

Jun Okushi, Master of Architecture, American Institute of Aeronautics and Astronautics Lifetime Member

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OVERVIEW

Jun Okushi is the third generation of an Architects family and a National Aeronautics and Space Administration (NASA) trained Space Architect who resides in Mito, Japan.

Mr. Okushi has enjoyed a three-decades-long career working with significant cutting-edge institutions, organizations and individuals around the world in the field of space developments and explorations, as well as traditional architectural design practice with his father; Sir Hiroshi Okushi (1921-2012:The Decoration of Sacred Treasure of Japan). Mr. Okushi served as a NASA Research Grant Student at the Southern California Institute of Architecture (SCI-ARC), under the directions of Dr. Yvonne Clearwater and Dr. Marc M Cohen, from NASA-Ames Research Center, Space Human Factors Office and Professor David Anthony Nixon, at SCI-ARC involving the early stage of design definition for the NASA International Space Station. The design research exploration skills for human space missions and habitability that he developed as a student at SCI-ARC enabled him to take a leading role in the establishment of the Space Architecture Research Consortium at the University of Tokyo, making that university a core member in the field. He continues to enrich his professionalism through a commissioned researcher experiences at the consortium. Mr. Okushi is the author of a number of published papers and articles within the discipline of design implications for extreme environments and human space exploration.

1957 March Born in Mito, Ibaraki, Japan

EDUCATION and TRAINING

1983 March Bachelor of Science in Architectural Engineering

Hachinohe Institute of Technology (HI-TECH), Aomori, JAPAN

1983 April-July Post-graduate Research Fellow at the Regional Planning Laboratory, directed by Dr.

Yoshihiko Sasaki The Department of Architectural Engineering, HI-TECH, Hachinohe,

Aomori, JAPAN

1983 December Certificates: Advanced Academic Preparation at The English Program for Foreign Students,

University of Pennsylvania, Philadelphia, PA. U.S.A.

1984 August The Japan Institute of Architect: Summertime Internship Open Desk Fellow at Mikami

Architectural Office, Mito, Japan

Awarded By The Institute of Japanese Architects, Tokyo, JAPAN

1984-1986 NASA Research Grant Student at Institute For Future Studies/Space Projects Group

Southern California Institute of Architecture, Santa Monica, CA. U.S.A.: Grant Awarded

by NASA Contract NCC2-356:

1985 December Master of Architecture, Southern California Institute of Architecture, Santa Monica, CA.

U.S.A.

1986 March Internship: Architectural Design Assistant at Mikami Architectural Office, Mito, Japan

2006 Ph.D. Candidate: University of Tokyo,



ACTIVITIES, PRACTICE and PROJECTS

1987-1989 NASA Grant Space Habitat Design Research/Draftsman, Khalil Studio, New York, NY

U.S.A.

1989-1990 Okushi Architects, Architectural Engineering Consultant for Electromagnetic Anechoic

Chamber Designs for the EMC (ElectroMagnetic Compatibility) Department AKZO

JAPAN LTD.Tokyo, JAPAN

1989-1992 Space Architectural Design Research SPACE PROJECTS GROUP (Phase II), Research

Partnership with Regis Fauquet, Los Angeles, U.S.A.- Mito, JAPAN

1989-2012 Private Practice, SpaceProjectsGroup/Okushi Architects Mito, JAPAN

1998 March Mandatory Attending Lecturer at the Interdisciplinary Engineering Program "Humans to

Mars, By the year of 2012" directed by Professor Larry H. Kuznetz, University of California,

Berkeley U.S.A.Invited by the Advanced Space Projects Branch NASA ARC,

Dr. Marc M Cohen

1999 The Mars Society - Japanese Chapter Original Representative / Funding Coordinator of the

Mars Society of Japan, Tokyo, JAPAN

2001-Present American Institute of Aeronautics and Astronautics Technical Committee

2002-2007 University of Tokyo, Space Architecture Research Consortium at the Matsumura

Laboratory, Adjacent Researcher Graduate School of Engineering, University of Tokyo,

Tokyo, JAPAN

2012-Present SUPR-SYSTEMS

Founding Director

TECHNICAL PAPER PRESENTATIONS and PUBLICATIONS

1986 "Space Station Habitability Module Interior Design Concept"

David Nixon, Space Station Group Activities Habitability Module Study

NASA Contractor Report 4010 1986

1990 "Architectural Implications and Requirements Relating to the Question of Human Body

Motion in Microgravity."

Regis Fauquet and Jun Okushi/Space Projects Group

European Space Agency (ESA) ESAWpp-015,1990 Noordwijk Netherlands.

