



www.aiaa.org/sections/sh

Letter from the Chairman

Mark Ray

We're off to a great start this year with many exciting events already. I'd like to thank Mr. Dennis Hannaway for his Flight Test Operations Safety Review lecture in August. I'd also like to thank our YP Chair Nick McFall and all who participated in our Speed Networking program this year. Nick did an excellent job organizing and conducting this program. We've got several interesting, upcoming events already planned including two distinguished lecturers. Keep checking the AIAA Savannah website <http://www.aiaa.org/sections/sh> for more details on upcoming programs and other announcements.

AIAA Announces 2004-2005 Section Award Winners!

Congratulations to the Savannah Council Members for their outstanding efforts throughout the year. Every year we strive to offer exciting programs and social events that the AIAA members will enjoy. Planning each event takes a lot of energy. My thanks go out to all of the 2004-2005 Savannah Section Council Members for contributing your valuable time and effort to make Savannah Section so successful! Below is a listing of the Awards the Savannah Section received. Congratulations!

Outstanding Section Award - First Place
Shelly Brimmeier *Section Chair*

Career Enhancement Award - Third Place
Mike Foster *Career Enhancement Chair*

Communications Award - Second Place
Ken Terry *Webpage and Newsletter Editor*

Membership Award - Third Place
Paul Taylor *Membership Chair*

Harry Staubs Pre-college Outreach Award – Second Place
Pat Connor *PCO Chair*

Public Policy Award - Third Place
Tim Connors *Public Policy Chair*

Young Professional Award - Second Place
Nick McFall *Young Professionals Chair*



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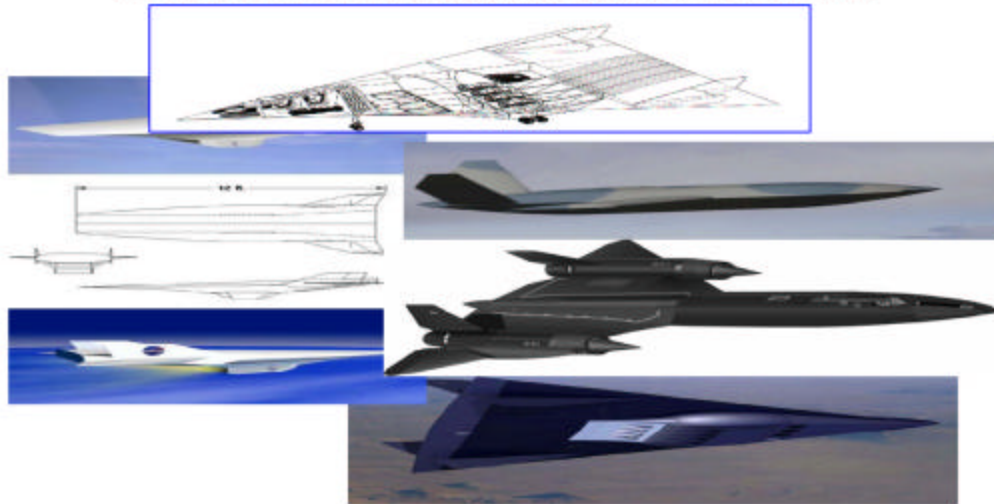
American Institute of
Aeronautics and Astronautics

October Distinguished Lecturer Dinner

Topic: Dr. L. Scott Miller:

“Shadow Craft – A World of Secret Flight”

This presentation will summarize many of the rumors and review publicly available evidence that suggests the existence of secret aircraft projects. The viability of the rumors and evidence will be discussed and some additional ideas will be offered.



