

# AIAA SAN FRANCISCO SECTION NEWSLETTER

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS • P.O. Box 1548, Mountain View, CA 94042 • <http://aiaa-sf.org>

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MARCH - APRIL 2001

## MARCH DINNER MEETING DAVID FULLER *CREW RESOURCE MANAGEMENT*

(See pg. 3 for meeting details) David Fuller of Space Systems/Loral will discuss Crew Resource Management at the March AIAA San Francisco Section Dinner Meeting. For several years, commercial air carriers have utilized a group of techniques, known collectively as Crew Resource Management (CRM), to reduce human performance errors on the flight deck, thereby reducing airline accidents. They have proven so successful that CRM training is mandated by the Federal Aviation Administration (FAA), and CRM has been adapted in such diverse activities as nuclear power station control rooms and medical operating theaters.

Space operations, like aircraft operations, is a complex, real-time, high reliability environment. Millions and sometimes billions of dollars and years of effort are often invested in a single spacecraft. The same skills and behaviors that help ensure safe aircraft operations can be used in every spacecraft control center. By training space operations personnel in techniques of CRM, we can reduce human performance errors and help assure mission success.

**About the Speaker** David Fuller has been involved with operations for over 20 years. His initial training was as an air traffic controller in the mid 70's. In 1981 he worked on Space Shuttle ground and flight operations teams, and also served as engineering support for the NASA Flight Surgeon. In 1988 he went to Germany and supported the German Space Agency Flight Surgeon and helped plan operations for the German D-2 Spacelab mission. In 1990 he moved to The Netherlands and worked for the European Space Agency, where he led the operations for several major materials science experiments that flew in Spacelab. While there he developed and implemented concepts for remote science  
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## JOINT ASME/AIAA APRIL DINNER MEETING TIM MALONEY *LUNAR PROSPECTOR*

(See pg. 3 for meeting details) Lunar Prospector, the first competitively selected Discovery Mission, launched from Cape Canaveral on 7 January (GMT) 1998, and flew a nearly flawless mission in lunar orbit for 19 months until plunging into a crater on the lunar south pole on 31 July 1999. The highly successful scientific mission returned findings quantifying likely polar ice deposits, detailed gravity field maps, and global elemental composition surveys of the entire lunar surface. The outstanding performance of the spacecraft was in part made possible by a rigorous proto-flight test program that sought to balance the competing demands of the faster, better, cheaper philosophy.

### Evolution of Flight Campaign Art Contest



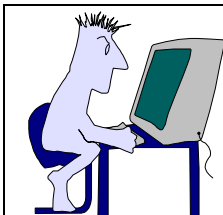
**WHO:** Students from all over the world, ages 5-13.

**WHAT:** Entries must be on an 8-1/2" x 11" sheet of white paper (no computer generated or three-dimensional art is eligible). Artwork should be based on the theme "The Future of Flight" and should depict your vision of what air or space travel will look like in the next 100 years. The winning artwork will be featured on the AIAA Evolution of Flight web site and may be included in other promotional materials, including a traveling display. Prizes will be awarded.

**WHEN:** Entries must be postmarked by 16 March 2001.

**WHY:** AIAA wants to excite and engage children of all ages in the upcoming centennial of the first successful, manned, controlled, heavier-than-air, powered flight by Orville and Wilbur Wright on December 17, 2003.

**HOW:** To find more information on the contest and rules and to download a the required parental consent form, please visit  
[http://www.flight100.org/activities/activities\\_artcontest.html](http://www.flight100.org/activities/activities_artcontest.html)



### The AIAA-SF Web Page

is always the best place to go for accurate, up to date information about AIAA events. Check [www.aiaa-sf.org](http://www.aiaa-sf.org) frequently!

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## For more information...

about the events mentioned in the newsletter, as well as other AIAA activities, go to **www.aiaa-sf.org**. On the web page you can read about an outstanding young engineer, **Keith Comeaux** who won the 2001 Lawrence Sperry award, see pictures from our recent activities, including the **History of Aviation Banquet** and get up-to-date information on all upcoming events. The National AIAA web page, [www.aiaa.org](http://www.aiaa.org) has information about memberships, awards, and conferences, including the AIAA/NAL-NASDA-ISAS 10th International Space Planes and Hypersonic Systems and Technologies Conference being held in Kyoto, Japan this April.

## 2001-2001 Elections

Below are the candidates for Officer Positions of the San Francisco Section of AIAA. Please indicate your vote by checking the line next to the desired candidate.

