

# Gateway News



American Institute of Aeronautics and Astronautics, St. Louis Section

<http://www.aiaa.org>

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

**OCTOBER 2000**

## CHAIRPERSON'S REMARKS

INSIDE THE SECTION

**C**ongratulations to Dianne Chong, the Council, and the entire AIAA St. Louis Section for being chosen as the second place recipient of the 1999 / 2000 Outstanding Section Award in the Large Category. Each Council member was asked to define two goals for the 2000 / 2001 year.

The first goal was to address a Process Improvement, and the second one would be a Stretch goal. My first goal is to conduct a formal St. Louis Section membership drive. Planning for this event is ongoing. In support of this, I would like to challenge each and every member to recruit at least one new member. Wouldn't it be great to double our current membership? The new member could be a previous member whose affiliation has lapsed or someone who has never joined before. If the new member is on the technical career path, the Boeing Co. will reimburse one technical society membership dues for Associate Technical Fellows, two for Technical Fellows, and three for Sr. Technical Fellows.

The second goal is to submit a winning proposal for the Evolution of Flight Campaign which culminates with a national tour in 2003, the 100th anniversary of the Wright Brothers achievement. Several cities will be selected to host events leading up to the final celebration at Wright Patterson AFB. For more information visit [www.flight100.org](http://www.flight100.org) on the Internet.

Our September meeting, "Strategies for Ensuring our Success," with Mike Sears was jointly sponsored with the Boeing St. Louis Leadership Association. This provided us the opportunity to congratulate Mr. Sears on his recent advancement to AIAA Fellow and thank him for his many years of support to the St. Louis Section.

Included in this issue is the current Council Roster. Please consider supporting one of the Committees by contacting the Chair and offering your assistance.

*Larry Brase*

OCTOBER MEETING

**Life Cycle Customer Support**

**Mr. Jay A. Kappmeier**  
General Manager, Life Cycle Customer Support  
Military Aerospace Support  
The Boeing Company

The AIAA St. Louis Section's Dinner Meeting, October 26 at the Thompson Center, will feature Mr. Jay Kappmeier, General Manager, Life Cycle Customer Support with Boeing. Mr. Kappmeier will be discussing the growing importance of Life Cycle Customer Support in the Aerospace Industry. Before joining the Boeing Company (formerly McDonnell Douglas), Mr. Kappmeier served in the United States Air Force for 25 years, retiring with the rank of Colonel.

**AIAA Dinner Meeting**  
Thursday  
October 26, 2000  
Thompson Center  
12145 Ladue Rd. (West of I-270)  
Creve Coeur, MO

|                          |                |
|--------------------------|----------------|
| Happy Hour               | 5:00 - 6:00 PM |
| Dinner in Dining Room    | 6:00 - 7:00 PM |
| Program in Holiday House | 7:00 - ?       |

|                |          |                                       |
|----------------|----------|---------------------------------------|
| Mike Swartwout | 935-6077 | Washington University                 |
| Kay Bopp       | 977-8240 | Parks College of St. Louis University |
| Fred Nelson    | 341-4613 | University of Missouri - Rolla        |

### Menu

- Rich & Charlie Salad
- Chicken Kiev
- Rosemary Roasted Potatoes
- French Cut Green Bean Almondine
- Apple Pie ala Mode
- Coffee/Tea

### Ticket Prices

|                 |         |
|-----------------|---------|
| Members/Faculty | \$18.00 |
| Non-Members     | \$23.00 |
| Students        | \$13.00 |

(Purchase After Oct. 23, Add \$5.00)

## September Evening Meeting

Mike Sears, Boeing CFO, was the guest speaker at a Joint AIAA and Boeing Leadership Club meeting in September. Mr. Sears had returned to St. Louis after his recent promotion to CFO to present the current and future Boeing vision. Some presentation topics were:



- Stakeholders are shareholders, customers, employees, and communities. A common element is a healthy business that aligns itself with Wall Street.
- Leading the Way to the Future requires a healthy core that is expanding and leaders willing to push the frontiers. Boeing is doing this with increased focus on customer support and financing. New frontiers include focus on the global economy, system-of-systems, and internet commerce. A yearly increase of 15% is the goal.
- Chairman's Innovation Initiative is aimed at leveraging intellectual capital to grow future business opportunities. This total company commitment is aimed at breaking down traditional barriers to innovation and is backed by a \$200 million company investment pool.

