



NIST PUBLICATIONS

# List of Publications 1969 - 1991

Panel on Wind and Seismic Effects

Panel on Wind and Seismic Effects

of

U.S.-Japan Cooperative Program in Natural Resources

QC 100 .U57 835 1992 C.2 United States Department of Commerce
Technology Administration
National Institute of Standards and Technology

he National Institute of Standards and Technology was established in 1988 by Congress to "assist industry in the development of technology... needed to improve product quality, to modernize manufacturing processes, to ensure product reliability... and to facilitate rapid commercialization... of products based on new scientific discoveries."

NIST, originally founded as the National Bureau of Standards in 1901, works to strengthen U.S. industry's competitiveness; advance science and engineering; and improve public health, safety, and the environment. One of the agency's basic functions is to develop, maintain, and retain custody of the national standards of measurement, and provide the means and methods for comparing standards used in science, engineering, manufacturing, commerce, industry, and education with the standards adopted or recognized by the Federal Government.

As an agency of the U.S. Commerce Department's Technology Administration, NIST conducts basic and applied research in the physical sciences and engineering and performs related services. The Institute does generic and precompetitive work on new and advanced technologies. NIST's research facilities are located at Gaithersburg, MD 20899, and at Boulder, CO 80303. Major technical operating units and their principal activities are listed below. For more information contact the Public Inquiries Desk, 301-975-3058.

#### **Technology Services**

- Manufacturing Technology Centers Program
- Standards Services
- Technology Commercialization
- Measurement Services
- Technology Evaluation and Assessment
- Information Services

## **Electronics and Electrical Engineering Laboratory**

- Microelectronics
- Law Enforcement Standards
- Electricity
- Semiconductor Electronics
- Electromagnetic Fields<sup>1</sup>
- Electromagnetic Technology<sup>1</sup>

# Chemical Science and Technology Laboratory

- Biotechnology
- Chemical Engineering<sup>1</sup>
- Chemical Kinetics and Thermodynamics
- Inorganic Analytical Research
- Organic Analytical Research
- Process Measurements
- Surface and Microanalysis Science
- Thermophysics<sup>2</sup>

#### **Physics Laboratory**

- Electron and Optical Physics
- Atomic Physics
- Molecular Physics
- Radiometric Physics
- Quantum Metrology
- Ionizing Radiation
- Time and Frequency<sup>1</sup>
- Quantum Physics<sup>1</sup>

#### **Manufacturing Engineering Laboratory**

- Precision Engineering
- Automated Production Technology
- Robot Systems
- Factory Automation
- Fabrication Technology

# Materials Science and Engineering Laboratory

- Intelligent Processing of Materials
- Ceramics
- Materials Reliability<sup>1</sup>
- Polymers
- Metallurgy
- Reactor Radiation

#### **Building and Fire Research Laboratory**

- Structures
- Building Materials
- Building Environment
- Fire Science and Engineering
- Fire Measurement and Research

#### **Computer Systems Laboratory**

- Information Systems Engineering
- Systems and Software Technology
- Computer Security
- Systems and Network Architecture
- Advanced Systems

# Computing and Applied Mathematics Laboratory

- Applied and Computational Mathematics<sup>2</sup>
- Statistical Engineering<sup>2</sup>
- Scientific Computing Environments<sup>2</sup>
- Computer Services<sup>2</sup>
- Computer Systems and Communications<sup>2</sup>
- Information Systems

<sup>&</sup>lt;sup>1</sup>At Boulder, CO 80303.

<sup>&</sup>lt;sup>2</sup>Some elements at Boulder, CO 80303.

NIST C QC 100 457 835 1992

### List of Publications 1969 - 1991

#### Panel on Wind and Seismic Effects

Ken-ichi Tokida, Japan and Noel J. Raufaste, NIST, Editors

Building and Fire Research Laboratory National Institute of Standards and Technology Gaithersburg, MD 20899 Japan Ministry of Construction Public Works Research Institute Tsukuba, Japan

April 1992



U.S. Department of Commerce Barbara Hackman Franklin, Secretary

Technology Administration
Robert M. White, Under Secretary for Technology

National Institute of Standards and Technology John W. Lyons, Director



# LIST OF PUBLICATIONS 1969 - 1991 PANEL ON WIND AND SEISMIC EFFECTS

#### **PREFACE**

The Panel on Wind and Seismic Effects is one of 16 Panels making up the United States-Japan Cooperative Program in Natural Resources. The Panel's focus is on promoting the exchange of wind and seismic technology to better reduce structural, building, and lifeline damages caused by strong wind, earthquakes, high tides, and tsunamis.

The idea of creating a List of Publications of this Panel's work first surfaced in 1988 for the occasion of its 20th anniversary. Three years later this idea was brought to realization in support of the International Decade for Natural Disaster Reduction (IDNDR). This List notifies the many organizations and individuals within IDNDR countries about the availability of this Panel's technologies.

The Japan-side Panel collected and categorized the papers which make up the listings. These papers represent 23 years of collaborations between the United States and Japanese government researchers. Over 1200 papers were published during this time. Collectively, they make a valuable contribution to the literature and is an important resource for international cooperation.

We the chairman of the Panel on Wind and Seismic Effects are pleased to be part of this major undertaking which has produced a useful resource of technologies in wind and earthquake engineering including storm surge and tsunamis. We thank all the authors found in the following pages for their useful contributions to their field of work. Their contribution form the basis for major improvements to U.S. and Japan design and construction practices.

Richard N. Wright

Chairman, U.S.-side Panel

Director

Building and Fire Research Laboratory

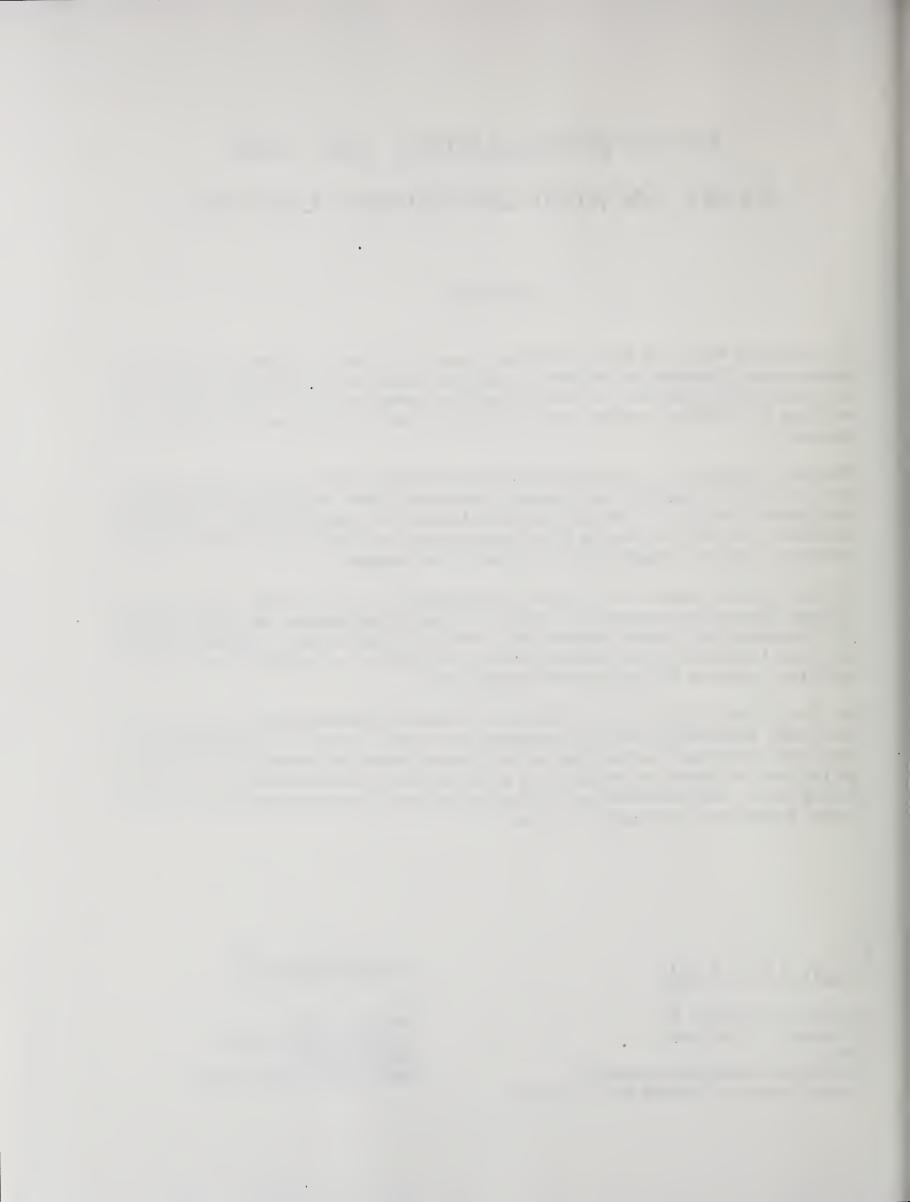
National Institute of Standards and Technology

Toshio Iwasaki

Chairman, Japan-side Panel

Director-General

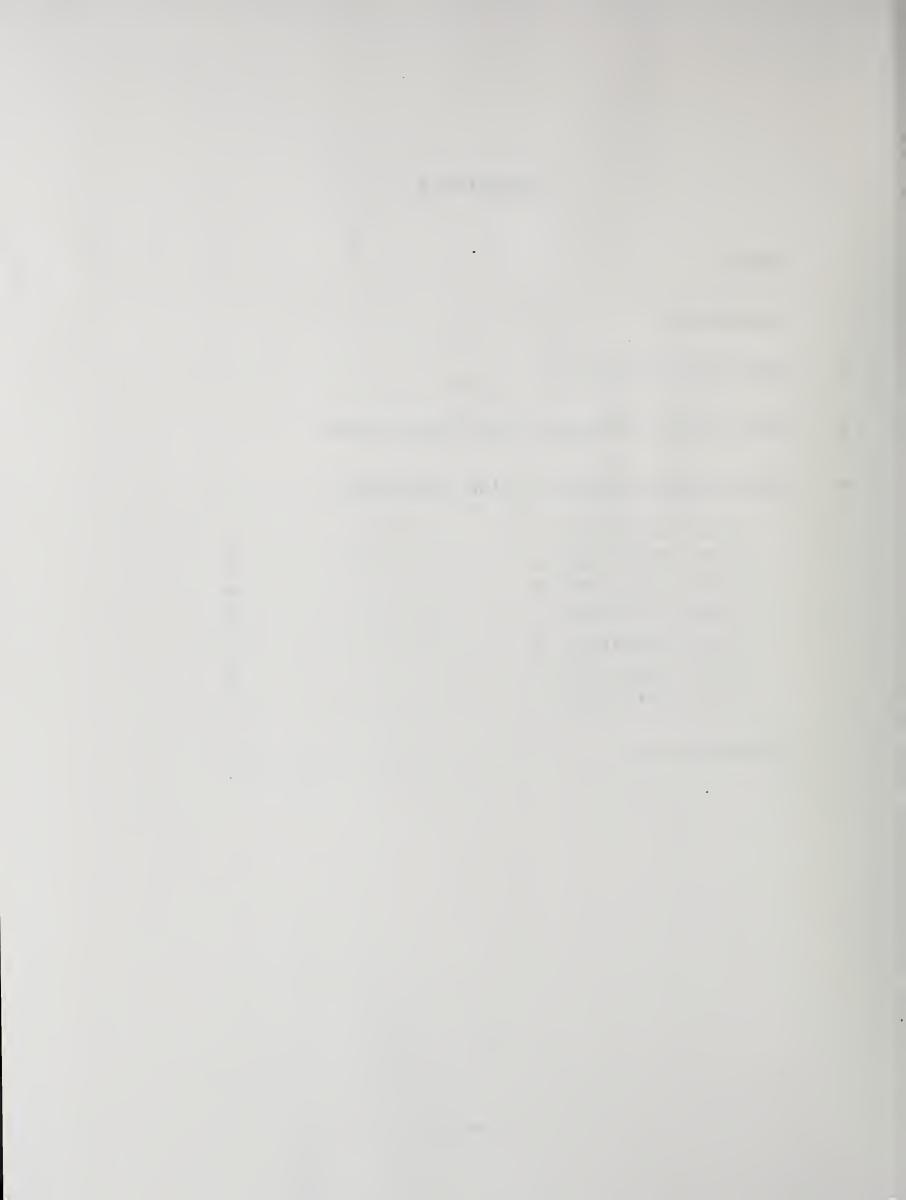
Public Works Research Institute



#### **CONTENTS**

#### PREFACE

1.	BACKGROUND	*************	••••••	ix
2.	USING THIS PUBLIC	CATION		xi
3.	PUBLISHED REPORTS	INDEX of J	OINT PANEL MEETIN	G 1
4.	PUBLISHED REPORTS	S INDEX of T	TASK COMMITTEES	41
	TASK COMMI	ГТЕЕ "С"	•••••	41
	TASK COMMI	TTEE "D"	•••••	46
	TASK COMMI	TTEE "E"	•••••	48
	TASK COMMI	TTEE "F"	•••••	49
	TASK COMMI	TTEE "H"	***************************************	51
	TASK COMMI	TTEE "I"	•••••	53
	TASK COMMI	ГТЕЕ "Ј"	••••••	55
5.	AUTHOR'S INDEX	••••		67



# BACKGROUND



#### 1. BACKGROUND

Responding to the need for improved engineering and scientific practices through exchange of technical data and information, research personnel, and research equipment, the United States and Japan in 1961 created the U.S.-Japan Cooperative Science Program. Three collateral programs comprise the Cooperative Science Program. The U.S.-Japan Cooperative Program in Natural Resources (UJNR), one of the three, was created in January 1964. The objective of UJNR is to exchange information on research results and exchange scientists and engineers in the area of natural resources for the benefit of both countries. UJNR is composed of 17 Panels each responsible for specific technical subjects.

The Panel on Wind and Seismic Effects was established in 1969. Sixteen U.S. and six Japanese agencies participate with representatives of private sector organizations, to develop and exchange technologies aimed at reducing damages from high winds, earthquakes, storm surge, and tsunamis. This work is produced through collaboration between U.S. and Japanese member researchers working in 11 task committees. Each committee focuses on specific technical issues, e.g., earthquake strong motion data. The Panel provides the vehicle to exchange technical data and information on design and construction of civil engineering lifelines, buildings, and water front structures, and to exchange high wind and seismic measurement records. Annual meetings alternate between the U.S. and Japan (even numbered years in the U.S.; odd numbered years in Japan). These one-week technical meetings provide the forum to discuss ongoing research and research results; one-week technical study tours follow the meetings.

The National Institute of Standards and Technology (NIST) provides the U.S.-side chairman and secretariat. The Public Works Research Institute (PWRI) provides the Japan-side chairman and secretariat.

Cooperative research is performed through formal Panel Programs. Six joint cooperative programs have been initiated. The first was cooperative research on reinforced concrete structures that was performed during 1979-1987. The second, cooperative research for steel structures conducted during 1982-1987. The third joint research project, lifeline facilities, was started in 1982 and is continuing. The fourth program, in-situ testing methods for liquefaction was initiated in 1983 and completed in 1986. In 1984, the fifth joint research program was started on masonry building structures; it is nearing completion. The sixth coordinated program is on precast seismic structural systems; it was initiated in 1991.

Task Committee meetings, exchanges of data and information through technical presentations at annual Panel Meetings, exchanges of guest researchers, visits to respective research laboratories and informal interactions between Panel Meetings, joint workshops and seminars, and joint cooperative research programs all contribute to the development and effective delivery of knowledge that has influenced design and construction practices in both countries.

Direct communication between counterpart country organizations is the cornerstone of the Panel. Effective information exchanges and exchanges of personnel and equipment have strengthened domestic programs of both countries. There are opportunities for experts in various technical fields to get to know their foreign counterparts, conduct

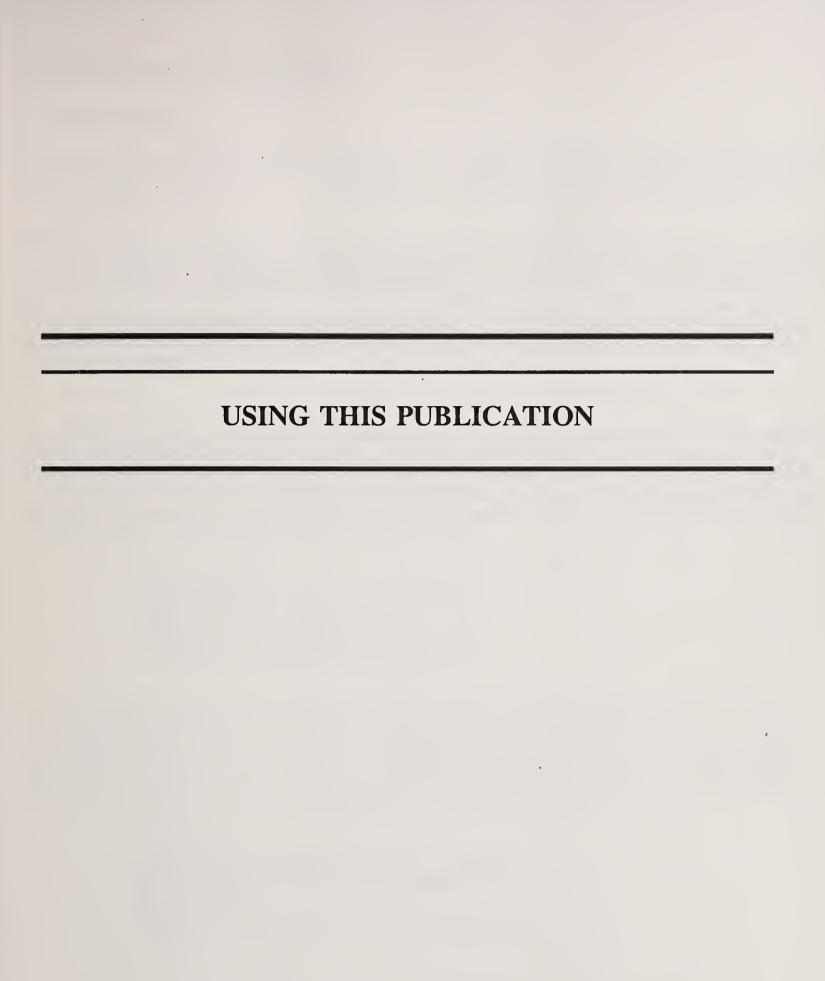
informal exchanges, bring their respective views to the frontiers of knowledge, and advance knowledge of their specialities.

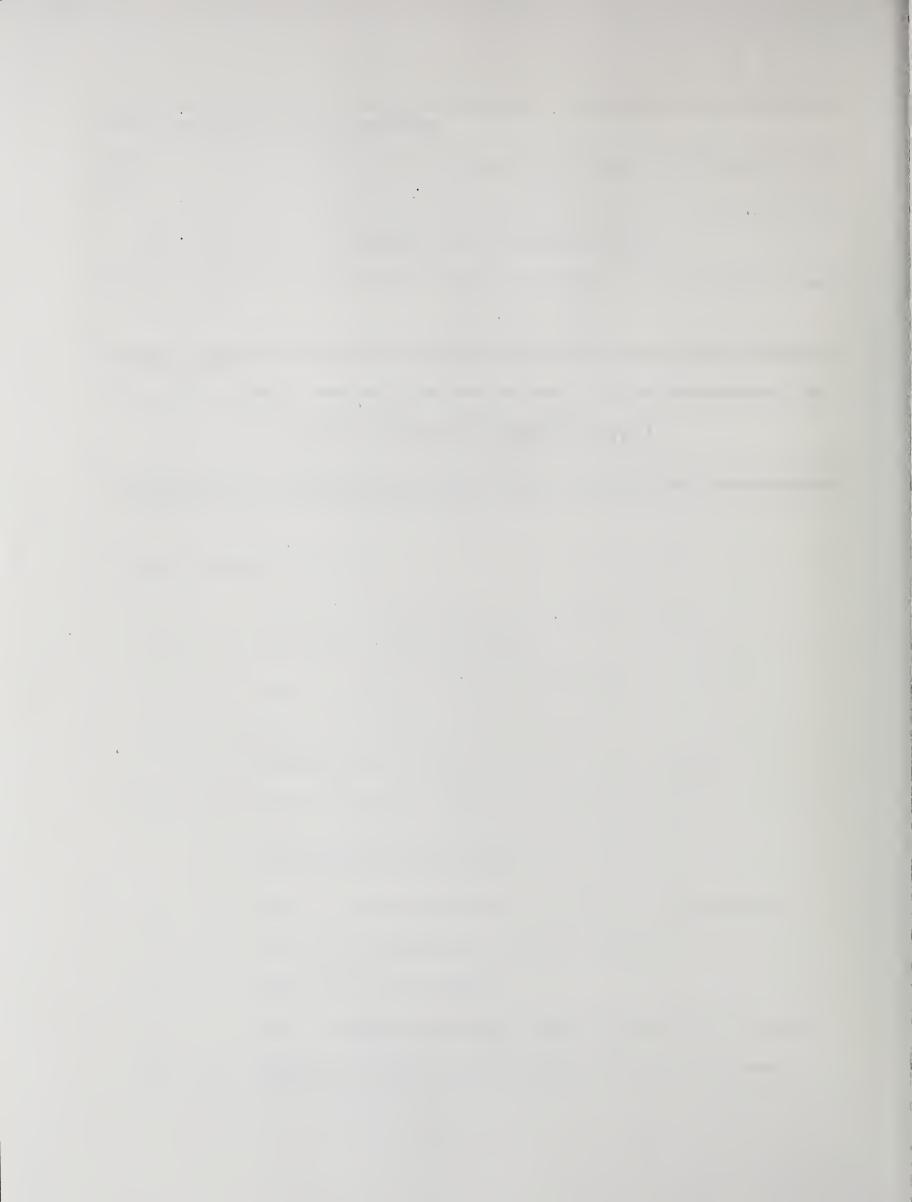
The Panel's results have supported improvements in practices in both countries. They have;

- 1. created and exchanged digitized earthquake records for use as the basis of research for U.S. and Japanese geotechnics and structures;
- 2. produced data that advanced U.S. and Japan design and construction of bridge columns;
- 3. produced large-scale testing data that advanced seismic design standards for buildings;
- 4. created a database comparing U.S. and Japanese standard penetration tests to improve seismic design criteria for soil liquefaction;
- 5. created databases on storm surge and shore line interaction and on tsunamis and tsunami warning systems for use by designers to verify mathematical models of tsunamis and storm surge.

#### The Task Committees (T/C) are;

T/C "A".	Strong-Motion Instrumentation Arrays and Data
T/C "B".	Large-Scale Testing Programs
T/C "C".	Repair and Retrofit of Existing Structures
T/D "D".	Evaluation of Structural Performance
T/C "E".	Ground Motion and Seismic Design Forces Program
T/C "F".	Disaster Prevention Methods for Lifelines Systems
T/C "G".	Wind Characteristics and Structural Response ( Merged with T/C "D", 1988 )
T/C "G".	Passive, Active, and Hybrid Control Systems (Created 1990)
T/C "H".	Soil Behavior and Stability during Earthquakes
T/C "I".	Storm Surge and Tsunamis
T/C "J".	Wind and Earthquake Engineering for Transportation Systems
T/C "K".	Wind and Earthquake Engineering for Offshore and Coastal Facilities





#### 2. USING THIS PUBLICATION

#### 2.1 GENERAL

Publications constitute a major end produce to the Panel's efforts. This report lists the Panel of Wind and Seismic Effects papers published during the period April 1969 through May 1991.

Published papers are found in Chapters 3 and 4 while Chapter 5 presents the Author's Index. Chapter 3 lists those papers published from Joint Meeting through the 23rd meeting. Chapter 4 lists those papers published by the Panels 11 Task Committees. Both sections list the papers in chronological order starting with the earliest paper. The Author's Index lists, in alphabetical order, all Panel Authors. Their respective papers are denoted by a four digit number used to identify their respective papers in Chapter 3 and/or 4.

An example below, illustrates information for the papers presented at the Joint Meetings. The listings are preceded by a four digit code, followed by a one or two digit code, followed by a letter code. These codes are illustrated in the example by a), b), and c). Where a) is the report designation number within a group of reports prepared for a particular Joint Meeting. The b) code designates the Joint Meeting, its date, and location. The c) code designates the subject theme.

0651<sup>a)</sup>, 20<sup>b)</sup>, B<sup>c)</sup>
In Situ Measurement of Pore Pressure
Build-Up during Liquefaction
Thomas L. Holzer, Michael J. Bennett: USGS
T. Leslie Youd: Brigham Young University

For the papers published by the Panel's Task Committees, the listings are preceded by a one letter code and four digit code, followed by a one or two letter code and one digit code. These codes are illustrated in the example by a) and b). Where a) is the report designation number within a group of reports prepared for a particular Workshop. The b) code designates the Task Committee, its date, and location.

C0016<sup>a)</sup>,C2<sup>b)</sup>
Development of Post-Earthquake Measures for Buildings and Structures Damaged by Earthquakes
Eiichi Kuribayashi, Masaya Hirosawa, Tatsuo Murota: PWRI

#### 2.2 SAMPLE LISTING

#### 1) JOINT PANEL MEETING

a)	Pa	per	Nu	mber
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MILIOCI	
Paper Number	Joint Meeting
0001 - 0018	1
0019 - 0036	2
0037 - 0058	3
0059 - 0077	4
0078 - 0103	5
0104 - 0132	6
0133 - 0164	7
0165 - 0204	8
0205 - 0235	9
0236 - 0273	10
0274 - 0315	11
0316 - 0349	12
0350 - 0396	13
0397 - 0435	14
0436 - 0479	15
0480 - 0523	16
0524 - 0570	17
0571 - 0608	18
0609 - 0642	19
0643 - 0677	20
0678 - 0710	21
0711 - 0748	22
0749 - 0795	23

#### b) Joint Meeting Number

JIIIC IVICCO	ang rumber	
No.	Date	Location
1	Apr. '69	Tokyo
2	May '70	Washington D.C.
2 3	May '71	Tokyo
4	May '72	Washington D.C.
5	May '73	Tokyo
6	May '74	Washington D.C.
7	May '75	Tokyo
4 5 6 7 8 9	May '76	Washington D.C.
9	May '77	Tokyo
10	May '78	Washington D.C.
11	Sept. '79	Tokyo
12	May '80	Washington D.C.
13	May '81	Tsukuba
14	May '82	Washington D.C.
15	May '83	Tsukuba
16	May '84	Gaithersburg
17	May '85	Tsukuba
18	May '86	Gaithersburg
19	May '87	Tsukuba

20	May '88	Gaithersburg
21	May '89	Tsukuba
22	May '90	Gaithersburg
23	May '91	Tsukuba

#### c) Subject Theme

A: Wind Engineering

B: Earthquake Engineering C: Storm Surge and Tsunami

D: Joint Cooperative Research Program

Z: Others

#### d) Affiliation

#### U.S. side:

Department of Commerce, National Bureau of Standards (NBS) [1901~1988]

Department of Commerce, National Institute of Standards and

Technology (NIST) [1989~]

Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)

U.S. Nuclear Regulatory Commission (NRC)

Department of Interior, Bureau of Reclamation (BUREC)

Department of Housing and Urban Development (HUD)

Department of Transportation, State of California (CALTRANS)

International Development Cooperation Agency, Agency for International Development (AID)

Federal Emergency Management Agency (FEMA)

Development of State, Office of Foreign Buildings (OFB)

Veterans Administration (DV) [~1990]

Department of Veterans Affairs (DVA) [1990~]

Department of Agriculture, Forest Service (FS)

Department of Navy, Naval Facilities Engineering Command (NAVFAC)

Department of Navy, Naval Civil Engineering Laboratory (NCEL)

Department of Transportation, Federal Highway Administration (FHWA)

National Science Foundation (NSF)

Department of Interior, U.S. Geological Survey (USGS)

Department of Army, Corps of Engineers (CORPS)

Department of Army, Waterways Experiment Station (WES)

#### Japan side;

National Research Center for Disaster Prevention, Science and

Technology Agency (NRCDP) [ ~ 1990 ]

National Research Institute for Earth Science and Disaster Prevention,

Science and Technology Agency (NIED) [ 1991 ~ ]

Port and Harbour Research Institute, Ministry of Transport (PHRI)

Meteorological Research Institute, Japan Meteorological Agency (MRI)

Geographical Survey Institute, Ministry of Construction (GSI)

Public Works Research Institute, Ministry of Construction (PWRI)

Building Research Institute, Ministry of Construction (BRI)

#### 2) TASK COMMITTEE

a) Paper Number	
Paper Number	Workshop Number
C0001 - C0012	C1
C0013 - C0030	C2
C0031 - C0051	C3
C0052 - C0079	C4
C0080 - C0098	C5
D0001 - D0017	D1
D0018 - D0035	D2
D0036 - D0045	D3
E0001 - E0015	E1
F0001 - F0017	F2
F0018 - F0039	F3
H0001 - H0008	H1
H0009 - H0014	H2
H0015 - H0033	H3
I0001 - I0024	<b>I2</b>
J0001 - J0039	J1
J0040 - J0060	J2
J0061 - J0087	J3
J0088 - J0118	J4
J0119 - J0141	J5
J0142 - J0181	<u>J6</u>
J0182 - J0213	J7
J0214 - J0232	JR1

#### b) Workshop Number

T/C A	No. 1	Date Aug. '87	Location Menlo Park	Remarks
В	1	Mar. '84	Tsukuba	
C	1 2 3 4 5	May '80 May '81 May '82 May '87 May '90	Los Angels Tsukuba San Francisco Tsukuba Gaithersburg	Cooperated with T/C "D"
D	1 2 3	May '83 Jul. '84 May '85	Tsukuba Barkeley Tokyo	
E	1	May '91	Tsukuba	
F	1 2 3	May '84 Dec. '84 May '89	McLean Tsukuba Tsukuba	
Н	1 2 3	Aug. '85 May '88 Jan. '91	San Francisco Jackson Hole Tsukuba	
I	1 2	May '83 Nov. '90	Tsukuba Honolulu	
J	1 2 3 4 5 6 7	Feb. '84 Aug. '85 May '87 May '88 May '89 May '90 May '91	Tsukuba San Francisco Tsukuba San Diego Tsukuba Lake Tahoe Tsukuba	
JR	1	Dec. '90	Tsukuba	Workshop on Seismic Retrofit of Bridge

#### c) Affiliation

The affiliation of the first author is presented.

#### 2.3 ORDERING INFORMATION

Persons interested in ordering copies of the Panel's annual Proceedings, Wind and Seismic Effects, and the Workshop's Proceedings should contact with the Secretary-General, UJNR Panel, although not all papers listed are available.

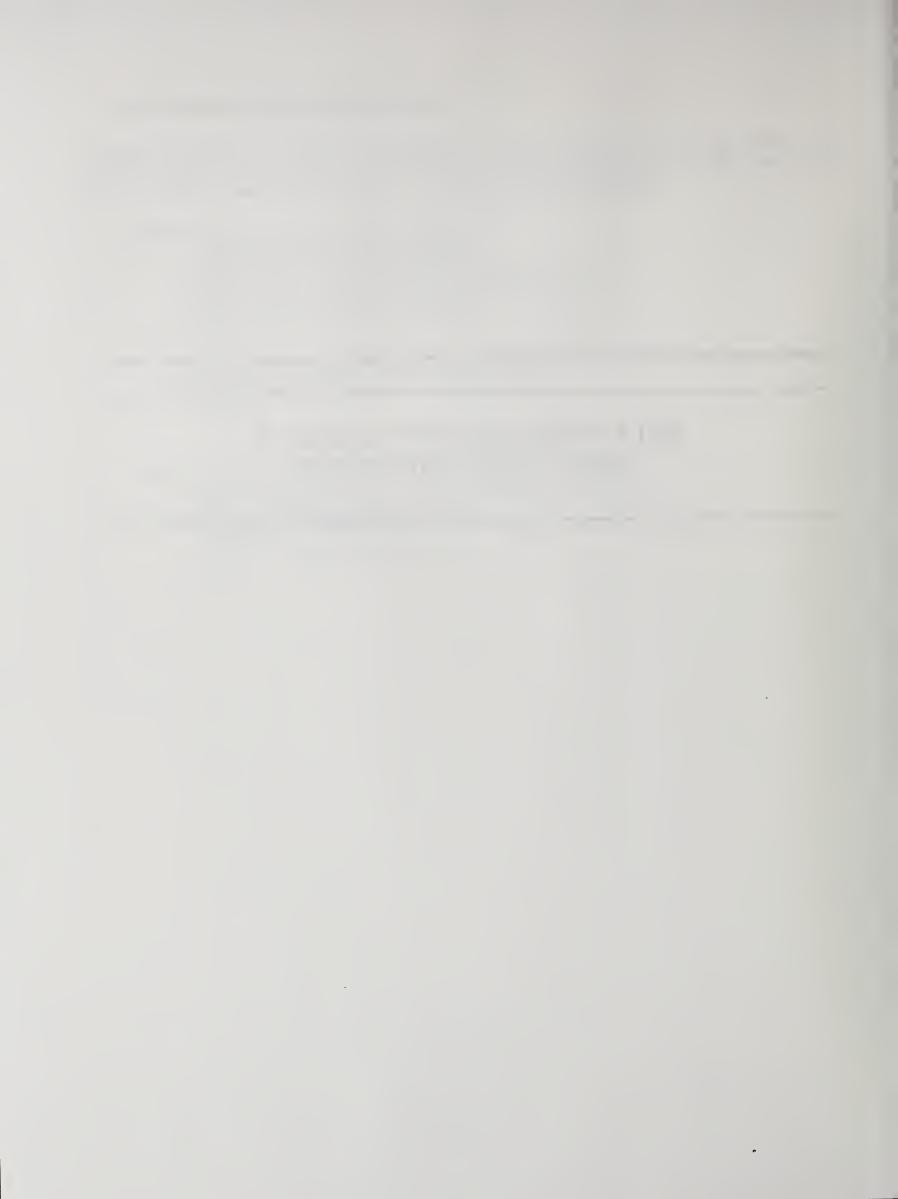
Secretary-General, U.S. side UJNR Panel:

Cooperative Research Programs
Building and Fire Research Laboratory
National Institute of Standards and Technology
Gaithersburg, Maryland, 20899
U.S.A.

National Technical Information Service Springfield, VA 22161. U.S.A.

Secretary-General, Japan side UJNR Panel:
Planning and Research Administration Department
Public Works Research Institute
Ministry of Construction
1, Asahi, Tsukuba, Ibaraki, 305
Japan

# PUBLISHED REPORTS INDEX of JOINT PANEL MEETINGS



#### 3. PUBLISHED REPORTS INDEX of JOINT PANEL

0001, 1, A

Wind Measurement for Structural Design H.C.S. Thom: Environmental Science Services Administration

0002, 1, B

Comments on Earthquake Records and

William K. Cloud: Coast and Geodetic Survey, HUD

0003, 1, A,B

The Relation between Codes and Standards Criteria for Wind and Seismic Considerations and the Design and Construction of Federal Buildings in the United States George B. Begg: General Service Administration

0004, 1, C

The March 1964 Tsunami - Its Effects on Ports and Harbors Charles E. Lee: CORPS

0005, 1, B

Earth Structures and Foundations Subject to Seismic Loading H.J. Gibbs: BUREC

0006, 1, A,B

Current States of Design of Bridges in the United States for Resistance to Wind Effects and Seismic Forces Charles F. Scheffey: FHWA

0007, 1, B

The Problem of Ground Amplification and Ground Failure in Earthquake-Resistant

William B. Joyner: USGS

0008, 1, A

Windstorm Insurance in the United States Thomas R. Callaway: HUD

0009, 1, B

Program for Insurance against Earthquake

John T. Dressel: Coast and Geodetic Survey, HUD

0010, 1, A

Surveys on Damage to Structures Caused by Strong Winds

Warren A. Shaw: NCEL

0011, 1, A

Present Circumstances of Strong Wind Observation in Japan Jiro Kawase: MRI

0012, 1, B

Present Status of the Observation of Strong-Motion Earthquakes in Japan

Toshiji Ariga: NRCDP

0013, 1, A,B

Requirements for Structural Design of Buildings against Wind and Seismic Effects Yorihiko Ohsaki: BRI

0014, 1, B

Current Procedure for Earthquake Resistant Design of Harbour Structures in Japan Satoshi Hayashi: PHRI

0015, 1, B

Earth Structures Masami Fukuoka: PWRI

0016, 1, A,B

Specifications for Wind and Earthquake Resistant Design of Highway Bridges in Japan Yasuo Tada: PWRI

0017, 1, B

Seismicity of Japan Shun-ichiro Omote: BRI

0018, 1, A

A Review on the Problems in Wind-Resistant Design of Structures Tadayoshi Ohkubo: PWRI

0019, 2, A

A Survey Paper on the Wind Loading of Structures Richard D. Marshall: NBS

H.C.S. Thom: Environmental Science Services Administration

0020, 2, A

Present Status of Strong Wind Characteristics Studies (in Japanese) Seiji Soma, Tatsumi Kitaoka: MRI

0021, 2, A Vertical Attack Angles of Natural Wind (in Japanese)

Tadayoshi Ohkubo, Nobuyuki Narita: PWRI

0022, 2, A

Estimation of Expected Maximum Wind Velocity (in Japanese) Tatsumi Kitaoka: MRI

0023, 2, B

Report on Seismic Damage and Strong Motion Results Santa Rosa, California, Earthquakes of October 1, 1969 William K. Cloud, Leonard M. Murphy: Coast and

Geodetic Survey, HUD

0024, 2, B

Report on the Port and Harbour Damage Caused by the Tokachi-oki Earthquake of 1968 (in Japanese) Satoshi Hayashi: PHRI

0025, 2, B

Specific Recent Strong Motion Records in Japan (in Japanese)
Shun-ichiro Omote, Yorihiko Ohsaki, Makoto Watabe, Yoji Murata: BRI

0026, 2, B

Survey on the Disaster due to the Tokachi-Oki Earthquake, 1968

- Roads, Rivers and Highways Bridge - Masami Fukuoka, Eiichi Kuribayashi : PWRI

0027, 2, A

Experiments on Full Scale Suspension Bridges
Charles F. Scheffey: FHWA

0028, 2, B

Revise of Seismic Design Specifications for Highway Bridges (in Japanese) Yasuo Tada: PWRI

0029, 2, B

Bureau of Reclamation Development Work in Earthquake Engineering Design Jack W. Hilf: BUREC

0030, 2, B

Damage to Structures by the Tokachi-Oki Earthquake, 1968 and Influences on Structural Design of Buildings Yorihiko Ohsaki, Toneo Endo: BRI

0031, 2, B

"On the Present Situation of Practical Planning and Zoning to Prevent the Earthquake Disaster" in Japan Yorihiko Ohsaki, Makoto Watabe: BRI

0032, 2, Z

Port and Harbor Research by the Corps of Engineers

Charles E. Lee: CORPS

0033, 2, B

Problems of the Seismic Design Standards for Port and Harbour Structures in Japan (in Japanese)

Satoshi Hayashi: PHRI

0034, 2, B

Foundations Investigations for Seismic Effects

H.J. Gibbs: BUREC

0035, 2, B

Seismic Design of Earth Structures and Foundations (in Japanese)
Masami Fukuoka: PWRI

0036, 2, A

Study on the Disasters Caused by Typhoons in Japan (in Japanese)
Minoru Okuda, Tatsumi Kitaoka: MRI

0037, 3, B

MSK Intensity Scale as Compared with JMA Intensity Scale
Takuzo Hirono, Kaoru Sato: MRI

0038, 3, B

The Influence of Geology on Earthquake Ground Motion-Preliminary Results from a Downhole Seismometer Array on the San Francisco Bay Shore

William B. Joyner, Richard E. Warrick: National Center for Earthquake Research, USGS

0039, 3, B

On Structural Inelastic Response and Human Response as Related to the Maximum Acceleration of the Earthquakes Yorihiko Ohsaki, Makoto Watabe: BRI Kenkichi Sawada: NRCDP

0040, 3, B

Average Response Spectra for Various Subsoil Conditions Satoshi Hayashi, Hajime Tsuchida, Eiichi Kurata: PHRI

0041, 3, B

Vertical Ground Acceleration during
Earthquake
(A Preliminary Progress Report)
William K. Cloud, Virgilio Perez: Seismological Field
Survey, National Ocean Survey

0042, 3, B

Vibrational Characteristics of a Huge Foundation Structure

Eiichi Kuribayashi, Toshio Iwasaki, Yutaka Iida: PWRI

0043, 3, B

The Impact of the San Fernando Earthquake on Veterans Administration Facilities and Design Procedures

James Lefter: Civil Engineering Service, DV

0044, 3, B

Estimation of Liquefaction Potential of Sandy Soils

Hajime Tsuchida, Satoshi Hayashi: PHR1

0045, 3, C

Prediction of Long Term Tsunami Inundation at Crescent City, California, U.S.A.
Norman L. Arno, Orville T. Magoon: CORPS