Vice Chair 2001 (Chairman Elect 2002): Seth Kurasaki, NASA Ames Research Center \_\_\_\_\_

Secretary: Roger Martinez, Analytical Graphics \_\_\_\_\_

Treasurer: Fanny Zuniga, NASA Ames Research Center \_\_\_\_\_

Write-in candidates can be made by petition. The petition must have the signatures of at least 5% of the membership of the San Francisco Section (currently 70 signatures required).

Mail ballot to Gano Chatterji at the address listed below for engineer of the year nominations.

## Engineer of the Year Nominations

Each year the AIAA San Francisco Section honors a few Bay Area residents as Engineers of the Year. Awards may be made in up to seven disciplinary categories, in recognition of the diversity of talent and accomplishments among engineers in the area. Nominations are solicited from the membership at large, but nominators and nominees are **not required** to be AIAA members. Please send (or email) the completed nomination forms *by May 7, 2001* to:

Dr. Gano Chatterji  
Vice Chairman, AIAA SF Section  
NASA Ames Research Center  
Mail Stop 210-8  
Moffett Field, CA 94035-1000  
email: [vicechair@aiaa-sf.org](mailto:vicechair@aiaa-sf.org)

The following information must be attached **on a separate sheet of paper** to the form below:

**Proposed Citation** (Write a brief statement of the individual's contributions)

**Basis of the Nomination** (Write a brief paragraph assessing the significance of the contributions)

**Background** (Education and Employment)

**Nominator** (Include name, address, and daytime telephone)

## Nomination for Engineer of the Year

Category (circle one)

Aeronautics

Astronautics

Engineering Design

Engineering Educator

Information Systems

Project Management

Young Engineer

Nominee:

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Continued from Page 1

operations and less restrictive access to the real-time command channel by the science teams.

In 1998, Mr. Fuller began working at Space Systems/Loral in their long term satellite operations facility. He works there as a shift supervisor, where he and his team are responsible for the operations of over a billion dollars' worth of satellites and infrastructure, plus revenue stream. Based on FAA and aviation industry standards, Mr. Fuller has recently developed a Crew Resource Management approach to satellite operations that will reduce human error in space operations.

Mr. Fuller is a senior member of AIAA, and last year joined the Space Operations and Support Technical Committee Working Group on Best Practices. These Best Practices will be published soon on the AIAA website, and will form the bases of a living document that should be an invaluable resource for Program and Operations Managers.

## Nominations for Associate Fellow and Fellow

When submitting a nomination for an AIAA National award, please be certain to furnish all relevant information. The submitted material is the total case as it will be presented to the National Honors and Awards Committee.

You may download a PDF version of the Award Nomination Form under the Honor & Awards section of the Forms page on the AIAA web site

(<http://www.aiaa.org/Members/index2.cfm?memo=8>), which you can then print, complete, and mail to AIAA.

Nominations will be judged on the assessment of the importance and significance of the achievement(s) or the contribution(s) involved, with a specific evaluation of the extent and degree of success in its practical application. Nominations may be supported by three to five letters of recommendation. Include a citation of the achievement(s) or contribution(s) upon which the nomination is based. Please keep in mind that AIAA membership is required for nominees unless overriding conditions exist. Please note the following deadlines:

- April 15: Associate Fellow nomination forms due.
- May 15: Associate Fellow references due.
- June 15: Fellow and Honorary Fellow nomination forms due.
- July 15: Fellow and Honorary Fellow references due.

Reminder: Senior Member upgrade forms are available and processed year-round. All Associate Fellow nominees must be Senior Members; Fellow nominees must be Associate Fellows; and Honorary Fellow nominees must be Fellows of the Institute.

### Coming Soon: An Electronic Newsletter!

We will begin electronic delivery of our newsletter beginning with the May-June issue. During transition, we will continue delivering the printed version throughout this council year. Please refer to the web page, [www.aiaa-sf.org](http://www.aiaa-sf.org) for more information.

## MEETING INFORMATION

Dinner meetings are held the third Thursday of each month and are open to the general public. Bring a friend!

### Where

Dinner Meetings:

Wyndham Garden Hotel, 1300 Chesapeake Terrace, Sunnyvale, CA, 408/747-0999.

### When

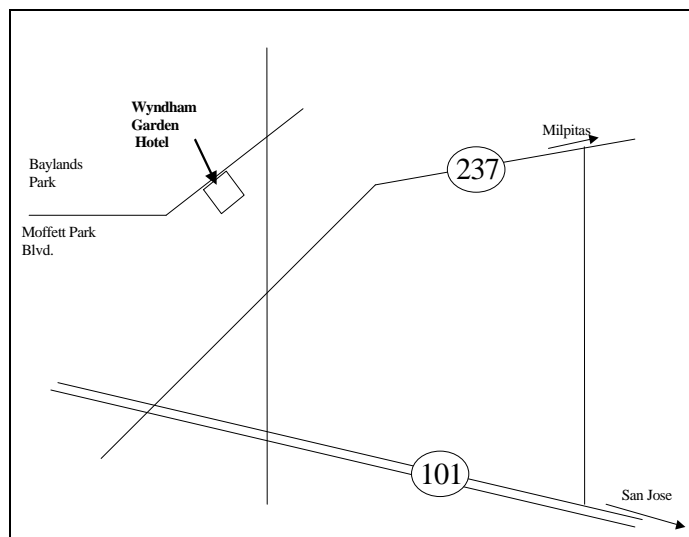
March Dinner Meeting                      Thursday, March 15, 2001  
April Dinner Meeting                        Thursday, April 19, 2001

