## Topics From Within



Meeting site at Grand Sierra Resort (formerly Reno Hilton Hotel)



Snapshot of award ceremony at Associate Fellow Dinner

# Attending AIAA TCCS, IAC, IAC-DI Meeting and 46th Aerospace Sciences Meeting

Takashi lida, NICT/JFSC

AIAA TCCS (Technical Committee on Communications System) meeting, IAC (International Activities Committee) meeting, AIAA Board of Directors meeting, Director-International Task Force meeting and 46th Aerospace Sciences Meeting were held at

Grand Sierra Resort (formerly Reno Hilton Hotel) in Reno, Nevada from Monday on January 7 to Friday on January 11, 2008. When I arrived at Reno, the snow seemed to be piled up around 20-30 cm. But the weather continued to be fine through the week I stayed, although I did not understand the outside well because I spent only in the hotel for all a week.

The TCCS meeting was held from 9:00 a.m. to past 2:00 p.m. on January 7, and Mr. Houston, Chairperson, Ms. Elizabeth Klein-Lebbink, secretary and other 8 committees including me attended, and several participants were on telephone meeting at the same time. The agenda was shown in the right table.

The meeting focused in the first on the preparation status for ICSSC2008, especially, how many papers were gathered, which started on June 9, 2008 in San Diego until June 12. The number of paper proposals was a little over 100 papers at this time point. Chair-

## **TCCS Meeting Agenda**

- 1.Introductions
- 2.TCCS Subcommittee Reports
  - A. Conference Subcommittee
    - a. ICSSC-2008 Planning
    - b. ICSSC-2009
    - c. ICSSC-2010
  - B. Steering
    - · Membership news
  - C. Vice Chairman
  - D. Awards
  - E. ICSSC Steering Committee
  - F. Japan Forum
  - G. Treasure Report
- 3. TCCS Any Other Business
- 4. Next Meeting
- 5.Adjourn

person of ICSSC2008, Dr. Frueholz, Aerospace Corp., wants to have dozens of papers more, and, according to Dr. Frueholz's suggestion, the deadline of paper proposal was postponed until around 10 days. The ICSSC2009 will be held in Edinburgh, Scotland, U.K. and a memorandum was exchanged between AIAA and the Institute of Engineering and Technology. About Awards, three candidates will be recommended by January 31. The candidate must be a contributor not only in a business field but also in a technical field

under the condition of non-TCCS member for at least two years. Next, I reported JFSC activities in 2007 (see Appendix). In particular, this report included an TCCS approval matter for the revision of By-Law of JFSC. It was discussed whether or not it is appropriate that the By-Law of JFSC allows a non-member of AIAA to carry out same activity as an AIAA members. I explained that if a non-member of AIAA becomes a board member, the AIAA member would recommend him to become a member of AIAA and this action contributes to increase members of AIAA. There was no objection particularly, and the revision of this By-Law was approved. In addition, AIAA announces this time that a style of slide format shown in Appendix is recommended.

I also reported the activity of JFSC in an IAC meeting held on January 8. The IAC Chairperson Mr. Bole of Aerospace Corporation and other 20 committees attended there. The AIAA Board of Directors (BoD) meeting was held on January 11, and AIAA President, Dr. Nielsen and about 30 directors attended. Being to my special impression, it was introduced that there is a criticism that AIAA becomes "old white male" society. This is a problem that should be resolved by diversity including younger generation.

AIAA 46th Aerospace Sciences Meeting (ASM) was held on January 7-10. It is likely that people more than 2000 participated. This meeting is one of biggest AIAA meetings. As for the contents, all about aerospace was concerned, and about 1500 papers were presented in about 180 sessions. An exhibition was taken place, too, but almost all of exhibitions were conducted by using computer display. I attended three next special lectures that have the name of a well-known scholar. They are:

- Dryden Lectureship in Research: Steve W. Squyres, Cornell Univ., "Robotic Exploration on Mars"
- AIAA/SAE William Littlewood Memorial Lecture: Dr. E. M. Murman, MIT, "Lean Aerospace Engineering"
- von Karman Lectureship in Astronautics: Dr. E. J. Weiler, Director, NASA GSFC