Thursday, October 27th, 2005

Skylers Restaurant at East Bay Inn

Social: 6:00 pm, Dinner: 6:30 pm, Presentation: 7:30 pm

225 East Bay Street, Downtown Savannah

Cost: \$22 Non-members, \$18 members, \$ 15 Students

Ticket Deadline: Tuesday at Noon, October 25, 2005

Tickets available from Rob Vieito (x2-7634) or any AIAA Officer

Savannah's AIAA Website: <http://www.aiaa.org/sections/sh/>

YP Event Announcement



**American Institute of
Aeronautics and Astronautics**

AIAA Young Professionals Group Presents:

The 2nd Annual AIAA Ten Pin Classic

Thursday, November 17, 2005
AMF Victory Lanes
2055 E Victory Dr
7:00 PM – 9:00 PM



Reserve your ticket by Tuesday, November 15

Tickets are \$10. Sign up a friend and get a ticket to the next AIAA event

Tickets available from Nick McFall (x23553) or any AIAA Officer

Savannah's AIAA Website... <http://www.aiaa.org/sections/sh/>



Membership Update

Paul Taylor
Membership Chair

Congratulations to our newest Savannah Section Associate Fellow, Mr. Tim Conners. Way to go, Tim! Tim is member of the Preliminary Design group as a Propulsion Specialist, with a distinguished career in this discipline and has served as the Public Policy Chair for the Savannah Section both this year and last.

We currently have 83 active members in the Savannah Section of AIAA and have remained strong at this level for some time. I'd like to welcome our newest professional member: Mr. John Louis, as well as our new Educator Associate members: Ms. Judi Griffin, Mrs. Tracy Hanson, Ms. Johanna Redeye, Ms. Antonette Sams, Ms. Channil Scott, Mrs. Nichole Stowers, and Ms. Michelle Thompson.

Pre-College Outreach Update

Pat Connor
Pre-College Outreach Chair

Since the beginning of this past year, the Savannah AIAA Section has been involved in a number of educational activities, both at the precollege and college level.

In June, we sponsored 2 major events. On 15 June, approximately 40 local area high school juniors and seniors participated in a mechanical engineering workshop and tour of the Gulfstream facilities. This was all part of a week-long Engineering Academy workshop that was being conducted by Armstrong Atlantic State University (AASU) for local area students who expressed an interest in learning more about engineering during their summer vacation. During their day at Gulfstream, they were briefed on our activities at Gulfstream, given a tour of both the Gulfstream and Flight Safety facilities and participated in a mechanical engineering design problem. The feedback we received from the AASU instructors conducting this program indicated that their visit to Gulfstream was the highlight of their week.

Later in June, the Savannah AIAA Section also conducted a workshop session for local area science teachers who were participating in a summer science program which was also sponsored by AASU. During their visit to Gulfstream, they were briefed on our local AIAA PCO activities, introduced to the AIAA Educator-Associate program and given a tour of the Gulfstream facilities. Approximately 20 local area teachers participated in this workshop and 8 of these teachers subsequently became AIAA Educator-Associate members. Following their briefing and tour of the Gulfstream facilities, several AIAA members met with the teachers on a second day and guided them in building and flying some simple, rubberband-powered model airplanes. The teachers seemed to have a lot of fun with this hands-on activity. They will hopefully be able to implement this activity in their own classrooms and get some of the students excited about aviation.

Shortly after the start of the school year, the local AIAA section began our 5th annual model building program. Due to a fairly high attrition rate experienced in previous years, this year's program was shortened from 15 class and flying sessions to 6 sessions. A total of 9 instructors helped conduct this year's program. Five of the instructors were active AIAA members (Doug McKissack, Rob Vieito, Franz Nawrocki, Jason Merret and Pat Connor), three of the instructors were either retired or current Gulfstream engineers (Bob MacDonald, Johnny Hodges and George Hicks) and one instructor was an employee at a local hobby shop (James VanHook).

A total of 18 students participated in this year's program which started on 13 September and concluded on 15 October. Students participating in this year's program ranged from the 4th grade to the 12th grade. The class met on a weekly basis at the 8th Air Force Museum (one of the sponsors of the program). In addition to providing a facility to meet, the 8th AF Museum was also active in advertising the program and ensuring that various resources were available to support our instructional and model building activities.