Six Strategies for Continuing Our Momentum were presented

1. Product Focus Team Organization
  - Organize into teams & outsource production
  - Reduce cost, cycle time, capital assets, and improve quality
2. Employee Involvement
  - A cultural thing and the most powerful of strategies
  - Want employees to be involved and make suggestions to increase earnings
  - Investing \$4 billion to buy back stock shares until end of December 2000
  - Be pro-active with your team to improve top-line assets
  - All employees need to answer "How/What can we do to improve business?"
3. Move up the value chain
  - Know your business and core competencies
  - Be good at your competencies and buy everything else
  - Boeing has idle machines that are not productive and functions need to be outsourced
4. Supplier Integration
  - Integrate suppliers and schedules
  - Don't duplicate functions at suppliers and primes
5. Quality and Cycle Time Improvement
  - Improving shop quality and office cycle time will reduce costs
6. Globalization
  - Boeing is part of the global company tied to the world economy
  - We must know the world and markets to get the best from world class suppliers

In summary; Boeing is on the right track in 2000

- Earnings and margins are up
- Commercial recovery is dramatic
- Revenues guidance increased by \$1 billion
- Cash flow increased twice-
- Boosted revenue projections for 2001 by \$2 billion
- Wall Street says "Buy Boeing"
- Solid performance + strong demand = improved outlook

Post presentation questions drew some pointed questions;

Don Melvern, former McDonnell Aircraft president, questioned the

soundness of selling the St. Louis manufacturing capability. The McDonnell breakthroughs in composites, NC machining, and super plastic formed/diffusion bonded titanium.

Mr. Sears responded that Boeing is a core integration organization that can start new technologies but then transition them to outside suppliers. We are on a great recovery path with a great pool of experts and technical know-how. We are here to be in business. Another question centered on the McDonnell heritage retirement healthcare status. Jerry Daniels, Aircraft & Missile president, addressed this question saying there would be no healthcare for retirees at this time. Government regulations prevent company funding of healthcare from pension plan surpluses.

Some additional comments were:

- Boeing will win the JSF competition. First flight was good as well as life cycle support. Boeing may put together an industry team to produce the aircraft.
- A paradox; Wall Street wants Boeing to be capital light while the government wants contracts to be capital intense.
- St. Louis fabrication center sell is in the negotiation phase.
- Virtual integration does not work
- We need to get out of pure R & D and focus on applications. We need to bring technology to customers that are willing to pay for it.
- China trade bill will be a longtime benefit to Boeing
- Job security will be dependent on good products and world markets. We need to retain employees to assemble those products. Every employee needs to do their specific task to make the company function correctly.

American Institute of Aeronautics and Astronautics, St. Louis Section  
**AIAA-INCOSE-**  
**Parks College**  
**Flight Simulation Tour**  
*International Council on Systems Engineering*

A tour of the Boeing Flight Simulation facility will include an overview by Bill Bezdek followed by a tour of the F/A-18C/D, F/A-18E/F, and Pilot Vehicle Integration Center (PVIC). Time will be allotted for some individuals to fly the simulators doing carrier take-offs, landings, an air-to-air engagement, or an air-to-ground weapon delivery. Non-Boeing/ INCOSE/ AIAA/Parks College participants are welcome. A security clearance is not required, but individuals will need to be US citizens for the tour portion.