As for the second lecture, introducing reports: "Made in America" in 1989, "Machine Changed World" in 1990, "Lean Engineering" in 2002, and Toyota production method, it describes that "lean" thinking is the dynamic, knowledge-driven, customer-found powers through what all people is a defined envelope eliminate waste and create value. According to Lean Aerospace Initiative (LAI) in 1993, NASA's "Faster, Better, Cheaper" is no based on LAI, while F/A-18 E/F project is 25% larger but 47% fewer total parts. Furthermore, the concept of Big room was introduced, which contains Obeya and Genchi-genbutsu. In ASM, Award Luncheon to confer various awards and Associate Fellow Dinner (see photograph above right) to confer a prize on the people who became Associate Fellow were held as usual. I was disappointed that no Japanese became Associate Fellow in this year.

Furthermore, Director-International Special Task Committee Meeting which discusses Director-International issue was held in the afternoon on January 9. Mr. Bole of Boeing who is Vice President international activities, BoD, Dr. Ying of a mediator, Mr. Iasiello of the AIAA, and other 15 people attended. The main issue was how to make clear the role of conventional Director-International and Director-Region VII. An argument to establish Director which specializes in Europe, Asia, and an area like South America was performed.

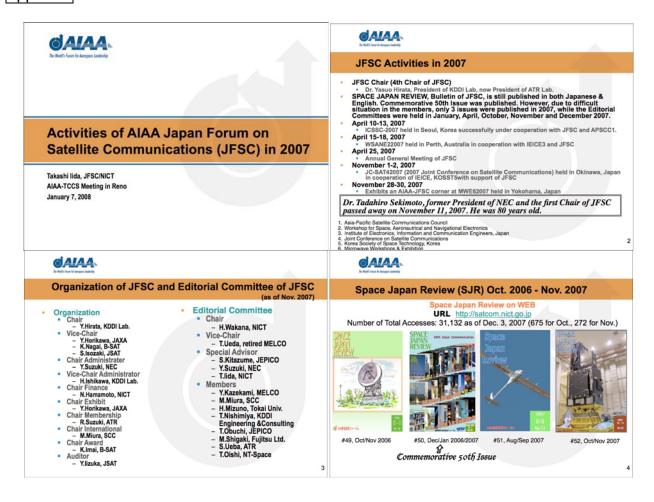
That is all about report of meetings I attended. Finally I would like to add some information. There is a big change, because the hotel is changed to Grand Sierra Resort, formerly Reno Hilton Hotel. Not only hotel room is changed, but also slot machines on the lobby are placed only back side, instead café or bar increased. There is a conventional steak house, but the family type restaurant which I took breakfast in the past disappeared. In addition, Starbucks was in a lobby floor.





View from hotel room toward airport (left photo) and road traffic at rush hour time (right photo)

## Appendix AIAA-JFSC's Activities in 2007





## **Example of Recent Articles in Space Japan Review**

- ment by Dr. Y.Horikawa, Executive
  - cs From Within Satellite Design Contest Disaster Mitigation Den ETS-VIII

- Mr.Michiaki Miyake, President & CEO, Mitsubishi Space Software Co.,Ltd
- "High Altitude Wireless Network for Disasters," Mikio Suzuki, Ryu Miura and Hiroyuki Tsuji, NICT
- "MJ@lert -Earthquake Early Warning for Advanced Users-," Mitsubishi Space Software Co.,Ltd 'c from Within
- n Within ort on Stay at ESA/ESTEC", Nozomu Nishinaga, NICT Reprint translated into Japanese with the permission of Aerospace America, J.R. Wilson: "Faster communications for a broader bettlefeld," Aerospace America, Vol. 45, No. 8, pp.42-45, Aug. 2607.
- "25th AlAA International Communications Satellite Systems Conference," Yoshiaki Suzuki (Secretary JFSC)

- orating the 50th Issue of Space Japan
  - riew
    "Its Brief History," Takashi Iida, Special Editing Advisor
    "CONGRATULATIONS," Neil Helm, George Washington
    University b 2.0 and Satellite Communications Technol ashi lida, Adviser at SJR Editing Committee
  - out AIAA system exhibition in micro wave bition (APMC 06) in 2006," Masafumi Shigaki
- Mr. Kenji Nagai, President and CEO, Broadcasting Satellite System Corporation (B-SAT) ce Japan Club
  Mr. Shigetaka Shinozuka, General Manager, Satellitt
  Engineering & Operation Division and Satellite Con
  Dept., Satellite & Network Operations Group, Space
  Communications Corporation
  ital Product Raview



