that I know of picked up that specialty and they are bursting at the seams. Sometimes the needs are lagging indicators as to what we currently need. Two years ago we were worried as an industry as to where we would get the pilots that we need. Then a few things changed like the economy and another thing that changed was the age requirement was increased to 65. I predict another 2-3 years we are going to face how we will train all the pilots for the future in addition to House Bill 3371 being discussed right now about changing commuter requirements to ATP designation and how we're going to fill those seats. They are going to allow academic training requirements to substitute for those 1500 hours, they just don't which ones or how much they are going to allow.

**Q. Ken** – Dr. Tim Brady worked very hard on that. Initially the bill didn't have anything of the like it just had a solid 1500 hours. We are focused on competency and quality here not prescriptive hours so we fought pretty hard against that. We were a major player to get that into the bill. How that's defined, we are still trying to figure that out as well. If the bill passes it's going to be up to the administrator to assemble a team to figure out how to quantify that. We are going to play a part in that as well, as well as other industry folks. We feel that is was a success getting that into the bill. We are working with senate and other folks in industry to get that 1500 hour language out of there and leave it to the administrator. There is a significant difference between organizations that train students. Traditionally in collegiate organizations students are more prepared to be professionals at the end of it we feel. So we are working to highlight that. We want them to tell us what they want the outcome to be and we want them to regulate the quality and the safety much like Transport Canada is doing rather than set specific hours.

**J.B** – Keep in mind the ARCs future in this there may be some opportunities to assist. Some of these problems are so difficult, we just need to collaborate on this, for us to survive as a community and provide a quality product to the industry and quite honestly to make Florida a leader in this industry.

**Jorge Guerra** – Yes, HR3371 passed the house already and it's sitting with the senate subcommittee right now. We are urging our industry partners to back us up and write our senators to let them know we need their support to allow the language we submitted that's changes to the bill that will support schools and colleges that have a reputation of putting out good quality qualified pilots.

**Gene** – For both Ken and Jorge, what do you see if the bill goes through with the 1500 hours as being the unintended consequences for the flight training world and where it might lead us?

**Ken** – It goes back to the pilot shortage that's going to happen. There is a general lack of interest in domestic students to go into the piloting field. Most schools are filled with international students. If that boom comes back, we are going to lose what we have and we are concerned that there won't be anybody to fill those instructor roles and those positions. Because the people that are here now all have that 1500 hour requirement by the time that bill comes around and we will have to fill a huge void. We feel people will just rent aircraft and go fly kind of haphazardly and not focus on safety and quality like we do at the academic level. This will make it a more dangerous industry. We are going to focus on more professionalism and beef it up more. We are also going to focus on flight quality and safety management systems. The FAA is going to require these types of things and we think there is going to be a strong need.

**J. B.** – As a side one of the staffer's recommendations to attain this 1500 hour goal is to have academic institutions provide this training. We could do it but who has the checkbook?

**Jorge** – Because of the current economic situation banks are not issuing loans to students who want to learn how to fly. They are not issuing the loans, so compound that with 1500 hours and the fact that domestic students aren't going into the pilot career field, it could look pretty grim for the future if we don't look into some of these issues.

**Gene** – Along with curriculum development and delivery of training, this group could also serve as a unified voice on some of these issues.

- **Q. J.B.** – I have a question for Marsh Heard, FAAA where do you see the states priority in aerospace with the glooming budgetary issues from the next 2-3 years.

**A. Marsh** – I think the issue is going to be on non-tradition tasks. Can we take the technology that we've developed in the aerospace industry and bring it to things like science and alternative energy? I think there will be less of a focus on direct aerospace and more of a focus on how to we take the benefits from aerospace and spread it across the citizenry. For example a guy who is a citrus grower may be interested in seeing space age technology that helps him track progress for tankers, water, mowers, observation sites, etc. I think we are going to see a huge change in the way the aerospace industry is looked at.

**J.B.** - One thing brought to my attention is the migration of aviation developed curricula in human factors crew resource management and it's migration into the operating room where the same sort of factors affect outcome if you're not careful. Maybe the ARC should look at exporting this curriculum to fields outside of aerospace for sustainability.

**Marsh** – I think one of the smartest things you could do is talk to the ARC about their technology requirements. I suspect that you're going to find that we've solved some of the problems that they're wrestling with. You may not use the same terms but I'm willing to bet with the we because of our avionics experience software modeling and simulation have done a lot that can be transferred to them. I think we could learn something.

- **Craig Reval from KAMAN** – It think it is not so much the curriculum development because I think the ARC is doing a great job on that and we have the people here to prove that. But more from how are we going to attract people to this industry. We are developing courses and certifications but really need to fill the seats.

**Gene** – That's one of our key tasks this year, to create curricula and reach out to the next generation and attract more people to aviation industry.

**J. G.** –referred to a study that was done with the Boy Scouts of America. When they surveyed what they wanted to be when they grow up, they all said pro-sports. But what caught my attention was the prominence of culinary arts. How did that become a highly rated profession for the future? Look at all the cooking shows on TV now. We have to indoctrinate our future students early as to the benefits of a career in aerospace. We at Florida State College at Jacksonville have done a fairly good job in our summer camp program. We give them something fun to do that is academically challenging. We have students from faraway places such as MIT that wanted something to do that wasn't boring like canoeing and playing volleyball, they were doing orbit strategies, boosting satellites, etc. I'll bet that 99% of the American public doesn't know that Air Traffic Controller is a profession. They see the baggage agents, the ticket agents, the pilots etc. but they never see the air traffic controllers so therefore they don't exist. It's a struggle to get the career field out in front of the students. A lot of our students are children of air traffic controllers and think it's a cool field so we have to indoctrinate early and get that information out there.

**Gene** – Another piece of that is articulating a national space policy vision and everybody is looking towards the results of the Augustine commission report and the initiative the Obama administration is going to take on the manned space program for example. If we get a clearly articulated vision that could energize the aerospace industry again or on the other hand if we don't get support it needs that could lead to downtime.

**Jorge** – The FAA newsletter had an article about exploring aviation and space careers. The FAA together with the American Institute of Aeronautics and Astronautics put together what they called an Education Ally. They do this in California and Houston and they had thousands of young people interested in those careers come through and had a great success. I am wondering why we can't do something like this in Florida. We have the space coast here and a tremendous history of aviation in Florida. Can we look at bringing that idea to Florida and get some young people excited about the industry.

**Gene** – I'm going to look into that.

- Action Items

- At our next advisory council meeting, scheduled on March 1, 2010, we will be looking for industry recommendations on what curricula to develop.
- AIAA Education Ally-look into bringing to Florida for Marketing and Outreach Plan.

- Closing Remarks

- J. B. thanked everybody. He is leaving the ARC in body but not in spirit. He is close by and if he can be of assistance to anybody, please call me.
  - Gene thanked everybody for being here today and announced we would distribute minutes of the meeting.
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- Next Advisory Meeting
    - March 1, 2009

The Web Conference Advisory Council meeting adjourned at 11:30 a.m.