1990 "Tasks of Architectural Design in Spacecraft"

34th Annual National Conference on Space Science and Technology

1990 Tokyo, Japan



1991 "Architectural Ideas Relating to the Question of Human Body Motion in Microgravity" Regis Fauquet and Jun Okushi/Space Projects Group 21st International Conference on Environmental Systems, SAE TECHNICAL PAPER SERIES 911498 1991 "Architectural Studies Relating to the Nature of Human Body Motion in Microgravity" Regis Fauquet and Jun Okushi Proceedings: International Pacific Air & Space Technology Conference and 29th Aircraft Symposium, 1991, Gifu, Japan SAE P246, 912076 1991 "Architectural Studies Relating to Human Motion Morphology and Interface in Microgravity" Regis Fauquet and Jun Okushi 4th European Symposium on Space Environmental Control Systems EUROPEAN SPACE AGENCY, Florence, Italy 1991 "Architectural Ideas Relating to the Question of Human Mobility in Microgravity" Fauquet, R., Okushi, J., SPACE PROJECTS GROUP Proceedings: The First International Design for Extreme Environments Assembly Houston, Texas, U.S.A. 1996 "First Mars Outpost Architectural Study" Okushi, J. SpaceProjectsGroup-Okushi Architects Space 96. Albuquerque, NM U.S.A. 1996 "First Mars Outpost Architectural Study I" Okushi, J. SpaceProjectsGroup-Okushi Architects 26th International Conference on Environmental Systems Monterey, California 1996, SAE TECHNICAL PAPER SERIES 96144 1998 "First Mars Outpost Habitat Design Study (NO PAPER)" The 3rd International Conference on Life Support Systems and Biosphere Science Orlando, Florida, U.S.A. 2003 "Design Implications of Latent Challenges to the Long-Duration Space Mission" Marilyn Dudley-Rowley; OPS-Alaska & Sonoma State University, California CA U.S.A, Jun Okushi, OPS-Alaska Japanese Operations/Space Projects Group/Okushi Architects, Thomas Gangale OPS-Alaska & San Francisco State University CA U.S.A. Pablo Flores, Moscow Aviation Technical Institute, Russia Eduardo Diaz, Sonoma State University CA U.S.A. AIAA Space 2003 Conference, Long Beach CA U.S.A. 2005 "Architectural Design For Life in Space" Jun Okushi, Space Projects Group/Okushi Architects, Mito Japan The 56th International Aeronautical Congress, Fukuoka, Japan 2005 "Innovative Facilities Concepts for Space Station"(宇宙ステーションの道具たち) Jun Okushi, University of Tokyo, Space Architecture Research Consortium Forum 'Dougulogy' Study on Tools No.10, Tokyo Japan

2006 "20 Years On- The SCI-ARC/NASA-AMES Habitability Module Project"

David A Nixon, Altus Associates, Architects, Los Angeles, CA U.S.A. Jun Okushi, Space Projects Group/Okushi Architects, Mito, Japan

AIAA Space 2006, San Jose, CA U.S.A.

2007 "The Human Factors of Deep Space Mission: From Human Factors to Mission Design"

(宇宙極地探査のヒューマン・ファクター)

Jun Okushi, University of Tokyo, Space Architecture Research Consortium

10+1 No.46,Tokyo Japan ISBN 978-4-87275-140-6

2009 "Alternative Space-Station Module Interiors" Out of This World- The New Field of Space

Architecture

David Nixon and Jun Okushi (contributor), A. Scott Howe and Brent Sherwood edited.

American Institute of Aeronautics and Astronautics, Reston, VA U.S.A

ISBN:978-1-56347-4344

White Paper Contribution:"A Short Review of the Necessity of Human Spaceflight Our

Advocacy of a Decade " "PATHWAYS TO EXPLORATION: Rationales and Approaches A

U.S. Program of Human Space Exploration"

The National Academies Press, Washington, DC, U.S.A.

ISBN 978-0-309-38736-1

AWARDS

1988 Honorable Mention

Design Competition Vietnam Veterans Memorial for The State of New Jersey, U.S.A.

Collaborated with Matthew Fowler

1989 2nd Prize

Ichouzaka Public Rest Room Design Competition

Mito, Japan

1990 Winner of the International Open Bit

for the 10-meter Electoro-Magnetic Anechoic Chamber Construction for

The National Electronics Technology Research Institute,

Tedjon, Korea.

1991 "Best Bio-Morphic Space Station Module Designer"

NASA ARC Space Human Factor Research Award

Presented by Dr. Yvonne Clearwater, Space Human Factors Office, NASA -ARC

Moffett Field CA U.S.A.

1993 Annual SD Review Award, "Akikawa Farmers Market"

Collaborated with Keikaku Kankyo Kennchiku Architectural Office

Tokyo, Japan



COLLECTIONS

- 1. The works at Khalil Studio has been collected in the section of Art and Architecture, by The Museum of Modern Art, New York, Manhattan USA
- 2. The technical paper; "First Mars Outpost Architectural Study I" 1996 has been collected by The National Diet Labially of Japan