This year's program consisted of 3 phases. In Phase 1 we talked to the students about the components and unique features of a simple balsawood glider model and then had them assemble the models and add control tabs to the wing and tail surfaces. As part of Phase 1, instructors conducted 2 demonstrations to illustrate flight with a rubberband-powered model and flight with an RC model. Phase 1 concluded with the students experimenting with their glider models and learning how their models respond to various control surface deflections.

Phase 2 consisted of 2 class sessions. In the first session, the students were given instructions on how to build a fairly simple, balsawood and paper, rubberband-powered model airplane. The remainder of the 1st session was



spent constructing these models. At the start of the 2nd session of this phase, one of the instructors used the AIAA mini wind tunnel to talk about lift and drag while another instructor talked to the students about how propellers and jet engine develop thrust. The students were given some instructions on how to prepare their models for flight and then turned loose to practice flying their models. The 2nd Phase concluded with a competition for the longest powered flight. The winner was given a gift certificate to the local hobby shop.

Phase 3 consisted of 2 class sessions and one flying session. At the start of the first class session, the students were briefed on Gulfstream and the products we build. This presentation was followed by another presentation on the basic controls for a Radio-Control (RC) model airplane. The remainder of this session was spent using one of several flight simulators to get familiar with how to fly RC models. A Gulfstream pilot spoke to the group at the start of the 2nd session and one of the RC instructors briefed the students on the major component of an RC model airplane. This session again concluded with having the students use one of several RC flight simulators to learn how to fly RC airplanes.

On Saturday, 15 October, the students had an opportunity to fly one of four electric-powered RC model airplanes. These models were generously donated to our program by a model RC company, Horizon Hobby. We had 4 experienced RC instructors who were paired up with the students via "buddy box" transmitters. By having 4 airplanes, buddy boxes and instructors, each of the 13 students that participated in this final session got several opportunities to fly the RC models. Several of the students were able to actually takeoff and land these RC models. At the conclusion of the program, many of the students asked if they could repeat the program next year.

Like last year, several Savannah AIAA members are again acting as mentors to the Johnson High School FIRST Robotics program. Section members involved in this program include Brian Lojko, Tobin Morgan and Brian DeRosa. These instructors and several other Gulfstream engineers have been meeting with the robotics team on a weekly basis since the beginning of the school year to prepare them for their roles in the upcoming competition. Once the competition officially begins in January, these instructors will be meeting with the students on a daily basis to guide them in the construction of their robot. The local AIAA section will be making a \$250 contribution to this very worthwhile program to help with just a small portion of the expenses associated with this program.

In September 2005, the Savannah AIAA Section received a request to financially support a local cub scout group participating in a rocket derby. Thrust for the rockets in this competition was provided by a rubberband-powered propeller. As part of this program, the scouts learned about weight, lift, drag and thrust in the process of building an flying model rockets. Our local section agreed to provide a \$150 contribution to help fund this noteworthy program. Approximately 150 cub scouts in the Bluffton, South Carolina area participated in this activity.

On 9 September 2005, 3 AIAA members organized and conducted a tour of the Gulfstream facilities to approximately 14 college engineering students and 2 faculty members. All of the tour participants were members of the AASU Engineering Society. In addition to the tour, we provided the group with information on the various engineering career fields represented at Gulfstream and some general information concerning aviation and the aerodynamics of flight.

On 14 and 15 October 2005, a workshop was held in Savannah for middle school and high school technology teachers from various schools throughout Georgia. In conjunction with this workshop, the local AIAA section was asked to conduct a tour of the Gulfstream facilities to teachers attending this workshop. A total of about 60 teachers participated in this tour which was conducted by 5 Savannah AIAA members—Shelly Brimmeier, Lloyd Morgan, Jason Thomas, Paul Taylor and Pat Connor.

