

Gateway News



American Institute of Aeronautics and Astronautics, St. Louis Section

<http://www.aiaa.org>

<http://www.me.wustl.edu/ME/orgs/aiaastl/>

MARCH 2001

AIAA DINNER MEETING

American Institute of Aeronautics and Astronautics, St. Louis Section
 Boeing St. Louis Leadership Association
 International Council on Systems Engineering

**AIAA-BSLLA-
INCOSE
Dinner Meeting**

Grease or Grit in Gears - Management in Motion?

With **Ms. Carolyn S. Griner**
 Retired Deputy Director
 Marshall Space Flight
 Center NASA

The AIAA St. Louis Section, the BSLLA, and the INCOSE Midwest Gateway Chapter are pleased to feature Ms. Carolyn Griner, Retired Deputy Director, NASA's Marshall Space Flight Center, at a dinner meeting on March 21 at the Airport Marriott Hotel. A graduate of Florida State University, Ms. Griner has served in a variety of capacities with NASA including supporting both the Space Shuttle and the International Space Station programs. For her efforts, she received two NASA Distinguished Service Medals. Ms. Griner will be drawing from her experiences to discuss how management can make or break (be grease or grit in) the smooth running of a productive organization. Management approaches will be discussed including NASA's "Faster, Better, Cheaper" philosophy.



AIAA Dinner Meeting
 Wednesday
 March 21, 2001
 Airport Marriott Hotel

Social 5:00 - 6:00 PM
 Dinner 6:00 - 7:00 PM
 Program 7:00 - 9:00 PM



Ticket Prices:

Members: \$20.00
 Nonmembers: \$25.00
 Students \$15.00
 Presentation only . . \$1.00
 Presentation only
 at the door \$2.00
 (Purchase After Mar 16, Add \$5.00)

Ticket Sellers:

John Mohr 567-3398
 Public and Retirees
 Mike Swartwout . . 935-6077
 Washington University
 Kay Bopp 977-8240
 Parks College of
 St. Louis University
 Fred Nelson 341-4613
 University of Missouri-Rolla

Dinner Menu

*Salad
 Entree
 Dessert
 Coffee/Tea*

YOUNG PROFESSIONAL AWARD

Kirk Ellett was introduced and presented the AIAA Young Professional Award by Terry Schmidt, Avionics Manager, at the February dinner meeting. Kirk was recognized for his excellent technical contributions to developing applications of commercial-off-the-shelf (COTS) hardware and software utilization to significantly reduce cost of avionics aboard Boeing fighter aircraft. Kirk and his wife were dinner guests of the AIAA St. Louis Section.

Congratulations Kirk!



Terry Schmidt (left) presenting Kirk Ellett with AIAA Young Professional Award

FEBRUARY DINNER MEETING

VSTOL: Past, Present, and Future with Jackie Jackson



YAV-8B PROTOTYPE PROGRAM



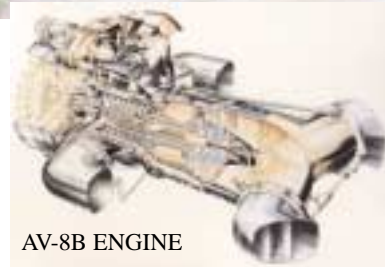
AV-8B PRODUCTION DEVELOPMENT



YAK 38U IN HOVER

Jackie Jackson entertained a large group of AIAA and SFTE guests at the Thompson Center in Creve Coeur. Jackie presented the personal views from the cockpit, as Chief Boeing Production Pilot and longtime Harrier pilot. The advantages of VSTOL and Harrier experience were presented. His experience with the Russian YAK-38U was compared. Jackie had an invitation to test fly the YAK-38U in mid-1990's. This aircraft obtains VSTOL via two lift engines, mounted directly behind the pilot. The lift engines support the forward fuselage while a cruise engine with twin swiveling nozzles provides aft fuselage support and forward thrust. The Harrier utilizes a single engine with four swiveling nozzles. The complexity of the Yak-38 and preplanning required for transition to hover were a serious operational limitation. The Yak-38 accelerated well but lack of instantaneous vectoring was limiting. Jackie related his early Marine training and experiences as a helicopter pilot in Vietnam. His Harrier experience followed Marine Corps decision to provide ground support that followed close behind the troops. A short video of Harriers in Action highlighted the presentation. Additional snapshots of Jackie's unsuccessful bid for Congress were sprinkled throughout the presentation as lessons learned.

YAK 38 ENGINE



AV-8B ENGINE

Science Fair Volunteers Needed

The Annual St. Louis County Science Fair needs judges in April to evaluate the projects.
Contact: Gary White, 636-925-4247.