### 25th ICSSC\*

- "Evolution Toward a Ubiquitous Network Society"
- Date April 10-13, 2007
- Place
  Convention & Exhibition Center (COEX),
  Seoul, Korea
- - ganization

    General Chair

    -Dr. Hong-Yul Paik, President Korea Aerospace Research Institute

    -Deputy General Chair

    -Dr. Eul K.Koh, Former President and Advisor APSCO

    -Yoshlaid Suzuki, Secretary, AIAA JFSC

    -Staerting Committee Chair

    -Aerospace Research Institute

     Technical Program Committee Chair

    -Dr. Masshiro Umehira, Professor, Ibaraki
    University

**GAIAA** 

shiaki Suzuki (Secretary JFSC: "25th AIAA Ir nmunications Satellite Systems Conference" an Review, No.51, Aug/Sep 2007.



Number of Participants: 350 Number of Countries: 22 Number of Paper Presented: 162 - Japan: 54, Korea: 36, UK: 16, France: 15, USA: 8, Spain: 7, Italy: 7, Netherlands: 5, China: 4, Canada: 3, Norway: Lands: 12, Germany: 2, Morocco: 1, New Zealand: 1,



## **JFSC Provides Many Opportunities**

- To Discuss on Nomination for Various Kind
- To Discuss on Japanese Space Policy
- To Coordinate With Other Organization, such as APSCC, IEICE and SSPI Japan\*

  ICSSC2007 in cooperation with APSCC

  JC-SAT2007 in Okinawa, Japan, JC-SAT2005 in Nagoya, Japan, WSANE2007 in Perth, Australia, WSANE2006 in X'an, China and WSANE2005 in Daejong, Korea

  To Encourage Patinal Person to Windows
- To Encourage Retired Persons to Work Together
- To Exhibit an AIAA-JFSC Corner to MWE Every Year
- To Host Financial Support for Award Luncheon of AIAA-ICSSC

\*Society of Satellite Professional International Japan



**Exhibit of** AIAA-JFSC Corner at MWE2007 (Microwave Workshops

Exhibition)



## Recent Situation of Japanese Space Development

- Continuous Successful Launches of Satellites
  Fortunately we have successful launches of satellites: ETS-VIII and SELENE.
  Expect successful launch of WINDS\* (coming February)
- Progress ISS Program

  ISS construction pro progresses well and we expect to launch our ISS-module JEM "Kibo" by Space
- Discussion on the Space Fundamental Law
  - cussion on the Space Fundamental Law
    There is not a law to prescribe a national space policy in Japan. Instead, there is a law of NASDA
    andior JAXA which prescribes the space development is only for the peaceful purpose. This is
    based on a resolution of House of Representatives plenary session in 1989, and this peaceful
    purpose limits the space development to "non-military" affairs in Japan.
    The Space Fundamental Law is aimed for improvement of nation life, economic social
    development, world peace and improvement of the welfare of the human based on the following
    idea:

  - idea:

    The peaceful use of space, it means "non-aggression" instead of "non-military", in accordance with the Space Treaty.

    Reinforcement of technical power and competition in the international market of a space industry international cooperation about space development.

    International cooperation about space development.

    General isscurity

    Realization of a frame of the human and development of human society.

    Protection of Earth environment.

    Protection of Earth environment.

    The prime Whinister installs "Space Development Strategy Head only the stabilishes" Space Basics Plant and reviews space development organizations including JAXA.

    If this law is established, the Japanese environment of space development would show an aspect different from the present situation and become much more active than the present.
- including JAXA.

  If this law is established, the Japanese environment of space development would show an aspect different from the present situation and become much more active than the present.

  "Wideband interNetworking engineering test and Demonstration Satellite



### Article I - III

< Article I > Name

The name of this organization shall be the AIAA Japan Forum on Satellite Communications. This Forum is a sub-committee of AIAA TCCS. ation: AIAA-JFSC hereafter designated AIAA-JFSC)

(Abbreviation: Nurvoir St. Instantial St. Article II > Objective

The objective of this organization is to further the purposes and program of the AIAA TCCS in the territory of Japan and encourage the satellite communications related activities within its territory.