**Date:** Wednesday, 1 November 2000  
**Location:** Boeing, Building 65, Room 267  
**Off McDonnell Blvd. Enter through Building 64N. Lobby**

|                              |                           |
|------------------------------|---------------------------|
| <b>Gathering and Snacks:</b> | <b>5:00 PM to 5:45 PM</b> |
| <b>Presentation:</b>         | <b>5:45 PM to 6:00 PM</b> |
| <b>Tour:</b>                 | <b>6:00 PM to 7:00 PM</b> |

**No charge for meeting.**  
**US citizenship required for tour.**

Please E-mail Dianne.G.Milton@ boeing.com or call 314-233-6801 for badging by 1 November or if you need directions.

**JOINT MEETING  
AICHe / ASME / AIAA / SAE / SWE  
November 21, 6:00 pm**

**Planet Hollywood, Laclede's Landing**  
\$22 (meal and parking included)



**INTERNATIONAL SPACE STATION:  
THE WORLD'S PROJECT**



**Sandra H. Magnus (Ph.D.)**  
NASA Astronaut – Mission Specialist

Born in Belleville, Illinois and graduated from Belleville West High School. She received a bachelor degree in physics and a master degree in electrical engineering from the University of Missouri-Rolla. Later she earned a doctorate from the School of Material Science and Engineering at the Georgia Institute of Technology.

During 1986 to 1991, Magnus worked for McDonnell Douglas Aircraft Company as an engineer studying the effectiveness of RADAR signature reduction techniques. She was assigned to the Navy's A-12 Attack Aircraft program working on the propulsion system until the program was cancelled.

Selected by NASA in April 1996, Dr. Magnus completed two years of training and evaluation at the Johnson Space Center. She is qualified for flight assignment as a mission specialist.

**Interesting Web Sites**

- <http://www.triz-journal.com>  
A journal of Triz techniques, applications, and methods
- <http://www.friends-partners.org/~mwade/spaceflt.htm>  
Encyclopedia Astronautica. A collection of rockets, launch vehicles, and spaceflight data present and past. Includes many stories of obscure space activities, astronaut biographies, and flight specifications.
- <http://www.tv-now.com/stars>  
A search program to identify favorite stars and movies on commercial and cable television
- <http://www.ipbookstore.com/>  
Patent, QFD, TRIZ books and professional reports available.
- <http://www.patentcafe.com>  
Inventors resource store
- <http://www.triz.u-net.com/QFDTRIZ/sld001.htm>  
A slide presentation on Fast QFD

**AIAA Opportunities**

The St. Louis Section has council opening in **Membership and Young Members**. Get involved and be part of the leadership team!