**“Evolution of Flight”
Air & Space Trivia Night
Saturday, 31 March 2001**

Doors Open 6:30 p.m.

Round 1 Begins 7:00 p.m. Sharp!

Hazelwood Community Center

White Birch Park, 1186 Teson Road

[Directions: I-270 to McDonnell Blvd, North to Teson Road]

The St. Louis Section of the American Institute of Aeronautics and Astronautics is participating in the National AIAA "Evolution of Flight" program to inform, inspire and celebrate the wonders of flight leading to a celebration of the 100 year anniversary of the Wright Brother's first powered flight at Kitty Hawk, North Carolina in December 1903. This fund-raiser will help pay for upcoming local programs and events. Go to website <http://www.flight100.org/> for more information.

Trivia Game

\$80 / Table

Maximum of 8 people per table

10 Rounds / 10 Questions

First Place Team wins \$160

Second Place Team wins \$80

Reserve your table today!

Call Karen at (636) 272-6340

or (314) 234-5742

e-mail at kkcopper@aol.com

Terrific Attendance Prizes!!!

Tax Deductible Contribution!

Challenge your Colleagues!!

Lightning Bonus Game

\$5 / Person (Purchase Night of Event)

3 Rounds / 10 Questions

Individual with most points wins 25% of Lightning Bonus Game Jackpot!

Send \$80 check payable to AIAA to:

AIAA

c/o Karen Copper

1 Shaker Leg Court

O'Fallon, MO 63366-8480

You are welcome to bring snacks & drinks

(Beer & wine are allowed, but no hard liquor.)

2001-2002 St. Louis Section Nominations

In accordance with the AIAA St. Louis Section Bylaws, a nominating committee was formed and has prepared a slate of prospective candidates for the 2001-2002 program year.

Officers

Chair

Margaret (Peggy) Holly

Vice-Chair

Andy Hesketh

Bill LaManna

Secretary

Bob Dougwillo

Dave Koshiba

Treasurer

Karen Copper

Catherine Sabinash

Region V Representative

Larry Brase

Retiree Advisor – vote for 1

Mohr

Kling

University Advisor – vote for 1

Peters (Washington U.)

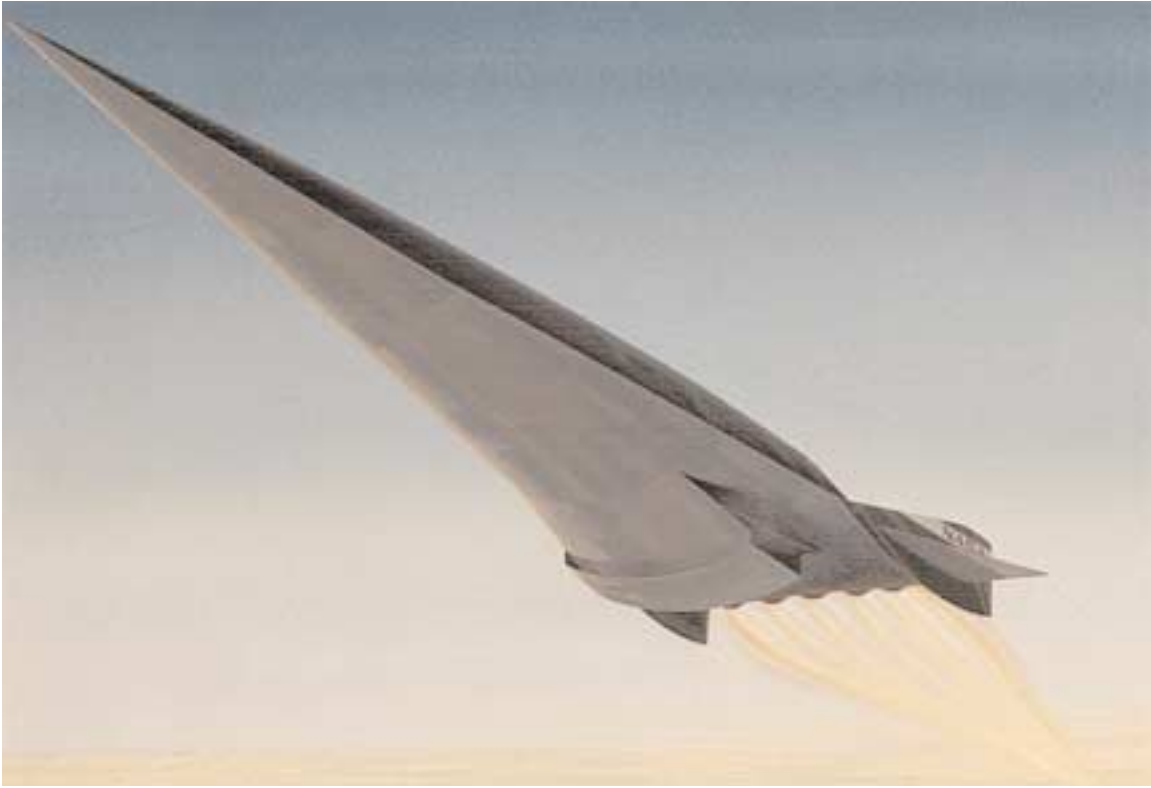
Revindra (St. Louis U.)