- In the Mission

  The mission of the AIAA-JFSC is to promote the advancement of the satellite communication systems profession with special emphasis on the following tasks.

  (1) To provide the membership with opportunities for continuing study, professional growth on satellite communications technology and to assist the general public in understanding the benefits of satellite communications systems and technology by means of following activities.

  (a) Support for International Communications Satellite Systems Conference
  (b) Satellite Communications Systems Exhibition
  (c) Publication of Space Japan Review (in Japanese and English)

  (2) To stimulate the exchange of information within the academic and industrial community and collect information related to satellite communications systems

  (a) Meeting on research & development of satellite communications system
  (b) Technical survey tour
  (3) To provide Honors & Awards to the person who contributed the satellite communications system research and development significantly.

  (a) Japan Aerospace Communications Award
  (b) Nomination to AIAA Award



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## Other Issues

- Revision of JFSC's Bylaws (see Appendix)

  Minor changes including

  Editorial amendment and correction to the fact
- For Activities of JFSC
  - Financial problem

    To need further discussion on making JFSC to be NPO (Nonprofit Organization)
- For Space Japan Review
- Need much effort to solicit articles
   Need much effort to solicit articles
   To use a computer software to decrease difficulties for translating Japanese into English
   Little response from readers so far
   Please give us any comments!!
- Please ICSSC2011
- SSC2U13

  In the case of taking place in Japan or Asia

  Need more time to discuss its possibilities

  Need increase the number of participants from U.S.A., because Americans' presence is very important to show the U.S.A.'s strong support. Otherwise, it will be difficult that Japanese side make effort to take place it in Japan or Asia.

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## Article VII

- Article VII > Officers

  (1) The officers of the AIA-JFSC shall consist of Chairperson, Vice chairpersons, Secretary, Vice secretary, Treasurer, Publication Officer, Membership Officer, Honors & Awards Officer, Academy relation & Exhibition Officer, International Relations Officer, and Auditor. The board of officer shall consist of all members of the officers except chairperson, vice chairperson and auditors.

  (2) All officers shall be elected at the Annual General Meeting which consists of the members of AIAA-JFSC of all practices.
- (4) All officers shall be independent from board of officer in order to keep his/her position neutral.
  (4) All officers shall have responsibility for terms of two years. However, recommission is not prohibited.
- Officers area has been been chief executive officer of the AIAA-JFSC. The Chairperson shall be the chief executive officer of the AIAA-JFSC and represent the AIAA-JFSC in dealing with outside agencies.
- (in with outside agencies.)

  (in Vice-chairperson and in the Vice chairperson and in the Vice chairperson and in the Vice chairperson and in coasion.

  (7) Secretary

  The Vice chairperson shall be responsible for conducting the detailed planning and shall support the chairperson in all coasion.

  (7) Secretary

  The Vice chairperson shall be responsible for sending out all the Vice chairperson in the Vice chairperson in the Vice chairperson in the Vice secretary is the Vice secretary shall support the secretary in all coasion.

  (8) Treasurer

  The Theorems shall have chame of the finances of the AIAA-JFSC and shall make all required financial reports.
- Socretary in an uncommunity of the finances of the AIAA-JFSC and shall make all required financial reports and financial plans and such expenditures reports as should be authorized by general meeting.

   Publication Officer

  The additional filter is responsibile for the preparation and distribution of all AIAA-JFSC publications including
- The publication officer is responsible for the preparation and distribution of all AIAA-JFSC publications including the Space Japan Review. The editorial committee is headed by the publication officer.



Appendix

Bylaw of the AIAA Japan Forum on Satellite Communications Revised in April, 2007



## Article IV -VI

< Article IV > Membership
1) The membership of the AIAA-JFSC shall consist of the AIAA members of all grades who want to join the AIAA-JFSC.

The clause of Article V shall define the exclusive method of determining eligibility of a member to the AIAA-JFSC.

The persons who are not AIAA member but want to support the AIAA-JFSC can also become members of the AIAA-JFSC, and shall be eligible to get related information and Space Japan Review.

Review.

(3) The Corporation members who want to support the AIAA-JFSC financially are also members of the AIAA-JFSC, and shall be eligible to get related information and Space Japan Review.