**American Institute of Aeronautics and Astronautics  
St. Louis Section 2000 - 2001 Council Roster**

| Office                    | Incumbent          | Address   | Telephone / Fax     | E-Mail                          |
|---------------------------|--------------------|---|---------------------|---------------------------------|
| Chairman                  | Larry Brase        | MC S064-1092**  | 777-5586 / 777-5161 | lawrence.o.brase-jr@boeing.com  |
| Vice Chairman             | Peggy Holly        | MC S276-1009**  | 234-3513 / 234-5010 | margaret.a.holly@boeing.com     |
| Secretary                 | Mark Johnson       | MC S064 1092 **   | 234-2692 / 232-7774 | mark.j.johnson2@boeing.com      |
| Treasurer                 | Karen Copper       | MC S001 2700**  | 234-5742 / 234-2369 | karen.k.copper@boeing.com       |
| Advisors                  | John L. Mohr       | 11638 Summerhaven Dr.<br>St. Louis MO 63146                 | 636-562-3398        | JLMohr@aol.com                  |
|                           | David A. Peters    | Campus Box 1130<br>One Brookings Dr.,<br>St. Louis MO 63130 | 935-4337            | dap@mecf.wustl.edu              |
|                           | Walter J. Reschke  | MC S064-3449  | 777-4038            | walter.j.reschke-jr@boeing.com  |
|                           | Charles R. Saff    | MC S102-1322  | 233-8623 / 777-1171 | charles.r.saff@boeing.com       |
| Region V Rep.             | Dianne Chong       | MC S001 2700 **   | 232-9719/ 234-2369  | dianne.chong@boeing.com         |
| Committee                 | Chair              | Address   | Telephone / Fax     | E-Mail                          |
| Arrangements              | Karen Copper       | MC S001 2700**  | 234-5742/ 234-2369  | karen.k.copper@boeing.com       |
| Attendance                | Andrew Cary        | MC S106-7126  | 234-1830            | andrew.w.cary@boeing.com        |
| Career Enhancement        | Steve D'Urso       | MC S064 2809 **   | 233-5441            | steven.j.durso@boeing.com       |
| Education                 | Marty Ferman       | 1452 Old Farm Dr.<br>St. Louis, MO 63146                    | 542-0703 / 997-8437 | fermanma@slu.edu                |
| Education                 | Rich Andres        | 4943 Crownover Dr.<br>St. Louis, MO 63128                   | 892-5117            | andresm@aol.com                 |
| Historian                 | Fred Roos          | MC S102 1431 **   | 234-9935 / 233-2918 | frederick.w.roos@boeing.com     |
| Honors & Awards           | Catherine Sabinash | MC S270 4360 **   | 233-5113 / 234-0241 | catherine.m.sabinash@boeing.com |
| Membership                |                    |   |                     |                                 |
| Newsletter                | Dave Morgan        | MC S106 7250 **   | 234-1919 / 777-1977 | david.e.morgan@boeing.com       |
| Pilot Education           | Jeff Larrick       | MC S102-2272  | 232-3455            | jeffrey.c.larrick@boeing.com    |
| Pre-College Outreach      | Bill Bernzott      | MC S064 2807 **   | 234-6271 / 234-0510 | william.j.bernzott@boeing.com   |
| Programs                  | Ray Cosner         | MC S1067126 **  | 233-6481 / 777-1328 | raymond.r.cosner@boeing.com     |
| Public Policy             | Dick Pinckert      | MC S034 1126 **   | 234-0623            | richard.e.pinckert@boeing.com   |
| Publicity - Internal      | Bruce Scheidhauer  | MC S270 4360 **   | 233-0759 / 234-0241 | bruce.r.scheidhauer@boeing.com  |
| Service Projects          | Gary White         | MC S500 2025 **   | 925-4247 / 925-5853 | gary.p.white@boeing.com         |
| Tech. Specialist Mtg.     | Joe Stemler        | MC S106 7250  | 232-3362 / 232-3820 | joseph.n.stemler@boeing.com     |
| Webmaster                 | John Donigan       | MC S064 1426 **   | 234-4103 / 777-1139 | jdonigan@swbell.net             |
| Young Members             |                    |   |                     |                                 |
| Young Professional Awards | Ron Smith          | MC S106 2103 **   | 232-4671/ 232-1454  | ronald.e.smith@boeing.com       |

\*\* Boeing Address: The Boeing Company, P.O. Box 516, St. Louis, MO 63166

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**2000 – 2001 St. Louis Section  
Officers and Council Members**

Chairperson

**Larry Brase**

Vice Chairperson

**Peggy Holly**

Treasurer

**Karen Copper**

Secretary

**Mark Johnson**

Advisors

**John Mohr**

**Dave Peters**

**Walt Reschke**

**Charlie Saff**

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# **AIAA FUTURE EVENTS**

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## **FLIGHT SIMULATION TOUR**

Date: **Wednesday, 1 November 2000**

Location: **Boeing, Building 65, Room 267**

Off McDonnell Blvd. Enter through Building 64N. Lobby

Gathering and Snacks: 5:00 PM to 5:45 PM

Presentation: 5:45 PM to 6:00 PM

Tour: 6:00 PM to 7:00 PM

No charge for meeting.

US citizenship required for tour.

## **JOINT MEETING**

**“INTERNATIONAL SPACE STATION:  
THE WORLD'S PROJECT”**

**with Local Astronaut  
Dr. Sandra H. Magnus**

November 21, 2000

Planet Hollywood  
on Laclede's Landing

6:00 pm until ??