Topics From Within



会場の Grand Sierra Resort (前リノ・ヒルトン・ホテル)



Associate Fellow Dinner での授与式風景

AIAA TCCS, IAC, IAC-DI Meeting および 46th Aerospace Sciences Meeting に出席して

NICT/JFSC 飯田尚志

AIAA の TCCS (Technical Committee on Communications System)会議, IAC (International Activities Committee) 会議, AIAA Board of Directors 会議, 関連する Director-International Task Force 打ち合わせ, および 46th Aerospace Sciences Meeting が 2008 年 1 月 7 日 (月) から 11 日 (金) にかけて, ネバダ州リノ市の Grand Sierra Resort (前 Reno Hilton Hotel)で開催された。リノは到着したときは積雪が20-30cm くらいと思われたが, 滞在した週は良い天気が続いた(ただ, 一週間ホテル内で過ごしたので外のことはよく分からなかったのが実感である)。

TCCSは1月7日午前9時から午後2時過ぎにか けて開催され、Houston 委員長、Elizabeth Klein-Lebbink 書記をはじめ私を含めて 10 名が出 席し、同時に電話会議に数名が参加した。議事を右 表に示す。今回は 2008 年 6 月 9 日から 12 日ま でサンディエゴで開催される ICSSC2008 の準備 状況、特に、論文の集まり方の報告が中心であった と思う。この時点で集まった論文が 100 件強であ り、大会委員長の Aerospace Corp.の Dr. Frueholz によるともう数十件欲しいとのことで、提案メ 切を 10 日程延ばすことになった。ICSSC2009 は 英国スコットランドのエジンバラで開催すべく Institute of Engineering and Technology と覚書 を交換したとのことであった。Awards に関しては、 3候補を1月31日までに推薦する。条件としては TC メンバでなくなってから2年以上が条件で、事

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

業の成功だけではダメで、技術的な貢献が必要ということであった。その後、我が国の

JFSC の活動状況を説明した(付録参照)。この中では、特に JFSC の By-Law の改正の承認事項があった。ディスカッションとしては、JFSC の By-Law では AIAA の非会員と一緒の活動をしているが、組織の決定に非会員が関与して大丈夫かというものであった。この点に関しては、もし非会員が役員となるようなときには、AIAA 会員になることを薦めるので、AIAA 会員を増やすことに貢献すると説明し、特に異議がなく、本 By-Law の改正は承認された。なお、今回から AIAA に関する発表には付録に示すスタイルのフォーマットを使うことが推奨されている。

JFSC の活動に関しては、1月8日に開催された IAC 会議においても報告した。IAC 会議には Aerospace Corp.の Bole 委員長をはじめ 20 名の委員が出席した。また、Board of Directors (BoD) においては1月11日に開催され、Nielsen AIAA 会長ほか約30名の理事が出席した。BoD において特に印象に残っているのは AIAA が "old white male society"となっているという批判があると紹介されたことである。これは、若い会員などの活動の多様性を図っていくことなどの改善をしていかねばならない問題である。

AIAA 46th Aerospace Sciences Meeting (ASM) は1月7日から10日まで開催された。本ミーティングは AIAA としては最大級の会議で、2000名を超える人々が参加した模様である。内容は航空宇宙に関するすべてのことが含まれ、約180のセッションで約1500件の論文が発表された。展示も行われていたが、ディスプレイによる展示が大部分という印象であった。また、ASMでは著名な学者の名が冠せられた次の3つの特別講義を聴講した。即ち、

- 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 特に、2番目の講演では、一連の報告書である 1989 年の "Made in America", 1990 年の "Machine Changed World", 2002 年の "Lean Engineering"を引き合いに、トヨタ生産方法についても言及しながら、Lean thinking はダイナミックで、知識ドライブ型、顧客本位の対処方法で、これを航空宇宙に適用したものを Lean Aerospace Initiative (LAI) として 1993 年に実施したこと。NASA の Faster, Better, Cheaper は LAI に基づいたものではないこと。また、F/A-18 E/F 開発では 25% 大型になったにも拘わらず、47% 少ない部品で達成していること。また、Big room という概念として Obeya(大部屋)、Genchi-genbutsu(現地現物)を推奨していた。ASM では、例年のとおり、Associate Fellow となった方々に賞を授与するための Associate Fellow Dinner(写真参照)と各種の賞を授与するための Award Luncheon が開催された。残念なのは、本年 Associate Fellow となった日本人がいなかったことであった。

さらに、1月9日午後に Director-International に関する Special Task Committee Meeting が開催された。BoD の Vice President international activities である Bole 氏、まとめ役の Boeing の Dr. Ying、AIAA 事務局の lasiello 氏をはじめ約 15 名が出席した。要点は従来の Director-International と Region VII(海外)の Director などの役割をどうはっきりさせるかであり、ヨーロッパ、アジア、南米などの区域に特化した Directorを設ける方向の議論が行われた。

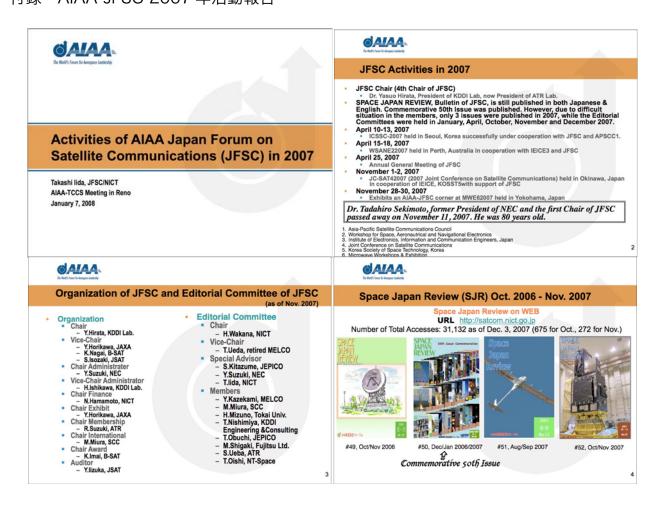
以上で会議の報告は終わるが、ホテルは Grand Sierra Resort となり、従来の Reno Hilton から大きく変わった。ホテルの部屋が改装されたばかりでなく、ロビーのスロットマシンは奥の方だけになり、カフェとかバーが増えた。従来のステーキの店はあるが、朝食を食べたファミレス風の店は無くなった。また、ロビーフロアに Starbucks が入った。





ホテルの部屋から空港の方角(左写真)及び夕方のラッシュ時(右写真)を望む

付録 AIAA-JFSC 2007 年活動報告





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 Technological Ida, 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

GAIAA.

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

GAIAA





- 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





Exhibit of AIAA-JFSC Corner at MWE2007 (Microwave Workshops



28-30, 2007

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 Space Besides Plan" 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



11

GAIAA.

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 AIA&Award

GAIAA. 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

- Need more time to discuss its possibilities
 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.

GAIAA

Article VII

- < Article VII > Officers
 (1) The officers of the AIAJ-FSC 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 managements.
- (c) an outcome snail be elected at the Annual General Meeting which consists of the members of Alv grades.

 (3) Auditor 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.

 (5) Chailprepson.

Indicate and the state of the Alanders of the

(6) Vice-chalpersons shall be responsible for conducting the detailed planning and shall support the chalperson in all occasion.

(8) Treasure:
The treasurer shall have charge of the finances of the AIAA-JFSC and shall make all required financial rep and financial plans and such expenditures reports as should be authorized by general meeting.

(9) Publication Officer: 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 Audical Teach III.



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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