0046, 3, B

Earth Structures under Seismic Condition Mineo Nagamori, Kazuya Yamamura, Yasushi Sasaki: PWRI

0047, 3, B

Summary of Criteria Currently Used in the United States and Japan for Investigation of Foundations for Earthquakes

H.J. Gibbs: Engineering and Research Center, BUREC

0048, 3, A

Regional Characteristics of High Winds for Structural Design

Tatsumi Kitaoka: MRI

0049, 3, A

Interpolation of Design Wind Speeds for Japan

H.C.S. Thom: Environmental Data Service, NOAA

0050, 3, A

Full-Scale Studies of Wind Effects on Buildings in Japan

Masanori Izumi, Mitsuo Nakahara: BRI

0051, 3, B

The San Fernando, California Earthquake of February 9, 1971

H.S. Lew, R.D. Dikkers, Edgar V. Leyendecker, Edward O. Pfrang, Samuel Kramer: NBS

0052, 3, A

Wind Induced Oscillation of Bridge Members Tadayoshi Ohkubo, Nobuyuki Narita: PWRI

0053, 3, A

Results of Wind Tunnel Model Tests and Field Observations of Wind Effects on the Onomichi Bridge

Tadayoshi Ohkubo, Yoshiyuki Enami: PWRI

0054, 3, A,B

Status Report on Research on Seismic and Wind Protection of Bridges

Charles F. Scheffey: FHWA

0055, 3, B

Lateral Load Tests on Multi-Storied Full-Size Building of Reinforced Concrete Wall Construction for Earthquake Resistant Design Yasunori Koizumi, Masaya Hirosawa, Shin Okamoto,

Toneo Endo: BRI

0056, 3, B

Seismic Performance Criteria for Operation Breakthrough Housing Systems

William J. Werner: HUD

0057, 3, A,B

An Outlook of Recent Studies in Japan on Countermeasures against Earthquake and Storm

(Mainly, Studies done in Government Organs) Toshiji Ariga, Kenkichi Sawada: NRCDP

0058, 3, A,B

Current Research in Wind and Seismic Effects Carried on Through NSF

Michael P. Gaus, Charles A. Babendreier, George K. Lea: NSF

0059, 4, A

Recent Studies on "Tatsumaki" (Spout) in Japan

Ichiro Imai, Seiji Soma: MRI

0060, 4, A

Adjustment of Design Wind Speed for Local Conditions

H.C.S. Thom: Environmental Data Service, NOAA

0061, 4, A

On the Revised Wind Resistant Design Criteria for the Proposed Honshu-Shikoku Bridges

Tadayoshi Ohkubo, Nobuyuki Narita: PWRI

0062, 4, A

Inphase Characteristics of Winds to 150 meters

John W. Kaufman, Kelly Hill: Aero-Astrodynamics Laboratory, Marshall Space Flight Center

0063, 4, A

Status Report on an Instrumentation System to Monitor and Record Wind Velocities, Directions, and Structural Responses at Suspension Bridge Sites

John J. Tomko, Richard H. Gade, Charles F. Scheffey: FHWA

0064, 4, A

A Resume of the Aerodynamic Investigations for the Kanmon Bridge

Tadayoshi Ohkubo, Nobuyuki Narita, Yoshiyuki Enami : PWRI

0065, 4, B

Some Problems in Estimating the Recurrence of Damaging Earthquakes

J.C. Stepp: Environmental Research Laboratories, NOAA

0066, 4, B

Characteristics of Strong Motion Accelerograms and of Damages due to Local Earthquakes

Makoto Watabe, Yutaka Matsushima, Yoshikazu Kitagawa: BRI

0067, 4, B

Inelastic Response of Steel Pile Structure and its Seismic Stability

Satoshi Hayashi, Hajime Tsuchida, Takamasa Inatomi: PHRI

0068, 4, B

Veterans Administration Earthquake Engineering Program

James Lefter: Civil Engineering Service, DV

0069, 4, B

Earthquake Resistability of Submerged Tunnels

Shiro Ibukiyama, Eiichi Kuribayashi, Toshio Iwasaki: PWRI

0070, 4, B

Performance of Building Structures during the 1971 San Fernando Earthquake

H.S. Lew: Institute for Applied Technology, NBS

0071, 4, B

Response Analyses of the Ground and Buildings due to Earthquakes (Summary) Masanori Izumi, Yoshikazu Kitagawa: BRI

0072, 4, B

Earthquake Response of Highway Bridges and its Standardization (Summary)

Eiichi Kuribayashi, Toshio Iwasaki, Yutaka Iida: PWRI

0073, 4, B

General Aspect on Repair Works of Buildings Damaged by Tokachi-oki Earthquake 1968 Yasunori Koizumi, Masaya Hirosawa, Tetsuro Goto: BRI 0074, 4, A,B

Present State of Research Activity in Japan regarding Structures against Wind and Earthquake

Kenkichi Sawada: NRCDP

0075, 4, B

Preparation of Seismic Micro Zoning of Chimbote Area, Peru Yasunori Koizumi: BRI

0076, 4, B

Geologic Control of Destruction during the Peru Earthquake of May 31, 1970 George E. Ericksen, George Plafker: USGS

0077, 4, A

Wind Damage due to Typhoon "Yoling" (1970) in Greater Manira Area Tadayoshi Ohkubo: PWRI

0078, 5, A

Properties of High Winds Caused by the Topography and Buildings Ichiro Imai, Seiji Soma: MRI

0079, 5, A

The Statistical Property of Wind Speed Fluctuations in a Storm Ichiro Imai, Shigeru Nemoto: MRI

0080, 5, A

An Investigation of the Aerodynamic Behavior of the Sitka Harbor Cable-Stayed Bridge Richard H. Gade: FHWA

0081, 5, A

A Cable-Stayed Bridge and its Aerodynamic Design

Tadayoshi Ohkubo, Nobuyuki Narita, Koichi Yokoyama : PWRI

0082, 5, B

A Preliminary Strategy for Zoning the San Francisco Bay Region on the Basis of Relative Ground Motion Predictions Roger D. Borcherdt: National Center for Earthquake Research, USGS

0083, 5, B

A Resume of Seismicity and Tectonics in the Andean Region

George E. Ericksen: USGS

0084, 5, B

Seismic Risk Estimation in the United States S.T. Algermissen, D.M. Perkins: Seismological Research Group, NOAA

0085, 5, B

The Research Project on the Automatic Analysis of the Seismic Observation by the Japan Meteorological Agency Akira Suwa, Masaji Ichikawa: MRI

0086, 5, B

Characteristics of Base Rock Motions
Calculated from Strong Motion Accelerograms
Satoshi Hayashi, Hajime Tsuchida, Tatsuo Uwabe:
PHRI

0087, 5, B

On the Characteristics of the Strong Earthquake Motions Observed in Japan Makoto Watabe, Yoshikazu Kitagawa: BRI

0088, 5, B

The Cerl Biaxial Shock Test Machine John J. Healy:

0089, 5, B

Earthquake Engineering Design of Earth Fills Kazuya Yamamura: PWRI

0090, 5, B

Wood Structure Performance in an Earthquake in Anchorage, Alaska March 27, 1964
L.O. Anderson, J.A. Liska: Forest Products Laboratory, Department of Agriculture

0091, 5, B

Estimation of a Seismicity of Port Structures Satoshi Hayashi, Hajime Tsuchida, Setsuo Noda: PHRI

0092, 5, B

Dynamic Behavior of Concrete Dams Keith O. O'Donnell: CORPS

0093, 5, B

Vibration Characteristics of the North Fork

Jimmy P. Balsara: WES

0094, 5, B

Ductility Testing of Portal Frames in a Concrete Modular Highrise Building System William J. Werner: HUD

0095, 5, B

Judgement Standard for Earthquake Properties of Existing Reinforced Concrete Buildings Kiyoshi Nakano, Masaya Hirosawa: BRI

0096, 5, B

Earthquake Resistant Criteria for Underground Structures

Eiichi Kuribayashi : PWRI Toshio Iwasaki : BRI 0097, 5, A,B

Present State of Research Activity in Japan regarding Structures against Wind and Earthquake

Seiichi Inaba: NRCDP

0098, 5, B

Research Project on New Criteria for Earthquake Resistant Design for over-all Structures

Mitsuru Nagao: PWRI

0099, 5, B

On the Trainings in the International Institute of Seismology and Earthquake Engineering, TOKYO

Tetsuo Santo: BRI

0100, 5, B

Preliminary Survey on Seismology and Earthquake Engineering in the Union of Burma

Eiichi Kuribayashi: PWRI

0101, 5, B

Determination of Earthquake Hazards in Densely Populated Areas and Preventive Measures to be Considered in Urban Planning Naokazu Koiwai, Katsumi Miyawaki: Yokohama City

0102, 5, B

Building Performance in the 1972 MANAGUA Earthquake

Richard N. Wright, Samuel Kramer: Institute for Applied Technology, NBS

0103, 5, B

Preliminary Report on Damage of MANAGUA Earthquake December 23, 1972

Tadayoshi Ohkubo : PWRI Seiichi Inaba : NRCDP Shin Okamoto : BRI

0104, 6, A

On the Gust Response of Long-Span Suspension Bridges (Progressive Report) Nobuyuki Narita, Koichi Yokoyama: PWRI

0105, 6, A

Extreme Winds in Hurricanes and Possibility of Modifying them

R. Cecil Gentry: Environmental Research Laboratories, NOAA

0106, 6, A

Extreme Winds in the United States

Arnold R. Hull, Patrick E. Hughes: Environmental Data

Service, NOAA

0107, 6, A

Wind Tunnel Experiments for Studying a Local Wind

Ken Suda, Seiji Soma, Kiyohide Takeuchi: MRI

0108, 6, A

A Study of Wind Pressures on a Single-Family Dwelling in Model and Full Scale Richard D. Marshall: Center for Building Technology, NBS

0109, 6, B

Nonlinear Calculations of Ground Response in Earthquakes

William B. Joyner, Albert T.F. Chen, Patrick C. Doherty: USGS

0110, 6, B

Observation and Analysis of Ground Response in Earthquakes

Satoshi Hayashi, Hajime Tsuchida: PHRI

0111, 6, B

Research Study on Liquefaction

William F. Marcuson III: WES

0112, 6, B

Estimation of Liquefaction Potential by Means of Explosion Test

Kazuya Yamamura, Yasuyuki Koga: PWRI

0113, 6, B

Landslide Incidence and Mechanisms during Earthquakes

George E. Ericksen: USGS

0114, 6, B

Dynamics of Soil Structures and Ground Response in Earthquake Stress Condition Effects on Dynamic Properties of Soils

Eiichi Kuribayashi : PWRI Toshio Iwasaki : BRI

0115, 6, B

Prediction of Maximum Earthquake Intensities for the San Francisco Bay Region

Roger D. Borcherdt, James F. Gibbs: USGS

0116, 6, Z

A Statistical Approach to Loading and Failure of Structures

Ronald G. Merritt: U.S. Army Construction Engineering Research Laboratory

0117, 6, B

Synthetic Experimental Research on Ductilities of Reinforced Concrete Short Columns under Large Deflection Kiyoshi Nakano, Masaya Hirosawa: BRI 0118, 6, A

Nonlinear Analysis of Guyed Tower Stanley K. Takahashi, Warren A. Shaw: NCEL

0119, 6, B

The Regulation for Structural Properties of Prefabricated Dwellings

Kiyoshi Nakano, Masaya Hirosawa, Tatsuo Murota: BRI

0120, 6, B

An Analytical Model for Determining Energy Dissipation in Dynamically Loaded System John F. McNamara, S.K. Sharma: University of Illinois

0121, 6, B

Design of Pile Foundation Subjected to Lateral Load

Tadayoshi Ohkubo, Keiichi Komada, Asao Yamakawa: PWRI

0122, 6, B

Comprehensive Seismic Design Provisions for Buildings

Charles G. Culver: Center for Building Technology, NBS

0123, 6, A

Wind Loading and Modern Building Codes Emil Simiu, Richard D. Marshall: Center for Building Technology, NBS

0124, 6, B

Seismic Retrofitting of Existing Highway Bridges

James D. Cooper, R. Richard Robinson: FHWA Anatole Longinow: IIT Research Institute

0125, 6, B

Dynamic Tests of Structures by Use of Large Scale Shaking Table Seiichi Inaba: NRCDP

0126, 6, A,B

A Methodology for Evaluation of Existing Building against Earthquake, Hurricane and Tornado

H.S. Lew, Charles G. Culver: Center for Building Technology, NBS

0127, 6, B

Experimental Research on the Aseismic Characteristic of Spherical Steel Tank for Liquid Petroleum Gas

Kiyoshi Nakano, Makoto Watabe: BRI

0128, 6, B

Research on Minimizing Earthquake Structural Damage to Single Family Dwellings

William J. Werner: HUD

0129, 6, B

Earthquake Engineering Research Supported by the National Science Foundation Charles C. Thiel: Earthquake Engineering Research Applications Directorate (RANN), NSF

0130, 6, Z

Preliminary Report on Present Status and Development Project of Volcanological Observation and Research in Indonesia Akira Suwa: MRI

0131, 6, Z

Use of Stabilized Adobe Block and Cane in Construction of Low-Cost Housing in Peru S.G. Fattal: Center for Building Technology, NBS

0132, 6, Z

A Comment on the Technological Aid to Developing Countries
Tadayoshi Ohkubo: PWRI

0133, 7, A

Present Status of the Study of the Structure of Wind in Japan Kiyohide Takeuchi: MRI

0134, 7, A

A Reexamination of Hurricane Camille Arnold R. Hull: Environmental Data Service, NOAA

0135, 7, A

Fire Tornado and its Maximum Wind-Speed Seiji Soma, Ken Suda: MRI

0136, 7, A

A Research Project on the Wind Flow around Tall Buildings

Tatsuo Murota, Kiyoshi Nakano: BRI

0137, 7, A

Wind Engineering Research Program
Supported by the National Science Foundation
Michael P. Gaus: NSF

0138, 7, A

Study on the Wind Pressure and the Response of Roof Corners

Tatsuo Murota, Mitsuo Nakahara: BRI

0139, 7, B

Highway Bridge Seismic Research
James D. Cooper: FHWA

0140, 7, A

On the Wind Response of the Kanmon Bridge Tadayoshi Ohkubo, Nobuyuki Narita, Koichi Yokoyama : PWR1 0141, 7, A

Luling, Louisiana Cable-Stayed Bridge Wind Tunnel Section Model Tests Richard H. Gade, Walter Podolny, Jr., Harold R. Bosch: FHWA

0142, 7, B

On the Regional Distribution of the Earthquake Danger in Japan Sadaiku Hattori, Yoshikazu Kitagawa, Tetsuo Santo:

0143, 7, B

Quantification of Seismicity
Tsutomu Terashima, Tetsuo Santo: BRI

0144, 7, B

On the Maintenance of the Strong-Motion Accelerograph and the Data Processing of the Records

Eiichi Kuribayashi : PWRI Hajime Tsuchida : PHRI Makoto Watabe : BRI

0145, 7, B

The United States Strong-Motion Network: Field Operations
Richard P. Maley: USGS

0146, 7, B

Strong-Motion Data Management Christopher Rojahn: USGS

0147 7, B

Brief Review on Liquefaction during Earthquakes in Japan Eiichi Kuribayashi, Fumio Tatsuoka: PWRI

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0148, 7, B Vibration Test on Settlement of Submerged Sand Layer Kenkichi Sawada, Yasuyuki Koga: PWRI

0149, 7, B

Study on Earthquake Response of Structures by Considering Non-Deterministic Variables Yutaka Yamazaki, Yasunori Koizumi: BRI

0150, 7, B Least Weight Structures for Threshold Frequencies

Richard D. McConnell:

0151, 7, B

Ductile Shear Walls in Earthquake-Resistant Multistory Buildings

Mark Fintel: Portland Cement Association

0152, 7, B

Surveillance of Corps of Engineers Structures in Earthquake-Prone Areas Keith O. O'Donnell: CORPS

0153, 7, B

School and Hospital Construction in California

John F. Meehan: Office of Architecture and Construction, Department of General Services, State of

0154, 7, B

California

Improved Earthquake Resistive Design and Construction of Single-Family Residential Dwellings

G. Robert Fuller: HUD

0155, 7, B

Dynamic Tests of Structures for Oil Tanks and Nuclear Power Plant

Seiichi Inaba: NRCDP

0156, 7, B

Sheet Pile Foundation and its Structural Characteristics against Horizontal Loads Kenji Kawakami, Tadayoshi Ohkubo, Keiichi Komada, Michio Okahara: PWRI

0157, 7, B

On Specifications for Earthquake-Resistant Design of Highway Bridges (January 1971) Kenji Kawakami, Eiichi Kuribayashi, Yutaka Iida: **PWRI** 

Toshio Iwasaki: BRI

0158, 7, B

On Specifications for Earthquake-Resistant Design of the Honshu-Shikoku Bridges (JSCE 1974)

Ishio Kawasaki: Honshu-Shikoku Bridge Authority Eiichi Kuribayashi : PWRI

0159, 7, B

Recent Revision of Design Standards on Seismic Effects for Port and Harbour Structures

Satoshi Hayashi, Hajime Tsuchida, Setsuo Noda: PHRI

JSCE Specifications for Earthquake Resistant Design of Submerged Tunnels (1975)

Eiichi Kuribayashi: PWRI Hajime Tsuchida: PHRI

A Proposal to the Joint Research Program on the Aseismic Properties of R.C. Structure by the Full Size Specimens

Makoto Watabe, Masaya Hirosawa, Shinsuke Nakata:

0162, 7, D

Earthquake Disaster Mitigation: A Joint Research Approach

Charles C. Thiel, John B. Scalzi: Earthquake Engineering Research Applications Directorate (RANN), **NSF** 

0163, 7, A

High Wind Study in the Philippines Noel J. Raufaste, Jr., Richard D. Marshall: Center for Building Technology, NBS

0164, 7, B

Survey on Seismology and Earthquake Engineering in India, Iran and Turkey Makoto Watabe, Hideo Tokuhiro, Masakazu Shinozuka: BRI

0165, 8, A

Aspects of Hurricane Winds as Recorded at an Instrumented Suspension Bridge

Richard H. Gade: FHWA

Robert H. Scanlan: Princeton University

0166, 8, A

Study on the Wind Effect on Eaves Tatsuo Murota: BRI

0167, 8, A

Measurements of Wind Loads and Tie-Down Forces on Mobile Homes Richard D. Marshall, Robert A. Crist: NBS

0168, 8, A

On the Wind Resistant Design Specifications for the Proposed Honshu-Shikoku Bridges

Tadayoshi Ohkubo, Nobuyuki Narita: PWRI

0169, 8, A

Equivalent Static Wind Loads for Tall Building Design

Emil Simiu: Center for Building Technology, NBS

0170, 8, A

A Wood House Will Resist Wind Forces Billy Bohannan: Forest Products Laboratory

0171, 8, A

Wind Loads on Low-Rise Buildings Noel J. Raufaste, Jr.: NBS

0172, 8, A

Characteristics of the High Wind at Hachijojima Island on the Occasion of Typhoon No. 7513 Seiji Soma: MRI

0173, 8, A

High Winds in the United States, 1975 Arnold R. Hull, Thomas D. Potter, Nathaniel B. Guttman: Environmental Data Service, NOAA

0174, 8, A

Mean Speed Profiles of Hurricane Vinds Emil Simiu: Center for Building Technology, NBS Virendra C. Patel: University of Iowa

John F. Nash: Sybucon, Inc.

0175, 8, B

Planning and Design of Strong-Motion Instrument Networks R.B. Matthiesen: USGS

0176, 8, B

Observation of Earthquake Response of Ground with Horizontal and Vertical Seismometer Arrays

Satoshi Hayashi, Hajime Tsuchida, Eiichi Kurata: PHRI

0177, 8, B

**Building Strong-Motion Earthquake** Instrumentation

Christopher Rojahn: USGS

0178, 8, B

Characteristics of Underground Seismic Motions at Four Sites around Tokyo Bay Toshio Iwasaki, Susumu Wakabayashi, Fumio Tatsuoka : PWRI

0179, 8, B

Relationship between Earthquake Damage of Existing Wooden Houses and Seismic

Eiichi Kuribayashi, Tadayuki Tazaki, Takayuki Hadate: **PWRI** 

0180, 8, B

A Method for Calculating Nonlinear Seismic Response in Two Dimensions

William B. Joyner: USGS

0181, 8, B

A New Scale Representing the "Quake-Sensitivity" at a Certain Region Tsutomu Terashima, Tetsuo Santo: BRI

0182, 8, A

Damage to the Civil Engineering Structures in Hachijojima Island by Typhoon 7513 Tadayoshi Ohkubo, Nobuyuki Narita, Koichi Yokoyama : PWRI

0183, 8, A

Cyclone Tracy

Richard D. Marshall: Center for Building Technology, **NBS** 

0184, 8, A

On the Damage to Building in Hachijojima Caused by Typhoon No. 7513

Tatsuo Murota: BRI

0185, 8, B

Seismic Response of Reinforced Concrete Highway Bridges

J. Penzien, W.G. Godden, M.C. Chen, D. Williams, Kazuhiko Kawashima: University of California

0186, 8, B

An Evaluation Method for the Earthquake Resistant Capacity of Reinforced Concrete and Steel Reinforced Concrete Columns Masakazu Ozaki, Yuji Ishiyama: BRI

0187, 8, B

The Earthquake Engineering Program of the National Science Foundation

John B. Scalzi: NSF

0188, 8, A,B

Large-Scale Testing Programs Related to Wind and Seismic Effects Currently Underway in Japan

Seiichi Inaba: NRCDP

0189, 8, B

Earthquake Damages to Earth Structures Kenkichi Sawada: PWRI

0190, 8, B

Dynamic Test of a Circuit Breaker for Transformer Substation Seiichi Inaba, Shigeo Kinoshita: NRCDP

0191, 8, B

Comprehensive Seismic Design Provisions for Buildings A Status Report Charles G. Culver: NBS

0192, 8, B

Retrofitting of Vulnerability in Earthquake Disaster Mitigation Problems

Kaoru Ichihara, Eiichi Kuribayashi, Tadayuki Tazaki: **PWRI** 

0193, 8, B

Dynamic Response Characteristics of a Model Arch Dam

Charles D. Norman, Roger D. Crowson, Jimmy P. Balsara: Weapons Effects Laboratory, WES

0194, 8, B

The Measurement of the Dynamic k-Value in Site and its Application to Design Tetsuo Kunihiro, Kaname Yahagi, Michio Okahara: **PWRI** 

0195, 8, B

Laboratory Investigation of Undisturbed Sampling and Standard Penetration Tests on Fine Sands

William F. Marcuson III, S.S. Cooper, M.A. Bieganousky: WES

0196, 8, B

Dynamic Soil Properties with Emphasis on Comparison of Laboratory Tests and Field Measurements

Toshio Iwasaki, Fumio Tatsuoka: PWRI

0197, 8, B

Design Earthquakes

Ellis L. Krinitzsky, Frank K. Chang: WES

Relation between Seismic Coefficient and Ground Acceleration for Gravity Quaywall Satoshi Hayashi, Setsuo Noda, Tatsuo Uwabe: PHRI

0199, 8, B

Investigation of Earthquake Resistance of Structural (Shear) Wall Buildings Carried out at Portland Cement Association

Mark Fintel: Portland Cement Association

0200, 8, Z

A Philosophy for Structural Integrity of Large Panel Buildings

Mark Fintel, Donald M. Schultz: Portland Cement Association

0201, 8, A,B

Wind and Seismic Design of United States Nuclear Power Plants

Lawrence C. Shao, Richard J. Stuart, Charles H. Hofmayer: NRC

0202, 8, B

Outline of Basic Philosophy and Practices of Aseismatic Design for Nuclear Facilities in

Makoto Watabe, Yorihiko Ohsaki: BRI

0203, 8, A

Tornado-Borne Missiles

James F. Costello: NRC

0204, 8, B

Structural Damage to Bridges Resulting from the Guatemala Earthquake

James D. Cooper: FHWA

0205, 9, A

On Distribution Models of Pressure and Wind over Stationary Typhoon Fields Shigemi Fujiwara, Kiyoshi Kurashige: MRI

0206, 9, A

Extreme Winds in the United States Thomas D. Potter, Michael J. Changery: Environmental Data Service, NOAA

0207, 9, A

Aerodynamic Stability of a Long-Span Suspension Bridge at Construction Stage Tetsuo Kunihiro, Nobuyuki Narita, Koichi Yokoyama: **PWRI** 

0208, 9, B

Present Situation of Earthquake Prediction Research in Japan

Kazuo Hamada, Hiroshi Takahashi: NRCDP

Hiroshi Sato: GSI Akira Suwa: MRI

0209, 9, B

The Complementary Importance of Earthquake Prediction and Structural Response Estimation in Seismic Design and Planning Decisions

Robin K. McGuire: USGS

0210, 9, B

Research and Development of Permanent Ocean-Bottom Seismograph Observation System off the Pacific Coast of Central Honshu, Japan

Akira Suwa, Norio Yamakawa, Tatsuo Iinuma: MRI

0211, 9, B

Vertical Distribution of the Seismic S-Wave Velocities at the Site of the Iwatsuki Deep Borehole Observatory of Crustal Activities Fumio Yamamizu, Hiroshi Takahashi: NRCDP Yutaka Ohta, Noritoshi Goto, Keiji Shiono: Hokkaido University

0212, 9, B

Researches of Active Faults in the Metropolitan Area

Hiroshi Sato: GS1

Toshihiro Kakimi: Geological Survey of Japan, Ministry of International Trade and Industry

0213, 9, B

Characteristics of Vertical Components of Strong-Motion Accelerograms Tatsuo Uwabe, Setsuo Noda, Eiichi Kurata, Satoshi

0214, 9, B

Hayashi: PHRI

Developments in Strong-Motion Data Management

A. Gerald Brady: USGS

0215, 9, B

On a Method for Synthesizing the Artificial Earthquake Waves by Using the Prediction Error Filter

Keiichi Ohtani, Shigeo Kinoshita: NRCDP

0216, 9, B

Statistical Analysis of Strong-Motion Acceleration Records

Masamitsu Ohashi, Toshio Iwasaki, Susumu Wakabayashi, Ken-ichi Tokida: PWRI

0217, 9, B

Research on Design Earthquake

Makoto Watabe: BRI

0218, 9, B

Properties of Superficial Layer for Vibration

Yukitake Shioi : BRI Toshio Iwasaki : PWRI

0219, 9, B

Studies on Soil Liquefaction Relating to the Earthquake Resistant Design of Structures Masamitsu Ohashi, Toshio Iwasaki, Fumio Tatsuoka: PWRI

0220, 9, B

Earthquake Resistant Design Based on Ground Motions at Base-Rock

Eiichi Kuribayashi, Kazuhiko Kawashima: PWRI

0221, 9, B

Basic Earthquake for Dam Design

Jerry S. Dodd: BUREC

0222, 9, B

Study on Regional Distribution of Maximum Earthquake Motions in Japan

Masakazu Ozaki, Yoshikazu Kitagawa, Sadaiku Hattori: BRI

0223, 9, B

Treatments on Seismic Force in Designing Earth Structures

Kenkichi Sawada: PWRI

0224, 9, B

Studies on the Aseismic Properties of Underground Pipes

Keiichi Ohtani, Nobuyuki Ogawa, Chikahiro Minowa: NRCDP

0225, 9, B

Observation of Dynamic Behavior of Kinuura Submerged Tunnel during Earthquakes Shigeo Nakayama, Osamu Kiyomiya, Hajime Tsuchida: PHRI 0226, 9, B

A Proposal for Earthquake Resistant Design Methods

Kiyoshi Nakano: BRI Masamitsu Ohashi: PWRI

0227, 9, B

On the Object Postulate for Earthquake-Resistant Code

Kiyoshi Nakano, Yuji Ishiyama, Yoshitsugu Aoki: BRI

0228, 9, B

The Earthquake Response of Hysteretic Structures

W.D. Iwan, N.C. Gates: California Institute of Technology

0229, 9, B

Earthquake Resistant Design of High-Rise Buildings in Japan

Keiichi Ohtani: NRCDP

0230, 9, Z

Racking Strength of Wood-Frame Walls Roger L. Tuomi: Forest Products Laboratory

0231, 9, B

Examination for an Evaluation Method of Damage to Existing Wooden Houses Caused by Earthquakes

Kaoru Ichihara, Eiichi Kuribayashi, Tadayuki Tazaki, Takayuki Hadate: PWRI

0232, 9, B

Relationship between Modified Mercalli Intensity and Wood Frame Dwelling Earthquake Insurance

Karl V. Steinbrugge: Insurance Service Office S.T. Algermissen: USGS

0233, 9, B

Warrants for Retrofitting Highway Bridges Anatole Longinow, Ernest Bergmann: IIT Research Institute

James D. Cooper: FHWA

0234, 9, B

Criterion on the Evaluation of Seismic Safety of Existing Reinforced Concrete Buildings Kiyoshi Nakano, Masaya Hirosawa, Shin Okamoto: BRI

0235, 9, A

Transferring Wind Technology to Developing Countries

Noel J. Raufaste, Jr.: NBS

0236, 10, A

On the Distribution of Extreme Winds Expected in Japan

Tadayoshi Ohkubo, Nobuyuki Narita: PWRI

0237, 10, A

**Boundary Layer Winds** 

Duane A. Haugen: Wave Propagation Laboratory, NOAA

0238, 10, A

On the Damage to Buildings in Oki-Erabu Island Caused by Typhoon No.7709 of September 9, 1977 Tatsuo Murota, Yuji Ishiyama: BRI

Shigemi Fujiwara, Minoru Okuda, Kiyoshi Tsukada:

0239, 10, A

Recent Developments in Atmospheric Remote Sensing and their Implication for Wind Engineering

William H. Hooke: Wave Propagation Laboratory, NOAA

0240, 10, A

Extreme Wind Data Base Development at the National Climatic Center

Michael J. Changery: National Climatic Center, NOAA

0241, 10, B

Strong-Motion Record Information Retrieval System

A.M. Converse, R.B. Matthiesen: USGS

0242, 10, B

Integration of Strong-Motion Accelerograms Susumu Iai, Eiichi Kurata, Hajime Tsuchida, Satoshi Hayashi: PHRI

0243, 10, B

Some Recent Developments in National and International Seismic Data Exchange

James F. Lander: World Data Center A for Solid Earth Geophysics, NOAA

0244, 10, B

Report on the International Workshop on Strong-Motion Earthquake Instrument Arrays May 2-5, 1978, at Hawaii Tadayoshi Ohkubo: PWRI

Hajime Tsuchida: PHRI

0245, 10, B

Study on Expectancy of Maximum Earthquake Motions in Japan

Makoto Watabe, Yoshikazu Kitagawa: BRI

0246, 10, B

Determination of Design Earthquake for the Dynamic Analysis of the Fort Peck Dam William F. Marcuson III, Ellis L. Krinitzsky: Soils and Pavements Laboratory, WES

0247, 10, B

The Izu-Ohshima Kinkai Earthquake of January 14, 1978

Minoru Tajima, Hiroshi Sato: GSI

Michio Ohtsuka, Ken Sudo, Katsuhiko Ishibashi: BRI

0248, 10, B

Empirical and Analytical Methods of Estimating Soil Liquefaction Risk

Robin K. McGuire: USGS

Fumio Tatsuoka: University of Tokyo Toshio Iwasaki, Ken-ichi Tokida: PWRI

0249, 10, B

A Practical Procedure for Assessing Earthquake-Induced Liquefaction of Sandy Deposits

Masamitsu Ohashi, Toshio Iwasaki, Fumio Tatsuoka,

Ken-ichi Tokida: PWRI

0250, 10, A

Wind Resistant Design of Cable-Staved Bridges in Japan

Tadayoshi Ohkubo, Nobuyuki Narita, Masataka Katsuragi: PWRI

0251, 10, A

Aerodynamic Stability of Proposed Ohio River Cable-Stayed Bridge

Loyd R. Cayes: FHWA

0252, 10, A

Some Aerodynamic Considerations in the Design of the Ruck-A-Chucky Bridge Robert H. Scanlan: Princeton University

0253, 10, A

A Summary of Wind-Tunnel Test Results for the Luling, Louisiana, Cable-Stayed Bridge Harold R. Bosch: FHWA

0254, 10, A

A Technique for Measuring Fluctuating Wind. Loads on a Tall-Building Model Irrespective of Model Motion

Timothy A. Reinhold: NBS

0255, 10, A

A Study of Building Damage Caused by Wind James R. McDonald, Patrick A. Lea: Texas Tech University

0256, 10, B

Recent Earthquake Resistant Design Methods for Different Types of Foundations in Japan Yukitake Shioi, Toshio Furuya, Michio Okahara, Yasuo Mitsuie: PWRI

0257, 10, B

Recent Developments in Seismic Design

Roland L. Sharpe: Applied Technology Council

0258, 10, B

Logical Analysis of Seismic Design Provisions

James Robert Harris: NBS

0259, 10, B

Highlights of California School and Hospital Building Regulations

John F. Meehan: Office of the State Architect, State of California

0260, 10, B

Summary of Research Projects Carried out in the Large Size Structures Testing Laboratory during the Last Eleven Years: From 1967 to 1977

Masaya Hirosawa, Yuji Ishiyama, Tetsuro Goto: BRI

0261, 10, B

Dynamic Behaviors of Rectangular Water Tanks Assembled with Panels

Keiichi Ohtani, Chikahiro Minowa: NRCDP

0262, 10, B

Inelastic Behavior of Non-Bearing Wall in an 11-Storied Steel-Reinforced Concrete Frame and Aseismatic Safety of External Surface Finishes and Coatings

Makoto Watabe, Toshiyuki Kubota, Akio Baba, Toshibumi Fukuta, Hiroshi Ito: BRI

0263, 10, B

Seismic Evaluation of Existing Multistory Residential Buildings

G. Robert Fuller: HUD

0264, 10, B

Damage Features of Engineering Structures due to the Near Izu-Ohshima Earthquake of January 14, 1978

Kazuto Nakazawa, Toshio Iwasaki, Kazuhiko Kawashima : PWRI

Makoto Watabe, Hiroyuki Yamanouchi, Yutaka Yamazaki: BRI

0265, 10, B

Repair and Retrofit of Buildings

James K. Wight, Robert D. Hanson: University of Michigan

0266, 10, B

An Evaluation Study on the Distribution Characteristics of Property Losses Caused by Historical Earthquakes

Eiichi Kuribayashi, Tadayuki Tazaki: PWRI

0267, 10, B

Present Status and Problems on Countermeasures to Earthquake Disasters with Emphasis on Disaster-Resistivities of Cities

and their Lifelines

Kazuto Nakazawa, Eiichi Kuribayashi: PWRI

0268, 10, B

The Investigation on the Rescue and Rehabilitation of the Izu-Ohshima Kinkai Earthquake of 1978

Eiichi Kuribayashi, Tadayuki Tazaki, Takayuki Hadate: PWRI

0269, 10, B

National Science Foundation Activity in Earthquake Hazard Mitigation

Charles C. Thiel, William A. Anderson, Michael P. Gaus, William Hakala, Frederick Krimgold, Shih Chi Liu, John B. Scalzi: NSF

0270, 10, B

Rapid Seismic Analysis Procedures for Buildings

Tingley K. Lew, Stanley K. Takahashi, C.V. Chelapati: NCEL

0271, 10, Z

Report of the US-Southeast Asia Symposium on Engineering for Natural Hazards Protection A. H-S. Ang: University of Illinois at Urbana-Champaign

0272, 10, C

Storm Surge

Celso S. Barrientos: National Weather Service, NOAA

0273, 10, C

Operation of Tsunami Warning System in the Pacific

Mark G. Spaeth: National Weather Service, NOAA

0274, 11, B

New Initiatives in Earthquake Hazards Mitigation

Charles C. Thiel: Earthquake Hazards Reduction Coordination Group, Office of Science and Technology Policy, Executive Office of the President

0275, 11, B

Earthquake Hazard Reduction Research at the National Bureau of Standards

Edgar V. Leyendecker, James Robert Harris, Richard N. Wright, Edward O. Pfrang: Center for Building Technology, NBS

0276, 11, B

On the U.S. - Japan Cooperative Program on Large Scale Testing

Tadayoshi Ohkubo: PWRI

0277, 11, A

Modelling of 1978 Tokyo Tornado for Overturning of Tozai Subway Train

Eiji Uchida, Shigemi Fujiwara: MR1

Ryozo Tatehira: Japan Meteorological Agency Ichiro Tabe, Kazuyuki Ohtsuka: Teito Rapid Transit

Authority

0278, 11, A

Extreme Wind Speeds at 129 Stations in the Contiguous United States

Michael J. Changery: National Climatic Center, NOAA Emil Simiu, James J. Filliben: NBS

0279, 11, A

Some Analysis on Strong Winds Observed by Very Tall Towers

Keikichi Naito, Isao Tabata, Noboru Banno, Katsumi Takahashi: MRI

0280, 11, B

A Proposal of the New Parameter for Assessing Seismic Disaster Michio Ohtsuka: BR1

0281, 11, B

Simulation of Earthquake Ground Motion and its Application to Dynamic Response Analysis

Tetsuo Kubo, Makoto Watabe: BR1

0282, 11, B

Comparison of Vertical Components of Strong-Motion Accelerograms for Western United States and Japan Tatsuo Uwabe: PHR1

0283, 11, B

Earthquake Observation System in and around Structure in Japan

Kiyoshi Nakano, Yoshikazu Kitagawa: BRI

0284, 11, B

Single-Story Residential Masonry Construction in Uniform Building Code Seismic Zone 2 G. Robert Fuller: HUD

0285, 11, B

The Performance of Lapped Splices in Reinforced Concrete under High-Level Repeated Loading

Peter Gergely, Richard N. White: Cornell University Fernando Fagundo: University of Puerto Rico

0286, 11, B

Dynamic Behaviors of Reinforced Concrete Frame Structures

Keiichi Ohtani, Chikahiro Minowa: NRCDP

0287, 11, B

Seismic Response of Precast Concrete Walls James M. Becker, Carlos Llorente, Peter Mueller: Massachusetts Institute of Technology

0288, 11, B

Seismic Response Analysis of the Itajima Bridge with Use of Strong Motion Acceleration Records Masamitsu Ohashi, Toshio Iwasaki, Kazuhiko Kawashima: PWRI

0289, 11, B

Field and Laboratory Determination of Soil Moduli

William F. Marcuson III, Joseph R. Curro, Jr.: WES

0290, 11, B

An Experimental Study on Liquefaction of Sandy Soils on a Cohesive Soil Layer Tatsuo Asama, Yukitake Shioi: PWRI

0291, 11, B

Stress-Strain Behavior of Dry Sand and Normally Consolidated Clay by Inter-Laboratory Cooperative Cyclic Shear Tests Hiroshi Oh-oka, Kohjiro Ito, Yoshihiro Sugimura, Masaya Hirosawa : BRI

0292, 11, A

Wind and Structure Motion Study for Pasco-Kennewick Bridge

M.C.C. Bampton: Battelle Pacific Northwest Laboratories

Harold R. Bosch, David H. Cheng: FHWA

0293, 11, A

Calculation of the Gust Responses of Long-Span Bridges

Nobuyuki Narita, Hiroshi Sato: PWRI

0294, 11, B

Draft Seismic Design Guidelines for Highway.