Industry Advisors – vote for 2

Andrew Cary

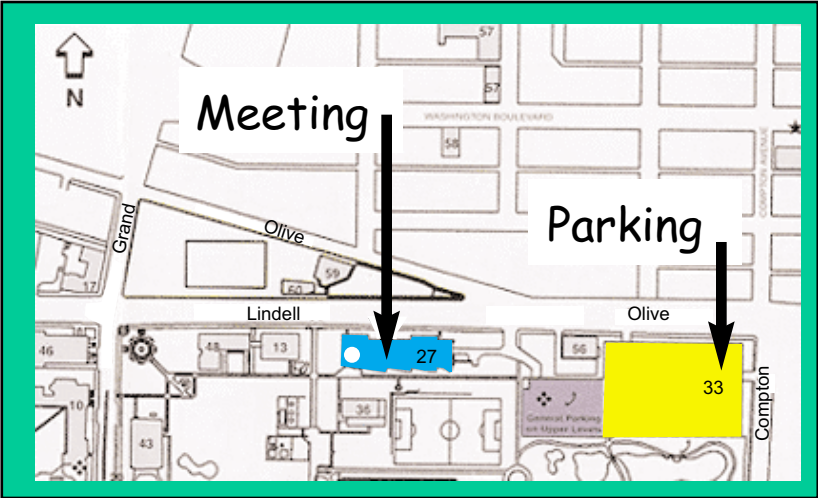
Dianne Chong

AIAA Technical Specialist Meeting
History of Hypersonics in St. Louis



**Presented by
Professor Paul Czysz**

17 April 2001, 6 pm to 7 pm
Room 001, McDonnell Hall, St. Louis University
Lindell at Olive



Free Parking Validation
Available for Attendees



**American Institute of Aeronautics and Astronautics
St. Louis Section**

**Nominations Solicited
for 2001 Section Awards**

The St. Louis Section AIAA strives to recognize significant contributions. In that regard, we need your recommendations on worthy individuals for St. Louis Section awards. A few moments spent nominating an individual or team will benefit those who have helped advance the aerospace profession. Nominations are being accepted for the following awards to be presented at the annual Honors and Awards Dinner, May 2001. The awards reflect a broad range of recognition.

Technical Contribution: *In recognition of an outstanding contribution to the advancement of the aerospace sciences in a technical discipline by a section member or team of members.*

Technical Management: *In recognition of an outstanding accomplishment in technical management by a section member or team of members.*

Section Service: *In recognition of outstanding contributions to Section Activities by a member.*

Civil Awards: *In recognition of outstanding contributions to the progress of aerospace activities in the St. Louis area by a member or nonmember.*

The history of these awards spans several decades. Recipients cover a wide spectrum of individuals ranging from corporate leaders to researchers to congressman to engineers to journalists. The significance and prestige of the awards can not be overstated. Prior recipients view them as a great honor. Further, St. Louis is one of the few sections in all of AIAA that has a heritage of bestowing such awards on an annual basis.

If you are associated with individuals whose achievements merit candidacy please submit a nomination on their behalf.

Review of nominations by the Selection Committee will commence 2 April 2001. The Committee encourages you to expend time and effort nominating worthy recipients. Please help preserve a rich heritage and St. Louis tradition!

Submit Nomination to:

Catherine Sabinash, AIAA Honors and Awards Committee Chairman
The Boeing Company, PO Box 516, MC S2704360, St. Louis, MO 63166-0516
catherine.m.sabinash@boeing.com, Phone (314) 233-5113, FAX (314) 234-0421



**American Institute of Aeronautics and Astronautics
St. Louis Section**

Nomination Must Be Received by 2 April 2001

1. **Indicate the Award:**

- * Technical Contribution
- * Section Service
- * Technical Management
- * Civic

2. **Nominee:**

Name: _____

Title/Position: _____

AIAA Membership Grade:

- * Associate Member
- * Member
- * Senior Member
- * Non-Member
- * Associate Fellow
- * Fellow
- * Honorary Fellow

3. **Proposed Citation:**

Statement in 25 Words or less of the achievement upon which the nomination is based:

4. **Basis for Nomination:**

On separately attached sheets, please set forth the basis for the nomination including discussion of the importance of the achievement with specific evaluation of success in its practical application. The discussion should make clear the times and dates involved and specific ways in which the requirements of the award are met. Technical award nominations should include a list of publications, technical reports, conference papers, lectures, and patents relevant to the achievement under consideration. Avoid generalities. Stress personal accomplishment.

