

Remember of Dr. Edelson

Takashi Iida, President of CRL

On January 3, 2002, Dr. Joseph N. Pelton, The George Washington University, e-mailed me a sad news that Dr. Burton I. Edelson, Director of the Institute for Applied Space Research, The George Washington University, had suffered a massive heart attack and was hospitalized in New York. I could not help me doing other than hoping his recovery. He passed away on January 6, 2002 and was 75 years old. The burial ceremony with an honor guard at Arlington National Cemetery and the memorial services took place January 11, 2002.

Dr. Edelson had given us many suggestions on the satellite communications R&D from his broad point of view. He was also very active as one of steering committee members for the JUSTSAP (Japan-U.S. Science, Technology and Space Applications Program). I heard that he looked very well at the JUSTSAP meeting in Hawaii last year. Therefore, people concerned who know Dr. Edelson well were surprised at his death and felt very sorry.

Dr. Edelson was the former U.S. Naval official and concerned the space development from the beginning. He was Director of COMSAT Laboratory, Associate Administrator of NASA and Director of Institute of Applied Space Research, The George Washington University. I knew his name for the first time to read the paper on his proposal of "Antenna Farm"⁽¹⁾, when I studied on the geostationary platform in mid-1980s. He proposed the JUCS (Japan-U.S. Cooperation in Space Project), former of JUSTSAP, in order to make the people concerned in both Japan and U.S. more intimate. He agreed to be one of the steering committee members of JUCS. The first meeting of the JUCS was held at the Jefferson Hall of the University of Hawaii in 1990. The working group on satellite communications was established and Dr. Edelson and I had served as co-chair of the working group. He proposed at that time to conduct the experiment on connecting super computers via high data rate (HDR) satellite communications. This proposal took position as one of the U.S.'s Information High-Way and was expanded to the U.S.-Japan Trans-Pacific HDR Satellite Communications Experiment and moreover to the project of Gigabit satellite communications system⁽²⁾.

He also contributed very much to promote the TRMM (Tropical Rainfall Measurement Mission) project, which measures the worldwide rainfall distribution for Earth environment protection. The international project consists of the satellite prepared by the U.S., mission equipment of rain radar and launch by Japan. The TRMM project was very succeeded.

He visited Japan as a representative of the study group of JTEC (Japanese Technology Evaluation Center) project supported by NASA and NSF in 1992. The report was released⁽³⁾. He was an advisor of Communications Research Laboratory 1993-1998 and gave many useful advices on the research. He received the Award by the Minister of Posts and Telecommunications

for his contribution of promoting Japanese Space program in June 1999. He was also delighted to contribute his commentary article to the Space Japan Review⁽⁴⁾.

Dr. Edelson had always humor sense and we can work with him in the relax environment. When he organized the result of the satellite communications working group of the JUSTSAP, that was held in Maui Island, Hawaii, in November 1993, I forgot the beginning, but he said that he was so nervous in his youth that he overturned a chalk box and confused very much. Thanks to his talk, I remember well that we felt more relax to proceed the meeting. Further, when the AIAA ICSSC-17 was held in Yokohama in 1997, he attended the conference with his wife. He and his wife participated the cruise in the Tokyo Bay as an accompany persons program. The ship pitched and rolled due to bad weather. After the program, when I talked him about bad weather, he said he came from the U.S. Navy and he did not feel bad in such a rough sea. I impressed him to be a real sea man and felt relief.

I indebted Dr. Edelson personally because he was my references for Associate Fellow of AIAA and Senior Member and Fellow of IEEE. Especially, when he was my reference for a Senior Member of IEEE, he encouraged me that I deserved Fellow of IEEE sufficiently. Furthermore, when I visited Washington, D.C., he invited me to a dinner at the Cosmos Club. In this place, there is a corner to display portraits of many American Nobel prize winners. I understood the American power on my mind.

I might write unintentionally about my concern to Dr. Edelson too much. There may be many persons who know him very well in Japan. I pray for the repose of his soul with such persons.

References

- (1) B.I.Edelson and W.Morgan, "Orbital Antenna Farm", *Astronautics and Aeronautics*, pp. 20-27, September 1977.
- (2) T.Iida and N.Kadowaki: "Gigabit Satellite: Its Dawn and Activities", *Space Japan Review*, No.1, pp.10-15, Feb. 1998.
- (3) "NASA/NSF Panel Report on Satellite Communications Systems & Technology", July 1993.
- (4) B.I.Edelson: "Commentary: Japan is the Most Important Partner as a Leader of Development for Satellite Communications", *Space Japan Review*, No.1, p.4, Feb. 1998.



Dr. Burton I. Edelson

Personal History

1947: Graduate from U.S. Naval Academy
 1960: Doctor of Metallurgy from Yale University
 1960: Research Officer, U.S. Naval Research Laboratory
 1968: COMSAT Laboratory and Its Director
 1982: Associate Administrator of NASA, Space Science and Applications
 1988: Professor and Director of Institute of Applied Space Research, The George Washington University
 January 6, 2002: Passed away (75 Years Old)

Award

Awarded by Navy Legion of Merit, NASA Exceptional Service Medal and Yale University Wibur Cross Medal, and awarded by Minister of Posts and Telecommunications for Contribution to the Japanese Space Program in June 1998, Senior Fellow of AIAA, Life Fellow of IEEE.



At the Cosmos Club in Washington, D.C. in April 1999

(From left without title: N.Helm, N.Kadowaki, J.N.Pelton, B.I.Edelson, R.P.DePaula, T.Iida)



Attendees in Satellite Communications Working Group, JUSTSAP held in Maui Island, Hawaii in
November 1993

(From left without title: J.Crisafulli, T.Kawafune, M.Borota, T.Iida, K.M.Price, B.I.Edelson,
D.J.Curtin, A.U.Mac Rae, L.A.Bergman, C.E.Mahle)