James D. Cooper, Charles F. Scheffey: FHWA Roland L. Sharpe, Ronald L. Mayes: Applied **Technology Council** 

0295, 11, B

Analysis and Design of Cracked Reinforced Concrete Nuclear Containment Shells for Earthquakes

Peter Gergely, Richard N. White: Cornell University

0296, 11, B

Comparison of Measured and Computed Response of Yuda Dam during the July 6, 1976 and June 12, 1978 Earthquakes Ryuichi Iida, Norihisa Matsumoto, Satoru Kondo: **PWRI** 

0297, 11, B

Report on the 1978 Miyagi-Ken-Oki Earthquake

Makoto Watabe, Yutaka Matsushima, Yuji Ishiyama, Tetsuo Kubo, Yuji Ohashi: BRI

0298, 11, B

Disastrous Ground Failure in a Residential Area of Large-Scale Cut-and-Fill in the Sendai Region Caused by Earthquake of 1978 Hitoshi Haruyama, Motoo Kobayashi: GSI

0299, 11, B

Damage Features of Civil Engineering Structures due to the Miyagi-Ken-Oki Earthquake of 1978

Tadayoshi Ohkubo, Masamitsu Ohashi, Toshio Iwasaki, Kazuhiko Kawashima, Ken-ichi Tokida: PWRI

0300, 11, B

Damages to River Dykes Caused by the Miyagi-Ken-Oki Earthquake of June, 1978 Kazuya Yamamura, Yasushi Sasaki, Yasuyuki Koga, Eiichi Taniguchi: PWRI

0301, 11, B

Damage to Port Structures by the 1978 Miyagi-Ken-Oki Earthquake Hajime Tsuchida, Setsuo Noda: PHR1

0302, 11, B

Wood Diaphragms in Masonry Buildings Mihran S. Agbabian : Agbabian Associates

0303, 11, B

Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings Mihran S. Agbabian: Agbabian Associates

0304, 11, B

Development of a Universal Fastener for Wooden Building Roof Frames Tatsuo Murota, Yuji Ishiyama: BRI

0305, 11, B

The NASA/MSFC Experimental Facilities at Huntsville, Alabama

John B. Scalzi: NSF

George F. McDonough, Jr., Nicholas C. Costes: National Aeronautics and Space Administration

0306, 11, B

Earthquake Hazards Reduction Research Supported In 1978

Charles C. Thiel, William A. Anderson, Michael P. Gaus, William Hakala, Frederick Krimgold, Shih Chi Liu, John B. Scalzi: NSF

0307, 11, B

Functional Damage and Rehabilitation of Lifelines in the Miyagi-Ken-Oki Earthquake of 1978

Kazuto Nakazawa, Eiichi Kuribayashi, Tadayuki Tazaki, Takayuki Hadate, Ryoji Hagiwara: PWRI

0308, 11, B

Social Aspects of Earthquake Mitigation and Planning in the United States
William A. Anderson: NSF

0309, 11, C

Orientation of Tsunami's Researches in Japan Hiroshi Takahashi, Yukio Fujinawa: NRCDP

0310, 11, C

Wave Setup Caused by Typhoon 7010 Hiroshi Hashimoto, Takaaki Uda: PWRI

0311, 11, C

Specification and Prediction of Surface Wind Forcing for Ocean Current and Storm Surge Models

Celso S. Barrientos, Kurt W. Hess: Techniques Development Laboratory, Systems Development Office, National Weather Service, NOAA

0312, 11, C

A Dynamical Model to Predict Storm Surges and Overland Flooding in Bays and Estuaries Chester P. Jelesnianski, Celso S. Barrientos, Jye Chen: Techniques Development Laboratory, Systems Development Office, National Weather Service, NOAA

0313, 11, C

Topics on Tsunami Protection along the Port Areas in Japan Yoshimi Goda: PHRI

0314, 11, B

Seismic Risk Maps in the Southeast Asian Countries (Maximum Acceleration and Maximum Particle Velocity)
- Philippines, Indonesia and Indo-China

Sadaiku Hattori: BR1

0315, 11, B

California School and Hospital Ceilings
John F. Meehan: Office of the State Architect, State of
California

0316, 12, B

Dense Instrument Array Program of the Public Works Research Institute for Observing Strong Earthquake-Motion Yoshijiro Sakagami, Tadayoshi Ohkubo, Toshio Iwasaki, Kazuhiko Kawashima: PWRI 0317, 12, B

The Imperial Valley Earthquake, October 15, 1979. Digitization and Processing of Accelerograph Records

A. Gerald Brady, Virgilio Perez, P.N. Mork: NSF

0318, 12, B

Preliminary Summary of the U.S. Geological Survey Strong-Motion Records from the October 15, 1979 Imperial Valley Earthquake Ronald L. Porcella, R.B. Matthiesen: USGS

0319, 12, B

Three-Dimensional Synthetic Accelerograms for Design Earthquake Ground Makoto Watabe: BRI

0320, 12, B

Study on Dynamic Ground Characteristics in Sendai District

Makoto Watabe, Yoshikazu Kitagawa: BRI

0321, 12, A

Hurricane Wind Speeds in the United States Martin E. Batts, Emil Simiu: Center for Building Technology, NBS Larry R. Russell: Larry Rusell & Assoc., Inc.

0322, 12, A

A Statistical Result of Maximum Surface Winds Surrounding Typhoons

Shigemi Fujiwara: MRI

I. Subbaramayya: Andhra University, India

0323, 12, A

Surface Winds from Hurricane Frederic (September 12 and 13, 1979) an Engineering Viewpoint

Timothy A. Reinhold: NBS

0324, 12, A

Hurricanes David and Frederic 1979
Celso S. Barrientos: Techniques Development
Laboratory, Systems Development Office, National
Weather Service, NOAA

0325, 12, B

Seismic Response of Floating Offshore Structures

Hajime Tsuchida, Susumu Iai, Setsuo Noda: PHRI

0326, 12, B

Critical Excitations of Structures

R.F. Drenick, F. Novomestky: Polytechnic Institute of New York

G. Bagchi: NRC

0327, 12, B

Dynamic Testing of a Three-Story Reinforced Concrete Structure
Keiichi Ohtani: NRCDP

0328, 12, B

Buckling Analysis of Buried Pipelines under Seismic Loads

C.C. Chen, Teoman Ariman, L.H.N. Lee: University of Notre Dame

0329, 12, B

Shaking Table Tests of Earth Retaining Structures on Improved Ground Setsuo Noda, Sosuke Kitazawa, Hajime Tsuchida: PHRI

0330, 12, B

Full-Scale Experimental Study on Aseismic Property of Medium-Rise Reinforced Concrete Wall Structure

Masaya Hirosawa, Tetsuro Goto, Manabu Yoshimura, Hisahiro Hiraishi: BRI

0331, 12, B

Soil Dynamics - State of the Art - 1980 William F. Marcuson III, Arley Gus Franklin, P.F. Hadala: Geotechnical Laboratory, WES

0332, 12, B

Dynamic Analysis for Sheet Pile Foundation Tatsuo Asama, Yukitake Shioi, Michio Okahara, Yasuo Mitsuie: PWRI

0333, 12, B

Dynamic Behavior of Multi-Column Foundation with Inclined Piles during Earthquake

Tatsuo Asama, Yukitake Shioi, Yasuo Mitsuie: PWRI

0334, 12, B

Analysis of Liquefaction Potential of Sands on Level Ground during Earthquakes Using Cyclic Strain Controlled Tests Felix Y. Yokel, Riley M. Chung: NBS

Ricardo Dobry: Renssealaer Polytechnic Institute Richard S. Ladd: Woodward-Clyde Consultants

0335, 12, B

Participation Factor of Horizontal Force Applied to Pile Foundation

Yoshihiro Sugimura, Makoto Watabe: BRI

0336, 12, C

Operational Models for Forecasting Storm Surges in NOAA

Celso S. Barrientos: Techniques Development Laboratory, Systems Development Office, National Weather Service, NOAA

0337, 12, C

Storm Surge Prevention around the River Mouth in Japan

Hiroshi Hashimoto: PWRI

0338, 12, B

New Structural Design Enforcement for Building Structures

Kiyoshi Nakano, Makoto Watabe, Yuji Ishiyama: BRI

0339, 12, B

Impact of Draft Highway Bridge Seismic Design Guidelines

James D. Cooper: FHWA

Ronald L. Mayes, Roland L. Sharpe: Applied

**Technology Council** 

0340, 12, B

New Specifications for Earthquake-Resistant Design of Japanese Highway Bridges Eiichi Kuribayashi, Toshio Iwasaki, Osamu Ueda: PWRI

0341, 12, B

Single-Story Residential Masonry Construction in Uniform Building Code Seismic Zone

- Tentative Recommendation -

R.J. Morony: HUD

0342, 12, B

Earthquake Disaster Preparedness Program for the Lima, Peru Metropolitan Area

Masamitsu Ohashi: PWRI

Makoto Watabe, Yoshio Kumagai: BRI

Yoshihisa Hoshino: GSI

0343, 12, B

Fundamental Factors in Optimizing
Earthquake Disaster Mitigation Investments
Yoshijiro Sakagami, Eiichi Kuribayashi, Osamu Ueda,
Tadayuki Tazaki: PWRI

0344, 12, B

Wood Sheathed Diaphragms as Lateral Force Resisting Elements

E. Zacher:

0345, 12, B

A Proposed Method for the Evaluation of Aseismic Performance of Existing Timber Dwellings

Tatsuo Murota, Hisashi Okada: BRI

0346, 12, B

An Evaluation Method on Aseismicity of Earth Structures (Road Embankment)
Tatsuya Fujii, Yasushi Sasaki: Ministry of Construction

0347, 12, A

Wind-Induced Vibration of Truss Members of the Commodore Brray Bridge

Gerard F. Fox: Howard Needles Tammen and Bergendoff

0348, 12, A

Calculation of the Gust Responses of Long-Span Bridges (II)

Nobuyuki Narita, Hiroshi Sato: PWRI

0349, 12, A

Active Turbulence Generator for Aerodynamic Tests of Bridge Section Models B. Bienkiewicz, J.E. Cermak, J.A. Peterka: Colorado

State University

0350, 13, B

Dense Instrument Array Program of the Public Works Research Institute and Preliminary Analysis of Some Records Tadayoshi Ohkubo, Toshio Iwasaki, Kazuhiko Kawashima: PWRI

0351, 13, B

Peak Horizontal Acceleration and Velocity from Strong-Motion Records
William B. Joyner, David M. Boore, Ronald L. Porcella: USGS

0352, 13, B

Dense Instrument Arrays of the Port and Harbour Research Institute for Observing Strong Earthquake-Motion

Setsuo Noda, Eiichi Kurata, Hajime Tsuchida: PHRI

0353, 13, B

Current Strong Motion Accelerogram Processing; Imperial Valley, 1979 A. Gerald Brady: USGS

0354, 13, B

Strong Motion Earthquake Observation by Velocity Type Seismometer Keiichi Ohtani: NRCDP

0355, 13, B

Stability of Spectra of Microtremors and Microzonation

Sadaiku Hattori: BRI

0356, 13, B

Studies on Liquefaction of Sands during Earthquakes

Toshio Iwasaki, Ken-ichi Tokida, Toshio Kimata: PWRI

0357, 13, B

Undisturbed Sampling of Cohesionless Soils William F. Marcuson III, Arley Gus Franklin: WES

0358, 13, B

Shaking Table Tests on the Countermeasure to Liquefaction by Gravel Drains Yasushi Sasaki, Eiichi Taniguchi: PWRI

0359, 13, B

Seismic Shear Transfer in Reinforced

Concrete

Richard N. White: Cornell University

0360, 13, B

Earthquake Observation of Improved Ground Made of Hard Treated Soil and its Surrounding Soft Ground

Takamasa Inatomi, Setsuo Noda: PHRI

0361, 13, B

Investigation of the Imperial County Services Building, EL Centro

Lawrence G. Selna: University of California

0362, 13, B

Behavior of Traditional Japanese Wooden Frames under Repeated Horizontal Load Tatsuo Murota, Hisashi Okada, Masatoshi Sato, Kanji

Saito: BRI

Takanori Arima: Shizuoka University

0363, 13, B

Seismic Analysis of a Cyclopean Concrete Quaywall

C.V. Chelapati: California State University Stanley K. Takahashi: NCEL

0364, 13, B

Horizontal Load Test of Multi-Column Foundation

Yukitake Shioi, Yasuo Mitsuie, Jiro Fukui, Keiji Chino: PWRI

0365, 13, B

Experimental Investigations and Research Needs in Seismic Behavior of Buried Pipelines

Teoman Ariman, Masanori Hamada: University of Tulsa

0366, 13, B

Current Researches and Research Needs in Lifeline Earthquake Engineering

Leon Ru-Liang Wang: University of Oklahoma

0367, 13, B

Vibration Tests of Bridge Models Using a Large Shaking Table

Eiichi Kuribayashi, Osamu Ueda, Ryoji Hagiwara: PWRI

0368, 13, B

Evaluation of Unreinforced Masonry Building Components by Seismic Simulation Tests Mihran S. Agbabian: Agbabian Associates

0369, 13, B

Observed Behavior and Analysis of Rockfill Dam during Earthquake

Norihisa Matsumoto, Satoru Kondo: PWRI

0370, 13, B

NBS Tri-Directional Test Facility
Kyle A. Woodward: National Engineering Laboratory,

JRS

0371, 13, B

An Econometric Model of Long Term Effects of Earthquake Losses

Eiichi Kuribayashi, Osamu Ueda, Tadayuki Tazaki: PWRI

0372, 13, B

The United States Navy's Earthquake Hazard Reduction Program

Stanley K. Takahashi, C.V. Chelapati: NCEL

0373, 13, B

On the Place Prediction of Ground Failure Caused by Earthquake

Motoo Kobayashi : GSI

0374, 13, B

Plan for Assessing Tentative Seismic Provisions by Means of Trial Designs

James Robert Harris: NBS

0375, 13, C

High Tide and Wind Waves Generated by Typhoon 7920

Yoshinobu Tsuji, Hiroshi Takahashi: NRCDP

0376, 13, C

SLOSH: A Hurricane Storm Surge Model for Bay and Estuary

Chester P. Jelesnianski: Techniques Development Laboratory, Systems Development Office, National Weather Service, NOAA

Celso S. Barrientos: Center for Environmental Assessment Services, Environmental Data and Information Service, NOAA

0377, 13, C

Storm Surge Defence Works at the Ohta River Mouth

Hiroshi Hashimoto: PWRI

0378, 13, A

Strong Winds Observed by A 200-m Tsukuba Meteorological Observation Tower Keikichi Naito, Noboru Banno, Tatsuo Hanafusa.

Tokunosuke Fujitani, Yoshihiro Yamashita: MRI

0379, 13, A

ARIMA Representation of Turbulence Spectra and Longitudinal Integral Scales

D.A. Reed: NBS

Robert H. Scanlan: Princeton University

0380, 13, A

Wind Response Observation at Tsukuba Meteorological Observation Tower Tatsuo Murota, Hisashi Okada: BRI

0381, 13, A

Full-Sca'e Measurements of Wind Velocities and Dynamic Response of a Tall Tower Arthur N.L. Chiu: University of Hawaii Stanley K. Takahashi: NCEL

0382, 13, A

Properties of Overwater Wind and the Analysis of Motions of Large Sized Floating Offshore Structures

Shigeru Ueda, Osamu Kiyomiya, Satoru Shiraishi, Hajime Tsuchida: PHRI

0383, 13, A

Unsteady Aerodynamic Forces for a Suspended Structure with Stiffening Trusses
Tadayoshi Ohkubo, Nobuyuki Narita, Kunio Yamamoto,

Hiroshi Sato: PWRI

0384, 13, B

Increased Seismic Resistance of Highway Bridges Using Improved Bearing Design Concepts

Roy A. Imbsen: Engineering Computer Corporation

0385, 13, A,B

Load and Resistance Factor Design (LRFD) Wind and Seismic Design

Clarkson W. Pinkham: S.B. Barnes and Associates, Consulting Structural Engineers

0386, 13, B

Studies on Reinforcement of Bridge Seats against Earthquakes

Yukitake Shioi, Yasuo Mitsuie, Takao Shimizu: PWRI

0387, 13, A

Structural Design Recommendations for Residential Buildings in Coastal High Risk Areas

G. Robert Fuller, Davis E. White: HUD

0388, 13, B

Developments in U.S. Seismic Standards - A Status Report -

Edgar V. Leyendecker: Center for Building Technology, NBS

0389, 13, B

Report on the Technical Cooperation for the Earthquake Disaster Prevention in the Lima Metropolitan Area

Makoto Watabe, Ichiro Tanahashi, Yutaka Yamazaki:

Tadayuki Tazaki: PWRì

0390, 13, B

United States-China Cooperative Research on Earthquake Engineering

Shih Chi Liu: NSF

0391, 13, B

Technical Cooperation for the El Asnam Earthquake of October 10th, 1980 and Field Survey on the Southern Italy Earthquake of November 23rd, 1980

Kiyoshi Nakano : BRI Eiichi Kuribayashi : PWRI

0392, 13, D

Progress Report on U.S.-Japan Large-Scale Aseismic Experiments for Building Structures (No.1 Outline of Research Program) Katsuro Kamimura, Makoto Watabe, Osamu Sakaguchi, Masaya Hirosawa: BRI

0393, 13, D

Progress Report on U.S.-Japan Large-Scale Aseismic Experiments for Building Structures (No.2 Subassemblage Tests of Full-Scale Structure)

Shinsuke Nakata, Hisahiro Hiraishi, Tetsuro Goto,

Manabu Yoshimura: BRI

0394, 13, D

Progress Report on U.S.-Japan Large-Scale Aseismic Experiments for Building Structures (No.3 Feasibility of Pseudo-Dynamic Testing System)

Makoto Watabe, Shin Okamoto, Takashi Kaminosono, Hiroyuki Yamanouchi, Hisahiro Hiraishi: BRI

0395, 13, D

Progress Report on U.S.-Japan Large-Scale Aseismic Experiments for Building Structures (No.4 Correlation Study between Shaking Table Tests and Pseudo-Dynamic Tests by Reduced Scale R.C. Models) Makoto Watabe, Yoshikazu Kitagawa, Toshiyuki

Makoto Watabe, Yoshikazu Kitagawa, Toshiyuki Kubota, Tetsuo Kubo, Manabu Yoshimura, Takashi Kaminosono: BRI

0396, 13, D

Progress Report on U.S.-Japan Large Scale Aseismic Experiments for Building Structures (No.5 Associated Experiments, Studies and Participation by U.S. Members) Robert D. Hanson, James K. Wight: University of Michigan

0397, 14, A

Effects of Solidity of Trusses on Unsteady Aerodynamic Forces of Stiffening Trussed-Girders

Tadayoshi Ohkubo, Nobuyuki Narita, Kunio Yamamoto, Hiroshi Sato: PWRI

0398, 14, A

Field Studies on the Pasco-Kennewick Cable-Stayed Bridge

M.C.C. Bampton: Battelle Pacific Northwest Laboratories

0399, 14, A

Wind Load on Solar Water Heaters Hisashi Okada, Tatsuo Murota: BRI

0400, 14, B

Estimation of Response-Spectral Values as Functions of Magnitude, Distance, and Site Conditions

William B. Joyner, David M. Boore: USGS

0401, 14, B

Reconsideration of the Input Waves for Dynamic Analysis Keiichi Ohtani : NRCDP

0402, 14, B

Some New Processing Techniques for the Imperial Valley 1979 Aftershocks A. Gerald Brady: USGS

0403, 14, B

Dense Instrument Array Observation by the Public Works Research Institute and Analyses of Some Records

Tadayoshi Ohkubo, Tadashi Arakawa, Kazuhiko Kawashima: PWR1

0404, 14, B

Gravel Drains as a Countermeasure to Liquefaction of the Ground Yasushi Sasaki, Eiichi Taniguchi: PWR1

0405, 14, B

Volume Change and Excess Pore Water Pressure Buildup as a Function of Degree of Saturation of Sands during Resonant Column Testing

Riley M. Chung, Felix Y. Yokel, Erik D. Anderson: Center for Building Technology, NBS

0406, 14, B

Estimation Procedures of Liquefaction Potential and its Application to Earthquake Resistant Design

Toshio Iwasaki, Tadashi Arakawa, Ken-ichi Tokida, Toshio Kimata: PWR1

0407, 14, B

Coupled Hydrodynamic Response Characteristics and Water Pressures of Large Composite Breakwaters

Tatsuo Uwabe, Setsuo Noda, Hajime Tsuchida: PHR1

0408, 14, B

Dynamic Analysis of Embankment Sections, Richard B. Russell Dam

Arley Gus Franklin, Mary Ellen Hynes-Griffin: WES

0409, 14, B

Pipe Stresses during Earthquakes Based on a Two-Dimensional Seismometer Array Observation

Hajime Tsuchida, Ken-ichiro Minami, Osamu Kiyomiya, Setsuo Noda: PHR1

0410, 14, B

Buckling and Rupture Failure in Pipelines due to Large Ground Deformations Teoman Ariman: University of Tulsa

0411, 14, B

Experimental Studies on Seismic Behavior of Structural Members Using a Dynamic Structural Testing Facility at PWRI Eiichi Kuribayashi, Toshio lwasaki, Ryoji Hagiwara:

Takayuki Hadate: National Land Agency

0412, 14, B

Report of the Urakawa-oki Earthquake of March 21, 1982

Tomomitsu Yasue, Toshio Iwasaki, Yasushi Sasaki, Hideya Asanuma, Takeo Nakajima: PWRI

0413, 14, B

Linear versus Nonlinear Behavior of Cable Stayed Bridges

John F. Fleming: University of Pittsburgh

0414, 14, B

Behavior of Concrete-Filled Steel Tubes Nobuyuki Narita, Shoichi Saeki, Michio Kanai : PWRI

0415, 14, B

Microcomputer for Earthquake Studies Stanley K. Takahashi : NCEL Joseph V. Tyrrell : NAVFAC

0416, 14, B

Vibratory Cone Penetrometer to Assess the Liquefaction Potential of the Ground Yasushi Sasaki, Yasuyuki Koga: PWRI

0417, 14, B

Direct Evaluation Method for Floor Response Spectra

Makoto Watabe: BR1

0418, 14, B

Lowland Earthquake Disasters and Land Conditions (in Japanese) Eisaku Tsurumi, Hiroaki Sunaga, Yosuke Kumaki: GSl 0419, 14, B

A Procedure for Estimating Indirect Effects of Earthquakes on Economy

Eiichi Kuribayashi, Toshio Iwasaki, Takeo Nakajima: PWRI

0420, 14, B

Dynamic Tests of Rockfill Dam Models Norihisa Matsumoto, Mitsuo Toyoda, Minori Shiga: PWRI

0421, 14, B

The Connection Method for Pile Head and Footing of Pile Foundation Subjected to a Horizontal Load

Nobuyuki Narita, Hideya Asanuma, Jiro Fukui, Yoji Yamamoto: PWRI

0422, 14, B

On the Status of In-Situ Strong Ground Motion and Structural Response Investigations

Christopher Rojahn: Applied Technology Council

Roger D. Borcherdt: USGS

0423, 14, C

A Tsunami Research Plan for the United States

Eddie N. Bernard: Pacific Marine Environmental laboratory, NOAA

0424, 14, C

Digital Data Services for Tsunamis and Engineering Seismology

James F. Lander: National Geophysical and Solar-Terrestrial Data Center

0425, 14, C

Storm Surge Defense Works and Related Researches in Japan

Yoshimi Goda: PHRI Hiroshi Hashimoto: PWRI

0426, 14, C

Storm Surge Forecasting

Celso S. Barrientos: Center for Environmental Assessment Services, Environmental Data and Information Service, NOAA

0427, 14, D

Construction of the Full Scale Reinforced Concrete Test Specimen

James K. Wight: University of Michigan

0428, 14, D

Progress Report on the Full-Scale Seismic Experiment of a Seven-Story Reinforced Concrete Building

- Part 1 Pseudo-Dynamic Test before Repair -

Shin Okamoto, Yoshikazu Kitagawa, Shinsuke Nakata, Manabu Yoshimura, Takashi Kaminosono: BRI 0429, 14, D

Progress Report on the Full-Scale Seismic Experiment of a Seven-Story Reinforced Concrete Building

- Part 2 Pseudo-Dynamic Test after Repair -Shin Okamoto, Yoshikazu Kitagawa, Shinsuke Nakata, Manabu Yoshimura, Takashi kaminosono: BRI

0430, 14, D

Tests of Planar Wall Assemblies under In-Plane Static Reversing Loads

B.J. Morgan, Hisahiro Hiraishi, W.G. Corley: Construction Technology Laboratories, Portland Cement Association

0431, 14, D

Research Program on the Full-Scale Seismic Experiments of Steel Buildings

Makoto Watabe, Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Toshibumi Fukuta, Takashi Kaminosono : BRI

0432, 14, D

Status of U.S. Research Program on Full-Scale Steel Buildings

Shih Chi Liu: NSF

0433, 14, C

United States Foreign Assistance Program on Tsunami Hazard

Gerald T. Hebenstreit: Science Applications, Inc. Paul F. Krumpe: Office of Foreign Disaster Assistance, AID

0434, 14, B

Technical Cooperations in Developing Countries on Earthquake Engineering Katsuo Uemura, Makoto Watabe, Yuji Ishiyama, Yutaka Yamazaki: BRI

0435, 14, B

Incremental Expansion and Aseismic Design of Low-Cost Housing in Sites and Services Projects

Emil Simiu: Center for Building Technology, NBS

0436, 15, A

On Spatial Structures of High Winds Keikichi Naito, Tatsuo Hanafusa, Tokunosuke Fujitani : MRI

0437, 15, A

Inphase Characteristics of Wind to 150-meters

John W. Kaufman, Kelly Hill: Marshall Space Flight Center, National Aeronautics and Space Administration

0438, 15, A

A Study of Aerodynamic Response of Multiand Long-Span Road Bridge with Steel Box Girder

Nobuyuki Narita, Kunio Yamamoto, Hiroshi Sato: PWRI

0439, 15, B

Response of Cable Stayed Bridges to Static and Dynamic Loads

John F. Fleming: University of Pittsburgh

0440, 15, B

Results from High Amplitude Dynamic Tests and Implications for Seismic Design Bruce M. Douglas, Mehdi Saiidi, James Richardson, James Hart: University of Nevada-Reno

0441, 15, B

Earthquake Hazard Mitigation Program in Shizuoka Prefecture

Mamoru Mizuguchi: Shizuoka Prefectural Government

0442, 15, B

Analysis of Earthquake Ground Motion Records from Two Dimensional Seismometer Array - North Tokyo Bay Earthquake of June 4, 1977 -Hajime Tsuchida, Setsuo Noda, Susumu Iai, Eiichi Kurata: PHRI

0443, 15, B

Analysis of for the 1979 Imperial Valley Earthquake Based on Synthetic Seismogram Modeling of Strong Motion Records Ralph J. Archuleta: USGS

0444, 15, B

Attenuation of Peak Ground Motions and Absolute Acceleration Response Spectra Based on Japanese Strong Motion Data Misato Murakami, Tadashi Arakawa, Kazuhiko Kawashima: PWRI

0445, 15, B

Distribution of Supporting Ground for Building in the Osaka Plain Eisaku Tsurumi, Masakatsu Horino, Mitsuko Takeda: GSI

0446, 15, B

A Technique of Seismic Microzoning for Urban Areas

Masaya Hirosawa, Yoshihiro Sugimura, Hiroshi Oh-oka, Izuru Ohkawa: BRI

0447, 15, B

Rationalizing the Seismic Coefficient Method

Arley Gus Franklin, Mary Ellen Hynes-Griffin: WES

0448, 15, B

Development of Seismic Repair Techniques for Reinforced Concrete Members

Masaya Hirosawa, Shinsuke Nakata, Tetsuro Goto,

Manabu Yoshimura: BRI

Toshio Shiga, Akenori Shibata: Tohoku University

Hiroshi Imai: Tsukuba University

0449, 15, B

Response of Sand-Silt Mixtures to Cyclic Loading

F.G. McLean: BUREC

0450, 15, B

Shaking Table Tests on the Remedial Measures to Improve Seismic Stability of Embankments

Yasushi Sasaki, Osamu Matsuo: PWRI

0451, 15, B

Earthquake Resistance of Drydocks C.V. Chelapati, Stanley K. Takahashi: NCEL

0452, 15, B

Behaviors of High-Rise Buildings Excited by an Anticipated Tokai Earthquake Makoto Watabe, Yuji Ishiyama, Ken Sudo, Katsuhiko Ishibashi, Osamu Chiba: BR1

0453, 15, B

Vibration Test of Richard B. Russell Concrete Dam before Reservoir Impoundment

Robert J. Smith: CORPS

0454, 15, B

Distribution of the Dynamic Shear Modulus in a Prototype Rockfill Dam Norihisa Matsumoto, Mitsuo Toyoda, Minori Shiga: PWRI

0455, 15, B

Earthquake Engineering Research at National Research Center for Disaster Prevention

Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0456, 15, B

Behavior of Concrete-Filled Steel Tubes (Part 2; Bending Members)
Nobuyuki Narita, Shoichi Saeki, Michio Kanai:
PWRI

0457, 15, B

Seismic Resistant Bridge Design in California

James H. Gates: CALTRANS

0458, 15, B

Report of the Investigation on Earthquake Damage to Shizunai Bridge Nobuyuki Narita, Misato Murakami, Hideya Asanuma : PWR1

0459, 15, B

Analytical Procedures Used for the Seismic Design of Highway Bridges

Roy A. Imbsen: Engineering Computer Corporation J. Penzien: University of California, Berkeley

0460, 15, B

Data Processing and Methodologies for Assessing Seismic Response Characteristics of Meloland Road Overpass Stuart D. Werner, Mihran S. Agbabian: Agbabian

Associates

0461, 15, C

Development of Storm Surge Forecasting Methods in the United States

Celso S. Barrientos: Assessment and Information Services Center, National Environmental Satellite. Data, and Information Service, NOAA

0462, 15, C

Structural Tsunami Defence and Research on Tsunami Damage Mitigation

Yoshimi Goda: PHRI

Hiroshi Hashimoto, Takaaki Uda: PWRI

0463, 15, C

Feasibility Study on Mitigating Tsunami Hazards in the Pacific

Eddie N. Bernard, James F. Lander, Gerald T. Hebenstreit: Pacific Marine Environmental Laboratory, NOAA

0464, 15, D

U.S. Research Associated with the U.S.-Japan Cooperative Research Program Using Large-Scale Structural Facilities Edgar V. Leyendecker: NBS

0465, 15, D

U.S.-Japan Cooperative Research Program Utilizing Large-Scale Testing Facilities - Full-Scale Seismic Tests of a Steel Building and the Supporting Test on its Half-Scaled Partial Frames -

Katsuro Kamimura, Makoto Watabe, Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Isao Nishiyama, Toshibumi Fukuta: BRI

0466, 15, D

Overview of United States Research Projects for the Steel Building for the U.S.-Japan Cooperative Research Program for Large Scale Testing of Buildings John B. Scalzi: NSF

0467, 15, A

Response of Taut Strip Models to Smooth and Turbulent Flows Richard D. Marshall: NBS Kunio Yamamoto, Yoichi Nakagami, Kazuo Kanzaki: **PWRI** 

0468, 15, A

Characteristics of High Winds Measured at an Observation Tower above the Ocean Gen-ichi Naito, Isao Watabe, Masayuki Tokuda, Hiroshi Takahashi: NRCDP

0469, 15, B

Research and Development of Three-Dimensional Shaking Table Keiichi Ohtani, Hiroshi Takahashi: NRCDP

Goji Fujiwara: Hitachi Company

0470, 15, B

High Performance Strong-Motion Seismograph for the JMA Network Hideo Watanabe, Hideteru Matsumoto, Michio Takahashi: MRI

Tatsuo Iinuma: Seismological Observatory, Japan Meteorological Agency

0471, 15, B

Microzonation of Tsukuba Science City Sadaiku Hattori, Yoshiaki Kashimura: BRI

0472, 15, B

Ultimate Strength and Repair Method of Beam-Column Connections Fabricated by Fillet Welding

Koji Morita: Chiba University

Koichi Takanashi: University of Tokyo

Tatsuo Murota: BRI

0473, 15, B

Rehabilitation of Road Transportation Systems Damaged by Earthquakes Toshio Iwasaki, Takeo Nakajima, Katsushi Goto: **PWRI** 

0474, 15, B

Dynamic Response Analysis of Shizunai Bridge Damaged by the Urakawa-Oki Earthquake of March 21, 1982 Toshio Iwasaki, Ryoji Hagiwara: PWRI

0475, 15, B

Experimental Study on Failure Pattern of Embankment Supported by Sandy Layers during Earthquakes Tadashi Arakawa, Toshio Kimata, Masuo Kondo:

**PWRI** 

0476, 15, C

El Nino-Southern Oscillation Episode of 1982-1983

Celso S. Barrientos: Assessment and Information Services Center, National Environmental Satellite, Data, and Information Service, NOAA

0477, 15, C

Tidal Anomalies Induced by the Typhoons 8210 and 8218

Yoshinobu Tsuji, Atsushi Takeda, Tatsuo Konishi, Hiroshi Takahashi: NRCDP

0478, 15, D

U.S.-Japan Cooperative Research Program Utilizing Large-Scale Testing Facilities Correlation between Shaking Table Test and Pseudo Dynamic Test on Steel Structures Shin Okamoto, Yutaka Yamazaki, Takashi Kaminosono, Masayoshi Nakashima: BRI

0479, 15, D

U.S.-Japan Cooperative Research Program
Utilizing Large-Scale Testing Facilities
- Analysis of RC Full-Scale Building Test Makoto Watabe, Shinsuke Nakata, Manabu
Yoshimura, Yukinobu Kurose: BRI

0480, 16, A

Wind Resistant Design of a Long-Span Suspension Bridge with a Stiffening Box Girder

Nobuyuki Narita, Kunio Yamamoto, Hiroshi Sato, Satoshi Yuzawa, Kazuo Kanzaki: PWRI

0481, 16, A

An Assessment of Surface Wind Speeds during Hurricane Alicia

Richard D. Marshall: Center for Building Technology, NBS

0482, 16, A

Active Turbulence Generation for Section Model Studies

Dryver R. Huston: Princeton University

Harold R. Bosch: FHWA

0483, 16, A

An Empirical Tornado Hazard Assessment Model

Joseph T. Schaefer, Donald L. Kelly: National Weather Service, NOAA

Robert F. Abbey: Office of Naval Research

0484, 16, B

An Experimental Study on the Earthquake Resistance of Wall Type Improved Ground by Deep Mixing Method

Takamasa Inatomi, Hajime Tsuchida, Setsuo Noda: PHRI

0485, 16, B

Dynamic Testing of Homogeneous Embankment Models

R.W. Luehring, K.K. Adhya: BUREC

0486, 16, B

Rapid Analysis Procedure for Gravity Type Quaywalls

Tingley K. Lew: NCEL

0487, 16, B

Earthquake Analysis and Design of Concrete Gravity Dams

Lucian G. Guthrie: CORPS

0488, 16, C THRUST

Eddie N. Bernard, Richard R. Behn: Pacific Marine Environmental Laboratory, NOAA

0489, 16, C

Data Services Supporting the THRUST Project

James F. Lander: National Geophysical Data Center, NOAA

0490, 16, C

The Role of Numerical Models in the THRUST Program

Gerald T. Hebenstreit: Science Applications, Inc.

0491, 16, B

In Situ Determination of Liquefaction Potential Using the PQS Probe William E. Norton: WES

0492, 16, B

Damage to Port Facilities due to Liquefaction during the Nihonkai-Chubu Earthquake, 1983

Setsuo Noda, Takamasa Inatomi, Hajime Tsuchida: PHRI

0493, 16, B

Evaluation of the Effects of Soil and Rock on Earthquake Ground Motion

Walter W. Hays: USGS

0494, 16, B

Damage and Repair of Namioka Town Hospital Damaged by the Nihonkai-Chubu Earthquake, 1983

Part 1: Outline of Damage and Screening of Structural Safety

Masaya Hirosawa, Hisahiro Hiraishi, Tetsuro Goto,

Manabu Yoshimura: BRI

Tomoaki Akiyama: Tokyo Soil Research Co., Ltd.

0495, 16, B

Damage and Repair of Namioka Town Hospital Damaged by the Nihonkai-Chubu Earthquake, 1983

Part 2: Analysis of Damage by Elasto-Plastic Static and Dynamic Analysis Yoshikazu Kitagawa, Yutaka Yamazaki, Masaomi Teshigawara: BRI

0496, 16, B

Damage and Repair of Namioka Town Hospital Damaged by the Nihonkai-Chubu Earthquake, 1983

Part 3: Retrofit Design and Estimation of the Effect

Masaya Hirosawa: BRI

Kaname Takahara: Oka-Sekkei Co., Ltd.

Tomoaki Akiyama: Tokyo Soil Research Co., Ltd.