On 15 October, one of these AIAA members met again with a smaller group of these teachers (approximately 15) and instructed them on how they could talk to students about how airplanes fly. This session also included having the teachers build and fly simple, balsawood glider models. As part of this session, information was provided to these teachers on the AIAA Educator-Associate program and using the AIAA website as a source of aeronautical reference material.

Career Enhancement Announcements

The Career Enhancement Committee is actively working on upcoming programs in conjunction with Gulfstream University. Our Thin-Sheet Analysis and Avionics courses were a great success last year and we are working to build on these in the coming months. Stay tuned to the Section Newsletter, Bulletin Boards and the Section Website for upcoming announcements.

Public Policy Update

Tim Conners
Public Policy Chair

Congressional Visits Day Recap

Recent public policy activity has centered around the Savannah Section's visit to Washington DC this past March for Congressional Visits Day, essentially a nationwide aerospace lobbying effort sponsored by AIAA.

AIAA took five primary talking points to Congress in March. These were:

- 1) Revitalization of the NASA Aeronautics program
- 2) Establishment of a sustainable human space exploration program
- 3) Development of rapid global reach military air vehicles
- 4) Application of UAVs within the national airspace for homeland defense
- 5) Revitalization of the US science and technology base through education

Our scheduled time with each of the Georgia Congressmen and staffers with whom we met was very limited. To maximize impact, our AIAA delegation chose to focus on two topics in the list: NASA Aeronautics and Education. The first topic is arguably of most interest to the Georgia aerospace industry; the second enjoys broad bi-partisan political support.

Did AIAA Make a Difference?

Now that the smoke is clearing, did AIAA actually help to positively influence Congressional support in these areas? Absolutely, especially within the House of Representatives. Did that influence ultimately result in significant policy change? The verdict remains out.

Congress was hammered on several fronts this past year, and not just by AIAA, regarding the lousy state of NASA Aeronautics. Why should we care? A healthy and robust NASA program has far reaching implications, including support of industry's advanced product development. NASA Aeronautics funding currently represents *only about 1/20th of the total NASA budget*. At projected funding levels, programs will need to be canceled, NASA employees will lose their jobs, and progress made in the past several years, such as that related to sonic boom research, will be stymied.

Congress heard the message loud and clear, and both the House and Senate passed their own authorization bills that would, for the first time, lay the groundwork for a national aeronautics policy. This policy will ideally be used by all parties to keep NASA Aeronautics focused and on-track through the turmoil that inevitably results from changes in Presidents, NASA Administrators, and funding levels. The Senate and House now need to reconcile differences in the language of their two competing bills, but it is expected that the end result will be a strong document.

What about funding? That's where Appropriations comes into play, and that's part of the problem. The House, with bi-partisan support, approved a budget for NASA Aeronautics that would at least keep funding levels nearly constant compared to this year's level. Still lean, but jobs and wind tunnels would be spared. The Senate, on the other hand, has strong political factions that are more interested in keeping NASA's new space exploration initiative alive even at the expense of other important programs. In the end, the Senate appropriated a budget much less kind to Aeronautics. Sparks will be flying soon as the House and Senate wrestle over their differences.

From Out of Left Field Comes... More Politics

If a funding increase is ultimately approved by Congress, will the future of Aeronautics finally become clear for the first time in years? Hardly. The President recently appointed a new NASA Administrator, Michael Griffin. With the new Administrator comes the inevitable shake-up within the remaining organizational structure. In a surprise move, the new incoming Associate Administrator of Aeronautics has already scuttled most current programs in favor of a plan that, as far as we can tell, has no buy-in by the NASA Aero Centers, Congress, or Industry.