5. **Nominator:**

Name: _____ Phone: _____

Organization: _____

6. Letters of Recommendation: (Optional)

Letters of recommendation attesting to the importance of the achievement may be submitted in support of the nomination.

Please furnish all relevant information: missing data cannot be obtained elsewhere. The submitted material will constitute the total case, as it will be presented to the Honors and Awards Committee:

7. **Submit Nomination to:**

Catherine M. Sabinash, AIAA Honors and Awards Committee Chairman
The Boeing Company, PO Box 516, MC S2704360, St. Louis, MO 63166-0516
Phone: 314-233-5113 Fax: 314-234-0241



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Student Activities – St. Louis University

Preparations are underway for the Student Conference at Iowa State University, 18-20 April. Student page topics are:

- Analysis of Descent Rates of Flared Round Parachutes
- Landing Vehicle Design of the 2005 Venus Sample Return Mission
- Water Tunnel Studies of Tip Vortices and Flow Angularities of Joined-Wing Structures
- Optimized Orbital Trajectories and Propulsion System for an Unmanned Mission to Venus
- Conceptual Design of Ultra-Long Range Commercial Aircraft
- The Conceptual Design of a Four-Seat, Sportsman-Class Aerobatic Aircraft
- Mars Generations Mission, a Manned Mission to Mars
- Analysis of Various Micromechanical Models in Unidirectional Composite Materials

Industry Volunteers Needed!!

St. Louis University is in need of Industry Volunteers and AIAA retirees to help evaluate student papers on 10 April. If you can spare a half day, St. Louis University welcomes your participation. A lunch and post presentation dinner will be furnished the volunteers. Topics to be presented are;

- The Conceptual Design of a Four-Seat, Sportsman-Class Aerobatic Aircraft, The Aero coaster.
- Conceptual Design of Ultra-Long Range Commercial Aircraft. Carrying 310 passengers 8500 nm
- Sample Retrieval Mission to Venus

Interested members should contact Prof. David Manor, 314-977-8441, for confirmation and parking arrangements.

ADVERTISING OPPORTUNITIES

Advertising rates for a single insertion are:

Full page	\$150	Third page	\$ 75
Half page	\$100	Sixth page	\$ 50

Rates for other advertising space and multiple insertions will be provided on request. All inquires concerning advertisement should be directed to the editor at the indicated phone or e-mail address.

The AIAA Gateway News is a publication of the St. Louis Section of the American Institute of Aeronautics and Astronautics. The newsletter is published monthly except for June, July, and August. Circulation is approximately 900 members in the St. Louis area. Submission of articles to be published should be addressed to the editor. Items will be published on a space available basis and may be edited as necessary.



New address?? Forward newsletter address corrections to; David E. Morgan, Boeing m/c S106-7250, 314-234-1919, david.e.morgan@boeing.com

Newsletter and meeting announcements late?? The St. Louis section is working to cost-effectively speed announcements to our members. If you have an external Boeing e-mail address, please forward that to : dianne.chong@boeing.com and david.e.morgan@boeing.com. We are compiling an e-mail list for timely meeting announcements.



MARCH 2001

**Non-Profit
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Charlie Saff

AIAA FUTURE EVENTS



MARCH DINNER MEETING

Carolyn Griner, NASA Distinguished Service
Award Manager

“Grease or Grit in Gears-Management in Motion?”

Wednesday, 21 March 2001

Airport Marriott

Social 5:00 - 6:00PM

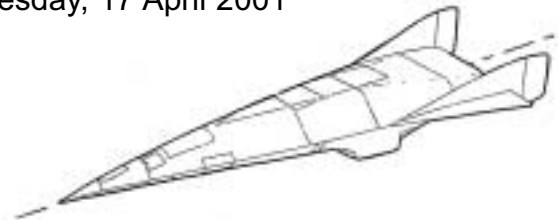
Dinner 6:00 - 7:00PM

Program 7:00 - 9:00PM

HISTORY of HYPERSONICS in ST. LOUIS

Presented by **Professor Paul Czysz**

Tuesday, 17 April 2001



Room 001, McDonnell Hall,
Lindell at Olive
St. Louis University Campus

EVOLUTION OF FLIGHT TRIVIA NIGHT

Saturday, 31 March 2001

6:30 PM Til ?

Hazelwood Community Center

APRIL DINNER MEETING

**SHEILA WIDNALL, SECRETARY OF
AIR FORCE (RTD)**

Thursday 26 April 2001, 5 pm, Airport Marriott