0497, 16, B

Model Experiments of Dynamic Behavior of Reinforced Concrete Bridge Pier Columns Toshio Iwasaki, Ryoji Hagiwara, Kinji Hasegawa, Tatsuhiko Koyama, Takeshi Yoshida: PWRI

0498, 16, B

Box Girder Bridge Hinge Restrainer Test Program

Lawrence G. Selna, L. Javier Malvar: University of California

0499, 16, B

Seismic Vulnerability of Prestressed Concrete Segmental Bridges Walter Podolny, Jr.: FHWA

0500, 16, B

Report on Damages to Civil Engineering Structures due to the Nihonkai-Chubu Earthquake of 1983

Toshio Iwasaki, Yasushi Sasaki, Yasuhiko Wakisaka, Norihisa Matsumoto, Katsumi Senoo, Tadashi Arakawa, Kazuhiko Kawashima, Naomi Obinata: PWRI

0501, 16, B

Behavior of the Meloland Road Overcrossing during the 1979-Imperial Valley Earthquake Bruce M. Douglas, Gary Norris, Lawrence Dodd, James Richardson: University of Nevada-Reno

0502, 16, B

Development of Strong Earthquake Alarm System for Tokai Earthquake Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0503, 16, B

Analysis of the Kurayoshi-Higashi City Office Damaged by the Tottori Earthquake of 1983

Masaya Hirosawa, Yutaka Yamazaki, Hideo Tsukagoshi: BRI

0504, 16, B

Behavior of Concrete-Filled Steel Tubes (Part 3; Beam-Column Members) Shoichi Saeki, Koichi Minosaku, Akira Takizawa: PWRI

0505, 16, B

Seismic Design Guidelines for Essential Buildings

Sigmund A. Freeman: Wiss Janney Elstner Associates Joseph P. Nicoletti: URS/Blume and Associates George Matsumura: CORPS

0506, 16, B

Engineering Considerations Based on Simulating the Near-Source Ground Motion of the 1979 Imperial Valley Earthquake Ralph J. Archuleta: USGS

0507, 16, B

Large-Scale Tests for Measuring Dynamic Shear Moduli and Damping Ratios of Rockfill Materials

Ryuichi Iida, Norihisa Matsumoto, Nario Yasuda, Kazuo Watanabe, Norio Sakaino, Kazuaki Ohno: PWRI

0508, 16, B

Effects of Permeability of Gravel Drains on the Uplift Acting on Semi-Buried Structures due to Liquefaction

Yasushi Sasaki, Eiichi Taniguchi: PWRI

0509, 16, B

Experiments and Researches on Lateral Resistance of Piles in a Slope Misato Murakami, Kazuya Ohshima, Yukio Sato, Ryoichi Abo: PWRI

0510, 16, B

Experimental Study of Embankment on Sandy Layers during Earthquakes
- Characteristics of Reconstructed Embankment on Liquefied Layers - Tadashi Arakawa, Kazuhiko Kawashima, Hideo Matsumoto, Masuo Kondo: PWRI

0511, 16, B

Seismic Risk Evaluation
- The Meaning, Comparative Study of
Method and an Example of Analysis in
Scandinavia Area Sadaiku Hattori: BRI

0512, 16, B

Elasto-Plastic Behavior of the Steel Frames with Concentric K-Type Braces
Toshibumi Fukuta, Isao Nishiyama, Hiroyuki
Yamanouchi, Masaya Hirosawa: BRI

0513, 16, B
Strong Motion Estimation due to a
Realistic Earthquake Faulting
Ken Sudo, Yoshikazu Kitagawa, Naoki Yoshimura:

0514, 16, B Criteria for Overturning of Bodies by Earthquake Excitations Yuji Ishiyama: BRI

0515, 16, B

Relationship between Seismic Disaster and Ground Condition in Noshiro Area, Akita Prefecture
Eisaku Tsurumi, Masakatsu Horino, Masataka Ohta:

Eisaku Isurumi, Masakatsu Horino, Masataka Unta GSI

0516, 16, C

Inundation Damages due to the 1983 Nihonkai-Chubu Earthquake Tsunami Takaaki Uda: PWRI

0517, 16, C

Distribution of Inundation Height of the Nihonkai-Chubu Earthquake Tsunami along the Coast of Japan and Korea

Yoshinobu Tsuji, Takeo Kinoshita, Tatsuo Konishi,

Hiroshi Takahashi: NRCDP

Un Seop Peak: Central Meteorological Observatory, Republic of Korea

Kyo Sung Chu: Hydrographic Office, Traffic

Division, Republic of Korea

Hui Soo An: Seoul National University, Republic of

Korea

0518, 16, D

U.S.-Japan Cooperative Research Program Utilizing Large-Scale Testing Facilities - Correlation between Shaking Table Test and Pseudo Dynamic Test on Steel Braced Frame -

Shin Okamoto, Yutaka Yamazaki, Masayoshi Nakashima, Takashi Kaminosono: BRI

0519, 16, D

Activities of the United States EERI Committee on the Anticipated Tokai Earthquake

Charles Scawthorn: Dames & Moore

0520, 16, D

U.S.-Japan Cooperative Research on In-Situ Testing Procedures for Assessing Soil Liquefaction (No.1)

Yasushi Sasaki, Katsuyuki Kutara, Toshio Iwasaki, Hiroshi Miki, Yoshihiro Ito, Koji Kaminaga: PWRI

W.D. Kovacs: Rhode Island University

L.A. Salomone: NBS Jeffrey A. Farrar: BUREC

0521, 16, D

Status of the US/Japan Cooperative Earthquake Engineering Research Program on the Performance of Building Structures Robert D. Hanson: University of Michigan

0522, 16, D

U.S.-Japan Cooperative Earthquake Research Program Utilizing Large Scale Test Facilities

- Preliminary Studies and Test Results of Eccentrically Braced Full-Size Steel Structure -

Subhash C. Goel: University of Michigan Douglas A. Foutch: University of Illinois

0523, 16, D

Inelastic Seismic Tests on a Full-Scale Six-Story Concentric-K Braced Steel Building - U.S.-Japan Cooperative Research Program -Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Isao Nishiyama, Katsuo Uemura: BRI

0524, 17, A

Interpretation of Section Model Aeroelastic Results in the Case of Cable-Stayed Bridges Robert H. Scanlan: Princeton University

0525, 17, A

Characteristics of Aerodynamic Forces on Bridge Decks in Smooth Flow and in Turbulent Flow

Nobuyuki Narita, Hirohiko Tada, Koichi Yokoyama, Hiroshi Sato: PWRI

0526, 17, A

Field Measurements on the Deer Isle-Sedgwick Suspension Bridge Harold R. Bosch: FHWA 0527, 17, A

Wind Tunnel Modeling for Flow around Buildings

Tatsuo Murota, Hisashi Okada: BRI Takeshi Ohkuma: Kanagawa University

0528, 17, A

Automatic Detection of Gust Fronts with a Single Doppler Radar

Hiroshi Ueda, Hiroshi Takahashi: NRCDP

Dusan S. Zrnic': National Severe Storms Laboratory, Environmental Research Laboratories, NOAA

0529, 17, B

Earthquake Hazard Reduction Program of the Department of State

Peter E. Gurvin: OFB

0530, 17, B

Strong Motion Instrumentation in Bureau of Reclamation Programs

Robert B. MacDonald, Andy Viksne: BUREC

0531, 17, B

Array Observation of Strong-Motion
Earthquakes in the Fuchu Area
Keiichi Ohtani, Shigeo Kinoshita, Tadashi Mikoshiba
: NRCDP

0532, 17, B

Implications of Recent Advances in Instrumentation for Strong-Motion Studies Roger D. Borcherdt: USGS

0533, 17, B

Dynamic Behaviours of a Rockfill Dam during Earthquakes

Norihisa Matsumoto, Nario Yasuda, Minori Shiga: PWRI

0534, 17, B

Vibration Test of Richard B. Russell Concrete Dam after Reservoir Impoundment Robert J. Smith: CORPS

0535, 17, B

Earthquake Resistant Bridge Design in California

James H. Gates: CALTRANS

0536, 17, B

Seismic Analysis, Instrumentation and Dynamic Testing of Cable-Supported Bridges

Ahmed M. Abdel-Ghaffar: Princeton University

0537, 17, B

Earthquake Resistant Design of Building Foundation

- Introduction and Commentary on "Design Guide for the Building Foundation against Seismic Force" -

Yoshihiro Sugimura: BRI

0538, 17, B

Shear Resistance of Unreinforced Hollow Concrete Block Masonry Walls Kyle A. Woodward, Frank Rankin: NBS

0539, 17, B

An Experimental Study on Sliding Block in Water during Earthquake

Tatsuo Uwabe, Norihiro Higaki, Setsuo Noda: PHRI

0540, 17, B

A Rapid Seismic Analysis Procedure for Anchored Sheet Pile Bulkheads

Tingley K. Lew: NCEL

0541, 17, B

Design of Piles for Slopes

Hirohiko Tada, Kazuya Ohshima, Yukio Sato, Ryoichi

Abo: PWRI

0542, 17, B

Dynamic Stresses and Displacements in a Buried Tunnel

S.K. Datta: Cooperative Institute of Research in

**Environmental Sciences** 

K.C. Wong: University of Colorado A.H. Shah: University of Manitoba

0543, 17, C

Damages of Coastal and River Structures Caused by the Nihonkai-Chubu Earthquake Tsunami

Takaaki Uda, Atsushi Omata: PWRI

0544, 17, C

Progress in Developing Tsunami Data Base James F. Lander, Patricia A. Lockridge: National Geophysical Data Center, NOAA

0545, 17, C

Tsunamis in the Japan Sea with Numerical Calculation

Yoshinobu Tsuji, Hiroshi Takahashi: NRCDP Tatsuo Konishi: Japan Meteorological Agency

0546, 17, D

Recommended U.S.-Japan Joint Research on Seismic Behavior of Buried Pipelines and Telecommunications Systems

Masanobu Shinozuka: Columbia University

0547, 17, D

Experimental Investigation on Hysteretic Behavior of Reinforced Concrete Bridge Pier Columns

Toshio Iwasaki, Kazuhiko Kawashima, Ryoji Hagiwara, Kinji Hasegawa, Tatsuhiko Koyama, Takeshi Yoshida: PWRI

0548, 17, D

Re-Evaluation of Liquefaction Resistance Curves

Riley M. Chung: NBS

H. Bolton Seed: University of California, Berkely

Arley Gus Franklin: WES Jeffrey A. Farrar: BUREC

0549, 17, D

In-Situ Test for Assessing Liquefaction Potential Using Vibratory Cone Penetrometer

Yasushi Sasaki, Yasuyuki Koga, Yoshihiro Ito, Takao

Shimazu, Masuo Kondo: PWRI

0550, 17, D

U.S.-Japan Joint Earthquake Research Program Involving Large-Scale Experiments on Masonry Building Structures - Japan Side Research Plan -Shin Okamoto, Yutaka Yamazaki, Akio Baba,

Shin Okamoto, Yutaka Yamazaki, Akio Baba, Masaomi Teshigawara, Hisahiro Hiraishi : BRI

0551, 17, D

Inelastic Seismic Tests on a Full-Scale Six-Story Eccentric-K Braced Steel Building - U.S./Japan Cooperative Earthquake Research Program -

Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Isao

Nishiyama, Masaya Hirosawa: BRI

0552, 17, D

Seismic Performance of Existing Buildings - A Progress Report -

Richard N. White, Peter Gergely: School of Civil and Environmental Engineering, Cornell University

0553, 17, B

Study on Economical Losses Caused by Change of Cargo Flow at Port of Akita due to the Nihonkai-Chubu Earthquake, 1983 Akira Yonezawa, Hajime Tsuchida: PHRI

0554, 17, B

Landslides and Damages due to the Naganoken-Seibu Earthquake of September 14, 1984

Masateru Tominaga, Yasushi Sasaki, Katsumi Senoo, Hiroyuki Yoshimatsu, Eiichi Taniguchi, Kimiaki Nakano, Naomi Obinata, Yoshifumi Hara, Tetsuro Kuwabara: PWRI

0555, 17, B

Geomorphological Characteristics and Factors of the Large-Scale Landslide and Detritus Flow on the South Slope of Ontake Volcano Caused by the Naganoken-Seibu Earthquake, 1984

Masatoshi Nagaoka, Yoshihisa Hoshino, Yoshimichi Takei, Seiji Ichikawa, Fumio Saito: GSI

0556, 17, B Seismological Studies on the Naganoken-Seibu Earthquake, 1984, Based on JMA

Minoru Takeo, Naoya Mikami, Masaji Ichikawa: MRI

0557, 17, A

Seismic Network

Features of Ocean Wind Fluctuations during Typhoon Passages

Gen-ichi Naito, Hiroshi Takahashi: NRCDP

0558, 17, A

The Variation of Gust Structure with Height up to 200m

Keikichi Naito, Tatsuo Hanafusa, Tokunosuke Fujitani : MRI

0559, 17, B

Seismic Vulnerability of Lifeline System Using Computervision CADDS Color Graphics Software

C.V. Chelapati: California State University Stanley K. Takahashi: NCEL

0560, 17, B

Vertical Distribution of Subsurface Horizontal Earthquake Accelerations P.C. Chen: Interpacific Technology, Inc.

0561, 17, B

Shaking Table Test on the Effects of Thickness of Liquefied Layer on Deformation of Embankments
Toshio Iwasaki, Yasushi Sasaki, Hideo Matsumoto, Masuo Kondo: PWRI

0562, 17, B

Study on Aseismic Measures to Embankments on Soft Clay Ground Yasuyuki Koga, Osamu Matsuo: PWRI

0563, 17, B

Draft of Guidelines for Post-Earthquake Inspection and Evaluation of Earthquake Damage in Reinforced Concrete Buildings and its Application to the Namioka Town Hospital Building

Tsuneo Okada: Institute of Industrial Science, University of Tokyo

Masaya Hirosawa, Hisahiro Hiraishi, Manabu Yoshimura: BRI

0564, 17, B
Dense Strong Motion Earthquake
Seismometer Array at Site with Different
Topographic and Geologic Condition in
Sendai

Yoshikazu Kitagawa, Toshihide Kashima, Masaya Hirosawa: BRI

0565, 17, B

Influence of Soil Conditions upon Response Spectrum of Strong Ground Motion Izuru Ohkawa, Yuji Ishiyama: BRI 0566, 17, C

Regional Tsunami Warning System (THRUST)

Eddie N. Bernard, Richard R. Behn: Pacific Marine Environmental Laboratory, NOAA

0567, 17, C

Studies on Storm Surges in Tidal Estuaries Tatsuo Konishi, Takeo Kinoshita, Hiroshi Takahashi: NRCDP

0568, 17, D

A SDOF Model to Analyze Earthquake Response of a Full-Scale Seven-Story Reinforced Concrete Structure Manabu Yoshimura, Shin Okamoto, Vladimir Sigmund: BRI

0569, 17, B

Settlement of Approaching Embankments to Bridges Caused by the Nihonkai-Chubu Earthquake

Yasuyuki Koga, Eiichi Taniguchi: PWRI

0570, 17, B

Rock Avalanche and Slope Failures induced by the Naganoken-Seibu Earthquake, 1984 Kohei Tanaka, Norio Ohyagi, Takashi Inokuchi, Shigetsugu Uehara, Hiroshi Takahashi: NRCDP

0571, 18, A

On the Evaluation of Wind-Induced Vibrations of Long-Span Bridges Using Taut-Strip Models Nobuyuki Narita, Hirohiko Tada, Koichi Yokoyama, Hiroshi Sato, Kazuo Kanzaki, Makoto Fukuda: PWRI

0572, 18, A

The Response of Taut Strip Models:
Comparisons of Theoretical and
Experimental Results
Robert H. Scanlan: Johns Hopkins University
Richard D. Marshall: NBS

0573, 18, A

The Effects of Large-Scale Upstream Gusting on the Aeroelastic Behavior of Section Models

Dryver R. Huston: Johns Hopkins University Harold R. Bosch: FHWA

H. Tanaka: Hitachi Zosen Corp.

0574, 18, A

A Full-Scale Measurement of Wind Load on a Solar Water Heater Hisashi Okada, Tatsuo Murota: BRI

0575, 18, A

Design Criteria for Glass Cladding Subjected to Wind Loads Emil Simiu, Erik M. Hendrickson: Center for Building Technology, NBS 0576, 18, A

Spatial Structure of the Wind in the Marine Boundary Layer

Keikichi Naito, Tatsuo Hanafusa, Tokunosuke Fujitani
• MRI

0577, 18, B

Spectral Characteristics of Ground Motion in the Tokyo Metropolitan Area Keiichi Ohtani, Shigeo Kinoshita: NRCDP

0578, 18, B
Strong-Motion Recordings from the
Hollister, California, Area M5.5
Earthquake, 26 January, 1986
A. Gerald Brady, Richard P. Maley, G. Noel Bycroft:
USGS

0579, 18, B

Dense Instrument Array System by PWRI for Observing Strong Earthquake Motion Toshio Iwasaki, Yasushi Sasaki, Keiichi Tamura, Koh Aizawa, Kazuyuki Takahashi: PWRI

0580, 18, B Vibrating Tests of an Asphaltic Facing Cofferdam by Blastings Norihisa Matsumoto, Nario Yasuda, Minori Shiga: PWRI

0581, 18, B

Summary of the Richard B. Russell Concrete Dam Vibration Study Vincent P. Chiarito: WES Robert J. Smith: CORPS

0582, 18, B

Shaking Table Tests on Seismic Stability of Reinforced Embankments
Yasuyuki Koga, Eiichi Taniguchi, Yoshihiro Ito:
PWRI

0583, 18, B

Status Report on New Study of Lower Van Norman Dam Arley Gus Franklin: WES

0584, 18, B

Seismic Design Procedure and Dynamic Strength of CAB

Toshio Iwasaki, Kazuhiko Kawashima, Naomi Obinata, Shigeki Unjo: PWRI

0585, 18, B

Large-Scale Bridge Column Tests
- A Progress Report -

Edgar V. Leyendecker, William C. Stone, Geraldine S. Cheok: NBS

0586, 18, B

Outline of Manual for Repair Methods for Civil Engineering Structures Damaged by Earthquakes

Toshio Iwasaki, Shigetoshi Kobayashi, Takaaki Uda, Yutaro Asai, Yasuyuki Koga, Yasushi Sasaki, Kazuhiko Kawashima: PWRI

0587, 18, B

Effects of Vertical Contraction Joints on the Dynamic Response of Arch Dams

H.L. Boggs: BUREC

J.R. Mays: University of Colorado

0588, 18, B

Decision Analysis for Embankment Dams under Seismic Load T.A. Luebke: BUREC

0589, 18, B

A New Criterion for Assessing Liquefaction
Potential

Susumu Iai, Hajime Tsuchida, Setsuo Noda: PHRI

0590, 18, B

Earthquake Safety Investigation of Existing Facilities

Joseph V. Tyrrell: NAVFAC

0591, 18, B

Thematic Mapping Works for Seismic Disaster Prevention in Geographical Survey Institute, Japan Masatoshi Nagaoka, Hiroyuki Matsuda: GSI

0592, 18, B Loading Test on the Connection of Concrete Filled Steel Tubes

Hirohiko Tada, Hiroshi Shinohara, Koichi Minosaku, Akira Takizawa, Jun Hikino: PWRI

0593, 18, B

Deformation Capacity of Steel Truss Girder Isao Nishiyama, Tatsuo Murota: BRI Choei Kaji, Shin-ichi Ina: Japan Federation of Architect Office Association

0594, 18, C

Satellite Methods and Applications in Marine Environmental Analysis

Celso S. Barrientos, F.G. Everdale, R.P. Stumpf: Assessment and Information Services Center, National Environmental Satellite, Data and Information Service, NOAA

0595, 18, C

Discrimination of Flooded Areas Caused by Tsunami or Storm Surge Using Satellite Data

Atsushi Takeda, Yoshinobu Tsuji, Hiroshi Takahashi: NRCDP

0596, 18, C

Fault Displacement Seiche Waves on Inland Reservoir and Lakes

Robert L. Dewey, Karl M. Dise: BUREC

0597, 18, C

Practical Approach for Determining Stage Frequency

H. Lee Butler, Thomas A. Hardy: Coastal Engineering Research Center, WES

0598, 18, D

U.S.-Japan Coordinated Earthquake Research Program on Reinforced Masonry Buildings - Seismic Capacity of Reinforced Masonry Walls and Beams -

Shin Okamoto, Yutaka Yamazaki, Takashi Kaminosono, Masaomi Teshigawara, Hisahiro Hiraishi : BRI

0599, 18, D

U.S.-Japan Coordinated Program on Masonry Research Shin Okamoto: BRI

James L. Noland: Atkinson-Noland & Associates

0600, 18, D

Seismic Behavior of a Full-Scale K-Braced Steel Building Structure

Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Isao Nishiyama, Tatsuo Murota: BRI

0601, 18, D

Full-Scale Studies of Steel Structures
Robert D. Hanson: University of Michigan

0602, 18, D

Field Investigation of Seismically Damaged Sites by Use of Vibratory Cone Penetrometer

Yasuyuki Koga, Yasushi Sasaki, Yoshihiro Ito, Osamu Matsuo: PWRI

0603, 18, B

Earthquake Damage in Mexico Caused by the September 1985 Earthquakes Edgar V. Leyendecker, William C. Stone, Felix Y. Yokel: NBS

0604, 18, B

Japan-Mexico Technical Cooperation on Damage Evaluation, Repair and Strengthening of Buildings Damaged by 1985 Mexico Earthquake Masaya Hirosawa, Tatsuo Murota: BRI

0605, 18, B

Aspects of Strong Motion from the Michoacan, Mexico Earthquake of September 19, 1986

John G. Anderson, James N. Brune, Jorge Prince, Paul Bodin: University of California

Enrique Mena, Mario Onate, Roberto Quaas, Shri

Krishna Singh: Universidad Nacional Autonoma de Mexico

0606, 18, B

Seismic Damage to Port Facilities by the 1985 Chile Earthquake and Improvement of Seismic Safety of the Damaged Ports Hajime Tsuchida, Setsuo Noda: PHRI

0607, 18, B

Observation of the Structural Damage Caused by the 3 March 1985 Chile Earthquake

Mete A. Sozen: University of Illinois

0608, 18, B

An Investigation on a Twelve-Story Office Building Damaged by the 1985 Mexico Earthquake

Hisahiro Hiraishi, Masaya Hirosawa, Hideo Tsukagoshi, Toshihide Kashima, Toshikazu Kawashima: BRI

0609, 19, A

Mean Wind Force Measurements on the Deer Isle-Sedgwick Suspension Bridge Harold R. Bosch: FHWA

0610, 19, A

Field Experiments for Wind Pressure Kishor C. Mehta: Institute for Disaster Research, Texas Tech University

0611, 19, A

Aerodynamic Characteristics of Continuous Box Girder Bridges Relevant to their Vibrations in Wind Nobuyuki Narita, Koichi Yokoyama, Hiroshi Sato, Yoichi Nakagami: PWRI

**3**-----

0612, 19, A
On Interpreting Model and Prototype
Responses of Suspended-Span Bridges to
Wind

Robert H. Scanlan: Johns Hopkins University

0613, 19, B

The United States Geological Survey Accelerograph Network in the U.S.-Operations, Record Processing and Research A. Gerald Brady: USGS

0614, 19, B

Estimation of Source Time Function Based on Strong Motions and its Application for Engineering

Yoshikazu Kitagawa, Takahito Inoue, Tatsuo Murota: BRI

0615, 19, B

Strong-Motion Instrumentation Program Corps of Engineers

Frank K. Chang, R.F. Ballard, Jr., Arley Gus Franklin: WES

0616, 19, B

Comparisons of Dynamic Shear Strength between Fine Sands and Gravels Norihisa Matsumoto, Nario Yasuda, Masahiko Ohkubo, Shoji Arakawa: PWRI

0617, 19, B

Preliminary Study of Shear Design for RC Piers

Hiroshi Shinohara, Michio Okahara, Shoichi Nakatani, Keiji Taguchi, Atsushi Funakoshi: PWRI

0618, 19, B

Some Recent Studies on Lifeline Earthquake Engineering in the United States:

Experimental and Field Study

Thomas D. O'Rourke: Cornell University

Jeremy Isenberg: Weidlinger Associates

0619, 19, B

Some Recent Studies on Lifeline Earthquake Engineering in the United States: Analysis and Design

Masanobu Shinozuka: Columbia University Leon Ru-Liang Wang: Old Dominion University

0620, 19, B

A Review of Base Isolation for Upgrading Earthquake Performance of Building Structures

Nishikant R. Vaidya: Paul C. Rizzo Associates Robert J. Smith: CORPS

0621, 19, B

Consideration of Earthquakes in Highway
Earthworks

Yasuyuki Koga, Akiomi Shimazu, Eiichi Taniguchi: PWRI

0622, 19, B

Damage, Strengthening, and Retrofit of Bridges

James H. Gates: CALTRANS

0623, 19, B

Large Scale Model Tests and Analysis of Gravel Drains

Susumu Iai, Katsuhiko Koizumi, Setsuo Noda, Hajime Tsuchida: PHRI

0624, 19, B

Experimental Study on Degree of Fixation at Pile Head Joint and Failure Strength of Prestressed High Strength Concrete Piles Yoshihiro Sugimura, Tsutomu Hirade: BRI

0625, 19, B

Schemes for Seismic Upgrading of a Major Hospital

Joseph V. Tyrrell: NAVFAC

0626, 19, C

Experimental Investigation on the Damage of Offshore Seawall due to the 1983 Nihonkai-Chubu Earthquake Tsunami Katsutoshi Tanimoto, Hiroichi Tsuruya: PHRI

0627, 19, C

A Summary of the Tsunami History of the United States

Herbert Meyers, Patricia A. Lockridge, James F. Lander: National Geophysical Data Center, NOAA

0628, 19, C

An Estimation of Tsunami Generated by Submarine Landslide

Shin-ichi Iwasaki, Hiroshi Takahashi: NRCDP

0629, 19, C

A Computer Program for Producing Tsunami Travel-Time Chart Masami Okada, Masaji Ichikawa: MRI

0630, 19, C

Numerical Simulation and Experiment on Tsunami Run-Up
Takaaki Uda, Atsushi Omata, Yasuhisa Yokoyama:

PWRI

0631, 19, D

Effect of Number of Loading Cycles and Loading Velocity of Reinforced Concrete Bridge Piers

Toshio Iwasaki, Kazuhiko Kawashima, Kinji Hasegawa, Tatsuhiko Koyama, Takeshi Yoshida: PWRI

0632, 19, D

Study of in Situ Testing for Evaluation of Liquefaction Resistance and Occurrence Jeffrey A. Farrar: BUREC

0633, 19, D

U.S.-Japan Coordinated Earthquake Research Program on Masonry Buildings

- Seismic Behavior of Three-Story Full Scale Brick Planar Frame Under Cyclic Lateral Loading -

Shin Okamoto, Yutaka Yamazaki, Takashi Kaminosono, Masaomi Teshigawara, Hisahiro Hiraishi : BRI

0634, 19, D

U.S. Coordinated Program for Masonry Building Research - 1986/87

James L. Noland: Atkinson-Noland & Associates

0635, 19, A

Wind Tunnel Test on Behavior of Rooftiles under Strong Wind

Hisashi Okada, Tatsuo Murota: BRI

0636, 19, B

Seismic Microzonation Using Urban Ground Information

Shinkichi Kishi, Toshikazu Morohoshi, Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0637, 19, B

Simplified Evaluation Procedure on Seismic Stability of Embankments on Liquefiable Ground

Yasuyuki Koga, Osamu Matsuo: PWRI

0638, 19, B

Strong Motion Observation System of PWRI

Toshio Iwasaki, Yasushi Sasaki, Tetsuro Kuwabara: PWRI

0639, 19, B

Evaluation of Economical Losses Induced by the Nihonkai-Chubu Earthquake of 1983 Toshio Iwasaki, Kazuhiko Kawashima, Naomi Obinata, Takashi Kano: PWRI

0640, 19, B

Analysis of Strong Motion Earthquake Records on January 9, 1987

Nobuyoshi Yamaguchi, Sadaiku Hattori, Shinsuke Nakata, Hatsukazu Mizuno, Masanori Iiba: BRI

0641, 19, B

Seismic Investigation and Improvement of Electrical Utility Systems
Joseph V. Tyrrell: NAVFAC

0642, 19, D

Practical Results for Design by Full-Scale Seismic Studies or K-Braced Steel Structure Hiroyuki Yamanouchi, Mitsumasa Midorikawa, Isao Nishiyama: BRI

0643, 20, A

Modeling the Effect of Spanwise Coherence of Aerodynamic Forces on Full-Bridge Response

Fazl Ehsan: John Hopkins University

Harold R. Bosch: FHWA

0644, 20, A

Studies on Wind-Resistant Design of Highway Bridges and New Design Codes in Japan

Nobuyuki Narita, Koichi Yokoyama, Hiroshi Sato: PWRI

0645, 20, A

Anchorages and Foundations Wind Resistance of Manufactured Homes G. Robert Fuller: HUD

0646, 20, A

Present State of Wind Engineering Research Related to Building Design in Japan Tatsuo Murota, Hisashi Okada: BRI 0647, 20, A,B

Outline on Research Results of Wind and Seismic Effects during 2 Decades at the National Research Center for Disaster Prevention

Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0648, 20, B

Development of Design Criteria for Mitigating Earthquake Damage - The Program of the Federal Emergency Management Agency -Richard W. Krimm: FEMA

0649, 20, B

State-of-the-Art on Earthquake Engineering to Port and Harbour in Japan Setsuo Noda, Hajime Tsuchida: PHRI

0650, 20, B

Overburden Correction for Blowcounts in Gravels

Mary Ellen Hyper Griffin, Arley Gye Frenklin : W.

Mary Ellen Hynes-Griffin, Arley Gus Franklin: WES

0651, 20, B

Sand Liquefaction Tests Using a Geotechnical Dynamic Centrifuge Yasuyuki Koga, Eiichi Taniguchi, Jun-ichi Koseki, Tadashi Morishita: PWRI

0652, 20, B

In Situ Measurement of Pore Pressure Build-Up during Liquefaction
Thomas L. Holzer, Michael J. Bennett: USGS
T. Leslie Youd: Brigham Young University

0653, 20, B

Two Directional Loading Test for Partially Concrete Filled Steel Columns Shoichi Saeki, Minoru Fujiwara, Koichi Minosaku, Jun Hikino: PWRI

0654, 20, B

Similitude Studies of Prototype and 1/6-Scale Model Bridge Columns under Reversed Cyclic Loading
William C. Stone Geraldine S. Check H.S. Lew:

William C. Stone, Geraldine S. Cheok, H.S. Lew: NBS

0655, 20, B

Study on the Development of the Mixed Structural System Composed of Reinforced Concrete Column and Structural Steel Girder

Hiroyuki Yamanouchi, Isao Nishiyama: BRI

0656, 20, B

Effects of Soil and Rock on Ground Motion and Potential Damage in an Earthquake Walter W. Hays: USGS

0657, 20, B

Seismic Performance of Reinforced Concrete High-Rise Frame Structure with Wall

- Part 1: Deformation Capacity of Principal Structural Elements such as Wall Columns, Beams and Shear Walls -

Masava Hirosawa, Hisahiro Hiraishi, Masaki Fujisawa : BRI

Manabu Yoshimura: Tokyo Metropolitan University

0658, 20, B

Vibration Studies of Richard B. Russell Concrete Gravity Dam

Robert Hall, Messrs Tommy Bevins, Stephen Wright: CORPS

0659, 20, B

Base Isolated Building Structures in Japan Yoshikazu Kitagawa, Masaya Hirosawa: BRI

0660, 20, B

Shaking Table Test on the Ridge Response during Earthquake

Yasushi Sasaki, Tetsuro Kuwabara, Seitaro Yoshimi: **PWRI** 

0661, 20, B

Field Experiments on Pipelines in the Parkfield Earthquake Zone

Jeremy Isenberg, Edward Richardson: Weidlinger Associates

0662, 20, B

Investigation of Two Buildings Shaken during the 19 September 1985 Mexico Earthquake

Douglas A. Foutch, Keith D. Hjelmstad: University

of Illinois at Urbana-Champaign

Enrique Del Valle Calderon: Universidad Nacional Autonoma de Mexico

0663, 20, B

Recorded Behavior of Structures Whittier Narrows Earthquake, 1 October 1987 A. Gerald Brady: USGS

0664, 20, B

The Drawing Image of Earthquake Hazard Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0665, 20, B

Loading Test on the Apartment of 15 Story Frames Structure with Wall Columns - Research on the High-Rise Frames Structure with Wall Columns -(in Japanese)

Masaya Hirosawa, Shinsuke Nakata, Hisahiro Hiraishi,

Tetsuro Goto: BRI

Manabu Yoshimura: Tokyo Metropolitan University

0666, 20, B

Model Shaking Table Tests on Seismic Resistance of Reinforced Embankment

Yasuyuki Koga, Yoshihiro Ito, Shuzo Washita, Takao Shimazu: PWR1

0667, 20, B

Dynamic Shear Moduli of Rockfill Materials

Norihisa Matsumoto, Nario Yasuda, Masahiko Ohkubo: PWRI

0668, 20, B

Seismic and Tsunami Disaster Prevention Surveys and Preparing Geographical Information in Geographical Survey Institute, Japan Masatoshi Nagaoka: GSI

0669, 20, B

Safety Analysis on the Vertical Bearing Capacity of Piles

Hiroshi Shinohara, Michio Okahara, Shoichi Nakatani, Keiji Taguchi: PWRI

0670, 20, C

Combined Effect of Storm Waves and Surge Paul D. Farrar, H. Lee Butler: WES

0671, 20, C

Stability of Submerged Dike at the Opening Section of Tsunami Protection Breakwaters Katsutoshi Tanimoto, Katsutoshi Kimura: PHRI

0672, 20, C

Marine Applications of Geographic Information System

Celso S. Barrientos: Data and Information Service, NOAA

0673, 20, D

U.S.-Japan Coordinated Earthquake Research Program on Masonry Buildings - Seismic Test of the Five Story Full Scale Reinforced Masonry Buildings Shin Okamoto, Yutaka Yamazaki, Takashi kaminosono, Masaomi Teshigawara: BR1

0674, 20, D

Current Status of the U.S. Coordinated Program for Masonry Building Research James L. Noland: Atkinson-Noland & Associates

0675, 20, D

Dynamic Strength and Ductility of Reinforced Concrete Bridge Piers Toshio Iwasaki, Osamu Ueda, Kazuhiko Kawashima,

Kinji Hasegawa, Takeshi Yoshida: PWRI

0676, 20, Z

US Side: Accomplishments and Challenges Panel on Wind and Seismic Effects Noel J. Raufaste, Jr., Richard N. Wright: Center for **Building Technology, NBS** 

0677, 20, Z

Two Decades of Accomplishments and Challenges for the Future Nobuyuki Narita: PWRI

0678, 21, A

A Summary of the Federal Highway Administration's Wind Engineering Research Program

Harold R. Bosch: FHWA

0679, 21, A

Wind Resistant Design Manual for Highway Bridges in Japan

Nobuyuki Narita, Koichi Yokoyama, Hiroshi Sato: PWRI

0680, 21, A

Field Measurements of Wind Pressures Kishor C. Mehta: Texas Tech University

0681, 21, A

Transfer of Research Results in Wind Engineering

J. Eleonora Sabadell: NSF

0682, 21, A

Wind Resistance in Manufactured Housing in Hurricane Zones
G. Robert Fuller: HUD

0683, 21, B

Behavior of the Nagara Dam during the Earthquake of December 17, 1987

Yasushi Sasaki, Tetsuro Kuwabara, Masao Nishimura: PWRI

Ikuji Seko, Jun Kashiwagi, Yoshiki Aoki: Water Resources Development Public Corporation

0684, 21, B

Analysis of Structural Response Records during Whittier Narrows, California, Earthquake Oct. 1, 1987 A. Gerald Brady: USGS

0685, 21, B

Behaviours of Dams during Chiba off Earthquake

Norihisa Matsumoto, Nario Yasuda: PWRI

0686, 21, B

Survey for Estimation of Seismic Damage in South Kanto Area

Hideaki Oda, Shigeru Tamura: National Land Agency

0687, 21, B

Seismic Design Considerations for Offshore Oil and Gas Structures

Charles E. Smith: Minerals Management Service

0688, 21, B

Centrifuge Dynamic Model Tests in PHRI Takamasa Inatomi, Motoki Kazama, Setsuo Noda, Hajime Tsuchida: PHRI

0689, 21, B

Modeling of Earthquake Induced Pore Pressure Behavior Richard H. Ledbetter: WES

0690, 21, B

Seismic Design Method of Earth Embankment with Seismic Coefficient Yasuyuki Koga, Osamu Matsuo: PWRI

0691, 21, B

Seismic Monitoring of Buildings: Analyses of Seismic Data

Mehmet Celebi: USGS

0692, 21, B

Development of Advanced Reinforced Concrete Buildings Using High-Strength Concrete and Reinforcement Tatsuo Murota, Masaya Hirosawa: BRI

0693, 21, B

Guidelines for Identification and Mitigation of Seismically Hazardous Existing Federal Buildings

H.S. Lew: NIST

0694, 21, B

U.S. Army Corps of Engineers Seismic research Program

William E. Roper: CORPS

0695, 21, B

The History and Status of Strong-Motion Earthquake Observation in Japan

Keiichi Ohtani, Hiroshi Takahashi: NRCDP

0696, 21, B

Summary of Lifeline Earthquake Engineering

James D. Cooper: FHWA

0697, 21, B

A Strong Motion Data Catalog for Personal Computers

Lee Wesley Row, III: University of Colorado Herbert Meyers: National Geophysical Data Center, NOAA

0698, 21, B

Non Linear Seismic Analysis of Concrete Gravity Dams

Lucian G. Guthrie: CORPS

0699, 21, B

Seismic Microzonation Walter W. Hays: USGS

0700, 21, B

Full Scale Test on a Three-Storied Wood-Framed Building

Tatsuo Murota, Motoi Yasumura: BRI

0701, 21, B

Damage by the Chiba-ken Toho-Oki Earthquake

Yasushi Sasaki: PWRI

0702, 21, C

Observations of Tsunamis on the West Coast of the United States

James F. Lander: University of Colorado

0703, 21, C

Present State of Tsunami Numerical Simulation

Chiaki Goto, Katsutoshi Tanimoto: PHRI

0704, 21, D

U.S.-Japan Coordinated Earthquake Research Program on Masonry Buildings

- Seismic Test of Five Story Full Scale Reinforced Masonry Building - (Part 2) Shin Okamoto, Yutaka Yamazaki, Takashi Kaminosono, Masaomi Teshigawara: BRI

0705, 21, D

Influence of Horizontal Reinforcement on the Shear Resistance of Masonry Walls Charles W.C. Yancey, H.S. Lew: NIST

0706, 21, D

Inelastic Behavior of Reinforced Concrete Bridge Pier - Effect of Bilateral Loading and Circular Hollow Section -Toshio Iwasaki, Osamu Ueda, Kazuhiko Kawashima, Kinji Hasegawa, Takeshi Yoshida: PWRI

0707, 21, D

U.S. Coordinated Program for Masonry Building Research A Fourth Year Status James L. Noland: Atkinson-Noland & Associates

0708, 21, Z

Minister-of-Construction's Agreement System in the Building Standard Law of Japan

Tatsuo Murota: BRI

0709, 21, Z

History of Structural Regulation in Japanese Building Codes and Outline of Wind-Resistant and Seismic Regulations Yuji Ishiyama: Peru Office, JICA

Yuji Ohashi : BRI

0710, 21, Z

Development and Enforcement of U.S. Building Regulations

James G. Gross, Richard N. Wright: NIST

0711, 22, A

Meteorological Data from Hurricane Hugo Joseph H. Golden: NOAA

0712, 22, A

Monitoring the Aerodynamic Performance of a Classic Suspension Bridge

Harold R. Bosch: FHWA

0713, 22, A

Cooperative Research Program on Wind Tunnel Testing in Turbulent Flow Koichi Yokoyama, Hiroshi Sato, Takaaki Kusakabe:

Koichi Yokoyama, Hiroshi Sato, Takaaki Kusakabe

PWR1

Robert L. Wardlaw, Michael G. Savage: National

Research Council of Canada

0714, 22, A

Wind on Offshore Platforms

Charles E. Smith: Minerals Management Service

0715, 22, C

**Deep Ocean Recordings of Tsunamis**Frank I. Gonzalez: Pacific Marine Environmental Laboratory, NOAA

0716, 22, C

Measurement and Modeling of Coastal Storm Effects

William E. Roper: CORPS

H. Lee Butler, Andrew Garcia: WES

0717, 22, C

Storm Surge Modeling in the United States Chester P. Jelesnianski, Jye Chen, Wilson A. Shaffer: National Weather Service, NOAA

0718, 22, D

The Japan Research Plan on Precast Concrete Seismic Structural System ( PRESSS Japan )

Shin Okamoto, Shinsuke Nakata, Hisahiro Hiraishi, Takashi Kaminosono, Hitoshi Shiohara: BRI

0719, 22, D

U.S. Coordinated Program for Masonry Building Research Fifth Year Status James L. Noland: Atkinson-Noland & Associates

0720, 22, D

Design Guidelines of Medium Rise RM Buildings

Yutaka Yamazaki, Shin Okamoto: BRI Tsuneo Okada: Institute of Industrial Science,

University of Tokyo

Akira Matsumura: Kanagawa University Toshiyuki Kubota: Kinki University

0721, 22, D

U.S.-Japan Cooperative Research Program on Hybrid Control of Seismic Response of Bridge Structures

Jiro Taguchi, Toshio Iwasaki, Yoshio Adachi, Yasushi Sasaki, Kazuhiko Kawashima: PWRI

0722, 22, B

Lateral Resistance of a Pile

Michio Okahara, Shoji Takagi, Keiji Taguchi: PWRI

0723, 22, B

Major Seismic Building Upgrades at the Lawrence Livermore National Laboratory F.J. Tokarz, G.E. Freeland: Lawrence Livermore National Laboratory

James R. Hill: U.S. Department of Energy

0724, 22, B

Attenuation Characteristics of Ground Strains Induced during Earthquake Ken-ichi Tokida, Keiichi Tamura, Koh Aizawa: PWRI

0725, 22, B

Dynamic Centrifugal Model Tests of Embankments on Liquefiable Grounds Yasuyuki Koga, Jun-ichi Koseki: PWRI

0726, 22, B

Seismic Resistance Requirements of Roller Compacted Dams

Alan T. Richardson, Louis H. Roehm: BUREC

0727, 22, B

Damage of Soil Liquefaction Caused by Earthquakes and Use of Geomorphological Maps

Takekazu Akagiri: GSI

0728, 22, B

Dynamic Deformation Characteristics of Compacted Rockfills by Cyclic Torsional Simple Shear Tests

Norihisa Matsumoto, Nario Yasuda, Masahiko Ohkubo, Yasushi Kinoshita: PWRI

0729, 22, B

Allowable Residual Displacement of Gravity Quaywall Given by Optimum Seismic Coefficient from Economical Viewpoint Tatsuo Uwabe: PHRI

0730, 22, B

The Relation between the Buildings
Damages and the Vibration Properties of
Ground (In Case of Spitak Earthquake)
Keiichi Ohtani: NRCDP

Hiroyoshi Kobayashi: Tokyo Institute of Technology

0731, 22, B

New Seismic Design Specifications of Highway Bridges in Japan Toshio Iwasaki, Kazuhiko Kawashima, Kinji Hasegawa: PWRI

0732, 22, B

Scatter on Mechanical Properties of Structural Steels Recently Supplied in Japan

Hirofumi Aoki: Yokohama National University

Hiroyuki Yamanouchi : BRI Ben Kato : University of Tokyo 0733, 22, B

Development of Effective Use of New Metallic Materials for Buildings Structures Hiroyuki Yamanouchi, Tatsuo Murota: BRI Hirofumi Aoki: Yokohama National University

0734, 22, B

Initial Overview of the San Francisco Bay and Santa Cruz Mountains Ground Motion A. Gerald Brady: USGS

0735, 22, B

The Loma Prieta Earthquake: Site Response and Liquefaction

Ellis L. Krinitzsky, Arley Gus Franklin: WES

0736, 22, B

Dam Performance during the Loma Prieta Earthquake of October 17, 1989 Robert B. MacDonald: BUREC

0737, 22, B

Performance of Wood-Framed Structures in the Loma Prieta Earthquake

John Tissell: American Plywood Association

0738, 22, B

Seismic Performance of Nonstructural Elements during the Loma Prieta Earthquake T.T. Soong: State University of New York at Buffalo

0739, 22, B

Socio-Economic Impacts of Lifeline Performance Related to the Loma Prieta Earthquake

Maryann T. Phipps: H.J. Degenkolb & Associates Ronald T. Eguchi: Dames & Moore

0740, 22, B

Lifelines Performance during the October 17, 1989 Loma Prieta Earthquake M. Khater, Charles Scawthorn, T. Larsen: EQE

Engineering

Jeremy Isenberg: Weidlinger Associates

LeVal Lund: Los Angeles Department of Water and

Masanobu Shinozuka: Princeton University

0741, 22, B

Summary Report on the Loma Prieta Earthquake of October 17, 1989

Toshio Iwasaki: PWRI

0742, 22, B

Experimental Study on Lateral Flow of Ground Induced by Soil Liquefaction Yasushi Sasaki, Ken-ichi Tokida, Hideo Matsumoto, Shoichi Saya: PWRI

0743, 22, B

Development of Advanced Reinforced Concrete Buildings Using High-Strength Concrete and Reinforcement

Tatsuo Murota, Hisahiro Hiraishi, Takashi Kaminosono, Masaomi Teshigawara, Hitoshi Shiohara : BRI

0744, 22, B

Characteristics of Supplemental Dampers for Earthquakes

Robert D. Hanson: NSF

0745, 22, B

An Economic Analysis of Laminated Rubber and Steel Bearing Base Isolation System for Buildings

Tingley K. Lew: NCEL

0746, 22, C

Damages Caused by Storm Surges in Maldives

Takaaki Uda: PWRI

0747, 22, A

Performance of Structures in Hurricane

Richard D. Marshall: NIST

0748, 22, A

The Performance of Structures in Hurricane Hugo 1989 - The Carolinas

Peter R. Sparks: Clemson University

0749, 23, A

Probabilistic Performance Goals for Wind and Tornado Design

James R. Hill: U.S. Department of Energy James R. McDonald: Texas Tech University Robert C. Murray: Lawrence Livermore National Laboratory