Cocktails are served at 6:30 pm, dinner at 7:00 pm.

### Cost

\$18 per person (includes buffet dinner).

\$14 for students



### Dinner Meeting Registration

Registration Deadline: Monday of the week of the meeting. Availability is limited to 50 persons.

Members are encouraged to register for the Dinner Meetings via our website at [www.aiaa-sf.org](http://www.aiaa-sf.org).

For more information, email Fanny at [programs@aiaa-sf.org](mailto:programs@aiaa-sf.org)

Note: The Section is unable to process credit cards. We accept US currency and in state checks.

The *AIAA SAN FRANCISCO SECTION NEWSLETTER* is a bimonthly publication of the San Francisco Section of the American Institute of Aeronautics and Astronautics. AIAA members with address changes should contact AIAA member services at **1-800-NEW-AIAA**.

**Newsletter Editor:**  
P.O. Box 1548  
Mountain View, CA 94042  
[newsletter@aiaa-sf.org](mailto:newsletter@aiaa-sf.org)

**Printer:**  
Pony Express 'N Printing  
2555 West Middlefield Road  
Mountain View, CA 94043

**AIAA San Francisco Section Roster**

<i>Position</i>	<i>Name</i>	<i>Phone</i>	<i>Email address</i>
Section Chairman	Matt Jardin	650/604-0724	chairman@aiaa-sf.org
Section Vice-Chairman	Gano Chatterji	650/604-1639	vicechair@aiaa-sf.org
Section Secretary	Roger Martinez	408/919-9180	secretary@aiaa-sf.org
Section Treasurer	Seth Kurasaki	650/604-6636	treasurer@aiaa-sf.org
Section Newsletter Editor	Morgan Bracken	408/742-3178	newsletter@aiaa-sf.org
Young Professionals Director	John Van Arsdall	408/743-1740	youngprof@aiaa-sf.org
Career Enhancement Director	Prasad Gogineni		career@aiaa-sf.org
Membership Director	Dan Stuart	408/867-2684	membership@aiaa-sf.org
Public Policy Director	Morgan Bracken	408/742-3178	pubpol@aiaa-sf.org
Evolution of Flight Director	Stephen Jaeger	650/604-1472	flight100@aiaa-sf.org
Precollege Outreach Director	Juanita Ryan	408/926-0862	precollege@aiaa-sf.org
Education Director	vacant		education@aiaa-sf.org
Honors & Awards Director	vacant		honors@aiaa-sf.org
Technical Activities Director	Larry Chien	650/424-2996	technical@aiaa-sf.org
Programs Director	Fanny Zuniga	650/604-2017	programs@aiaa-sf.org
AIAA On-line System Administrator	Rick Kwan		sysadmin@aiaa-sf.org
AIDAA/Euroavia Liaison	Larry Chien	650/424-2996	technical@aiaa-sf.org
Web Master	Corwin Lakin	408/353-2540	webmaster@aiaa-sf.org
Deputy Director At-Large	Norman Bergrun	650/941-9880	ddatlarge@aiaa-sf.org
Stanford University Student Chair	Howard Hamilton		howardh@leland.stanford.edu
Western Region Office	Elizabeth Carter	310/643-7515	elizabethc@aiaa.org
AIAA National Membership	Holly Switow	703/264-7527	hollys@aiaa.org
Honors and Awards Liaison	Katy Scheuerman	703/264-7623	katys@aiaa.org
Region VI Regional Director	Joe Morano		joe.morano@boeing.com
Region VI Assistant Director	Mike Lazar		mlazar@tdyryan.com
Manager, Evolution of Flight Campaign	Kimberly Grant		king@aiaa.org

**American Institute of  
 Aeronautics & Astronautics  
 San Francisco Section**  
  
**Post Office Box 1548  
 Mountain View, CA 94042-1548**

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**March 15<sup>th</sup> Dinner Meeting: David Fuller**  
*Crew Resource Management*

**April 19<sup>th</sup> Dinner Meeting: Tim Maloney**  
*Lunar Prospector*