(4) AIAA-JFSC shall have executive members and executive advisers who will be selected by the Board

< Article V > Membership application
(1) Person who wants to become member should submit the membership application form to AIAA-JFSC.
(2) Corporation members shall register their representative.
(3) Corporation members shall report when they change their representative.

< Article VI > Membership fee
(1) AIAA member shall not be required to pay any fee for membership of AIAA-JFSC in addition to AIAA

memoersnip ree.

AJAA\_FSC Shall neither charge nor collect membership fee, but it may accept incidental voluntary contribution and /or supporting money from members and corporate members for technical activities of the contribution and supporting money from members and corporate members for technical activities of the contribution and supporting money from members and corporate members for technical activities of the contribution and supporting money from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution and support from members and corporate members for technical activities of the contribution activities of the contribution and support from members and corporate members for technical activities of the contribution activities of the contribution



### Article IX - X

< Article IX > Annual General Meeting
(1) General Meetings (which are Annual General Meeting and Extraordinary General Meeting) shall be held.
2) Annual General Meeting is the perdoit Meeting which shall be consisting of the members of AIAA-JFSC of all

Annual General Meeting is the periodic meeting written sinal the consisting of the integrates,

Annual General Meeting shall be held within one month after the end of the fiscal year.

(a) When the Board of Officer approves the necessity,

(b) When one third of the members claims with the necessity

The Chaipperson of ANA JFSC shall convene the Annual General Meeting.)

The Annual General Meeting shall not open without two third of the officers.

The bill of General Meeting shall be agreed with more than half of the attendance.

The Chaipperson of a shall work of the officers of the Chaipperson of the Chaipperson shall preside at the General Meeting.

The Chaipperson shall preside at the General Meeting.

(a) Statement of Activity Report and accounts.

(b) Approved of Activity Report and accounts.

(c) Amendment for the Article of Bylava of AlAA-JFSC as necessary.

(10) A member who is not able to attend the Annual General Meeting may delegate his/her authority to the Chairperson of the General Meeting or other member in attendance.

Article X > Committee
 (1)AIAA\_IFSC Committee shall be appointed by the Chairperson, in consultation with the Vice-chairperson.
 (2)AIAA\_IFSC Committee shall be consisting of Technical Program Committee, Editorial Committee, Exhibition Committee and Award Committee.
 (3) The composition of other committee shall be decided as occasion demands. And the knowledgeable persons from outside of organization may become observers.
 (4)AIA\_IFSC Committee shall perform the concrete tasks, which support the objective and mission of AIAA\_IFSC to Audicial Teachill.



## Article VII (continued) - VIII

## < Article VII > Officers (Continued) (10) Membership Officer

Article VII > Officers (Continued)
 The membership officer is responsible for the AIAA-JFSC membership promotion and relention program (Renewa), and also for maintaining the AIAA-JFSC members list with address.

 The Honors & Awards Officer is responsible for the nomination and preparation of the Japan Aerospace Communications Award specified in Article XII Award, and also responsible for the nomination to AIAA-Award.

 The Academry Relation & Exhibition Officer is responsible for the establishment of the intimate communication between AIAA-JFSC and universities? leadering capacities within Japan territory to keep up with the advanced technical level provided by the academy, and also responsible for preparing the satellite communications system exhibition to promote the activities in satellite communications RAIA within Japan.

 The International Relation Officer is responsible for the maintainance of good interface with AIAA H.Q., TCCS and satellite communications related organizations in Asia Pacific region.

 Auditor

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## Article XI - XIII

< Article XI > Award
(1) The name of the Award shall be Japan Aerospace Communications Award.
(2) This Award is given to the people or companies who significantly contributed the satellite communications system development.

Article XII > Financial affairs
 (1) Supporting money
 The supporting money paid by sustaining members, corporation members and the supporting money from foundation and incidental voluntary contribution are basic fund of the AIAA-JFSC.
 (2) The AIAA-JFSC shall open and maintain a bank account in reliable banking or other financial institution for the disbursement of expenses incident to its organizational purposes and functions, and for acceptance and collection of supporting money prescribed in above clause.

(3) Fiscal year
The fiscal year shall be from April 1st to March 31st.

< Article XIII > Amendment (1) The Bylaws of the AIAA-JFSC may be amended by a majority vote of the board of officer and are subject to approval by Annual General Meeting and AIAA-TCCS prior to implementation.

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