0750, 23, A

Analysis of Tornado in Mobara City on December 11, 1990

Hiroshi Niino, Tokunosuke Fujitani: MRI Tatsuo Murota, Nobuyoshi Yamaguchi, Hisashi Okada : BRI

0751, 23, A

Hurricane Hugo in Perspective Peter R. Sparks: Clemson University

0752, 23, A

Boundary Layer Wind Tunnel Study on Full Aeroelastic Long Span Bridge Model Koichi Yokoyama, Tomoki Kanazaki: PWRI Masahiko Yasuda: Honshu-Shikoku Bridge Authority

0753, 23, B

The Worldwide Earthquake Risk Management (WWERM) Program S.T. Algermissen, Walter W. Hays: USGS

Paul F. Krumpe: Office of Foreign Disaster

Assistance, AID

0754, 23, B

Influence of Embankments on the Liquefaction of Ground

Yasuvuki Koga, Jun-ichi Koseki, Takao Shimazu,

Osamu Matsuo: PWRI

0755, 23, B

Maximum Ground Acceleration on Soft Clay

Tingley K. Lew: NCEL

0756, 23, B

Broadband Strong-Motion Seismic Observation Network Operated by Japan

Meteorological Agency

Masahiko Yamamoto, Iwao Sasakawa, Akira Nagai, Takeshi Kakishita: Japan Meteorological Agency Akihiko Wakayama, Koichi Uhira, Masaaki Seino: MRI

0757, 23, B

Seafloor Seismic Network Offshore Southern California

Charles E. Smith: Minerals Management Service

0758, 23, B

Distribution of Liquefaction in the Saitama Plain by the 1923 Kanto Earthquake and Geomorphological Maps

Tadao Dohi, Takekazu Akagiri: GSI

0759, 23, B

Damage to Civil Engineering Facilities from the July, 1990 Philippine Earthquake Yasushi Sasaki, Michio Okahara: PWRI

0760, 23, B

Report on Philippine Earthquake 1990 Shinsuke Nakata: BRI

0761, 23, B

Recorded Structural Response during the M7.1 Loma Prieta California Earthquake A. Gerald Brady: USGS

0762, 23, B

Monotonic and Cyclic Loading Tests of Rockfill Materials

Norihisa Matsumoto, Nario Yasuda, Masahiko Ohkubo, Ryoichi Yoshioka: PWRI

0763, 23, B

Full-Scale Structural Applications of Active Control Systems

T.T. Soong, A.M. Reinhorn, Masanobu Shinozuka: State University of New York at Buffalo

0764, 23, B

Base-Isolated Buildings and Seismic Safety Evaluation in Japan

Yoshikazu Kitagawa, Mitsumasa Midorikawa: BRI

0765, 23, B

Dynamic Modeling of Soil-Structure Systems for Control Applications H. Allison Smith, R.I. Borja: Stanford University

0766, 23, B

Current Research Efforts in Japan for Passive and Active Control of Highway Bridges against Earthquake

Kazuhiko Kawashima, Kinji Hasegawa, Shigeki Unjo, Hiroyuki Nagashima, Hideyuki Shimizu: PWRI

0767, 23, B

Status of U.S. Research on Structural Control Systems

Shih Chi Liu, Henry J. Lagorio, Ken P. Chong: NSF

0768, 23, B

Vibration of Large-Scale Shaking Table **Foundation** 

Chikahiro Minowa, Nobuyuki Ogawa, Tadashi Mikoshiba, Keiichi Ohtani, Norio Ohyagi: NIED

0769, 23, B

Safety and Economic Benefits Realized from Upgrading the Lawrence Berkeley Laboratory Donald Eagling: University of California James R. Hill: U.S. Department of Energy

0770, 23, B

Structural Regulations of Buildings and Development of Technology in Japan Yuji Ohashi, Hiroyuki Yamanouchi: BRI

0771, 23, B

Seismic Hazard Assessment of Liquefaction Potential at Mormon Island Auxiliary Dam, California, USA

David W. Sykora, Joseph P. Koester, Mary Ellen Hynes: WES

0772, 23, B

System Identification of Spirally Reinforced Circular Bridge Columns Subjected to Cyclic Lateral Loading William C. Stone, Andrew W. Taylor: NIST

0773, 23, B

Simplified Procedure for Inspecting Earthquake Resistant Potential of Highway Bridge against Soil Liquefaction Ken-ichi Tokida, Jiro Fukui, Hideo Matsumoto: **PWRI** 

0774, 23, B

Evaluation and Repair of Major Water Resources Structures for Improved Safety and Seismic Stability William E. Roper: CORPS

0775, 23, B

Shaking Table Tests for Hydrodynamic Pressure Acting on Double Cylindrical Caisson Type Breakwater in the Deep Sea Tatsuo Uwabe, Makoto Osada, Setsuo Noda: PHRI 0776, 23, B

Torsional Resistance of Multi-Column Foundation

Yukitake Shioi, Michio Okahara, Jiro Fukui, Shoji Takagi: PWRI

0777, 23, B

Evaluation of Penetration Resistance for Liquefaction Assessment at Jackson Lake

Jeffrey A. Farrar: BUREC Nario Yasuda: PWRI

0778, 23, B

Nondestructive Evaluation of Civil Structures and Materials Ken P. Chong, John B. Scalzi: NSF

0779, 23, B

NSF Supported Research in Concrete Structures and Materials

Ken P. Chong, Shih Chi Liu, Henry J. Lagorio: NSF

0780, 23, B

Comparison of Responses of a Select Number of Buildings to the 10/17/1989 Loma Prieta (California) Earthquake and Low-Level Amplitude Test Results Mehmet Celebi: USGS

Long T. Phan, Richard D. Marshall: NIST

0781, 23, C

Subaerial and Submarine Landslide Generated Tsunamis

James F. Lander: University of Colorado Patricia A. Lockridge, Herbert Meyers: National Geophysical Data Center, NOAA

0782, 23, C

A Study of the Effect of Tsunami Breakwater by Numerical Simulation Chiaki Goto, Katsutoshi Tanimoto: PHRI

0783, 23, C

Development of Water Level and Wave Height Design Data Martin C. Miller: WES William E. Roper: CORPS

Leon E. Borgman: L.E. Borgman, Inc. Joannes J. Westerink: University of Norte Dame

0784, 23, D

The U.S. - PRESSS Program M.J. Nigel Priestley: University of California

0785, 23, D

U.S.-Japan Cooperative Research Program PRESSS, Part 1: Design Trial of 15 Story Precast Reinforced Concrete Buildings Shin Okamoto, Shinsuke Nakata, Takashi Kaminosono, Hitoshi Shiohara, Mizuo Inukai: BRI

0786, 23, D

U.S.-Japan Cooperative Research Program PRESSS, Part 2-1: Tensile Tests of Lap-Spliced Joint for Precast Concrete Panel Connections

Shin Okamoto, Jhinsuke Nakata, Takashi

Kaminosono, Hitoshi Shiohara, Mizuo Inukai: BRI

0787, 23, D

U.S.-Japan Cooperative Research Program PRESSS, Part 2-2: Strength of Concrete Interface Subjected to Compression and Shear

Shin Okamoto, Shinsuke Nakata, Takashi

Kaminosono, Hitoshi Shiohara, Mizuo Inukai: BRI

0788, 23, D

U.S.-Japan Cooperative Research Program PRESSS, Part 3: Experimental Study on Shear Walls of High-Rise Precast Reinforced-Concrete Frame Buildings Shin Okamoto, Shinsuke Nakata, Takashi Kaminosono, Hitoshi Shiohara, Mizuo Inukai: BRI

0789, 23, D

U.S. Coordinated Program for Masonry Buildings Research: Sixth Year Status James L. Noland: Atkinson-Noland & Associates

0790, 23, B

Current Efforts to Improve the Performance of Nonstructural Systems Based on Experience from the Loma Prieta Earthquake Robert Reitherman: The Reitherman Company

0791, 23, D

State-of-the-Art Report on Seismic Design of Building Equipment and Nonstructural Elements in Japan Masaya Hirosawa, Hatsukazu Mizuno, Mitsumasa Midorikawa: BRI

0792, 23, 6

Present Status of IDNDR Activities in Japan

Toshio Iwasaki: PWRI

0793, 23, 6

Damages and Lessons from the Loma Prieta Earthquake

Stephen A. Mahin: University of California, Berkely

0794, 23, 6

Damages and Lessons Learned from Hurricane Hugo

Peter R. Sparks: Clemson University

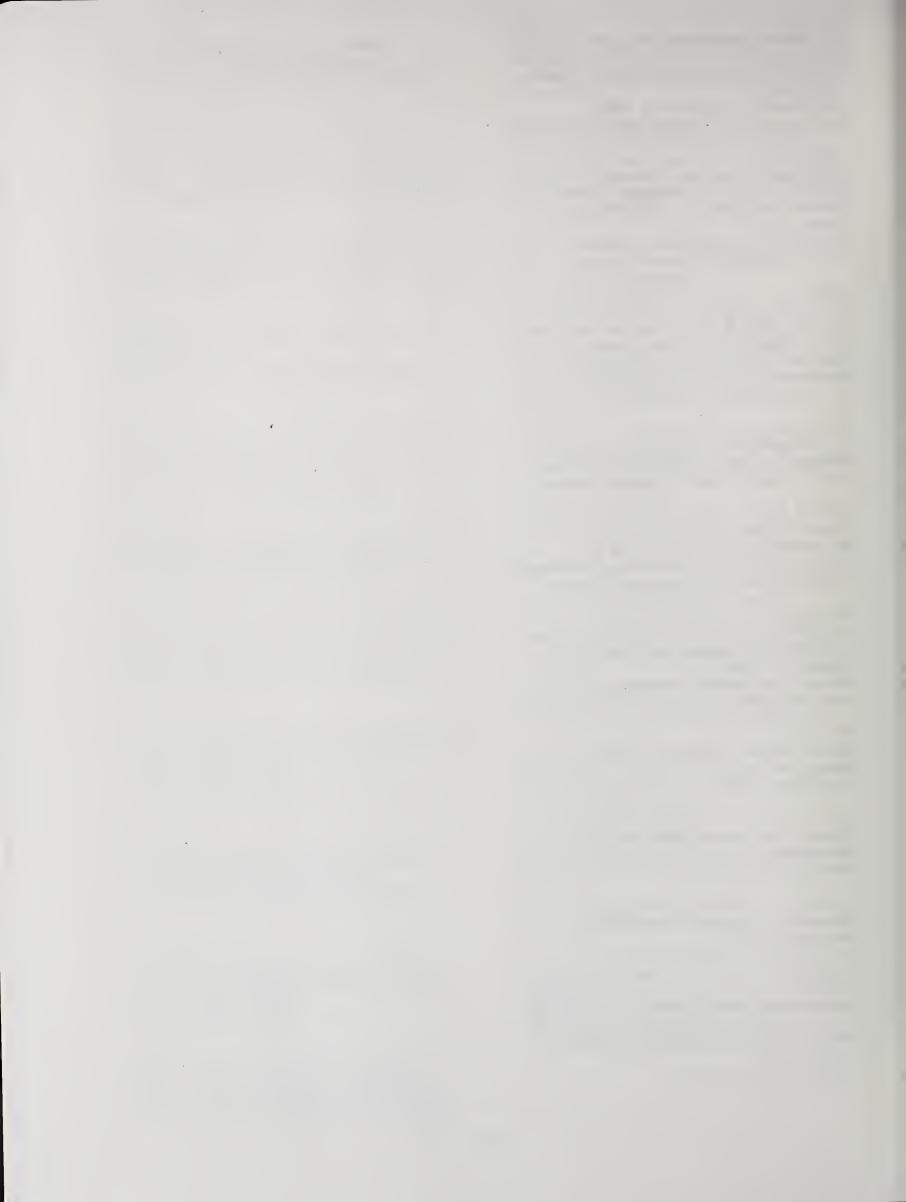
0795, 23, 6

United States Federal Agency Programs in Disaster Countermeasures

Paul F. Krumpe: Office of Foreign Disaster

Assistance, AID

Kenneth F. Sullivan: FEMA



# PUBLISHED REPORTS INDEX of TASK COMMITTEES



## 4. PUBLISHED REPORTS INDEX of TASK COMMITTEES

### TASK COMMITTEE "C" Repair and Retrofit of Existing Structures

C0001, C1

Seismic Strengthening of Old Buildings with Modern Codes

Loring A. Wyllie, Jr.: H.J. Degenkolb & Associates

C0002, C1

Aseismic Strengthening of Existing Reinforced Concrete Buildings

Shunsuke Sugano: Takenaka Construction Co., Ltd.

C0003, C1

Repair and Retrofit of Buildings Overview of U.S. Experiences

- Current Practice and Weaknesses -

James Warner: Consulting Engineer, Member of EERI

C0004, C1

Retrofitting and Repairs of Existing Steel

**Building Structures** Hiroyuki Yamanouchi: BRI

C0005, C1

Seismic Evaluation and Rehabilitation of Hud

Residential Buildings G. Robert Fuller: HUD

C0006, C1

How to Evaluate the Seismic Safety of Your House and How to Retrofit it (in Japanese)

Department of City Housing, Shizuoka Prefecture

C0007, C1

Inspection and Retrofitting for Earthquake Resistance Vulnerability of Highway Bridges

in Japan

Eiichi Kuribayashi, Osamu Ueda, Tadayuki Tazaki:

**PWRI** 

C0008, C1

Retrofitting Bridges to Increase their Seismic

Resistance

Oris H. Degenkolb: CALTRANS

C0009, C1

Repair and Retrofit Works for Existing

Highway Bridges

Tatsuo Asama, Yukitake Shioi, Tadayuki Tazaki, Hideya

Asanuma: PWRI

C0010, C1

Preliminary Report on Fire Testing of Epoxy

Repaired Shear Walls

Joseph M. Plecnik, Mai G. Pham: California State

University

C0011, C1

Repair of Bond in R/C Structures by Epoxy

Injection

Andrew D. Cowel, Egor P. Popov, Vitelmo V. Bertero:

University of California at Berkeley

C0012, C1

Research Project on Repair and Retrofit of

Buildings

Kiyoshi Nakano, Shin Okamoto, Toshiyuki Kubota,

Takashi Kaminosono: BRI

C0013, C2

Development of Retrofit Guidelines for

Highway Bridges

James D. Cooper, Richard V. Nutt, Ronald L. Mayes:

**FHWA** 

C0014, C2

Introduction to an Earthquake Evaluation Test for Effects to Retrofit of Reinforced Concrete

Bridge Pier Elements

Eiichi Kuribayashi, Shigetoshi Kobayashi: PWRI

C0015, C2

Considerations for Retrofitting Bridges

Oris H. Degenkolb: CALTRANS

C0016, C2

Development of Post-Earthquake Measures for

Buildings and Structures Damaged by Earthquakes

Eiichi Kuribayashi, Masaya Hirosawa, Tatsuo Murota:

**PWRI** 

C0017, C2

Criterion on the Evaluation of Seismic Safety

of Existing Reinforced Concrete Buildings

Masaya Hirosawa: BRI

C0018, C2

Seismic Resistance of Interior Partitions

Mihran S. Agbabian: Agbabian Associates

C0019, C2

Experimental Studies on Retrofitting of Reinforced Concrete Structural Members

Y. Higashi, Toneo Endo, Y. Shimizu: Tokyo

Metropolitan University

C0020, C2

Epoxy Repair Concrete Components under

Fire Exposure

Joseph M. Plecnik, W. Whitman, H.M. Chan, J. Choa:

California State University at Long Beach

C0021, C2

Guideline for Seismic Retrofitting Design of Existing Reinforced Concrete Buildings Shunsuke Sugano: Takenaka Construction Co., Ltd.

C0022, C2

Repair and Strengthening of Masonry Lawrence F. Kahn: Georgia Institute of Technology

C0023, C2

Strengthening Effect of Eccentric Steel Braces to Existing Reinforced Concrete Frames
Shigeya Kawamata, Masaaki Ohnuma: Tohoku Institute of Technology

C0024, C2

Seismic Evaluation and Strengthening of Existing Multistory Residential Buildings G. Robert Fuller, Andrei Gerich: HUD

C0025, C2

Retrofitting on Medium-Rise Reinforced Concrete Housing Structures Masaya Hirosawa, Yoshikazu Kitagawa, Yutaka Yamazaki: BRI

C0026, C2

Strengthening Existing Concrete and Masonry Buildings for Seismic Resistance Loring A. Wyllie, Jr.: H.J. Degenkolb & Associates

C0027, C2

Earthquake Damage at Izumi High School in 1978 Miyagi-Ken-Oki Earthquake and Methods of Repair and Strengthening M. Yokoyama, Hiroshi Imai: Tsukuba University

C0028, C2

Soil Modification to Reduce the Potential for Liquefaction

James Warner: Consulting Engineer, Member of EERI

C0029, C2

Veterans Administration Seismic Correction Program

Richard D. McConnell: DV

C0030, C2

Effects of Infills in Seismic Resistant Building

Vitelmo V. Bertero, S. Brokken: University of California at Berkeley

C0031, C3

Anchorage and Diaphragm Systems for Tilt-Up-Wall Buildings

Mihran S. Agbabian, R.D. Ewing: Agbabian Associates

C0032, C3

Retrofitted Structures against Earthquake and Research on them

Toneo Endo: Tokyo Metropolitan University

C0033, C3

Preliminary Report on Experimental Testing of Epoxy Repaired Concrete Beams
Joseph M. Plecnik, J. Chao, T. Baker, Pei-Horng Kuo, T-Liang Hsu: California State University at Long Beach

C0034, C3

A Repair Effect of Reinforced Concrete Joint Assemblies Subjected Seismic Loads Shinsuke Nakata, Toshikazu Kawashima, H. Sekiguchi: BRI

C0035, C3

A Repairing Test of Full Scale Seven Story Reinforced Concrete Building Subjected to Seismic Load

Masaya Hirosawa, Shin Okamoto, Shinsuke Nakata, Takashi Kaminosono, H. Sekiguchi: BRI

C0036, C3

Seismic Retrofit of Small Pumping and Chlorinating Station Buildings
LeVal Lund: Los Angels Department of Water and Power

C0037, C3

Campton Hotel Rehabilitation
George E. Greenwood: H.J. Degenkolb & Associates

C0038, C3

Outline of Research on Estimating of Damages and Repairs of the Building Damaged by the Miyagi-Ken-Oki Earthquake, June, 1978

Toshio Shiga, Akenori Shibata, Masaya Hirosawa: BRI

C0039, C3

The Rehabilitation of History Corner of the Stanford University Main Quad William T. Holmes: Rutherford and Chekene

C0040, C3

On the Development of Post-Earthquake Measures for Building and Structures Damaged by Earthquakes

Masaya Hirosawa, Tatsuo Murota: BRI

C0041, C3

Earthquake Bracing Program United States Geologic Survey

Nicholas F. Forell: Forell/Elsesser Engineers

C0042, C3

Examples of Repair and Retrofit Works on Road Bridge Substructures
Hideya Asanuma: PWRI

C0043, C3

Bridge Retrofitting Details

Oris H. Degenkolb: Highway Department, State of

California

C0044, C3

An Investigation into Methods of Nondestructive Evaluation of Masonry Structures

James L. Noland, Richard H. Atkinson, John C. Baur: Atkinson-Noland & Associates

C0045, C3

Effects of Behaviors of Reinforced Concrete Frames by Adding Shear Walls Y. Higashi, Toneo Endo, Y. Shimizu: Tokyo

Metropolitan University

C0046, C3

Studies Regarding Repair and Retrofitting of the Imperial Country Services Building, El Centro, California

Vitelmo V. Bertero: University of California at Berkeley

C0047, C3

On the Development of Post-Earthquake Measures for Civil Engineering Structures Damaged by Earthquakes

Misato Murakami, Tomomitsu Yasue, Toshio Iwasaki, Yasushi Sasaki, Tadashi Arakawa: PWRI

C0048, C3

Reinforcing Steel Considerations Unique to Repair and Retrofit

James Warner: Consulting Engineer, Member of EERI

C0049, C3

Damage to Buildings from Urakawa-Oki, Japan, Earthquake of March 21, 1982 Shin Okamoto, Tatsuo Murota, Yutaka Yamazaki, Eiichi Itoigawa: BRI

C0050, C3

An Overview of the State-of-the Art in Seismic Strengthening of Existing Reinforced Concrete Buildings

Shunsuke Sugano: Takenaka Construction Co., Ltd.

C0051, C3

Vibration Testing of an Epoxy-Repaired Four-Story Reinforced Concrete Structure Roger E. School, G. Norman Owen: URS/J.A. Blume & Associates

C0052, C4

Research Needs for Repair and Strengthening of Reinforced Concrete Floor Slab Systems Jack P. Moehle: University of California

C0053, C4

Design and Construction Schemes for Buildings

L.A. Willie: Degenkolb & Association

C0054, C4

Comparison of Building Seismic Design in U.S. and Japan (Report on the Second U.S.-Japan Workshop on the Improvement of Building Seismic Design and Construction Practices)

Yuji Ishiyama: BRI

C0055, C4

Evaluation on Positions of Dynamic Response Analyses in Seismic Design by a Full-Scale Six-Story Steel Building Structure Hiroyuki Yamanouchi, A. Hori, T. Yomo: BRI

C0056, C4

Overall Design Standard for Earthquake Resistant Capacity of Governmental Buildings K. Onisawa, K. Shimizu: Ministry of Construction

C0057, C4

Recent Five Years Source List on Repair and Retrofit for RC Buildings due to Earthquakes Shinsuke Nakata: BRI

C0058, C4

Post-Earthquake Inspection and Evaluation of Earthquake Damaged in Reinforced Concrete Buildings

Hisahiro Hiraishi, M. Murakami, Tsuneo Okada, M. Ohkubo, S. Ohtani, K. Takiguchi: BRI

C0059, C4

Methods of Temporary and Permanent Restoration Applied to Reinforced Concrete Buildings Damaged by Earthquake Manabu Yoshimura, Tsuneo Okada, Toneo Endo, M. Ohkubo: Tokyo Metropolitan University

C0060, C4

Seismic Capacity of Reinforced Concrete Buildings which Suffered 1985.9.19-20 Mexico Earthquake

Tsuneo Okada, M. Murakami, T. Minami, N. Ishikawa: Institute of Industrial Science, University of Tokyo

C0061, C4

Seismic Inspection and Retrofit on Nine-Story RC Building Damaged by the Mexico Earthquake, 1985

Masaya Hirosawa, Y. Endo, T. Noji, H. Yoshida, H. Yamanaka, Tomoaki Akiyama: BRI

C0062, C4

Seismic Capacity of Reinforced Concrete 4-Story School Buildings which Suffered 1985 Mexico Earthquake in Mexico City Shunsuke Sugano, H. Eto, T. Noji, K. Tamamura: Takenaka Construction Co., Ltd.

C0063, C4

Inelastic Analysis of the Namioka Town Hospital Building Damaged during the 1983 Nihonkai-Chubu Earthquake Yutaka Yamazaki, Masaya Hirosawa, Yoshikazu Kitagawa, Masaomi Teshigawara: BRI

C0064, C4

**Behavior of Expansion Anchor Bolts** Toneo Endo, Y. Shimizu: Tokyo Metropolitan University

C0065, C4

Experimental Study of Strengthening Effect on Reinforced Concrete Shear Wall Thickened with Retrofit (Mashiuchi) Wall Tetsuro Goto, H. Adachi: BRI

C0066, C4

Performance of Reinforced Concrete Components Repaired with Epoxy Resin A. Tasai, H. Aoyama, S. Ohtani: University of Tokyo

C0067, C4

A Study on the Strengthening with Carbon Fiber for Earthquake Resistant Capacity of Existing Reinforced Concrete Columns H. Katsumata, Y. Kobatake, T. Takeda: Ohbayashi Corporation

C0068, C4

Study on Retrofit Method of Existing Structures by Steel Braces with Dampers M. Seki, H. Katsumata, T. Takeda: Ohbayashi Corporation

C0069, C4

Seismic Behabiours of Existing R/C Frame Strengthened with Retrofitting Steel Elements Y. Yamamoto, H. Aoyama: Shibaura Institute of Technology

C0070, C4

Seismic Strengthening of Existing Reinforced Concrete Buildings by Braces and Panels of Structural Steel

Shunsuke Sugano, M. Fujita: Takenaka Construction Co., Ltd.

C0071, C4

Seismic Inspection and Strengthening of Public Reinforced Concrete Buildings, Chiefly in Case of School Buildings Masaya Hirosawa, Tomoaki Akiyama: BRI C0072, C4

Damaged Aspects and Hysteresis Properties after Repair and Installation of Non Structural Elements

Shinsuke Nakata, Akio Baba, Hiroshi Ito: BRI

C0073, C4

Strengthening of Steel Buildings against Strong Earthquakes Koichi Takanashi, Ben Kato, A. Tanaka: Institute of

Industrial Science, University of Tokyo

C0074, C4

An Outline of the Manual for Rehabilitation of Earthquake Damaged Steel Building Koichi Takanashi, Tatsuo Murota, Hiroyuki Yamanouchi, Isao Nishiyama: University of Tokyo

C0075, C4

Evaluation of Seismic Resistance Capacity of Damaged Steel Building Structure
S. Morino, Koichi Takanashi, Isao Nishiyama:
University of Tokyo

C0076, C4

An Experimental Study on the Repair of Steel Structures Severely Damaged due to Earthquake

H. Narihara, A. Tanaka, M. Izumi: Taisei Research Institute of Construction Technology

C0077, C4

Ultimate Strength and Repair Method of Beam-Column Connections Fabricated by Fillet Welding K. Morita, Koichi Takanashi, Tatsuo Murota:

University of Tokyo

C0078, C4

Seismic Strengthening of Reinforced Building in Japan
Shunsuke Sugano, Toneo Endo: Takenaka Construction

Co., Ltd.

C0079, C4

Actual Examples of Seismic Judgement for Existing Buildings with or without Retrofitting

H. Aoyama, Masaya Hirosawa: University of Tokyo

C0080, C5

Recent Seismic Countermeasure for Existing Buildings and Damaged Buildings in Japan Shinsuke Nakata, Masaya Hirosawa: BRI

C0081, C5

Deferring Payments: Management of the Earthquake Risk in Central United States Mete A. Sozen: University of Illinois

C0082, C5

Comparison of Aseismic Design between U.S. and Japan

Shin Okamoto, T. Teramoto, T. Ohkoshi: BRI

C0083, C5

Post-Installed Anchor Bolts Subjected to Tension

Y. Hosokawa, H. Aoyama: University of Tokyo

C0084, C5

A Study on Shear Strength of Post-Installed Anchors

Tomoaki Akiyama, Masaya Hirosawa, Y. Shimizu, T. Katagiri: Tokyo Soil Research Co., Ltd.

C0085, C5

Aseismic Performance and Strengthening of Existing RC Building Structures

Takashi Kaminosono, Tsuneo Okada, Masaya Hirosawa:

C0086, C5

Performance of Buildings for "High-Tech" Industries in Silicon Valley in the Roma Prieta Earthquake

Maryann T. Phipps: H.J. Degenkolb & Associates

C0087, C5

Actual Examples of Seismic Judgement for Existing Buildings with or without Retrofitting

Shin Okamoto, Takashi Kaminosono: BRI

C0088, C5

Implications of the Roma Prieta Earthquake on Building Requirements and Regulations Franklin Lew: City of San Francisco

C0089, C5

Current System for Inspection / Evaluation / Restoration of Earthquake Damaged Buildings and its Background and Future Issues M. Ohkubo: Kyushu Institute of Design

C0090, C5

Recent Research - Repair and Strengthening of Reinforced Concrete Structures
James O. Jirsa: University of Texas

C0091, C5

Repair, Retrofit and Strengthening of Steel Building and Bridges

Le-Wu Lu, Ben T. Yen: Lehigh University

C0092, C5

Ultimate Seismic Strength and Ductility Index of Reinforced Concrete Buildings Strengthened vith Steel Brace and Steel Panel Y. Yamamoto, Masaya Hirosawa: Shibaura Institute of Technology C0093, C5

Method of Strengthening and Designing Shear Connectors between Existing Reinforced Concrete Frame and Infilled Steel Brace and Panel

Y. Yamamoto, H. Aoyama: Shibaura Institute of Technology

C0094, C5

Ultimate Shear Strength of Reinforced Concrete Members with Extremely Small Shear Span Ratios

Y. Yamamoto: Shibaura Institute of Technology

C0095, C5

Seismic Strengthening of an Existing Reinforced Concrete Buildings Tsuneo Okada, M. Murakami, Y. Matsuzaki, S. Hayashi, T. Ohta: University of Tokyo

C0096, C5

Recent Research Results in Strengthening Methods by Steel Brace and Panel on Existing Reinforced Concrete Frames

Y. Shimizu, Y. Yamamoto: Technical High School, Tokyo Institute of Technology

C0097, C5

13

Experimental Study on Mortar Joints between Reinforced Concrete Frame and Steel Shear Brace

T. Katagiri, Y. Yamamoto, Y. Shimizu, Tomoaki Akiyama: Japan Drive-it Co., Ltd.

C0098, C5

Applications of Retrofit Method with Carbon Fiber for Existing Reinforced Concrete Structures

H. Katsumata, K. Kimura, Y. Kobatake, K. Yagi, T. Tanaka, T. Sawanobori: Ohbayashi Corporation

#### TASK COMMITTEE "D" Evaluation of Structural Performance

D0001, D1

**Evaluation of Buildings for Seismic Resistance** 

- An Overview of Problems and Issues Richard N. White: Cornell University

D0002, D1

A Method for the Evaluation of the Seismic Capacity of Existing Reinforced Concrete Buildings in Japan

H. Aoyama: University of Tokyo

D0003, D1

Safety Evaluation of Existing Buildings

J.T.P. Yao: Purdue University

D0004, D1

A Methodology to Evaluate the Vulnerability of Buildings to Earthquake Damage

Sigmund A. Freeman: Wiss Janney Elstner Associates

D0005, D1

Practical Application of the Evaluation Standard in Specific Earthquake Hazardous Locality

Tsuneo Okada: University of Tokyo

D0006, D1

Seismic Hazard Evaluation Methods of Existing Buildings
H.S. Lew: NBS

D0007, D1

**Evaluation and Screening of Large Groups of Buildings** 

Mihran S. Agbabian: Agbabian Associates

D0008, D1

Structural Evaluation of Multistory Residential Buildings for Seismic Resistance G. Robert Fuller: HUD

D0009, D1

Summary of Various Computer Programs to Evaluate Structural Performance against Earthquake Excitations

H. Aoyama: University of Tokyo

D0010, D1

Seismic Evaluation of Existing Buildings Incorporating Uncertainty and Utilizing Microcomputers

G.C. Hart: University of California

D0011, D1

Component Mode Method in Eigenvalue Analysis and its Applications to Building Structures of Numerous Degree-of-Freedom M. Izumi, H. Katsukura, M. Takita: Tohoku University D0012, D1

Comparative Study on the Application of the Evaluation Standard to 7 Story Full-Scale Reinforced Concrete Test Structure

Shin Okamoto: BRI

D0013, D1

Analysis on the Behavior of 7 Story Full-Scale Reinforced Concrete Test Structure Manabu Yoshimura: BRI

D0014, D1

Computer Analysis of the 7 Story Full-Scale Reinforced Concrete Test Structure T. Kabeyasawa, H. Shinohara, S. Ohtani, H. Aoyama: University of Yokohama

D0015, D1

Post-Earthquake Evaluation of an Essential Facility

R.G. Johnston: Brandow and Johnston Associates

D0016, D1

Methodologies for Immediate Judgement on the Safety of Damaged Structures Masaya Hirosawa, Tatsuo Murota: BRI

D0017, D1

Post-Earthquake Evaluation Methodologies of Safety of Structures

Poten Carachy Compil University

Peter Gergely: Cornell University

D0018, D2

Expert Systems for Safety Evaluation of Existing Structures
J.T.P. Yao: Purdue University

D0019, D2

Ultimate-State Design Analysis of R/C Wall-Frame Structures

T. Kabeyasawa: University of Yokohama

D0020, D2

Safety Evaluation of Several Damaged Buildings - A Progress Report J. Stephens, J.T.P. Yao: Purdue University

D0021, D2

Evaluation of Dynamic Characteristics of a Long Span Steel Truss Structure Excited by Vertical Ground Motions

Makoto Watabe, Hiroyuki Yamanouchi, T. Minami, Y. Maekawa, H. Miyanaga, T. Morimoto, K. Mizutori:
Tokyo Metropolitan University

D0022, D2

Reliability of Damaged Reinforced Concrete Frames

C. Meyer, M.S.L. Roufaiel: Columbia University

D0023, D2

Observation of Earthquake Response of Reinforced Concrete Weak-Model Structures Tsuneo Okada, R. Tamura: University of Tokyo

D0024, D2

Rapid and Detailed Evaluation on a Medium-Tall R/C Building

K. Shimizu: Ohbayashi Corporation

D0025, D2

A Quick Analysis of the ATC Benchmark R/C Nine Story Building

Shin Okamoto, K. Watanabe: BRI

D0026, D2

Rapid Evaluation Methodologies

Sigmund A. Freeman: Wiss Janney Elstner Associates

D0027, D2

Seismic Hazard Evaluation of Holiday Inn

Jack P. Moehle: University of California

D0028, D2

Inelastic Seismic Tests on a Full-Scale Six-Story Concrete-K Braced Steel Building
-U.S.-Japan Cooperative Research Program-Hiroyuki Yamanouchi, Mitsumasa Midorikawa,

Toshibumi Fukuta: BRI

D0029, D2

Detailed Seismic Evaluation of a Full-Scale Six Story Steel Building (U.S.-Japan Cooperative Program)

G.C. Hart: University of California

D0030, D2

Seismic Performance Evaluation of Concrete and Steel Structures

H.S. Lew: NBS

D0031, D2

A Quick Analysis of the Imperial Country Services Buildings for Seismic Resistance H. Aoyama: University of Tokyo

D0032, D2

An Example and an Opinion on Scope of Strength Evaluation for Building Structures

Mete A. Sozen: University of Illinois

D0033, D2

Evaluation of the Imperial Country Services

G.C. Hart: University of California

D0034, D2

Damage and Analysis of Namioka Town Hospital Damaged by the Nihonkai-Chubu Earthquake, 1983

Shin Okamoto: BRI

D0035, D2

Kurayoshi City East Building Damaged by the 1983 Tottori EQ

S. Ohtani, K-N. Li: University of Tokyo

D0036, D3

Seismic Performance of Existing Buildings A Progress Report -

Richard N. White, Peter Gergely: Cornell University

D0037, D3

Rapid Evaluation Methodologies

Sigmund A. Freeman: Wiss Janney Elstner Associates

D0038, D3

Comparative Study on the Application of the U.S. and Japan Rapid Evaluation Methods to Benchmark Structures

Shin Okamoto, Masaomi Teshigawara: BRI

D0039, D3

Seismic Capacity Evaluation of Existing SRC

**Buildings** 

H. Aoyama: University of Tokyo

D0040, D3

Summary of First U.S.-Japan Meeting on Improvement of Building Seismic Design and Construction Practices

M. Ozaki: Chiba University

D0041, D3

Hil

Review of Recent U.S. Activities in Evaluation Methodologies

G. Robert Fuller: HUD

D0042, D3

Draft of Guideline for Post-Earthquake Inspection and Evaluation of Earthquake Damage in Reinforced Concrete Buildings and its Application to the Namioka Town Hospital Building

Tsuneo Okada, Masaya Hirosawa, Hisahiro Hiraishi, Manabu Yoshimura: University of Tokyo

D0043, D3

Emergency Standard for Classification of Risk Levels of Earthquake Damaged Reinforced Concrete Buildings

S. Ohtani: University of Tokyo

D0044, D3

Draft Standard for Evaluation of Seismic Performance of Reinforced Concrete Block Masonry School Building in Japan

Tsuneo Okada, Y. Ohwada, H. Kimura: University of Tokyo

D0045, D3

Earthquake Observation of the Fifth Building Yutaka Yamazaki : BRI

#### TASK COMMITTEE "E" Ground Motion and Seismic Design Forces Program

E0001, E1

Some Engineering Aspects of Ground Motion Characteristics Clarified from PWRI Array Observation Records

Ken-ichi Tokida, Keiichi Tamura, Koh Aizawa: PWRI

E0002, E1

Study of an Assessment for Site Effects of

Seismic Strong Motions Eiichi Kuribayashi, T. Jiang, Tadashi Niiro, H. Nagasaka, S. Kuroiwa, Shozo Nishioka: Toyohashi University of Technology

E0003, E1

The Seismotectonic Basis for Earthquake Hazard Assessment in the United States Paul C. Thenhaus: USGS

E0004, E1

History and Status of Strong-Motion Earthquake Measurement in Japan Keiichi Ohtani: NIED

E0005, E1

Earthquake Hazard and Risk (Loss) Assessment Techniques in the United States A Review -

S.T. Algermissen: USGS

E0006, E1

Seismic Hazard Assessment - States of Practice in Japan -

Hiroyuki Kameda: Urban Earthquake Hazard Research Center, Disaster Prevention Research Institute, Kyoto University

E0007, E1

Engineering Risk Assessment of Seismic Ground Motion and Ground Liquefaction Ken-ichi Tokida, Keiichi Tamura, Koh Aizawa: PWRI

E0008, E1

Thematic Mapping for Hazards by the Geographical Survey Institute Tadao Dohi, Masaharu Tsuzawa: GSI

E0009, E1

Seismic Hazard and Ground Motion Studies in Japan - A Study Perspective -Tsuneo Katayama: Institute of Industrial Science, University of Tokyo

E0010, E1

Characterization of Earthquake Ground Motions and Design Earthquake Loading of Highway Bridges

Kazuhiko Kawashima: PWRI

E0011, E1

Seismic Design Criteria to Meet Probabilistic Performance Goals

James R. Hill, Robert C. Murray, Stephen A. Short: U.S. Department of Energy

E0012, E1

Deterministic Seismic Design and Evaluation Criteria to Meet Probabilistic Performance Goals

James R. Hill, Stephen A. Short, Robert C. Murray, Thomas A. Nelson: U.S. Department of Energy

E0013, E1

Seismic Loading and Safety Evaluation for Building Code in Japan Yoshikazu Kitagawa: BRI

E0014, E1

The Application of Earthquake Hazard Assessments to Building Codes in the United States

Edgar V. Leyendecker: USGS

E0015, E1

Japanese Experience with Seismic Design and Response of Port and Harbor Structures Susumu Iai, Yasuo Matsunaga: PHRI

## TASK COMMITTEE "F" Disaster Prevention Methods for Lifeline Systems

Systems Aspects of Lifeline Engineering Masanobu Shinozuka, M. Kitaura, F. Yamazaki: Columbia University

F0002, F2

Development of Model for Determining Differential Seismic Ground Motion

A. Zerva, A. H-S. Ang, Y.K. Wen: University of Illinois

F0003, F2

Wave Propagation Effects on Buried Pipelines Douglas J. Nyman: NTS/Structural Mechanics

Associates

F0004, F2

Behavior of Buried Pipelines under Large Ground Deformations in Earthquakes

Teoman Ariman: University of Tulsa

F0005, F2

Methods of Testing Buried Lifelines in the

J.L. Merritt: Merritt CASES, Inc.

F0006, F2

Seismic Performance of Telecommunications Structures and Equipment

Jeremy Isenberg: Weidlinger Associates

F0007, F2

Research and Development in Seismic Mitigation of Telecommunication Systems in CANADA

A. Tang: Northern CANADA Telecom Ltd.

F0008, F2

Earthquake Requirements for Telecommunications Equipment

J.W. Foss: Bell Communications Research, Inc.

F0009, F2

Experiments and Field Observations of Seismic Protection on Computer Facilities I-Kwang Chang: International Business Machines Corporation

F0010, F2

Earthquake-Resistant Design of Underground **Pipelines** 

Toshio Iwasaki: PWRI

F0011, F2

Finite Ground Strains Induced during Earthquake for Application to Seismic Design of Underground Pipelines

Kazuhiko Kawashima, Keiichi Tamura, Koh Aizawa: **PWRI** 

Liquefaction Damage and Analysis of Underground Telecommunications Facilities

Shiro Takada, T. Sawahashi: Kobe University

F0013, F2

F0012, F2

Field Observations on Telecommunications Facilities

Masahiro Nakano, H. Uematsu: N.T.T.

F0014, F2

Seismic Performance of Telecommunication

Network System M. Miwa: N.T.T.

F0015, F2

Seismic Risk and Assessment of Lifeline

Systems

Hiroyuki Kameda, Tadanobu Sato: Kyoto University

F0016, F2

Seismic Analysis of Lifeline Networks

Hideji Kawakami: Saitama University

F0017, F2

12

Aseismic Design of Telecommunications Equipment Based on Earthquake Observations of Buildings

Yuji Sato, Hisanobu Akagi: N.T.T.