Where the new plan came from is anyone's guess; and in this lies a new, but deep, wrinkle in the ongoing political intrigue. One thing is fairly certain: the NASA Aeronautics Administrator's plan does *not* align with the Congressionally-approved aeronautics policy. Your industry representatives are currently lobbying hard for sanity to prevail; and it will be interesting to see who remains standing as worlds collide in the coming months.

What's Ahead

In the meantime, we in AIAA can continue to petition our members of Congress to support a healthy U.S. Aeronautics program. If they continue to hear the message from their constituents, I am confident that we will continue to enjoy their support. They may not wield absolute power, but they make awesome teammates.

In the coming months, the Savannah Section plans to host at least one of two Congressmen who represent the Savannah area, Reps. Jack Kingston and John Barrow, to participate in a question and answer session for AIAA members. Stay tuned for more information with respect to that. We will also continue to support requests for information from Congress and, of course, we'll be making plans for another productive trip to DC for 2006 Congressional Visits Day.



Upcoming Section Events

October 27th, 2005 - Dr. L. Scott Miller will present on "Shadow Craft - The World of Secret Flight"

November 2005 - George Hicks "Lunch and Demonstration" Radio Controlled (RC) Aircraft in the company picnic area. *Date and location to be announced.*

November 17, 2005 – YP Bowling Event - The 2nd Annual AIAA Ten Pin Classic. See pg 3 of this newsletter for details.

November 2005 - Gulfstream Supersonic Acoustic Signature Simulator II (SASS II) Demonstration *Date and location to be announced.*

Upcoming:

February 2006 - AIAA Distinguished Lecturer Kenneth Szalai will present on "Flights of Discovery - Experimental Flight Research in the Modern Era", High risk experimental flight research programs of the modern era are portrayed in words and pictures along with discoveries that sprang from "expanding the envelope." The lessons learned from flight exploration at the frontiers of knowledge are also reviewed.

AIAA National Upcoming Events

US Air Force T & E days

6-8 Dec 2005 Nashville, TN – Opryland Convention Cntr

44th Annual Aerospace Sciences Meeting & Exhibit

9-12 Jan 2006 – Reno, NV – Reno Hilton
Early registration deadline – 9 December 2005

Congressional Visits Day

4-5 April 2005 – Washington , DC

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Recognition, Honors and Awards

The following Savannah Section members have received Gulfstream Pride awards in 3rd & 4th Quarter of 2005 for their outstanding job accomplishments at Gulfstream:

| | | | |
|-------------------|-------------|--------------|-------------------|
| Don Freund | Tom Greiner | Bob Mills | Frans Nuernberger |
| Charlie Osonitsch | Paul Taylor | Jason Thomas | |

Congratulations to these members for great accomplishments in their positions.

Congratulations and appreciation goes to Dr. Don Freund for being appointed to be the 2005-2006 Region II Deputy Director for Pre-College Outreach. Our region positions are important to the AIAA Section oversight and success, so thanks to Don for volunteering for this position.



Miscellaneous Announcements

AIAA Nationals is looking for help and support from it's members for it's "Ask an Engineer" program. The program receives various questions about engineering and engineering careers from Grade School and College students who are interested in engineering disciplines. If you are interested or have any questions about what's involved, feel free to contact Savannah Section member [Jason Thomas](#) via email.

Are you up-to-date? Make sure you stay up-to-date with AIAA Nationals on your personal information, especially if you have recently moved or changed email addresses. You can update your personal information on the AIAA website www.aiaa.org by logging-in and going to "My Information". If you haven't logged on before or don't know your password, follow the prompts on the website for "Login Help".

Savannah-Section Educator Associates: We would like to hear from you on what great things you are doing in your classrooms in support of science, technology and engineering education. Please feel free to [drop us a line](#) and let us know what you are doing and working on currently and your recent successes and accomplishments.

Thanks to Shelly Brimmeier for the layout and hard work on this month's newsletter.

AIAA Savannah Section Newsletter

Fall 2005

If you have any comments, suggestions or announcements for this newsletter, please let us know.

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