F0018, F3

Damage of Gas Pipeline from Chiba Toho-Oki

Earthquake

Tadao Mashimo: Tokyo Gas Co., Ltd.

F0019, F3

Seismic Damage, Design and Research Needs

of Buried Water Lifelines

Leon Ru-Liang Wang: Old Dominion University

F0020, F3

Damage to Buried Lifelines due to Liquefaction - Induced Ground Displacement

Masanori Hamada: Tokai University

F0021, F3

Quantitative Relationship between Ground Conditions and Pipeline's Damage

Susceptibility

Nobuaki Nishio: Tokyo Gas Co., Ltd.

F0022, F3

Malfunction Analysis of Roads and Streets

during Earthquake in Japan

Eiichi Kuribayashi, Jiang Tong, Tadashi Niiro, Wataru Kyokuno: Toyohashi University of Technology

F0023, F3

Analysis on The Finite Ground Strains Induced during Earthquakes

Yasushi Sasaki, Keiichi Tamura, Koh Aizawa: PWRI

F0024, F3

Pipeline Field Experiment at Parkfield, CA Jeremy Isenberg, Edward Richardson, Hiroyuki Kameda, Thomas D. O'Rourke: Weidlinger Associates

F0025, F3

PWRI Observation Station of Seismic Response of Pipeline

Toshio Iwasaki, Osamu Ueda, Kazuhiko Kawashima, Kinji Hasegawa: PWRI

F0026, F3

Loading Test of Shield Tunnel Specimens Subjected to Alternative Axial Loading Kazuhiko Kawashima, Hideki Sugita, Takashi Kano: PWRI

F0027, F3

Seismic Retrofitting of Bridge Columns for Enhanced Shear Strength and Flexural Ductility

M.J. Nigel Priestley: University of California

F0028, F3

Bridge Seismic Retrofit Program for California Highway System
James E. Roberts: CALTRANS

F0029, F3

Reliability and Risk Assessment of Lifeline Systems

Masanobu Shinozuka, Hiroyuki Kameda: Princeton University

F0030, F3

Earthquake Physical Damage and Functional Serviceability of Simplified Models of Lifeline Networks

Hideji Kawakami : Saitama University

F0031, F3

Identification and Upgrading of Critical Components for Improving Seismic Reliability of Large Lifeline Networks Tadanobu Sato, Kenzo Toki, Tomihiko Sekiya: Kyoto University

F0032, F3

Recent Research Works on The Preventive Measures of Buried Lifelines for Liquefaction Makoto Kawamura, Eiichi Kuribayashi, Shigeki Tsuchiyama, Akihiko Ogino: Toyohashi University of Technology F0033, F3

Aseismic Design for Telephone Tunnel Koji Yagi, Tadanobu Suzuki, Hiroaki Hattori: N.T.T.

F0034, F3

Analytical Study on Optimum Design for Base Isolation System
Hideyo Suzuki: Tokyo Electric Power Co.

F0035, F3

Earthquake Hazard Mitigation for a Large Metropolitan Water District Gary M. Snyder: Metropolitan Water District of Southern California

F0036, F3

Lifeline Hazard Mitigation through Strategic Industrial Planning Maryann T. Phipps: H.J. Degenkolb & Associates

F0037, F3

Early Post Earthquake Damage Detection for Lifeline Systems Ronald T. Eguchi, Jon D. Chrostwski, G.M. Lee: Dames & Moore

F0038, F3

Management Strategies and Public Education Resources for Lifeline Systems during Earthquakes

Peter R. Lucarelli: Los Angels City Fire Department

F0039, F3

An Expert System to Aid Restoration Works against Seismic Damaged Telecommunication Buried Pipelines

Shiro Takada: Kobe University

# TASK COMMITTEE "H" Soil Behavior and Stability During Earthquakes

H0001, H1

SPT for Liquefaction Resistance Evaluations
- State-of-the-Art and Future Requirements
Jeffrey A. Farrar: Engineering and Research Center,
BUREC

H0002, H1

Fundamental Study on the SPT

Mamoru Fuyuki, Kazuma Uto: Tokai University

H0003, H1

In Situ Test for Assessing Liquefaction Potential Using Vibratory Cone Penetrometer Yasushi Sasaki, Yasuyuki Koga, Yoshihiro Ito, Takao Shimazu, Masuo Kondo: PWRI

H0004, H1

Comparative Study of Various Penetration Tests in Ground that Underwent Liquefaction during the 1983 Nihonkai-Chubu and 1964 Niigata Earthquakes

Satoru Ohya, Tsuneaki Iwasaki, Mikio Wakamatsu: OYO Corporation

H0005, H1

A New Criterion for Assessing Liquefaction Potential of Japanese Port Area by Using SPT. N-Value

Susumu Iai, Hajime Tsuchida, Katsuhiko Koizumi: PHRI

H0006, H1

Liquefaction Studies in the Imperial Valley, California

T. Leslie Youd: Brigham Young University

H0007, H1

Provisions of Soil Liquefaction Specified in Current Japanese Design Codes

Toshio Iwasaki: PWRI

H0008, H1

Design of Viaduct Considering the Effects of Soil Liquefaction

Kozo Higuchi, Mitsuru Goto: Honshu-Shikoku Bridge Authority

H0009, H2

Remedial Treatments of Liquefiable Soils Currently Used in Japan

Yasushi Sasaki: PWRI

H0010, H2

Basic Consideration for Designing the Area of the Ground Compaction as a Remedial Measure against Liquefaction

Susumu Iai, Setsuo Noda, Hajime Tsuchida: PHRI

H0011, H2

Damages of Dikes by the 1983 Nihonkai Chubu Earthquake and their Remedial Works Kazuya Yamamura, Yasushi Sasaki, Hideo Nakajima, Masakazu Takahashi: Nihon University

H0012, H2

Experimental Study on the Deep Mixing Method as a Countermeasure against Liquefaction

Yasuyuki Koga, Osamu Matsuo, Jun-ichi Koseki, Minoru Enokida, Takashi Matsuda, Kichio Suzuki: PWRI

H0013, H2

An Application of Dynamic Compaction to a Coal Yard in Japan

Susumu Yasuda, Hisashi Tsuchiya, Naonobu Narumi: Kyushu Institute of Technology

H0014, H2

An Experimental Study on the Manhole Stabilizing Techniques against Liquefaction Masahiro Nakano, Yasushi Sasaki, Masaaki Yoshikawa, Hiroaki Hattori, Masanobu Arano: NTT Tsukuba Field Engineering Development Center

H0015, H3

Strategy for Remedial Treatment against Liquefiable Soil

- A Proposal of Basic Concept -Yasushi Sasaki : PWRI

H0016, H3

Dam on Liquefiable Foundation: Safety Assessment and Remediation

W.D.L. Finn, Richard H. Ledbetter, R.L. Fleming, Jr., A.E. Templeton, T.W. Forrest, S.T. Stacy: University of British Colombia

H0017, H3

Shake Table Tests on Lateral Ground Flow Induced by Soil Liquefaction

Yasushi Sasaki, Ken-ichi Tokida, Hideo Matsumoto, Shoichi Saya: PWRI

H0018, H3

Nature of Lateral Soil Movement Induced by Earthquake Liquefaction

Ikuo Tohata, Yukio Tamari, Kazuhiko Yamada: University of Tokyo

H0019, H3

A Simplified Procedure for the Analysis of the Permanent Ground Displacement Susumu Yasuda, Hideo Nagase, Hiroyoshi Kiku, Yutaka

Uchida: Kyushu Institute of Technology

H0020, H3

Effective Stress Analysis of a Sheet Pile Quay Wall

Susumu Iai, Tomohiro Kameoka: PHRI

H0021, H3

Pore Pressure and Residual Strain of Saturated Sand and Soft Clay Subjected to Cyclic Loading

Masayuki Hyodo, Kazuya Yasuhara: Yamaguchi University

H0022, H3

Development of Liquefaction Sensor Susumu Yasuda, Iwao Morimoto, Yoshihisa Shimizu: Kyushu Institute of Technology

H0023, H3

Simplified Examination Method of the Stability of Bridges Considering the Effects of Soil Liquefaction
Ken-ichi Tokida, Jiro Fukui, Hideo Matsumoto: PWRI

H0024, H3

Seismic Design for Road Bridge Considering Soil Liquefaction
- Seismic Design Specifications of Road Bridge and its Design Example - Katsuya Wada, Toru Terayama: Metropolitan Expressway Public Corporation

H0025, H3

Seismic Stability of Structures Buried in Liquefiable Sands against Uplift Yasuyuki Koga, Jun-ichi Koseki: PWRI

H0026, H3

A Study on the Effects of Ground Displacement Conditions on Evaluating the Resistivity of Pipelines in the Liquefaction Areas

Eiichi Kodama, Shin-ichi Suzuki: Tokyo Gas Co., Ltd.

H0027, H3

Countermeasures against Liquefaction in Japan - Types and Features of the Methods - Yukihisa Tanaka, Yutaka Nakajima, Hideo Tsuboi: Institute of Electric Power Industry

H0028, H3

Several Applications of Countermeasures against Liquefaction at Artificially Reclaimed Lands in Japan

Susumu Yasuda: Kyushu Institute of Technology

H0029, H3

Liquefaction Resistance Design of the Trans-Tokyo Bay Highway

Tomoji Hirukawa, Toshihiro Meta, Y. Kawase, Y. Mizutani, M. Ohta, Hisato Kato, S. Nakamura: Trans-Tokyo Bay Highway Corporation

H0030, H3

Liquefaction Induced Behavior and Remediation for Mormon Island Dam Richard H. Ledbetter, W.D.L. Finn, J.S. Nickell, R.E. Wahl, Mary Ellen Hynes: WES

H0031, H3

Soil Improvement Area against Liquefaction Susumu Iai, Yasuo Matsunaga: PHRI

H0032, H3

Analysis of Liquefaction Damages and Aseismatic Countermeasures for Conduits Koji Yagi, Shunji Nagamachi: NTT Tsukuba Field Engineering Development Center

H0033, H3

Gentle-Slope Bank and Super Embankment Construction Project of the Sumida River Kaoru Kusano: Institute of Civil Engineering, Tokyo Metropolitan Government

## TASK COMMITTEE "I" Storm Surge and Tsunamis

I0001, I2

Decay of the Initial Crest of the 1960 Chilean Tsunami: Scattering of Tsunami Waves Caused by Sea Mounts and the Effects of Dispersion

Yoshinobu Tsuji : Earthquake Research Institute,

University of Tokyo

10002, 12

On Frequency Modulation Observed in Two PacTOP Deep Ocean Tsunami Records Frank I. Gonzales: Pacific Marine Environmental

Laboratory, NOAA

10003, 12

On the Generation Mechanism of the Low Frequency T Phase due to Tsunamigenic Earthquakes

Shin-ichi Iwasaki: NIED

10004, 12

Modeling Implication of the 1985 Chilean Tsunami

Gerald T. Heberstreit, M.S. Moustafa: Science Applications International Corporation

10005, 12

Observation of Standing Edge Waves Trapped on the Shelf of Makurazaki Coast Yoshinobu Tsuji, Takashi Yanuma: Earthquake Research Institute, University of Tokyo

10006, 12

The Criteria for Identification of Tsunami Events Likely to Produce Far-Field Damage, A Data Application

Patricia A. Lockridge: National Geophysical Data

Center, NOAA

10007, 12

Impulsive Force of Timbers Drifted by Tsunamis

Hideo Matsutomi: Akita University

10008, 12

Simulation Models of Timber and Oil Spread due to Tsunamis Chiaki Goto: PHRI

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10009, 12

Stem Waves and Hexagonal Wave Pattern in Shallow Water

Sung B. Yoon, Philip L.-F. Liu: Cornell University

10010 12

Numerical Simulation and Experiment on Tsunami Run-Up

Shigeru Yamaki, Takaaki Uda: I.N.A. Civil Engineering Consultants Co., Ltd.

I0011, I2

Tsunami Propagation from a Finite Source George Carrier: Harvard University

I0012, I2

Hydraulic and Numerical Experiments of Non-Linear Dispersive Waves in Two-Dimensional Wave Basin

Fumihiko Imamura, Nobuo Shuto: Tohoku University

I0013, I2

On Momentum Exchange of a Tsunami Bore at a Shoreline

Harry Yeh: University of Washington

10014, 12

Least Squares Estimations of a Tsunami Source from Wave Records Harold G. Loomis: University of Hawaii

I0015, I2

Numerical Simulation as a Means of Warning for Near-Field Tsunamis Nobuo Shuto, Chiaki Goto, Fumihiko Imamura: Tohoku University

I0016, I2

Numerical and Hydraulic Modeling Flooding Charles L. Mader: Joint Institute for Marine& Atmospheric Research, University of Hawaii

I0017, I2

Experiment on Two Dimensional Transformation of Non-Linear Long Waves Propagating on Slope Takaaki Uda: PWRI

I0018, I2

Numerical Computation of the Tsunami Run-Up

Zygmunt Kowalik: Institute of Marine Science, University of Alaska

10019, 12

Inundation and Tsunami Waves George D. Curtis: Joint Institute for Marine& Atmospheric Research, University of Hawaii

10020, 12

Urban Planning for Tsunami Hazards
- Grays Harbor, Washington and Lima, Peru
Jane Preuss: Urban Regional Research

10021, 12

Ocean Bottom Pressure Gauge for Tsunami Warning System in Japan Masami Okada: MRI

## 10022, 12

Automatic Estimations of Tsunami Risk
Following a Distant Earthquake Using the
Mantle Magnitude Mm.
Emile A. Okal, Jacques Talandier, Dominique Reymond:
Northwestern University

### 10023, 12

Real-Time Determination of Earthquake Source Parameters and its Application to Tsunami Warnings Kenji Sakate: University of Michigan

10024, 12

Assessment of Project THRUST: Past, Present, Future Eddie N. Bernard: Pacific Marine Environmental Laboratory, NOAA

TASK COMMITTEE "J" Wind and Earthquake Engineering for Offshore and Coastal Facilities

J0001, J1

Outline of the Specifications for Earthquake-Resistant Design of Highway Bridges in Japan

Toshio Iwasaki: PWRI

J0002, J1

Outline of the Specifications for Substructures of Highway Bridges in Japan Kazuya Ohshima, Koji Kaminaga: PWRI

J0003, J1

Seismic Design Forces of Highway Bridges in Japan

Kazuhiko Kawashima: PWRI

J0004, J1

Experimental Study of Embankment on Sandy Layers

Tadashi Arakawa: PWRI

J0005, J1

Dynamic Response Analysis for Seismic Design of Highway Bridges

Ryoji Hagiwara: PWRI

J0006, J1

Ductility Demand for Bridge Piers Shigetoshi Kobayashi, Hirotaka Kawano: PWRI

J0007, J1

Earthquake Resistant Design of Tokyo Bay Crossing Bridge

Shin-ichi Ando, Tomoji Hirukawa: Japan Highway Public Corporation

J0008, J1

Earthquake Resistance Design of the Meiko Nishi Bridge

Michio Takahashi: Japan Highway Public Corporation

J0009, J1

A Dynamic Analysis of a Multi-Span Continuous Bridge

Mitsuo Hara: Metropolitan Expressway Public

Corporation

J0010, J1

Earthquake Resistant Design for Cable Stayed Bridge

- Ajigawa Bridge, Hanshin Expressway

Susumu Emi, Hiroyuki Nakajima: Hanshin Expressway Public Corporation

J0011, J1

Earthquake Resistant Design of Bannosu Viaduct

Kozo Higuchi: Honshu-Shikoku Bridge Authority

J0012, J1

Future Programs at Concrete Division, PWRI Shigetoshi Kobayashi: PWRI

J0013, J1

Research Plan on Earthquake Resistance by Foundation Engineering Division

Kazuya Ohshima: PWRI

J0014, J1

Behavior of Concrete Filled Steel Tubes (Part-3 Beam-Column Members) Shoichi Saeki, Toshitaka Miyata, Koichi Minosaku:

**PWRI** 

J0015, J1

Future Programs at Ground Vibration Division

Tadashi Arakawa: PWRI

J0016, J1

Future Programs at Earthquake Engineering Division, PWRI

Toshio Iwasaki: PWRI

J0017, J1

Earthquake Resistant Design and Tests of the Katashina-Gawa Bridge

Tsutomu Kadotani, Hiroshi Yoshida: Japan Highway Public Corporation

J0018, J1

Observation of the Behaviour of Multi-Span Continuous Girder Bridges

Hiroyoshi Miyauchi: Metropolitan Expressway Public Corporation

J0019, J1

Future Programs of Hanshin Expressway Public Corp.

Hiroyuki Nakajima: Hanshin Expressway Public Corporation

J0020, J1

Earthquake Resistant Design of Akashi Kaikyo Bridge

Mamoru Yamagata: Honshu-Shikoku Bridge Authority

J0021, J1

AASHTO Guide Specification Seismic Design for Highway Bridges James D. Cooper: FHWA

J0022, J1

Seismic Resistant Bridge Design Criteria in California

James H. Gates: CALTRANS

J0023, J1

NBS Large Scale Seismic Testing Project H.S. Lew: NBS

J0024, J1

Transportation Research Board Bridge Engineering Activities

Lawrence F. Spaine: Transportation Research Board

J0025, J1

Box Girder Bridge Hinge Restrainer Test Program

Lawrence G. Selna: University of California

J0026, J1

Implementation of the Analytical Capabilities Required for the Aseismic Design of Bridges Roy A. Imbsen: Engineering Computer Corporation

J0027, J1

Seismic Response of Meloland Road Overpass Stuart D. Werner, M.P. Levine, J.L. Beck, Sami F. Masri: Agbabian Associates

J0028, J1

**Bridge Foundation Problems** 

Richard W. Arden: S.E.A. Inc. Consulting Engineers /

**Planners** 

J0029, J1

Full-Scale Dynamic Testings and Earthquake Response Characteristics of Suspension Bridges

Ahmed M. Abdel-Ghaffar: Princeton University

J0030, J1

AASHTO and Bridge Earthquake Engineering Jack Freidenrich: New Jersey Department of Transportation

J0031, J1

Seismic Design Guidelines for Highway Bridges

- A Brief Overview Concerning their Use James Dodson: Nevada Department of Transportation

J0032, J1

Highway Bridge Design Specifications for Seismic Loads in U.S.

Veldo M. Goins: Oklahoma Department of Transportation

J0033, J1

Cable Stayed Bridges - Static and Dynamic Response

John F. Fleming: University of Pittsburgh

J0034, J1

Dynamic Field Testing of Full Scale Highway Bridges

Bru e M. Douglas: University of Nevada

J0035, J1

NSF Program John B. Scalzi: NSF

J0036, J1

Prospective Experimental Research on Bridge Structures at the National Bureau of Standards H.S. Lew: NBS

J0037, J1

FHWA Program of Earthquake Engineering Research

James D. Cooper: FHWA

J0038, J1

Research at the California Department of Transportation

James H. Gates: CALTRANS

J0039, J1

National Cooperative Highway Research Program

Lawrence F. Spaine: Transportation Research Board

J0040, J2

Basic Design Considerations for U.S. Long-Span Bridges Relative to Wind Robert H. Scanlan: Princeton University

J0041, J2

Wind Resistant Design of Highway Bridge in Japan

Hirohiko Tada, Koichi Yokoyama, Hiroshi Sato: PWRI

J0042, J2

New Specifications for Earthquake Resistant Design of Highway Bridges in Japan Eiichi Kuribayashi, Toshio Iwasaki, Osamu Ueda: Toyohashi University of Technology

J0043, J2

Seismic Analysis and Design of U.S. Highway Bridges

James H. Gates: CALTRANS

J0044, J2

Study on Wind-Resistant Design for Cable-Stayed Bridge - East Kobe Bridge
Masahiko Kitazawa, Tetsuo Oku: Hanshin Expressway
Public Corporation

J0045, J2

Mechanical Damper for Suppressing Wind-Induced Vibration of Long-Span Bridges under Construction

Isamu Kano, Katsuaki Takeda: NKK Corporation

J0046, J2

New Considerations Relative to the Aeroelastic Stability of Cable-Stayed Bridges Robert H. Scanlan: Princeton University

J0047, J2

Aeroelastic Behavior of Cable-Stayed Bridges Robert L. Wardlaw: National Research Council of Canada

J0048, J2

Earthquake Resistant Design for Cable-Stayed Bridge - East Kobe Bridge

Masahiko Kitazawa: Hanshin Expressway Public

Corporation

J0049, J2

Outline of Aseismatic Design for Honshu Shikoku Bridges

Mitsuru Goto, Kozo Higuchi: Honshu-Shikoku Bridge Authority

J0050, J2

Seismic Design of Long Span Bridge to Use Spring Shoe

Nayomon Uno: Ishikawajima-Harima Heavy Industries Co., Ltd.

J0051, J2

Earthquake-Response Characteristics of Cable-Stayed Bridges

Ahmed M. Abdel-Ghaffar, Aly S. Nazmy: University of Southern California

J0052, J2

Study on Behavior of Concrete Filled Steel Tubes

Hirohiko Tada, Hiroshi Shinohara, Koichi Minosaku, Akira Takizawa, Jun Hikino: PWRI

J0053, J2

Performance of Elastomeric Bearings Used for the Seismic Isolation of a Large-Scale Model Bridge Deck

lan G. Buckle, James M. Kelly: Computech Engineering Service

J0054, J2

Investigations on the Design of Highway Bridges to Resist Earthquakes
Douglas A. Foutch, M.E. Barenberg, M.A.

Saadeghvaziri: University of Illinois

J0055, J2

Experimental Investigation on Hysteretic Behavior of Reinforced Concrete Bridge Pier Columns

Toshio Iwasaki, Kazuhiko Kawashima, Ryoji Hagiwara, Kinji Hasegawa, Tatsuhiko Koyama, Takeshi Yoshida: PWRI

J0056, J2

Field Response Studies of Two Highway Bridges Subject to Simulated Earthquake

Bruce M. Douglas, Ian G. Buckle: University of Nevada

J0057, J2

California Department of Transportation Bridge Earthquake Retrofitting Program Ray J. Zelinski: CALTRANS

J0058, J2

UCLA Bridge Restrainer Testing Program Lawrence G. Selna: University of California

J0059, J2

Strong-Motion Instrumentation and Data Interpretation for Bridge Structures: Fundamental Concepts and Research Needs Stuart D. Werner: Agbabian Associates

J0060, J2

Strong-Motion Instrumentation, Data Acquisition and Interpretation
James H. Gates: CALTRANS

J0061, J3

Vibration Tests of the Completed S-Curved Cable Stayed Bridge Sohei Ohno, Kazuo Yamazaki, Hiroshi Kikkawa: Metropolitan Expressway Public Corporation

J0062, J3

A Report on the Analysis and Design of Three U.S. Cable-Stayed Bridges
Steven L. Stroh: Greiner Engineering Science Inc.

J0063, J3

Vibrational Characteristics and Earthquake Resistant Design for Cable-Stayed Prestressed Concrete Bridge - Inagawa II Bridge Morihisa Sugiyama: Hanshin Expressway Public Corporation

J0064, J3

Dynamic- and Seismic-Analysis Considerations for the Design of Long-Span Cable-Stayed Bridges Ahmed M. Abdel-Ghaffar, Aly S. Nazmy: Princeton University

J0065, J3

Damping Characteristics of Cable-Stayed Bridges
Toshio Iwasaki, Kazuhiko Kawashima, Shigeki Unjo: PWRI

J0066, J3

Probability-Based Bridge Design Codes Andrzej S. Nowak: University of Michigan

J0067, J3

Survey on the Lifespan of Highway Bridges Minoru Fujiwara, Yasuhiko Iwasaki : PWRI J0068, J3

Earthquake Resistant Design of Akashi Kaikyo Bridge

Satoshi Kashima, Masahiko Yasuda, Katsuyoshi Kanazawa, Koji Kawaguchi: Honshu-Shikoku Bridge Authority

J0069, J3

Earthquake Observation and Dynamic Analysis of Abutments on Soft Ground

Hideyuki Keto, Mikio Noda, Katsunori Tanaka: Japan Highway Public Corporation

J0070, J3

Damage Assessment and the Effects of Vertical Ground Motion on the Response of Highway Bridges

Douglas A. Foutch, M.E. Barenberg, M.A. Saadeghvaziri: University of Illinois

J0071, J3

Strong Earthquake Motion for Bridge Design Yasushi Sasaki, Keiichi Tamura, Koh Aizawa: PWRI

J0072, J3

Effect of Resin Injection for Repairing Different Types of Ruptures in Reinforced Concrete Beams

Shigetoshi Kobayashi, Kazumasa Morihama, Masashi Takahashi, Hiroto Takahashi: PWRI

J0073, J3

An Evaluation of Seismic Design and Retrofit Methods in California and the U.S. James H. Gates: CALTRANS

J0074, J3

Outline of the Studies Regarding the Aerodynamic Stability of the Stiffening Girder of the Akashi Kaikyo Bridge Kazuo Tada, Masahiko Yasuda, Shuichi Suzuki: Honshu-Shikoku Bridge Authority

J0075, J3

Comparative Wind Tunnel Testing of Bridge Road Decks

Robert L. Wardlaw, H. Tanaka, S.J. Zan, Michael G. Savage, H. Yamada: National Research Council of Canada

J0076, J3

Wind Resistant Design of Cable-Stayed Bridges

Koichi Yokoyama, Hiroshi Sato: PWRI

J0077, J3

On Interpreting Model and Prototype Responses of Suspended-Span Bridges to Wind Robert H. Scanlan: Johns Hopkins University J0078, J3

On Wind Tunnel Testing of Taut-Strip Bridge Models

Hiroshi Tanaka: University of Ottawa

J0079, J3

Aerodynamic Stability of the Cables of a Cable-Stayed Bridge Subject to Rain (A Case Study of the Ajigawa Bridge) Kazuya Ohshima, Masahiro Nanjo: Hanshin Expressway Public Corporation

J0080, J3

Evaluation of Energy Absorption Characteristics of Highway Bridges under Seismic Conditions

Roy A. Imbsen, Wen David Liu: Imbsen & Associates, Inc.

J0081, J3

An Active Control of Traffic Vibration on the Urban Viaducts

Kaname Yahagi, Hiromi Kosaka: Metropolitan Expressway Public Corporation

J0082, J3

Seismic Isolation of Bridge Structures in the United States of America
Ian G. Buckle, Ronald L. Mayes: Computech Engineering Services Inc.

J0083, J3

Hysteretic Behavior of Reinforced Concrete Bridge Piers by Dynamic Loading Tests and Shaking Table Tests

Toshio Iwasaki, Kazuhiko Kawashima, Kinji Hasegawa, Tatsuhiko Koyama, Takeshi Yoshida: PWRI

J0084, J3

Behavior of 1/6-Scale Model Bridge Columns Subjected to Cyclic Inelastic Loading Geraldine S. Cheok, William C. Stone, H.S. Lew: NBS

J0085, J3

Outline of Diaphragm Wall Foundations Hiroshi Shinohara, Michio Okahara, Jiro Fukui, Atsushi Funakoshi, Keiji Taguchi: PWRI

J0086, J3

Bridge Research at the University of Nevada Bruce M. Douglas, Mehdi Saiidi, Gary Norris, Emmanuel A. Maragakis: University of Nevada

J0087, J3

Research on Vibration Behavior of Prestressed Concrete Rigid-Frame Bridge Masayuki Yasui, Yasuo Inokuma, Masafumi Kato:

Japan Highway Public Corporation

J0088, J4

Yokohama Bay Bridge - Use of a Dynamic Damper for Aerodynamic Stability of its Support Tower

Toru Saito, Manabu Ito, Hiroshi Yamauchi, Shungo Eya : Mitsubishi Heavy Industries, Ltd.

J0089, J4

Role of Flutter Derivatives in Erection Stage Wind Effects on Cable-Stayed Bridges

Robert H. Scanlan, Nicholas P. Jones: Johns Hopkins University

J0090, J4

Wind Tunnel Tests of Cable-Stayed Bridges Using Sectional Model and Aeroelastic Full

Koichi Yokoyama, Hiroshi Sato, Takaaki Kusakabe: **PWRI** 

J0091, J4

Japan-Canada Joint Research on Bridge Aerodynamics

Robert L. Wardlaw, N.G. Ball: National Research Council of Canada

J0092, J4

Wind-Induced Vibrations of Cables of Cable-Stayed Bridges (Preliminary Report) Koichi Yokoyama, Hiroshi Sato, Takaaki Kusakabe:

J0093, J4

**PWRI** 

Some Discussions on Buffeting of Bridges H. Tanaka, J. Xie: University of Ottawa

A Proposal of Improve Aerodynamic Stability of Long-Span Suspension Bridges with Box Girder

Yuichi Hikami, Kazuo Tada, Yozo Fujino: Ishikawajima-Harima Co., Ltd.

J0095, J4

Ambient Vibration Measurements on the Quincy Bayview Cable-Stayed Bridge John C. Wilson: McMaster University

J0096, J4

Wind Tunnel Testing of Long-Span Suspension Bridge Using Aeroelastic Full Models

Yozo Fujino, Yuichi Hikami, Haruki Akiyama: University of Tokyo

J0097, J4

Full-Scale Dynamic Testing of Long Span Bridges

Katsuhiko Yamada, Norio Yamamoto, Haruki Akiyama: Honshu-Shikoku Bridge Authority

J0098, J4

Seismic Response of Base Isolated Highway Bridge by Shaking Table Tests Kazuhiko Kawashima, Kinji Hasegawa, Hiroshi Yamauchi, Hiromi Kosaka: PWRI

J0099, J4

Prioritization in the Phase II Retrofit Program California Department of **Transportation** 

Brain H. Maroney: CALTRANS

J0100, J4

Evaluation of Seismic Vulnerability of Highway Bridges

Kazuhiko Kawashima, Shigeki Unjo: PWRI

J0101, J4

Seismic Strength and Ductility of Concrete Bridge Columns - Research Needs for New and **Existing Bridges** 

M.J. Nigel Priestley, Frieder Seible: University of California

J0102, J4

Large Earthquake Countermeasures for Tomei Expressway Bridges
Seiji Ohkawa, Yoshito Maeda, Kazuhiko Kawashima,

Mitsuaki Saeki: Japan Highway Public Corporation

J0103, J4

Some Innovations in the Seismic Isolation of Bridges

Ian G. Buckle: Computech Engineering Services

J0104, J4

Bridge Strengthening Research at Iowa State University

F. Wayne Klaiber, Kenneth F. Dunker, Terry J. Wiqf, Wallace W. Sanders, Jr.: Iowa State University

J0105, J4

Inspection Manual and Data Bank System for National Highway Bridges in Japan Shoichi Saeki, Minoru Fujiwara, Yasuhiko Iwasaki, Ryosuke Shibasaki: PWRI

J0106, J4

Research and Innovation in Strengthening of Concrete Bridge Superstructures Frieder Seible, M.J. Nigel Priestley: University of

California

J0107, J4

Present State and Future Problems of Expressway Bridges Maintenance Hideyuki Keto, Yasuo Inokuma, Takehiko Sasaki: Japan

**Highway Public Corporation** 

J0108, J4

Bridge Live Loads and Strength Evaluation Wen David Liu, Robert A. Schamber, Roy A. Imbsen :Imbsen & Associates, Inc.

J0109, J4

Non-Jointification of Simply Supported Girders on Elevated Expressways in Service Minoru Tomita, Toshio Tanaka, Kunihiro Miyahana: Hanshin Expressway Public Corporation

J0110, J4

Development of Load and Resistance Factor Design (LRFD) for Bridges

Andrzej S. Nowak: University of Michigan

J0111, J4

Some Aspects of the Interaction between the Bridge Deck and Abutments during Earthquake Emmanuel A. Maragakis: University of Nevada

J0112, J4

Response of One-Way Hinged Pier under Lateral Loads

Mehdi Saiidi, J. Orie, Bruce M. Douglas: University of Nevada

J0113, J4

Response Evaluation and Research Needs for Seismic Design of Cable-Stayed Bridges Ahmed. M. Abdel-Ghaffar, Aly S. Nazmy: University of Southern California

J0114, J4

Recent Activities on Evaluation of Bridge Loading toward Limit States Design in Japan Yozo Fujino, Minoru Fujiwara, Chitoshi Miki, Yasuhiko Iwasaki, Jun Murakoshi: University of Tokyo

J0115, J4

Nondestructive Evaluation of Bridge Model Performance

Mihran S. Agbabian, Sami F. Masri, M.I. Traina, O. Waqfi: University of Southern California

J0116, J4

Similitude Studies of Prototype and 1/6-Scale Model Bridge Columns under Reversed Cyclic Loading

William C. Stone, Geraldine S. Cheok, H.S. Lew: NBS

J0117, J4

Dynamic Testing and Seismic Response Evaluation of the Meloland Road Overpass Bruce M. Douglas, C.B. Crouse, Stuart D. Werner: University of Nevada

J0118, J4

Pier Wall Testing

Lawrence G. Selna: University of California

J0119, J5

Attenuation Characteristics of Ground Motions in the Period Range of 2 to 20 Seconds - for Application to the Seismic Design of Large-Scale Structures -Yasushi Sasaki, Keiichi Tamura, Koh Aizawa: PWRI

J0120, J5

On the Estimation of Longitudinal Linear and Nonlinear Abutment Stiffnesses Emmanuel A. Maragakis, Bruce M. Douglas: University of Nevada

J0121, J5

New Aspects regarding the Use of Quick-Release Dynamic Tests for the Experimental Analysis of Bridge Structures
Bruce M. Douglas, Emmanuel A. Maragakis: University

J0122, J5

of Nevada

Hysterestic Behavior of Steel Bridge Piers by Shaking Table Tests Kazuhiko Kawashima, Kinji Hasegawa, Takeshi Yoshida, Takefumi Ikeuchi: PWRI

J0123, J5

Aseismic Study of Kawasaki Manmade Island in Trans-Tokyo Bay Highway Project Hiroshi Shinohara, Akinori Hasegawa, Tsuguo O-ishi : Trans-Tokyo Bay Highway Co., Ltd.

J0124, J5

Considerations for the Seismic Design of the Clark Cable-Stayed Bridge Douglas A. Foutch, Thomas Havenar, Shahram Pezeshk: University of Illinois

J0125, J5

Experiment on the Effects of Turbulence on Wind-Induced Vibrations of Long-Span Bridges

Koichi Yokoyama, Hiroshi Sato: PWRI

J0126, J5

Study on Suppressing Wind-Induced Vibration in Plane for Tower of Yokohama Bay Bridge under Construction (Design and On-site Testing of a Dynamic Damper for Cable Suspension Bridge) Katsuya Wada, Haruo Takano, Hiroshi Makuta: Metropolitan Expressway Public Corporation

J0127, J5

Damping Stay Cables with Ties Fazl Ehsan, Robert H. Scanlan: Johns Hopkins University J0128, J5

Field Instrumentation of the I-295 Cable-Stayed Box Girder Bridge

Thomas T. Baber, Ferman W. Barton, M. Mohr, D. Ramsey: University of Virginia

J0129, J5

Wind Resistant Design for the Akashi Kaikyo Bridge

Masaaki Tatsumi, Kensaku Hata, Masahiko Takeuchi: Honshu-Shikoku Bridge Authority

J0130, J5

Structural Modifications for Enhanced Aerodynamic Behavior of a Suspension Bridge Harold R. Bosch: FHWA

J0131, J5

Investigation of Aerodynamic Performance of Tokyo Port Bridge

Hiromi Kosaka, Hisamitsu Hanno, Yozo Fujino: Metropolitan Expressway Public Corporation

J0132, J5

Aerodynamic Stability of Three Parallely Located Box-Girder Bridges

Shigeru Motoyama, Mitsuru Hoshino, Noboru Takahashi, Tadaaki Maruyama: Kansai International Airport Co., Ltd.

J0133, J5

Current Research on Cable-Stayed Bridges at Caltrans

Hany Jamil Farran: California State Polytechnic University

J0134, J5

Design and Experiments on Shin-Hamadera Ohashi Bridge

Osamu Yoshikawa, Isao Sugiyama, Fumio Hakamada, Shin-ichi Kaneko: Hanshin Expressway Public Corporation

J0135, J5

Quality Control Testing for Construction of Cable-Stayed Bridge at Quency, Illinois H. Eugene Waldner, John M. Kulicki: Modjeski and Masters Consulting Engineers

J0136, J5

Large-Scale Plane Strain Bearing Capacity Test of Shallow Foundation on Sand Michio Okahara, Shoji Takagi, Hiroshi Obata, Hiroki Mori: PWRI

J0137, J5

Evaluation of Tendon Coupling Joints in Continuous Post-Tensioned Concrete Bridges Frieder Seible: University of California

J0138, J5

Application of Carbon Fiber Reinforced Plastics to Prestressed Concrete Bridges Minoru Fujiwara, Koichi Minosaku, Minoru Adachi, Takeaki Yamashita: PWRI

J0139, J5

Detection of Structural Changes in a Bridge Model

Mihran S. Agbabian, Sami F. Masri, M.I. Traina, O. Waqfi: University of Southern California

J0140, J5

A Program and Evaluation of Inspection System for Road Structures on Hanshin Expressway

Shugo Kato, Shigeru Uto, Shun-ichi Motomura, Mikitake Ishizuka: Hanshin Expressway Public Corporation

J0141, J5

An Experimental Study on Deterioration of Bridge Deck Slabs and their Repair Methods Yoshinori Ito, Yoneo Oka: Japan Highway Public Corporation

J0142, J6

Wind Resistant Design of Highway Bridges Installed with Noise Barrier Koichi Yokoyama, Yasuhiro Shoji, Masanori Higashikubo: PWRI

J0143, J6

Wind-Induced Failure of Bar-Cable on the Cornish-Windsor Bridge

Dryver R. Huston, Jean-Guy Beliveau: University of Vermont

J0144, J6

Wind-Proof Design of the Tower of Akashi-Kaikyo Bridge

Satoshi Kashima, Masahiko Yasuda, Satoshi Okano: Honshu-Shikoku Bridge Authority

J0145, J6

Estimation of Structural Damping Using Field Data from Long-Span Bridges Nicholas P. Jones, Robert H. Scanlan, Cheryl A. Spartz: Johns Hopkins University

J0146, J6

Sectional Modification of Bridge Tower for Aerodynamic Stabilization

Takafumi Takeuchi, Akira Nishijima: Sumitomo Heavy Industries Co., Ltd.

J0147, J6

Status of Nevada's Seismic Design and Retrofit Program

Rodney C. Johnson: Nevada Department of Transportation

J0148, J6

Seismic Design and Dynamic Tests for the Substructure of an Access Bridge to an Offshore Airport

Yoichi Fuse, Mitsuru Hoshino, Noboru Takahashi, Hiroshi Kawaguchi: Kansai International Airport Co., Ltd.

J0149, J6

Design of Anchorage Zones for Post-Tensioned Concrete Bridges David H. Sanders: University of Nevada

J0150, J6

Foundation Considerations for CALTRANS Seismic Retrofit Projects Adlai F. Goldschmidt: CALTRANS

J0151, J6

Comparative Study on Cable-Stayed and Suspension Bridges

Hany Jamil Farran, Frank Tyboroski, Daniel Schnepf: California State Polytechnic University

J0152, J6

Determination of the Cable Forces of the Tomei-Ashigara Bridge (A Cable-Stayed P.C. Bridge) by Using the Optimization Technique Hideo Arai, Tsutomu Kadotani, Kohei Furukawa: Sumitomo Construction Co., Ltd.

J0153, J6

Brooklyn Bridge Rehabilitation Design and Construction

Eugene Trachtenberg : Steinman Boynton Gronquist and Birdsall

J0154, J6

A Case Study of Recent Bridge Modifications Mainly Wakato-Ohashi Widening Construction of Upper Deck (Two Lanes Suspension Bridge Widened to Four Lanes)

Tetsuo Kaneko, Takao Ishii: Yokogawa Construction Co., Ltd.

J0155, J6

The Houston Ship Channel Cable Stayed Bridge

Steven L. Stroh, Thomas G. Lovett: Greiner, Inc.

J0156, J6

Performance of the Vincent-Thomas Suspension Bridge during the Whittier Earthquake of October 1, 1987 Ahmed M. Abdel-Ghaffar, Sami F. Massi, Hesham S. Sayed: University of Southern California J0157, J6

Analysis of Damping Characteristics of a Cable Stayed Bridge Based on Strong Motion Records

Kazuhiko Kawashima, Shigeki Unjo, Yoichi Azuta: PWRI

J0158, J6

Analysis of Damage to the Bay Bridge Caused by the Loma Prieta Earthquake of October 17, 1989

Abolhassan Astaneh: University of California at Berkeley

J0159, J6

Implications of Nondestructive and Destructive Tests on the Cypress Street Viaduct Structure

Jack P. Moehle, Stephen A. Mahin: University of California at Berkeley

J0160, J6

Inspection, Evaluation and Rating of Existing Highway Bridge Structures
Hany Jamil Farran: California State Polytechnic University

J0161, J6

Fatigue Damage of Steel Highway Bridges in Japan

Shoichi Saeki, Minoru Fujiwara, Jun Murakoshi: PWRI

J0162, J6

Safety Evaluation of Steel Truss Railway Bridges

Arya Ebrahimpour, Emmanuel A. Maragakis, Dan O'Connor: University of Nevada

J0163, J6

Mechanical Study on Solidification Crack Under Pulsating Loads - Welding on Structures in Service Condition - Izumi Imoto, You Chul Kim, Yasumasa Nakanishi: Ishikawajima-Harima Heavy Industries Co., Ltd.

J0164, J6

Repair of Earthquake Damage to the San Francisco Oakland Bay Bridge Mark Yashinsky: CALTRANS

J0165, J6

Response of a Major Freeway Bridge during the Whittier Earthquake

Wen David Liu, J.M. Ricles, Roy A. Imbsen, M.J. Nigel Priestley, Frieder Seible, F.S. Nobari, R. Yang: 1mbsen & Associates, Inc.

J0166, J6

Lateral Resistance of Diaphragm Wall Foundations

Michio Okahara, Shoji Takagi, Yoshitomi Kimura, Keiji Taguchi, Kazuhiko Chabayashi: PWRI

J0167, J6

Simple Modeling of the Impact Energy Losses Occurring between the Bridge Deck and Abutments

Emmanuel A. Maragakis, Bruce M. Douglas, Spiros Vrontinos: University of Nevada

J0168, J6

Dynamic Structure - Vehicle Interaction of Highway Bridges and its Implication to Seismic Design

Isao Sugiyama, Hiroyuki Kameda, Nobuyuki Sasaki, Shiro Kawakita: Hanshin Expressway Administration and Technology Center

J0169, J6

Effects of Vertical Motions on the Seismic Response of Highway Bridges

Douglas A. Foutch, M.A. Saadeghvaziri: University of Illinois

J0170, J6

Ambient Vibration Response of Simple and Complex Bridge Structures

Ferman W. Barton, Thomas T. Baber: University of Virginia

J0171, J6

Preliminary Parameter Identification Studies on the Meloland Road Overcrossing

Bruce M. Douglas, Emmanuel A. Maragakis, Spiros Vrontinos, B.J. Douglas: University of Nevada

J0172, J6

Dynamic Tests and Seismic Excitation of a Bridge Structure

Stuart D. Werner, J.L. Beck, A. Nisar: Dames and Moore

J0173, J6

Synchronization of Human Walking Observed during Lateral Vibration of a Congested Bridge

Benito M. Pacheco, Yozo Fujino: University of Tokyo

J0174, J6

Diagnostic Tests for Detection of Structural Changes in a Bridge Model

Mihran S. Agbabian, Sami F. Masri, M.I. Traina, O. Waqfi: University of Southern California

J0175, J6

Vibration Test of Yokohama Bay Bridge Katsuya Wada, Haruo Takano, Naoyoshi Tsumura, Hiroshi Horiuchi: Metropolitan Expressway Public Corporation

J0176, J6

Recent Progress in Base Isolation for Bridges in the United States

Ian G. Buckle: State University of New York at Buffalo

J0177, J6

Precision Control System under Construction of Yokohama Bay Bridge

Masahiro Yuki, Jun Sakurai, Kenji Ohsaka, Hiroshi Makuta, Shuji Habu: Metropolitan Expressway Public Corporation

J0178, J6

Toward Seismic Isolation of Cable-Stayed Bridges

Ahmed M. Abdel-Ghaffar, Hosam-Eddin M. Ali: University of Southern California

J0179, J6

The Significance of Redundancy as a Design Objective

Richard A. Parmelee, Harold R. Sandberg: Alfred Benesch & Company

J0180, J6

Instrumentation Concepts for Post-Earthquake Assessment

Robert L. Nigbor: Agbabian Associates

J0181, J6

Federal Highway Administration Bridge Research Program

James D. Cooper: FHWA

J0182, J7

The Seismic Design of Usui Bridge
Toru Kazama, Sadao Kurasawa, Takeo Nakamura,
Yasuyuki Yukawa: Japan Highway Public Corporation

J0183, J7

Seismic Performance of Cable-Stayed Bridges with Elastomeric and Lead-Rubber Bearings Hosam-Eddin M. Ali, Ahmed M. Abdel-Ghaffar: University of Southern California

J0184, J7

Aseismic Design of the Umemachi Bridge
- A Continuous Five-Span Rigid-Frame
Bridge with V-Shaped Legs Atsushi Nanjo, Shigeru Kayano: Hanshin Expressway
Public Corporation

J0185, J7

Estimation of Damping Characteristics of Cable Stayed Bridge for Seismic Design Kazuhiko Kawashima, Shigeki Unjo, Meguru Tsunomoto: PWRI

J0186, J7

On the Behavior of Base-Isolated Bearings at Low Temperatures

Osamu Nakano, Hisashi Konno, Hideyuki Taniguchi, Yuji Ono: Hokkaido Development Bureau

J0187, J7

Code Developments and Current Applications of Seismic Isolation to Bridges in the United States

Ian G. Buckle: State University of New York at Buffalo

J0188, J7

Evaluation of Lateral Inertia Force of Bridges for Seismic Design

Kazuhiko Kawashima, Kinji Hasegawa: PWRI

J0189, J7

Damage Assessment of Existing Bridges in Low to Medium Seismic Risk Zones John B. Mander: State University of New York at Buffaro

J0190, J7

Behaviour of Stiffened Box-Section Steel Bridge Piers in Seismic Regions from Model Tests

Gregory A. MacRae, Kazuhiko Kawashima, Kinji Hasegawa, Takefumi Ikeuchi, Kazuya Ohshima: PWRI

J0191, J7

Performance of Retrofit Bridges in California James H. Gates, Mark Yashinsky: CALTRANS

J0192, J7

Experimental Study of Phase-Different Ground Motion Effects on the Response of a Suspension Bridge

Ken-ichi Tokida, Keiichi Tamura, Koh Aizawa: PWRI

J0193, J7

Foundation Considerations for the Seismic Retrofit of CALTRANS Bridges Adlai F. Goldschmidt: CALTRANS

J0194, J7

A Damping Device on Main Tower Erection for the Suspension Bridge in Metropolitan Expressway Route No.12

Eisaku Sato, Hiroo Tominaga, Kenji Namikawa, Renji Kiyota, Koji Tanida, Takashi Nose: Metropolitan Expressway Public Corporation

J0195, J7

Effect of Sidewalk Vents on Bridge Response to Wind

Nicholas P. Jones, Robert H. Scanlan, Fazl Ehsan: Johns Hopkins University

J0196, J7

Resistance / Stability to the Wind of Hakucho-Ohhashi

Makoto Niiyama, Hiromi Kawasaki, Yoshiyuki Saito: Hokkaido Development Bureau

J0197, J7

Measurement of Antivibration Effects by TMD Used in Steel-Decked Box-Girder Yoichi Fuse, Noboru Takahashi, Tetsuhisa Kobayashi, Takazumi Ujihara, Kazumi Tamura: Kansai International Airport Co., Ltd.

J0198, J7

Preliminary Study on Active Control for Wind-Induced Oscillation of Long Span Bridges

Koichi Yokoyama, Takaaki Kusakabe: PWRI

J0199, J7

Non-Linear Horizontal Bearing Characteristics of Column Type Foundation Michio Okahara, Shoji Takagi, Yoshitomi Kimura: PWRI

J0200, J7

Accommodation of Movements in Bridge Design

Charles W. Roeder: University of Washington

J0201, J7

Estimation of Ultimate Deformation of Column-Footing Joint

Hirotaka Kawano, Hiroshi Watanabe: PWRI

J0202, J7

Design, Construction and Model Experiments on Corner Parts of Y-Shape Steel Bridge Piers Teruyo Hashimoto, Atsuhiro Makita, Kiyoshi Kobayashi : Metropolitan Expressway Public Corporation

J0203, J7

Bridge Engineering Research in Progress at the University of Nevada, Reno

Emmanuel A. Maragakis, Mehdi Saiidi, Bruce M. Douglas, Gary Norris, Raj Siddharthan, David H. Sanders: University of Nevada

J0204, J7

Current Condition on Introduction of Limit State Design Method to Highway Bridge Design in Japan

Minoru Fujiwara, Kazuhiro Nishikawa, Koichi Minosaku, Jun Murakoshi, Satoshi Yamamoto : PWRI J0205, J7

United States LRFD Bridge Specification John M. Kulicki, Dennis R. Mertz: Modjeski and Masters

J0206, J7

Design and Erection of Mono-Cable and Self-Anchored Suspension Bridge

Tadaaki Maruyama, Masahiro Kamei, Hiroshi Tanaka: Osaka Municipal Government

J0207, J7

West Seattle Swing Bridge

John H. Clark: Andersen Bjornstad Kane Jacobs, Inc.

J0208, J7

Foundation Design and Construction for the Akashi Kaikyo Bridge

Naoshige Nomura, Yoshitaka Yoshida: Honshu-Shikoku Bridge Authority

J0209, J7

Construction of the New Bridge Engineering Laboratory Facility at the University of Nevada, Reno

Bruce M. Douglas, Michael D. Blakely, Mehdi Saiidi, Emmanuel A. Maragakis: University of Nevada

J0210, J7

Planning and Design of Multi-Span Continuous Bridges

U. Kagawa, Toshihiro Meta, S. Nakamura, Hisato Kato: Trans-Tokyo Bay Highway Corporation

J0211, J7

Magnetic Perturbation for Cable Inspection of Suspension Bridges

Charles H. McGogney, James D. Cooper: FHWA

J0212, J7

Maintenance and Repair of Bridges in Tokyo Takeyoshi Shiozaki, Kazuo Takizawa: Tokyo Metropolitan Government

J0213, J7

Emphasis Areas in PennDOT's Bridge Inspection and Repair Program

Gary L. Hoffman: Pennsylvania Department of Transportation

J0214, JR1

Seismic Design, Seismic Strengthening and Repair of Highway Bridges in Japan Kazuhiko Kawashima: PWRI

J0215, JR1

Bridge Substructures and Design Methods Michio Okahara, Shoji Takagi, Shoichi Nakatani: PWRI J0216, JR1

Design Details of Reinforced Concrete Bridges in Japan

Taisuke Akimoto: Metropolitan Expressway Public Corporation

J0217, JR1

An Overview of Damage to Bridges in the Loma Prieta Earthquake of October 1989 H.S. Lew: NIED

J0218, JR1

San Francisco Double Deckers - Observed Damage and a Possible Retrofit Solution M.J. Nigel Priestley, Frieder Seible: University of California

J0219, JR1

Full-Scale Tests on the Cypress Viaduct Stephen A. Mahin, Jack P. Moehle: University of California

J0220, JR1

Assessment and Retrofit Research for Multi-Level, Multi-Column Bents Stephen A. Mahin, Jack P. Moehle: University of

California

J0221, JR1

Prioritizing Bridges for Seismic Retrofit James H. Gates, Brain H. Maroney: CALTRANS

J0222, JR1

Damage and Performance Assessment of Existing Concrete Bridges under Seismic Loads

Frieder Seible, M.J. Nigel Priestley: University of California

J0223, JR1

Large Earthquake Countermeasures for Bridge Substructures on the Tomei Expressway Toshikazu Tsubouchi, Kenji Ohashi, Kazushige Arakawa: Japan Highway Public Corporation

J0224, JR1

Seismic Inspection and Seismic Strengthening of Reinforced Concrete Bridge Piers with Termination of Main Reinforcement at Mid-Height

Kazuhiko Kawashima, Shigeki Unjo, Hiroyuki Iida: PWRI

J0225, JR1

Seismic Strengthening of Reinforced Concrete Piers on Metropolitan Expressway Taisuke Akimoto, Hiraku Nakajima, Fukashi Kogure: Metropolitan Expressway Public Corporation



# 5. AUTHOR'S INDEX

Abbey, Robert F.	0483			Astaneh, Abolhassan	J0158		
Abdel-Ghaffar, Ahmed M.	0536,	J0029,	J0051,	Atkinson, Richard H.	C0044		
	J0064,		J0156,	Azuta, Yoichi	J0157		
Alba Dissiphi	J0178,	J0183					
Abo, Ryoichi	0509, C0065	0541		Doho Akio	0262,	0550,	C0072
Adachi, H. Adachi, Minoru	J0138			Baba, Akio Babar, Thomas T.	J0128,	J0170	C0072
Adachi, Yoshio	0721			Babendreier, Charles A.	0058	30170	
Adhya, K.K.	0485			Bagchi, G.	0326		
Agbabian, Mihran S.	0302,	0303,	0368,	Baker, T.	C9033		
	0460,	C0018,	C0031,	Ball, N.G.	J0091		
	D0007,	J0115,	J0139,	Ballard, Jr., R.F.	0615		
	J0174			Balsara, Jimmy P.	0093,	0193	
Alzawa, Koh	0579,	0724,	E0001,	Bampton, M.C.C.	0292,	0398	
	E0007,		F0023,	Banno, Noboru	0279,	0378	
Almai I Kaanaha	J0071,	J0119,	J0192	Barenberg, M.E.	J0054,	J0070	0040
Akagi, Hisanobu	F0017	0758		Barrientos, Celso S.	0272,	0311,	0312, 0376,
Akagiri, Takekazu Akimoto, Taisuke	0727, J0216,				0324, 0426,	0336, 0461,	0476,
Akiyama, Haruki	J0096,				0594,	0672	0470,
Akiyama, Tomoaki	0494,	0496,	C0061,	Barton, Ferman W.	J0128,	J0170	
radyana, ramaas	C0071,		· ·	Batts, Martin E.	0321		
Algermissen, S.T.	0084,	0232,	0753,	Baur, John C.	C0044		
	E0005			Beck, J.L.	J0027,	J0172	
All, Hosam-Eddin M.	J0178,	J0183		Becker, James M.	0287		
An, Hui Soo	0517			Begg, George B.	0003		
Anderson, Erik D.	0405			Behn, Richard R.	0488,	0566	
Anderson, John G.	0605 0090			Beliveau, Jean-Guy	J0143 0652		
Anderson, L.O. Anderson, William A.	0269,	0306,	0308	Bernard, Eddie N.	10024		
Ando, Shin-ichi	J0007	0300,	0000	Bergmann, Ernest	0233		
Ang, A. H-S.	F0002,	0271		Bernard, Eddie N.	0423,	0463,	0488,
Aoki, Hirofumi	0732,	0733		<b>2</b> 0	0566	,	
Aoki, Yoshiki	0683			Bertero, Vitelmo V.	C0011,	C0030,	C0046
Aoki, Yoshitsugu	0227			Bevins, Messrs Tommy	0658		
Aoyama, H.	C0066,		C0079,	Bieganousky, M.A.	0195		
	C0083,	•	D0002,	Bienkiewicz, B.	0349		
	D0009, D0039	D0014,	D0031,	Blakely, Michael D.	J0209 0605		
Aral, Hideo	J0152			Bodin, Paul Boggs, H.L.	0587		
Arakawa, Kazushige	J0223			Bohannan, Billy	0170		
Arakawa, Shoji	0616			Boore, David M.	0351,	0400	
Arakawa, Tadashi	0403,	0406,	0444,	Borcherdt, Roger D.	0082,	0115,	0422,
	0475,	0500,	0510,		0532		
	C0047,	J0004,	J0015	Borgman, Leon E.	0783		
Arano, Masanobu	H0014			Borja, R.I.	0765		0000
Archuleta, Ralph J.	0443,	0506		Bosch, Harold R.	0141,	0253,	0292,
Arden, Richard W.	J0028	0057			0482, 0609,	0526, 0643,	0573, 0678,
Ariga, Toshiji Arima, Takanori	0012, 0362	0037			0712,	J0130	0070,
Ariman, Teoman	0302	0365,	0410,	Brady, A. Gerald	0712,	0317,	0353,
Tomas, roomwi	F0004	0000,	,	Diady, rt. Goldia	0402,	0578,	0613,
Arno, Norman L.	0045				0663,	0684,	0734,
Asal, Yutaro	0586				0761		
Asama, Tatsuo	0290,	0332,	0333,	Brokken, S.	C0030		
A	C0009	0.404	0.450	Brune, James N.	0605	10050	10000
Asanuma, Hideya	0412,	0421,	0458,	Buckle, lan G.	J0053,	J0056,	J0082,
	C0009,	C0042			J0103,	J0176,	J0187

Butler, H. Lee	0597,	0670,	0716	Dobry, Ricardo	0334		
Bycroft, G. Noel	0578			Dodd, Jerry S.	0221		
				Dodd, Lawrence	0501		
				Dodson, James	J0031		
Caideron, Enrique Del Val	0662			Doherty, Patrick C.	0109		
Cailaway, Thomas R.	0008			Dohl, Tadao	0758,	E0008	
Carrier, George F.	10011			Douglas, B.J.	J0171		
Cayes, Loyd R.	0251			Douglas, Bruce M.	0440,	0501,	J0034,
Celebi, Mehmet	0691,	0780			J0056,		J0112,
Cermak, J.E.	0349				J0117,	J0120,	J0121,
Chabayashi, Kazuhiko	J0166				J0167,	J0171,	J0203,
Chai, Y.H.	J0227				J0209	,	70200,
Chan, H.M.	C0020			Drenick, R.F.	0326		
Chang, Frank K.	0197,	0615		Dressel, John T.	0009		
Chang, I-Kwang	F0009	00.0		Dunker, Kenneth F.	J0104		
Changery, Michael J.	0206,	0240,	0278	Bullet, I Children.	00104		
Chao, J.	C0033	0240,	0270				
Chelapati, C.V.	0270,	0363,	0372,	Eagling, Donald	0769		
Chelapau, C.V.	0451,	0559	0072,	Ebrahimpour, Arya	J0162		
Chen, Albert T.F.	0109	0000		Eguchi, Ronald T.	0739,	F0037	
Chen, C.C.	0328			Ehsan, Fazi	0643,	J0127,	J0195
Chen, Jye	0312.	0717		Emi, Susumu	J0010	30127,	00193
		0/1/			0053,	0064	
Chen, M.C.	0185			Enami, Yoshiyuki			C0019,
Chen, P.C.	0560			Endo, Toneo	0030,	0055,	•
Cheng, David H.	0292	OCEA	10004		C0032,		C0035,
Cheok, Geraldine S.	0585,	0654,	J0084,	Endo V	C0064,	C0078	
Chiorita Vincent D	J0116			Endo, Y.	C0061		
Chiarito, Vincent P.	0581			Enokida, Minoru	H0012	0000	0112
Chiba, Osamu	0452			Ericksen, George E.	0076,	0083,	0113
Chino, Keiji	0364			Eto, H.	C0062		
Chiu, Arthur N.L.	0381			Everdale, F.G.	0594		
Choa, J.	C0020	0770	0770	Ewing, R.D.	C0031		
Chong, Ken P.	0767,	0778,	0779	Eya, Shungo	J0088		
Chrostwski, Jon D.	F0037						
Chu, Kyo Sung	0517	0.405	0540	Francis Francis	0005		
Chung, Riley M.	0334,	0405,	0548	Fagundo, Fernando	0285	10454	10460
Clark, John H.	J0207	0000	0044	Farran, Haniy Jamil	J0133,	J0151,	J0160
Cloud, William K.	0002,	0023,	0041	Farrar, Jeffrey A.	0520,	0548,	0632,
Converse, A.M.	0241	0400	0004	Former Doub D	0777,	H0001	
Cooper, James D.	0124,	0139,	0204,	Farrar, Paul D.	0670		
	0233,	0294,	0339,	Fattal, S.G.	0131		
	0696,	C0013,	J0021,	Filiben, James J.	0278	110000	
Ocener C.C	J0037,	J0181,	J0211	Finn, W.D.L.	H0016,	H0030	0000
Cooper, S.S.	0195			Fintel, Mark	0151,	0199,	0200
Corley, W.G.	0430			Fleming, John F.	0413,	0439,	J0033
Costello, James F.	0203			Fleming, Jr., R.L.	H0016		
Costes, Nicholas C.	0305			Forell, Nicholas F.	C0041		
Cowel, Andrew D.	C0011			Forrest, T.W.	H0016		
Crist, Robert A.	0167			Foss, J.W.	F0008	0000	10054
Crouse, C.B.	J0117			Foutch, Douglas A.	0522,	0662,	J0054, J0169
Crowson, Roger D.	0193	0100	0101	Fey Corord F	J0070,	J0124,	JU 109
Cuiver, Charles G.	0122,	0126,	0191	Fox, Gerard F.	0347	0257	0400
Curro, Jr., Joseph R.	0289			Franklin, Arley Gus	0331,	0357,	0408, 0583,
Curtis, George D.	10019				0447,	0548,	
				Empland C E	0615,	0650,	0735
Datta C.V	0540			Freeland, G.E.	0723	D0004	D0026,
Datta, S.K.	0542	C0015	C0043	Freeman, Sigmund A.	0505, D0037	50004,	D0020,
Degenkolb, Oris H.	C0008,	C00 15,	C0043	Eroidonrich look	J0037		
Dewey, Robert L.	0596			Freidenrich, Jack			
Dikkers, R.D.	0051			Fujil, tatsuya	0346 0309		
Dise, Karl M.	0596			Fujlnawa, Yukio	0309		

Fujino, Yozo	J0094,	J0096,	J0114,	Greenwood, George E.	C0037		
	J0131,	J0173		Gross, James G.	0710		
Fujisawa, Masaki	0657			Gurvin, Peter E.	0529		
Fujita, M.	C0070			Guthrie, Lucian G.	0487,	0698	
Fujitani, Tokunosuke	0378,	0436,	0558,	Guttman, Nathaniel B.	0173		
	0576,	0750					
Fujiwara, Goji	0469						
Fujiwara, Hiroshi	J0229			Habu, Shuji	J0177		
Fujlwara, Minoru	0653,	J0067,	J0105,	Hadala, P.F.	0331		
	J0114,	J0138,	J0161,	Hadate, Takayuki	0179,	0231,	0268,
	J0204				0307,	0411	
Fujiwara, Shigemi	0205,	0238,	0277,	Hagiwara, Ryoji	0307,	0367,	0411,
	0322				0474,	0497,	0547,
Fukuda, Makoto	0571				J0005,	J0055	
Fukul, Jiro	0364,	0421,	0773,	Hakala, William	0269,	0306	
	0776,	H0023,		Hakamada, Fumio	J0134		
Fukuoka, Masami	0015,	0026,	0035	Hall, Robert	0658		
Fukuta, Toshibumi	0262,	0431,	0465,	Hamada, Kazuo	0208		
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Fuller, G. Robert	0154,	0263,	0284,	Hanafusa, Tatsuo	0378,	0436,	0558,
,,	0387,	0645.	0682,	, , , , , , , , , , , , , , , , , , , ,	0576	,	,
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Funakoshi, Atsushi	0617,	J0085		112115511, 1155511 5.	0601,	0744	002.,
Furukawa, Kohei	J0152			Hara, Mitsuo	J0009	• • • • • • • • • • • • • • • • • • • •	
Furuya, Toshio	0256			Hara, Yoshifumi	0553		
Fuse, Yoichi	J0148,	J0197		Hardy, Thomas A.	0597		
Fuyuki, Mamoru	H0002	00107		Harris, James Robert	0258,	0275,	0374
r dydra, Mariord	110002			Hart, G.C.	D0010,	D0029,	
				Hart, James	0440	DOULS,	<b>D</b> 0000
Gade, Richard H.	0063,	0080,	0141,	Haruyama, Hitoshi	0298		
dade, Hioriaid II.	0165	0000,	0141,	Hasegawa, Akinori	J0123		
Garcia, Andrew	0716			Hasegawa, Kinji	0497,	0547,	0631,
The state of the s	0457,	0535,	0622,	naseyawa, Niliji	0497,	0706,	0731,
Gates, James H.	•	•	•				
	J0022,		J0043,		0766,	F0025,	•
	J0060,	J0073,	J0191,		J0083,	J0098,	
Cates N.C	J0221,			Hachimeta Limebi	J0188, 0310.	J0190,	
Gates, N.C.	0228	0127	0060	Hashimoto, Hiroshi	•	0337,	0377,
Gaus, Michael P.	0058,	0137,	0269,	Hachimete Tonne	0425,	0462	
Contra D. Cooll	0306			Hashimoto, Teruyo	J0202		
Gentry, R. Cecil	0105	0005	0550	Hata, Kensaku	J0129	110044	
Gergely, Peter	0285,	0295,	0552,	Hattori, Hiroaki	F0033,	H0014	0044
Corlob Androi	D0017,	D0036		Hattori, Sadaiku	0142,	0222,	0314,
Gerich, Andrei	C0024	0004	0047		0355,	0471,	0511,
Gibbs, H.J.	0005,	0034,	0047	Hauman Duara A	0640		
Gibbs, James F.	0115	0.405	0.400	Haugen, Duane A.	0237		
Goda, Yoshimi	0313,	0425,	0462	Havenar, Thomas	J0124		
Godden, W.G.	0185			Hayashi, S.	C0095	0004	0000
Goel, Subhash C.	0522			Hayashi, Satoshi	0014,	0024,	0033,
Goins, Veldo M.	J0032				0040,	0044,	0067,
Golden, Joseph H.	0711				0086,	0091,	0110,
Goldschmidt, Adlai F.	J0150,	J0193			0159,	0176,	0198,
Gonzales, Frank I.	0715,	10002			0213,	0242	
Goto, Chiaki	0703,	0782,	10008,	Hays, Walter W.	0493,	0656,	0699,
	10015				0753		
Goto, Katsushi	0473			Healy, John J.	0088		
Goto, Mitsuru	H0008,	<b>J004</b> 9		Heberstreit, Gerald T.	0433,	0463,	0490,
Goto, Noritoshi	0211				10004		
Goto, Tetsuro	0073,	0260,	0330,	Hendrickson, Erik M.	0575		
	0393,	0448,	0494,	Hess, Kurt W.	0311		
	0665,	C0065		Higaki, Norihiro	0539		

Higashi, Y.	C0019,	C0045		Ichikawa, Masaji	0085,	0556,	0629
Higashida, Norimasa	J0229			Ichikawa, Seiji	0555		
Higashikubo, Masanori	J0142			lemura, H.	J0230		
Higuchi, Kozo	H0008,	J0011,	J0049	liba, Masanori	0640		
Hikami, Yuichi	J0094,	J0096		lida, Hiroyuki	J0224		
Hikino, Jun	0592,	0653		lida, Ryuichi	0296,	0507	
							0453
Hilf, Jack W.	0029,	J0052		iida, Yutaka	0042,	0072,	0157
Hili, James R.	0723,	0749,	0769,	iinuma, Tatsuo	0210,	0470	
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Hiii, Kelly	0062,	0437				C0027	
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Hirade, Tsutomu	0624			imai, Ichiro	0059,	0078,	0079
Hiraishi, Hisahiro	0330,	0393,	0394,	imamura, Fumihiko	i0012,	10015	
	0430,	0494,	0550,	Imbsen, Roy A.	0384,	0459,	J0026,
	0563,			#1 <b>200</b> 11,110 / 12	•		
		0598,	0608,		J0080,	J0108,	J0165
	0633,	0657,	0665,	<b>imoto</b> , tzumo	J0163		
	0718,	0743,	C0058,	ina, Shin-ichi	0593		
	D0042			Inaba, Seiichi	0097,	0103,	0125,
Hirana Talura				masa, ocnom		•	
Hirono, Takuzo	0037				0155,	0188,	0190
Hirosawa, Masaya	0055,	0073,	0095,	Inatomi, Takamasa	0067,	0360,	0484,
	0117,	0119,	0161,		0492,	0688	
	0234,	0260,	0291,	Inokuchi, Takashi	0570		
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	0448,	0494,	0496,	Inoue, takahito	0614		
	0503,	0512,	0551,	Inukai, Mizuo	0785,	0786,	0787,
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				loophore loromy		0661	0740
	0608,	0657,	0659,	<b>Isenberg</b> , Jeremy	0618,	0661,	0740,
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	C0016,	C0017,	C0025,	ishibashi, Katsuhiko	0247,	0452	
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	C0061,	C0063,	· · · · · · · · · · · · · · · · · · ·	Ishikawa, N.	C0060		
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	C0079,		C0084,	<b>Ishiyama</b> , Yuji	0186,	0227,	0238,
	C0085,	C0092,	D0016,		0260,	0297,	0304,
	D0042				0338,	0434,	0452,
Hirukawa, Tomoji	H0029,	10007			0514,	0565,	0709,
		00007				0303,	0703,
<b>Hjelmstad</b> , Keith D.	0662				C0054		
Hoffman, Gary L.	J0213			Ishizuka, Mikitake	J0140		
Hofmayer, Charles H.	0201			ito, Hiroshi	0262,	C0072	
Holmes, William T.	C0039			Ito, Kohjiro	0291		
Holzer, Thomas L.	0652			ito, Manabu	J0088		
Hooke, William H.	0239			Ito, Yoshihiro	0520,	0549,	0582,
Hori, A.	C0055				0602,	0666,	H0003
Horino, Masakatsu	0445,	0515		Ito, Yoshinori	J0141	,	
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Horiuchi, Hiroshi	J0175	10110		itoigawa, E.	C0049		
Hoshino, Mitsuru	J0132,	J0148		lwan, W.D.	0228		
Hoshino, Yoshihisa	0342,	0555		Iwasaki, Shin-ichi	0628,	10003	
Hosokawa, Y.	C0083			Iwasaki, Toshio	0042,	0069,	0072,
Hsu, T-Liang	C0033				0096,	0114,	0157,
Hughes, Patrick E.	0106				0178,	0196,	0216,
Huii, Arnold R.	വാട	0134,	0173		0218,	0219,	0248,
Huston Davier D	0106,						0288,
Huston, Dryver R.	0482,	0573,	J0143		0249,	0264,	0200,
•	0482,	0573,	J0143		•	•	•
Hynes, Mary Ellen	0482, 0771,	0573, H0030			0299,	0316,	0340,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen	0482, 0771, 0408,	0573,	J0143 0650		0299, 0350,	0316, 0356,	0340, 0406,
Hynes, Mary Ellen	0482, 0771,	0573, H0030			0299, 0350, 0411,	0316, 0356, 0412,	0340, 0406, 0419,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen	0482, 0771, 0408,	0573, H0030			0299, 0350,	0316, 0356,	0340, 0406,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen	0482, 0771, 0408,	0573, H0030			0299, 0350, 0411, 0473,	0316, 0356, 0412, 0474,	0340, 0406, 0419, 0497,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen Hyodo, Masayuki	0482, 0771, 0408, H0021	0573, H0030 0447,	0650		0299, 0350, 0411, 0473, 0500,	0316, 0356, 0412, 0474, 0520,	0340, 0406, 0419, 0497, 0547,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen	0482, 0771, 0408, H0021	0573, H0030 0447,	0650		0299, 0350, 0411, 0473, 0500, 0561,	0316, 0356, 0412, 0474, 0520, 0579,	0340, 0406, 0419, 0497, 0547, 0584,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen Hyodo, Masayuki	0482, 0771, 0408, H0021	0573, H0030 0447, 0325, 0623,	0650 0442, E0015,		0299, 0350, 0411, 0473, 0500, 0561, 0586,	0316, 0356, 0412, 0474, 0520, 0579, 0631,	0340, 0406, 0419, 0497, 0547, 0584, 0638,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen Hyodo, Masayuki	0482, 0771, 0408, H0021 0242, 0589, H0005,	0573, H0030 0447,	0650		0299, 0350, 0411, 0473, 0500, 0561, 0586, 0639,	0316, 0356, 0412, 0474, 0520, 0579, 0631, 0675,	0340, 0406, 0419, 0497, 0547, 0584, 0638, 0706,
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Hynes, Mary Ellen Hynes-Griffin, Mary Ellen Hyodo, Masayuki lai, Susumu	0482, 0771, 0408, H0021 0242, 0589, H0005, H0031	0573, H0030 0447, 0325, 0623,	0650 0442, E0015,		0299, 0350, 0411, 0473, 0500, 0561, 0586, 0639, 0721,	0316, 0356, 0412, 0474, 0520, 0579, 0631, 0675, 0731,	0340, 0406, 0419, 0497, 0547, 0584, 0638, 0706, 0741,
Hynes, Mary Ellen Hynes-Griffin, Mary Ellen Hyodo, Masayuki	0482, 0771, 0408, H0021 0242, 0589, H0005,	0573, H0030 0447, 0325, 0623,	0650 0442, E0015,		0299, 0350, 0411, 0473, 0500, 0561, 0586, 0639,	0316, 0356, 0412, 0474, 0520, 0579, 0631, 0675,	0340, 0406, 0419, 0497, 0547, 0584, 0638, 0706, 0741, F0010,

	J0016,	J0042,	J0055,	Kawaguchi, Hiroshi	J0148		
humanid Tayanadi	J0065,	J0083		Kawaguchi, Koji	J0068	F0000	
Iwasaki, Tsuneaki	H0004	10105	10114	Kawakami, Hideji	F0016,	F0030	
Iwasaki, Yasuhiko	J0067, C0076,	J0105, D0011	J0114	Kawakami, Kenji	0156,	0157	
Izumi, M.	0050,	0071		Kawakita, Shiro	J0168		
Izumi, Masanori	J0230	0071		Kawamata, Shigeya	C0023 F0032		
Izuno, K.	30230			Kawamura, Makoto	J0006,	J0201.	10000
				Kawano, Hirotaka	J0006, J0196	JUZU1,	J0228
Jelesnianski, Chester P.	0312,	0376,	0717	Kawasaki, Hiromi	0158		
· · · · · · · · · · · · · · · · · · ·	E0002	0370,	0/1/	Kawasaki, ishio	0011		
Jiang, T.	C0090			Kawase, Jiro Kawase, Y.	H0029		
Jirsa, James O. Johnson, Rodney C.	J0147			Kawashima, Kazuhiko	0185,	0220,	0264,
Johnston, R.G.	D0015			Nawasi iiria, Nazui iino	0183,	0220,	0204,
Jones, Nicholas P. J	0089,	J0145.	J0195		0350,	0403,	0444,
Joyner, William B.	0005,	0038,	0109,		0500, 0500,	0510,	0547,
Joyner, William D.	0180,	0351,	0400		0584,	0586,	0631,
	0100,	0331,	0400		0639,	0675,	0706,
					0721,	0731,	0766,
Kabeyasawa, T.	D0014,	D0010			E0010,	F0011,	F0025,
Kadotami, Tsutomu	J0017,	J0152			F0026,	J0003,	J0055,
Kagawa, U.	J0210	00132			J0065,	J0083,	J0098,
Kahn, Lawrence F.	C0022				J0100,	J0102,	J0122,
Kaji, Choei	0593				J0157,	J0185,	J0188,
Kakimi, Toshihiro	0212				J0190,	J0214,	
Kakishita, Takeshi	0756				J0232	00217,	00224,
Kameda, Hiroyuki	E0006,	F0015,	F0024,	Kawashima, Toshikazu	0608,	C0034	
raineda, i moyani	F0029,	J0168	10024,	Kayano, Shigeru	J0184	00004	
Kamel, Masahiro	J0206	30100		Kazama, Motoki	0688		
Kameoka, Tomohiro	H0020			Kazama, Toru	J0182		
Kamimura, Katsuro	0392,	0465		Kelly, Donald L.	0483		
Kaminaga, Koji	J0002,	0520		Kelly, James M.	J0053		
Kaminosono, Takashi	0394,	0395,	0428,	Keto, Hideyuki	J0069,	J0107	
Territorio, racan	0429,	0431,	0477,	Khater, M.	0740	00107	
	0518,	0598,	0633,	Kikkawa, Hiroshi	J0061		
	0673,	0704,	0718,	Kiku, Hiroyoshi	H0019		
	0743,		0786,	Kim, You Chul	J0163		
	0787,	0788,	C0012,	Kimata, Toshio	0356,	0406,	0475
	C0035,			Kimura, H.	D0044	,	
Kanai, Michio	0414,	0456		Kimura, K.	C0098		
Kanazaki, Tomoki	0752			Kimura, Katsutoshi	0671		
Kanazawa, Katsuyoshi	J0068			Kimura, Yoshitomi	J0166,	J0199	
Kaneko, Shin-ichi	J0134			Kinoshita, Shigeo	0190,	0215,	0531,
Kaneko, Tetsuo	J0154				0577		
Kano, Isamu	J0045			Kinoshita, Takeo	0517,	0567	
Kano, Takashi	0639,	F0026		Kinoshita, Yasushi	0728		
Kanzaki, Kazuo	0467,	0480,	0571	Kishi, Shinkichi	0636		
Kashima, Satoshi	J0068,	J0144		Kitagawa, Yoshikazu	0066,	0071,	0087,
Kashima, Toshihide	0564,	0608			0142,	0222,	0245,
Kashimura, Yoshiaki	0471				0283,	0320,	0395,
Kashiwagi, Jun	0683				0428,	0429,	0495,
Katagiri, T.	C0084,	C0097			0513,	0564,	0614,
Katayama, Tsuneo	E0009				0659,	0764,	C0025,
Kato, Ben	0732,	C0073			C0063,	E0013	
Kato, Hisato	H0029,	J0210		Kitaoka, Tatsumi	0020,	0022,	0036,
Kato, Masafumi	J0087				0048		
Kato, Shugo	J0140			Kitaura, M.	F0001		
Katsukura, H.	D0011			Kitazawa, Masahiko	J0044,	J0048	
Katsumata, H.	C0067,	C0068,	C0098	Kitazawa, Sosuke	0329		0.40-
Katsuragi, Masataka	0250	0.46=		Kiyomiya, Osamu	0225,	0382,	0409
Kaufman, John W.	0062,	0437		Kiyota, Renji	J0194		
			71				

Klaiber, F. Wayne	J0104				0343,	0367,	0371,
Kobatake, Y.	C0067,	C0098			0391,	0411,	0419,
Kobayashi, Hiroyoshi	0730				C0007,	C0014,	C0016,
Kobayashi, Kiyoshi	J0202				E0002,	F0022,	F0032,
Kobayashi, Motoo	0298,	0373			J0042		
Kobayashi, Shigetoshi	0586,	C0014,	J0006,	Kuroiwa, S.	E0002		
	J0012,	J0072,	J0228	Kurose, Yukinobu	0479		
Kobayashi, Tetsuhisa	J0197			Kusakabe, takaaki	0713,	J0090,	J0092,
Kodama, Eiichi	H0026				J0198		•
Koester, Joseph P.	0771		•	Kusano, Kaoru	H0033		
Koga, Yasuyuki	0112,	0148,	0300,	Kutara, Katsuyuki	0520		
, , , , , , , , , , , , , , , , , , , ,	0416,	0549,	0562,	Kuwabara, Tetsuro	0554,	0638,	0660,
	0569,	0582,	0586,		0683	,	
	0602,	0621,	0637,	Kyokuno, Wataru	F0022		
	0651,	0666,	0690,	,			
	0725,	0754,	H0003,				
	H0012,		110000,	Ladd, Richard S.	0334		
Kogure, Fukashi	J0225	110020		Lagorio, Henry J.	0767,	0779	
Koiwai, Naokazu	0101			Lander, James F.	0243,	0424,	0463,
Koizumi, Katsuhiko	0623,	H0005		Editor, varies 1.	0489,	0544,	0627,
Kolzumi, Yasunori	0025,	0073,	0075,		0702,	0781	0027,
NOIZUITA, TASUROIT	0149	0073,	0073,	Larsen, T.	0702,	0/01	
Vernada Kajishi	0149	0156		•	0058		
Komada, Keiichi	•		0540	Lea, George K.			
Kondo, Masuo	0475,	0510,	0549,	Lea, Patrick A.	0255	LIAA16	H0030
Vanda Cotoru	0561,	H0003		Ledbetter, Richard H.	0689,	H0016,	поозо
Kondo, Satoru	0296,	0369	DEAE	Lee, Charles E.	0004,	0032	
Konishi, Tatsuo	0477,	0517,	0545,	Lee, G.M.	F0037		
Manna I lisashi	0567			Lee, L.H.N.	0328	0000	
Konno, Hisashi	J0186	10000	10404	Lefter, James	0043,	0068	
Kosaka, Hiromi	J0081,	J0098,	J0131	Levine, M.P.	J0027		
Koseki, Jun-ichi	0651,	0725,	0754,	Lew, Franklin	C0088	0070	0400
14.	H0012,	H0025		Lew, H.S.	0051,	0070,	0126,
Kovacs, W.D.	0520				0654,	0693,	0705,
Kowalik, Zygmung	10018				D0006,		
Koyama, Tatsuhiko	0497,	0547,	0631,		J0036,	J0084,	J0116,
	J0055,				J0217		
Kramer, Samuel	0051,	0102		Lew, Tingley K.	0270,	0486,	0540,
Krimgold, Frederick	0269,	0306			0745,	0755	
Krimm, Richard W.	0648			<b>Leyendecker</b> , Edgar V.	0051,	0275,	0388,
Krinitzsky, Ellis L.	0197,	0246,	0735		0464,	0585,	0603,
Krumpe, Paul F.	0433,	0753,	0795		E0014,		
Kubo, Tetsuo	0281,	0297,	0395	LI, K-N.	D0035		
Kubota, Toshiyuki	0262,	0395,	0720,	Liska, J.A.	0090		
	C0012			Liu, Philip LF.	10009		
<b>Kulicki</b> , John M.	J0135,	J0205		Liu, Shih Chi	0269,	0306,	0390,
Kulikov, Ye.A.	10002				0432,	0767,	0779
Kumagai, Yoshio	0342			Liu, Wen David	J0080,	J0108,	J0165
Kumaki, Yosuke	0418			Liorente, Carlos	0287		
Kunihiro, Tetsuo	0194,	0207		Lockridge, Patricia A.	0544,	0627,	0781,
Kuo, Pei-Horng	C0033				10006		
Kurasawa, Sadao	J0182			Longinow, Anatole	0124,	0233	
Kurashige, Kiyoshi	0205			Loomis, Harold G.	10014		
Kurata, Eiichi	0040,	0176,	0213,	Lovett, Thomas G.	J0155		
	0242,	0352,	0442	Lu, Le-Wu	C0091		
Kuribayashi, Eijchi	0026,	0042,	0069,	Lucareiii, Peter R.	F0038		
	0072,	0096,	0100,	Luebke, T.A.	0588		
	0114,	0144,	0147,	Luehring, R.W.	0485		
	0157,	0158,	0160,	Lund, LeVal	0740,	C0036	
	0179,	0192,	0220,				
	0231,	0266,	026				
	0268,	0307,	0340,				
	,		70				

MacDonald, Robert B.	0530,	0736		Mehta, Kishor C.	0610,	0680	
Machida, Atsuhiko	J0231			Mena, Enrique	0605		
MacRae, Gregory A.	J0190,	J0232		Merritt, J.L.	F0005		
		30232		•			
Mader, Charles L.	10016			Merritt, Ronald G.	0116		
Maeda, Yoshito	J0102			Mertz, Dennis R.	J0205		
Maekawa, Y.	D0021			Meta, Toshihiro	H0029,	J0210	
Magoon, Orville T.	0045			Meyer, C.	D0022		
Mahin, Stephen A.	0793,	J0159,	J0219,	Meyers, Herbert	0627,	0697,	0781
mariiri, Stephen A.		30139,	30219,				
	J0220			Midorikawa, Mitsumasa	0431,	0465,	0523,
Makita, Atsuhiro	J0202				0551,	0600,	0642,
Makuta, Hiroshi	J0126,	J0177			0764,	0791,	D0028
Maley, Richard P.	0145,	0578		Mikami, Naoya	0556		
Malvar, L. Javier	0498	00,0		Miki, Chitoshi	J0114	*	
Mander, John B.	J0189			Miki, Hiroshi	0520		
Maragakis, Emmanuel A.	J0086,	J0111,	J0120,	Mikoshiba, Tadashi	0531,	0768	
	J0121,	J0162,	J0167,	Miller, Martin C.	0783		
	J0171,	J0203,	J0209	Minami, Ken-ichiro	0409		
Marcuson III, William F.	0111,	0195,	0246,	Minami, T.	C0060.	D0021	
Marcusoff Mi, VVIIIculi I .		•	•	· · · · · · · · · · · · · · · · · · ·			OCEO
	0289,	0331,	0357	Minosaku, Koichi	0504,	0592,	0653,
Maroney, Brian H.	J0099,	J0221			J0014,	J0052,	J0138,
Marshall, Richard D.	0019,	0108,	0123,		J0204		
	0163,	0167,	0183,	Minowa, Chikahiro	0224,	0261,	0286,
	0467,	0481,	0572,		0768	,	,
	•		0372,	Mitaria Vanua		0220	0222
	0747,	0780		Mitsule, Yasuo	0256,	0332,	0333,
Maruyama, Tadaaki	J0132,	J0206			0364,	0386	
Mashimo, Tadao	F0018			<b>Miw</b> a, M.	F0014		
Masri, Sami F.	J0027,	J0115,	J0139,	Miyahana, Kunihiro	J0109		
,	J0156,	J0174	,	Miyanaga, H.	D0021		
Matauda Hiravaki	-	00174					
Matsuda, Hiroyuki	0591			Mlyata, Toshitaka	J0014		
Matsuda, Takashi	H0012			Miyauchi, Hiroyoshi	J0018		
Matsuda, Tetsuo	J0229			Miyawaki, Katsumi	0101		
Matsumoto, Hideo	0510,	0561,	0742,	Mizuguchi, Mamoru	0441		
,	0773,	H0017,	H0023	Mizuno, Hatsukazu	0640,	0791	
Matsumoto, Hideteru	0470	110017,	110020	Mizutani, Y.	H0029	0701	
		0000	0.4.00				
Matsumoto, Norihisa	0296,	0369,	0420,	Mizutori, K	D0021		
	0454,	0500,	0507,	Moehle, Jack P.	C0052,	D0027,	J0159,
	0533,	0580,	0616,		J0219,	J0220	
	0667,	0685,	0728,	<b>Mohr</b> , M.	J0128		
	0762	0000,	0.20,	Morgan, B.J.	0430		
Mataumura Atim					J0136		
Matsumura, Akira	0720			<b>Mori</b> , Hiroki		10000	
Matsumura, George	0505			Morihama, Kazumasa	J0072,	J0228	
Matsunaga, Yasuo	E0015,	H0031		Morimoto, Iwao	H0022		
Alletes a A	DAED	OFCO					
<b>Matsuo</b> , Osamu	0450.	U30Z.	0602.	Morimoto, T.	D0021		
Matsuo, Osamu	0450, 0637	0562, 0690	0602, 0754	Morimoto, T.	D0021		
<b>Matsuo</b> , Osamu	0637,	0690,	0602, 0754,	Morino, S.	D0021 C0075		
	0637, H0012,	0690,		Morino, S. Morishita, Tadashi	D0021 C0075 0651		
Matsushima, Yutaka	0637, H0012, 0066,			Morino, S. Morishita, Tadashi Morita, K.	D0021 C0075 0651 C0077		
Matsushima, Yutaka Matsutomi, Hideo	0637, H0012, 0066, I0007	0690,		Morino, S. Morishita, Tadashi	D0021 C0075 0651 C0077 0472		
Matsushima, Yutaka	0637, H0012, 0066,	0690,		Morino, S. Morishita, Tadashi Morita, K.	D0021 C0075 0651 C0077		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo	0637, H0012, 0066, 10007 J0226	0690,		Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N.	D0021 C0075 0651 C0077 0472 0317		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y.	0637, H0012, 0066, I0007 J0226 C0095	0690, 0297	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu	D0021 C0075 0651 C0077 0472 0317 0636		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B.	0637, H0012, 0066, I0007 J0226 C0095 0175,	0690, 0297 0241,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J.	D0021 C0075 0651 C0077 0472 0317 0636 0341		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y.	0637, H0012, 0066, 10007 J0226 C0095 0175, 0294,	0690, 0297	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L.	0637, H0012, 0066, 10007 J0226 C0095 0175, 0294, J0082	0690, 0297 0241,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B.	0637, H0012, 0066, 10007 J0226 C0095 0175, 0294,	0690, 0297 0241,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R.	0637, H0012, 0066, 10007 J0226 C0095 0175, 0294, J0082 0587	0690, 0297 0241, 0339,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S.	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R. McConnell, Richard D.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150,	0690, 0297 0241, 0339,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287	C0060	C0095
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R. McConnell, Richard D. McConnell, James R.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255,	0690, 0297 0241, 0339,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M.	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 10004 0287 C0058,	C0060,	
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R. McConnell, Richard D. McConnell, James R. McConnough, Jr., George F.	0637, H0012, 0066, 10007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305	0690, 0297 0241, 0339,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444,	C0060, 0458,	C0095 0509,
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R. McConnell, Richard D. McDonaid, James R. McDonough, Jr., George F. McGogney, Charles H.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305 J0211	0690, 0297 0241, 0339, C0029 0749	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M. Murakami, M. Murakami, Misato	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444, C0047	0458,	0509,
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L.  Mays, J.R. McConnell, Richard D. McDonaid, James R. McDonough, Jr., George F. McGogney, Charles H. McGuire, Robin K.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305 J0211 0209,	0690, 0297 0241, 0339,	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M. Murakami, Misato  Murakoshi, Jun	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444, C0047 J0114,		
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L. Mays, J.R. McConnell, Richard D. McDonaid, James R. McDonough, Jr., George F. McGogney, Charles H.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305 J0211	0690, 0297 0241, 0339, C0029 0749	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M. Murakami, M. Murakami, Misato	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444, C0047	0458,	0509,
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L.  Mays, J.R. McConnell, Richard D. McDonald, James R. McDonough, Jr., George F. McGogney, Charles H. McGuire, Robin K. McLean, F.G.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305 J0211 0209, 0449	0690, 0297 0241, 0339, C0029 0749	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M. Murakami, Misato  Murakoshi, Jun Murata, Yoji	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444, C0047 J0114, 0025	0458, J0161,	0509,
Matsushima, Yutaka Matsutomi, Hideo Matsuura, Yasuo Matsuzaki, Y. Matthiesen, R.B. Mayes, Ronald L.  Mays, J.R. McConnell, Richard D. McDonaid, James R. McDonough, Jr., George F. McGogney, Charles H. McGuire, Robin K.	0637, H0012, 0066, I0007 J0226 C0095 0175, 0294, J0082 0587 0150, 0255, 0305 J0211 0209,	0690, 0297 0241, 0339, C0029 0749	0754,	Morino, S. Morishita, Tadashi Morita, K. Morita, Koji Mork, P.N. Morohoshi, Toshikazu Morony, R.J. Motomura, Shun-ichi Motoyama, Shigeru Moustafa, M.S. Mueller, Peter Murakami, M. Murakami, Misato  Murakoshi, Jun	D0021 C0075 0651 C0077 0472 0317 0636 0341 J0140 J0132 I0004 0287 C0058, 0444, C0047 J0114,	0458,	0509, J0204

	0304,	0345,	0362,		0207,	0236,	0250,
	0380,	0399,	0472,		0293,	0348,	0383,
	0527,	0574,	0593,		0397,	0414,	0421,
	0600,	0604,	0614,		0438,	0456,	0458,
	0635,	0646,	0692,		0480,	0525,	0571,
	0700,	0708,	0733,		0611,	0644.	0677,
	0743,	0750,	C0016,		0679	•	00,,,
	C0040,	•	•	Narumi, Naonobu	H0013		
	C0077,		.,	Nash, John F.	0174		
Murphy, Leonard M.	0023			Nazmy, Aly S.	J0051,	J0064,	J0113
Murray, Robert C.	0749,	E0011,	E0012	Nelson, Thomas A.	E0012	.,	00110
Mutsuyoshi, Hiroshi	J0231	,		Nemoto, Shigeru	0079		
				Nickeli, J.S.	H0030		
				Nicoletti, Joseph P.	0505		
Nagai, Akira	0756			Nigbor, Robert L.	J0180		
Nagamachi, Shunji	H0032			Niino, Hiroshi	0750		
Nagamori, Mineo	0046			Niiro, Tadashi	E0002,	F0022	
Nagao, Mitsuru	0098			Nilyama, Makoto	J0196	10022	
Nagaoka, Masatoshi	0555,	0591,	0668	Nisar, A.	J0172		
Nagasaka, H.	E0002	0001,	0000	Nishijima, Akira	J0146		
Nagase, Hideo	H0019			Nishikawa, Kazuhiro	J0204		
Nagashima, Hiroyuki	0766			Nishimura, Masao	0683		
Naito, Gen-ichi	0468,	0557		Nishio, Nobuaki	F0021		
Naito, Keikichi	0279,	0378,	0436,	Nishioka, Shozo	E0002		
Naito, Neincill	0558,	0576	0430,	Nishiyama, Isao	0465,	0512,	0523,
Nakagami, Yoichi	0356,	0611		Mishinyanna, Isau	0551,	0512,	0600,
	0050,	0138			0642,	0655,	C0074,
Nakahara, Mitsuo	•	0130			C0075	0033,	C0074,
Nakajima, Hideo	H0011			Nobori E C			
Nakajima, Hiraku	J0225	10010		Nobari, F.S.	J0165		
Nakajima, Hiroyuki	J0010,	J0019	0.470	Noda, Mikio	J0069	0150	0400
Nakajima, Takeo	0412,	0419,	0473	Noda, Setsuo	0091,	0159,	0198,
Nakajima, Yutaka	H0027				0213,	0301,	0325,
Nakamura, Ippei	J0226				0329,	0352,	0360,
Nakamura, S.	J0210				0407,	0409,	0442,
Nakamura, Takeo	J0182				0484,	0492,	0539,
Nakanishi, Yasumasa Nakana Kimiali	J0163				0589,	0606,	0623,
Nakano, Kimiaki	0554	0117	0110		0649,	0688,	0775,
Nakano, Kiyoshi	0095,	0117,	0119,	Noti T	H0010	00000	
	0127,	0136,	0226,	Noji, T.	C0061,	C0062	0074
	0227,	0234,	0283,	Noland, James L.	0599,	0634,	0674,
Malana Masshire	0338,	0391,	C0012		0707,	0719,	0789,
Nakano, Masahiro	F0013,	H0014		Name was Alexabias	C0044		
Nakano, Osamu	J0186	0540		Nomura, Naoshige	J0208		
Nakashima, Masayoshi	0477,	0518	0.400	Norman, Charles D.	0193	10000	10000
Nakata, Shinsuke	0161,	0393,	0428,	Norris, Gary	0501,	J0086,	J0203
	0429,	0448,	0479,	Norton, William E.	0491		
	0640,	0665,	0718,	Nose, Takashi	J0194		
	0760,	0785,	0786,	Novomestky, F.	0326	10440	
	0787,	0788,	C0034,	Nowak, Andrzej S.	J0066,	J0110	
	C0035,	C0057,	C0072,	Nutt, Richard V.	C0013		
Mail at and Olivinia	C0080	0047		Nyman, Douglas J.	F0003		
Nakatani, Shoichi	J0215,	0617,	0669				
Nakayama, Shigeo	0225				10.400		
Nakazawa, Kazuto	0264,	0267,	0307	O'Connor, Dan	J0162	0450	
Namikawa, Kenji	J0194			O'Donnell, Keith O.	0092,	0152	
Nanjo, Atsushi	J0184			O'Rourke, Thomas D.	0618,	F0024	
Nanjo, Masahiro	J0079			Obata, Hiroshi	J0136		0501
Narihara, H.	C0076			Obinata, Naomi	0500,	0554,	0584,
Narita, Nobuyuki	0021,	0052,	0061,		0639		
	0064,	0081,	0104,	Oda, Hideaki	0686		
	0140,	0168,	0182,	Ogawa, Nobuyuki	0224,	0768	
				74			

Ogino, Akihiko	F0032				0722,	0759,	0776,
Oh-oka, Hiroshi	0291,	0446			J0085,	J0136,	J0166,
Ohashi, Kenji	J0223				J0199,	J0215	•
Ohashi, Masamitsu	0216,	0219,	0226,	Okal, Emile A.	10022		
	0249,	0288,	0299,	Okamoto, Shin	0055,	0103,	0234,
	0342	,	,	, c	0394,	0428,	0429,
Ohashi, Yuji	0297,	0709,	0770		0477,	0518,	0550,
Ohkawa, Izuru	0446,	0565			0568,	0598,	0599,
Ohkawa, Seiji	J0102	0000			0633,	0673,	0704,
Ohkoshi, T.	C0082				0718,	0720,	0785,
•	C0052	C0059,	C0089			•	
Ohkubo, M.	•				0786,	0787,	0788,
Ohkubo, Masahiko	0616,	0667,	0728,		C0012,	C0035,	
Only by Talandi	0762	0004	0050		C0082,		•
Ohkubo, Tadayoshi	0018,	0021,	0052,		D0025,	D0034,	D0038
	0053,	0061,	0064,	Okano, Satoshi	J0144		
	0077,	0081,	0103,	Oku, Tetsuo	J0044		
	0121,	0132,	0140,	Okuda, Minoru	0036,	0238	
	0156,	0168,	0182,	Omata, Atsushi	0543,	0630	
	0236,	0244,	0250,	Omote, Shun-ichiro	0017,	0025	
	0276,	0299,	0316,	Onate, Mario	0605		
	0350,	0383,	0397,	Onisawa, K.	C0056		
	0403			Ono, Yuji	J0186		
Ohkuma, Takeshi	0527			Orie, J.	J0112		
Ohno, Kazuaki	0507			Osada, Makoto	0775		
Ohno, Sohei	J0061			Owen, G. Norman	C0051		
Ohnuma, Masaaki	C0023			Ozaki, M.	D0040		
Ohsaka, Kenji	J0177			Ozaki, Masakazu	0186,	0222	
Ohsaki, Yorihiko	0013,	0025,	0030,	Ozani, Masarazu	0100,	ULLL	
Orisaki, Tolliliko	•	•	The state of the s				
Obahima Kaman	0031,	0039,	0202	Dachasa Daniis M	10470		
Ohshima, Kazuya	0509,	0541,	J0002,	Pacheco, Benito M.	J0173		
Oh. 1 - 1.4	J0013,	J0079,	J0190	Parmelee, Richard A.	J0179		
Ohta, M.	H0029			Patel, Virendra C.	0174		
Ohta, Masataka	0515			Peak, Un Seop	0517		
Ohta, T.	C0095			Penzien, J.	0185,	0459	
Ohta, Yutaka	0211			Perez, Virgilio	0041,	0317	
Ohtani, Keiichi	0215,	0224,	0229,	Perkins, D.M.	0084		
	0261,	0285,	0327,	Peterka, J.A.	0349		
	0354,	0401,	0455,	Pezeshk, Shahram	J0124		
	0469,	0502,	0531,	Pfrang, Edward O.	0051,	0275	
	0577,	0636,	0647,	Pham, Mai G.	C0010		
	0664,	0695,	0730,	Phan, Long T.	0780		
	0768,	E0004		Phipps, Maryann T.	0739,	C0086.	F0036
Ohtani, S.	C0058,		D0014,	Pinkham, Clarkson W.	0385	,	
	D0035,	· ·		Plafker, George	0076		
Ohtsuka, Kazuyuki	0277			Piecnik, Joseph M.	C0010,	C0020,	C0033
Ohtsuka, Michio	0247,	0280		Podoiny, Jr., Walter	0141,	0499	
Ohwada, Y.	D0044			Popov, Egor P.	C0011		
Ohya, Satoru	H0004			Porcelia, Ronald L.	0318,	0351	
Ohyagi, Norio	0570,	0768		Potter, Thomas D.	0173,	0206	
O-ishi, Tsuguro	J0123	0,00		Preuss, Jane	10020	0200	
Oka, Yoneo	J0123			Priestley, M.J. Nigel	0784,	F0027,	J0101,
		0262	0200	Priestley, W.J. Niger	•	J0165,	J0218,
Okada, Hisashi	0345,	0362,	0380,		J0106,	•	00Z10,
	0399,	0527,	0574,	Deimas lausa	J0222,	J0227	
Okoda Massai	0635,	0646,	0750	Prince, Jorge	0605		
Okada, Masami	0629,	10021	0445				
Okada, Tsuneo	0563,	0720,	C0058,				
	C0059,			Quaas, Roberto	0605		
	C0095,		D0023,				
	D0042,						
Okahara, Michio	0156,	0194,	0256,	Ramsey, D.	J0108		
	0332,	0617,	0669,	Rankin, Frank	0538		
			7.6				

Raufaste, Jr., Noel J.	0163,	0171,	0235,	Sato, Eisaku	J0194		
	0676			Sato, Hiroshi (PWRI)	0293,	0348,	0383,
Reed, D.A.	0379				0397,	0438,	0480,
Reinforn, A.M.	0763				0525,	0571,	0611,
Reinhold, Timothy A.	0254,	0323			0644,	0679,	0713,
Reltherman, Robert	0790				J0041,	J0076,	J0090,
Reymond, Dominique	10022				J0092,	J0125	
Richardson, Alan T.	0726			Sato, Hiroshi (GSI)	0208,	0212,	0247
Richardson, Edward	F0024,	0661		Sato, Kaoru	0037	,	
Richardson, James	0440,	0501		Sato, Masatoshi	0362		
Ricles, J.M.	J0165			Sato, Tadanobu	F0015,	F0031	
Roberts, James E.	F0028			Sato, Takashi	J0229		
Robinson, R. Richard	0124			Sato, Yuji	F0017		
Roeder, Charles W.	J0200			Sato, Yukio	0509,	0541	
Roehm, Louis H.	0726			Savage, Michael G.	0713,	J0075	
Rojahn, Christopher	0146,	0177,	0422	Sawada, Kenkichi	0039,	0057,	0074,
Roper, William E.	0694,	0716,	0774,	Odvidod, Normoni	0148,	0189,	0223
Hopei, William L.	0783	0710,	0774,	Sawahashi, T.	F0012	0100,	0220
Roufalel, M.S.L.	D0022			Sawanobori, T.	C0098		
Row, III, Lee Wesley	0697			Saya, Shoichi	0742,	H0017	
Russell, Larry R.	0321				J0156	110017	
nussell, Lally n.	0321			Sayed, Hasham S.		0187,	0269,
				Scalzi, John B.	0162,	•	
Condembusyini M A	IOOE 4	10070	10160		0305,	0306,	0466,
Saadeghvaziri, M.A.	J0054,	J0070,	J0169	Cooplan Debort U	0778,	J0035	0270
Sabadell, J. Eleonora	0681			Scanlan, Robert H.	0165,	0252,	0379,
Saeki, Mitsuaki	J0102	0450	0504		0524,	0572,	0612,
Saekl, Shoichi	0414,	0456,	0504,		J0040,		•
	0653,	J0014,	J0105,		J0089,	J0127,	J0145,
Collell Mahali	J0161	10000	10440	Convethorm Charles	J0195	0740	
Salldl, Mehdi	0440,	J0086,	J0112,	Scawthorn, Charles	0519,	0740	
Calte France	J0203,	J0209		Schaefer, Joseph T.	0483		
Salto, Fumio	0555			Schamber, Robert A.	J0108	0007	0054
Salto, Kanji	0362			Scheffey, Charles F.	0006,	0027,	0054,
Salto, Toru	J0088			Ochmonic Double	0063,	0294	
Salto, Yoshiyuki	J0196	0040		Schneph, Daniel	J0151		
Sakagami, Yoshijiro	0316,	0343		School, Roger E.	C0051		
Sakaguchi, Osamu	0392			Schultz, Donald M.	0200		
Sakalno, Norio	0507			Seed, H. Bolton	0548	10400	10407
Sakate, Kenji	10023			Selble, Frieder	J0101,	J0106,	J0137,
Sakural, Jun	J0177				J0165,	J0218,	J0222,
Salomone, L.A.	0520				J0227		
Sandberg, Harold R.	J0179			Seino, Masaaki	0756		
Sanders, David H.	J0149,	J0203		Seki, M.	C0068	00005	
Sanders, Jr., Wallace W.	J0104	04.40	04.40	Sekiguchi, H.		C0035	
Santo, Tetsuo	0099,	0142,	0143,	Sekimoto, Hiroshi	J0226		
	0181			Sekiya, Tomihiko	F0031		
Sasakawa, Iwao	0756			Seko, Ikuji	0683		10005
Sasaki, Nobuyuki	J0168			Selna, Lawrence G.	0361,	0498,	J0025,
Sasaki, Takehiko	J0107				J0058,	J0118	
Sasaki, Yasushi	0046,	0300,	0346,	Senoo, Katsumi	0500,	0554	
	0358,	0404,	0412,	Shaffer, Wilson A.	0717		
	0416,	0450,	0500,	Shah, A.H.	0542		
	0508,	0520,	0549,	Shao, Lawrence C.	0201		
	0554,	0561,	0579,	Sharma, S.K.	0120	0001	0000
	0586,	0602,	0638,	Sharpe, Roland L.	0257,	0294,	0339
	0660,	0683,	0701,	Shaw, Warren A.	0010,	0118	
	0721,	0742,	0759,	Shibasaki, Ryosuke	J0105	0 1 1 2	
	C0047,		H0003,	Shibata, Akenori	C0038,		0.500
	H0009,	•	H0014,	Shiga, Minori	0420,	0454,	0533,
	H0015,	H0017,	J0071,	Obles T. I.	0580	0.4.4.0	
	J0119			Shlga, Toshio	C0038,	0448	

Shimazu, Akiomi	0621			Sugita, Hideki	F0026		
Shimazu, Takao	0549,	0666,	0754,	<b>Sugiyama</b> , Isao	J0134,	J0168	
	H0003			Sugiyama, Morihisa	J0063		
Shimizu, Hideyuki	0766			Sullivan, Kenneth F.	0795		
Shimizu, K.	C0056,	D0024		Sunaga, Hiroaki	0418		
Shimizu, Takao	0386			Suwa, Akira	0085,	0130,	0208,
Shimizu, Y.	C0019,	C0045.	C0064,		0210	,	,
C,	C0084,		C0097	Suzuki, Hideyo	F0034		
Shimizu, Yoshihisa	H0022			Suzuki, Kichio	H0012		
Shinohara, H.	D0014			Suzuki, Shin-ichi	H0026		
Shinohara, Hiroshi	0592,	0617,	0669,	Suzuki, Shuichi	J0074		
Silitionala, Filiosili		-		· · · · · · · · · · · · · · · · · · ·	F0033		
Ohlmanden Manakani	J0052,	J0085,	J0123	Suzuki, Tadanobu			
Shinozuka, Masakazu	0164	0040	07.40	Sykora, David W.	0771		
Shinozuka, Masanobu	0546,	0619,	0740,				
	0763,	F0001,	F0029				
Shiohara, Hitoshi	0718,	0743,	0785,	Tabata, Isao	0279		
	<b>0</b> 786,	0787,	0788	Tabe, Ichiro	0277		
Shioi, Yukitake	0218,	0256,	0290,	Tada, Hirohiko	0525,	0541,	0571,
	0332,	0333,	0364,		0592,	J0041,	J0052
	0386,	0776,	C0009	Tada, Kazuo	J0074,	J0094	
Shiono, Keiji	0211			Tada, Yasud	0016,	0028	
Shlozaki, Takeyoshi	J0212			Taguchi, Jiro	0721		
Shiraishi, Satoru	0382			Taguchi, Keiji	0617,	0669,	0722,
Shoji, Yasuhiro	J0142				J0085,	J0166	J,
Short, Stephen A.	E0011,	E0012		Tajima, Minoru	0247	00.00	
Shuto, Nobuo	i0012,	10015		Takada, Shiro	F0012,	F0039	
Siddharthan, Raj	J0203	10013		Takagi, Shoji	0722,	0776.	J0136,
				rakayı, Siloji			J0136, .
Sigmund, Vladimir	0568	04.00	0174	Takahara Kanama	J0166,	J0199,	JUZ 15
Simiu, Emil	0123,	0169,	0174,	Takahara, Kaname	0496	0044	0000
	0278,	0321,	0435,	Takahashi, Hiroshi	0208,	0211,	0309,
Olm : N OL 11/11	0575				0375,	0455,	0468,
Singh, Shri Krishna	0605				0469,	0477,	0502,
Smith, Charles E.	0687,	0714,	0757		0517,	0528,	0545,
Smith, H. Allison	0765				0557,	0567,	0570,
Smith, Robert J.	0453,	0534,	0581,		0595,	0628,	0636,
	0620				0647,	0664,	0695
Snyder, Gary M.	F0035			Takahashi, Hiroto	J0072		
Soma, Seiji	0020,	0059,	0078,	Takahashi, Katsumi	0279		
	0107,	0135,	0172	Takahashi, Kazuyuki	0579		
Soong, T.T.	0738,	0763		Takahashi, Masakazu	H0011		
Sozen, Mete A.	C0081,		0607	Takahashi, Masashi	J0072		
Spaeth, Mark G.	0273	<b>J J J J J J J J J J</b>	000,	Takahashi, Michio	0470,	J0008	
Spaine, Lawrence F.	J0024,	J0039		Takahashi, Noboru	J0132,	J0148.	J0197
Sparks, Peter R.	0748,	0751,	0794	Takahashi, Stanley K.	0118,	0270,	0363,
Spartz, Cheryl A.	J0145	0,01,	3,5 1	idianosii, oanicy iv.	0372,	0381,	0415,
Stacy, S.T.	H0016				0372,	0559	0710,
Steinbrugge, Karl V.	0232			Takanashi, Koichi	0431,	C0073,	C0074,
	D0020			I aka i asi ii, kuki ii			00074,
Stephens, J.				Takana Uaria	C0075,		
Stepp, J.C.	0065	0000	0054	Takano, Haruo	J0126,	J0175	
Stone, William C.	0585,	0603,	0654,	Takeda, Atsushi	0477,	0595	
Ot 1: Ot	0772,	J0084,	J0116	Takeda, Katsuaki	J0045		
Stron, Steven L.	J0062,	J0155		Takeda, Mitsuko	0445		
Stuart, Richard J.	0201			Takeda, T.		C0068	
Stumpf, R.P.	0594			Takei, Yoshimichi	0555		
Subbaramayya, I.	0322			Takeo, Minoru	0556		
Suda, Ken	0107,	0135		Takeuchi, Kiyohide	0107,	0133	
Sudo, Ken	0247,	0452,	0513	Takeuchi, Masahiko	J0129		
Sugano, Shunsuke	C0002,		C0050,	Takeuchi, Takafumi	J0146		
	C0062,		C0078	Takiguchi, K.	C0058		
Sugimura, Yoshihiro	0291,	0335,	0446,	Takita, M.	D0011		
	0537,	0624	3 , , 3,	Takizawa, Akira	0504,	0592,	J0052
	3007,	0027		. a.maurre, / mina	0004,	J J J J ,	

	10010							
Takizawa, Kazuo	J0212			Tominaga, N		0554		
Talandier, Jacques	10022			Tomita, Mine		J0109		
Tamamura, K.	C0062			<b>Tomko</b> , Johr	1 J.	0063		
Tamari, Yukio	H0018			Tong, Jiang		F0022		
Tamura, Kazumi	J0197			Toyoda, Mits	SUO .	0420,	0454	
Tamura, Keiichi	0579,	0724,	E0001,	Trachtenber	rg, Eugene	J0153		
	E0007,	F0011,	F0023,	Traina, M.I.		J0115,	J0139,	J0174
	J0071,	J0119,	J0192	Tsuboi, Hide	90	H0027		
Tamura, R.	D0023			Tsubouchi,	Toshikazu	J0223		
Tamura, Shigeru	0686			Tsuchida, H	ajime	0040,	0044,	0067,
Tanahashi, Ichiro	0389					0086,	0091,	0110,
Tanaka, A.	C0073,	C0076				0144,	0159,	0160,
Tanaka, H.	0573,	J0075,	J0093			0176,	0225,	0242,
Tanaka, Hiroshi	J0078,	J0206				0244,	0301,	0325,
Tanaka, Katsunori	J0069	***				0329,	0352,	0382,
Tanaka, Kohei	0570					0407,	0409.	0442,
Tanaka, T.	C0098					0484,	0492,	0553,
Tanaka, Toshio	J0109					0589,	0606,	0623,
Tanaka, Yukihisa	H0027					0649,	0688,	H0005,
Tang, A.	F0007					H0010	0000,	110000,
Tanida, Koji	J0194		h.	Tsuchiya, Hi	icachi	H0013		
Taniguchi, Eiichi	0300,	0358,	0404	Tsuchlyama		F0032		
ranguers, Elicili	•	•	0404,					0517
	0508,	0554,	0569,	<b>Tsuji</b> , Yoshir	IODU	0375,	0477,	0517,
Tonierrohi I Edoradi	0582,	0621,	0651			0545,	0595,	10001,
Taniguchi, Hideyuki	J0186	0074	0700	Tout and a 10		10005		
Tanimoto, Katsutoshi	0626,	0671,	0703,	Tsukada, Ki	•	0238		
	0782			Tsukagoshi		0503,	0608	
Tasai, A.	C0066			Tsumura, Na		J0175		
Tatehira, Ryozo	0277			Tsunomoto,		J0185		
Tatsumi, Masaaki	J0129			<b>Tsurumi</b> , Eis		0418,	0445,	0515
Tatsuoka, Fumio	0147,	0178,	0196,	Tsuruya, Hi		0626		
	0219,	0248,	0249	Tsuzawa, Ma		E0008		
Taylor, Andrew W.	0772			Tuomi, Roge		0230		
Tazaki, Tadayuki	0179,	0192,	0231,	Tyboroski, I		J0151		
	0266,	0268,	0307,	Tyrreii, Jose	eph V.	0415,	0590,	0625,
	0343,	0371,	0389,			0641		
	C0007,	C0009						
Templeton, A.E.	H0016							
Teramoto, T.	C0082			Uchida, Eiji		0277		
Terashima, Tsutomu	0143,	0181		Uchida, Yut	aka	H0019		
Terayama, Toru	H0024			Uda, Takaal		0310,	0462,	0516,
Teshigawara, Masaomi	0495,	0550.	0598,	,		0543,	0586,	0630,
•	0633,	0673,	0704,			0746,	10010,	10017
	0743,	C0063,	· ·	Ueda, Hiros	hi	0528		
Thenhaus, Paul C.	E0003			<b>Ueda</b> , Osami		0340,	0343,	0367,
Thiel, Charles C.	0129,	0162,	0269,	00000		0371,	0675,	0706,
	0274,	0306	0200,			C0007,	F0025,	J0042
Thom, H.C.S.	0001,	0019,	0049,	Ueda, Shige	eni	0382	,	
	0060	00.0,	00,0,	Uehara, Shi		0570		
Tisseii, John	0737			Uematsu, H.	•	F0013		
Tohata, ikuo	H0018			Uemura, Ka		0434,	0523	
Tokarz, F.J.	0723			Uhira, Koich		0756	0020	
Tokil, Kenzo	F0031			<b>Ujihara</b> , Tak		J0197		
	0216,	0248,	0249,	Unjo, Shigel		0584,	0766,	J0065,
Tokida, Ken-ichi			•	Onjo, Sniger	VI	-	J0157,	J0185,
	0299,	0356,	0406,			J0100, J0224	00137,	JU 103,
	0724,	0742,	0773,	line November				
	E0001,	E0007,	H0017,	Uno, Nayomo		J0050		
Talauda Massaudi	H0023,	J0192		Uto, Kazuma		H0002		
Tokuda, Masayuki	0468			Uto, Shiger	U	J0140		
Tokuhiro, Hideo	0164							
Tominaga, Hiroo	J0194							
				78 -				

Uwabe, Tatsuo	0086,	0198,	0213,	Xie, J.	J0093		
	0282, 0729,	0407, 0775	0539,				
	0.20,			Yagi, K.	C0098		
				Yagi, Koji	F0033,	H0032	
Vaidya, Nishikant R.	0620			Yahagi, Kaname	J0081,	0193	
Viksne, Andy Vrontinos, Spiros	0530 J0167,	J0171		Yamada, H. Yamada, Katsuhiko	J0075 J0097		
violiulios, spilos	J0107,	30171		Yamada, Kazuhiko	H0018		
				Yamada, Y.	J0230		
Wada, Katsuya		J0126,	J0175	Yamagata, Mamoru	J0020		
Wahi, R.E.	H0030	0040		Yamaguchi, Nobuyoshi	0640,	0750	
Wakabayashi, Susumu Wakamatsu, Mikio	0178, H0004	0216		Yamakawa, Asao Yamakawa, Norio	0121 0210		
Wakayama, Akihiko	0756			Yamaki, Shigeru	10010		
Wakisaka, Yasuhiko	0500			Yamamizu, Fumio	0211		
Waldner, H. Eugene	J0135			Yamamoto, Kunio	0383,	0397,	0438,
Wang, Leon Ru-Liang	0366,	0619,	F0019		0467,	0480	
Waqfi, O.	J0115,			Yamamoto, Masahiko	0756		
Wardlaw, Robert L.	0713, J0091	JUU47,	J0075,	Yamamoto, Norio Yamamoto, Satoshi	J0097 J0204		•
Warner, James	C0003,	C0028	C0048	Yamamoto, Y.	C0069,	C0092,	C0093,
Warrick, Richard E.	0038	00020,		,	C0094,		
Washita, Shuzo	0666			Yamamoto, Yoji	0421		
Watabe, isao	0468			Yamamura, Kazuya	0046,	0089,	0112,
Watabe, Makoto	0025,	0031,	0039,	Vamonalia L	0300,	H0011	
	0066, 0144,	0087, 0161,	0127, 0164,	Yamanaka, H. Yamanouchi, Hiroyuki	C0061 0264,	0394,	0431,
	0202,	0217,	0245,	ramanosom, rinoyan	0465,	0512,	0523,
	0262,	0264,	0280,		0551,	0600,	0642,
	0297,	0319,	0320,		0655,	0732,	0733,
	0335,	0338,	0342,		0770,		C0055,
	0389, 0395,	0392, 0417,	0394, 0431,	Yamashita, Takeaki	C0074, J0138	D0021,	D0028
	0393,	0417,	0465,	Yamashita, Yoshihiro	0378		
	0479,	D0021	0.00,	Yamauchi, Hiroshi	J0088,	J0098	
Watanabe, Hideo	0470			Yamazaki, F.	F0001		
Watanabe, Hiroshi	J0201,	J0228		Yamazaki, Kazuo	J0061		
Watanabe, K. Watanabe, Kazuo	D0025 0507			Yamazaki, Yutaka	0149,	0264, 0477.	0389,
Wen, Y.K.	F0002				0434, 0503,	0477,	0495, 0550,
Werner, Stuart D.	0460,	J0027,	J0059,		0598,	0633,	0673,
,	J0117,	J0172			0704,	0720,	C0025,
Werner, William J.	0056,	0094,	0128		C0049,	C0063,	D0045
Westerink, Joannes J.	0783			Yancey, Charles W.C.	0705		
White, Davis E. White, Richard N.	0387 0285,	0295,	0359,	Yang, R Yanuma, Takashi	J0165 i0005		
winte, i lionara 14.	0552,	D0001,	D0036	Yao, J.T.P.	D0003	D0018,	D0020
Whitman, W.	C0020	2000.,		Yashinsky, Mark	J0164,	J0191	
Wight, James K.	0265,	0396,	0427	Yasuda, Masahiko	0752,	J0068,	J0074,
Williams, D.	0185			Magazila Navia	J0144	0500	0500
Willie, L.A. Wilson, John C.	C0053 J0095			Yasuda, Nario	0507, 0616,	0533, 0667,	0580, 0685,
Wigf, Terry J.	J0104				0728,	0762,	0777
Wong, K.C.	0542			Yasuda, Susumu	H0013,	H0019,	H0022,
Woodward, Kyle A.	0370,	0538			H0028		
Wright, Richard N.	0102,	0275,	0676,	Yasue, Tomomitsu	0412,	C0047	
Wright, Stephen	0710 0658			Yasuhara, Kazuya	H0021		
Wyllie, Jr., Loring A.	C0001,	C0026		Yasui, Masayuki Yasumura, Motoi	J0087 0700		
Try with borning At	50001,	00020		Yeh, Harry	10013		
			70				

Yen, Ben T. Yokel, Felix Y. Yokoyama, Koichi  Yokoyama, M. Yokoyama, Yasuhisa Yomo, T. Yonezawa, Akira Yoon, Sung B. Yoshida, H. Voshida, H.	C0091 0334, 0081, 0182, 0571, 0679, J0041, J0092, J0198 C0027 0630 C0055 0553 10009 C0061	0405, 0104, 0207, 0611, 0713, J0076, J0125,	0603 0140, 0525, 0644, 0752, J0090, J0142,	
Yoshida, Hiroshi Yoshida, Takeshi Yoshida, Yoshitaka Yoshikawa, Masaaki Yoshikawa, Osamu Yoshimatsu, Hiroyuki Yoshiml, Seitaro	J0017 0497, 0675, J0083, J0208 H0014 J0134 0554 0660	0547, 0706, J0122	0631, J0055,	
Yoshimura, Manabu	0330, 0428, 0479, 0568, C0059,	0393, 0429, 0494, 0657, D0013,	0395, 0448, 0563, 0665, D0042	
Yoshimura, Naoki Yoshioka, Ryoichi Youd, T. Leslie Yukawa, Yasuyuki Yuki, Masahiro Yuzawa, Satoshi	0513 0762 0652, J0182 J0177 0480	Н0006		
Zacher, E. Zan, S.J. Zelinski, Ray J. Zerva, A. Zmic', Dusan S.	0344 J0075 J0057 F0002 0528			

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This publication communicates the results of the work of the Panel on Wind and Seismic Effects during the period 1969 through 1991. The Panel is one of 16 Panels comprising the U.S.-Japan Cooperative Program in Natural Resources. Publications constitute a major end product of the Panel's efforts. This publication is divided into five chapters: 1. Panel background and activities; 2. information about using this publication; 3. title index of Panel publications from 1969 through 1991; 4. title index of Task Committee publications from 1969 through 1991; and 5. author listing.

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