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STRAIGHTWIRE - December 4, 1985

Laser '85 Conference c/o Dr. Charles P. Wang Sahara Las Vegas Hotel 2535 Las Vegas Boulevard, South Las Vegas, Nevada 89109

hessage.

It is with great pleasure that I send greetings to all those gathered for the LASER '85 Conference.

As you know, I believe our research under the Strategic Defense Initiative to be the best hope for protecting our country and our allies and strengthening the peace by reducing the danger of nuclear war. In our quest for an effective, affordable alternative to mutual vulnerability, the topic matter of your conference will be critical to the SDI program. The use of directed energy, and lasers in particular, are key aspects of our research and could play a central role in all phases of a strategic defense, a defense designed to provide deterrence based upon assured security rather than retaliation. Therefore, the efforts of the LASER '85 Conference are vitally important to our national security.

I am happy for this opportunity to wish all of you a successful and productive conference.

RONAL REAGAN

RR: DEFENSE: JWF: PN: AVH: NSC: reno PM38

cc: K.Osborne/B.Martin(NSC)/Joni

Stevens/C.Korte/J.Finn/CF EVENT: December 2 - 6

12/3 Laser '85

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WU INFOMASTER

WHITEHOUSE WSH

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PMS LASER '85 CONFERENCE
C/O DR. CHARLES P. WANG //DLR DONT DWR//
SAHARA LAS VEGAS HOTEL (ATTN MGR ON DUTY)
2535 LAS VEGAS BOULEVARD, SOUTH
LAS VEGAS, NV 89109
7WH?

IT IS WITH GREAT PLEASURE THAT I SEND GREETINGS TO ALL THOSE GATHERED FOR THE LASER '85 CONFERENCE.

AS YOU KNOW, I BELIEVE OUR RESEARCH UNDER THE STRATEGIC DEFENSE INITIATIVE TO BE THE BEST HOPE FOR PROTECTING OUR COUNTRY AND OUR ALLIES AND STRENGTHENING THE PEACE BY REDUCING THE DANGER OF NUCLEAR WAR. IN OUR QUEST FOR AN EFFECTIVE, AFFORDABLE ALTERNATIVE TO MUTUAL VULNERABILITY, THE TOPIC MATTER OF YOUR CONFERENCE WILL BE CRITICAL TO THE SDI PROGRAM. THE USE OF DIRECTED ENERGY, AND LASERS IN PARTICULAR, ARE KEY ASPECTS OF OUR RESEARCH AND COULD PLAY A CENTRAL ROLE IN ALL PHASES OF A STRATEGIC DEFENSE, A DEFENSE DESIGNED TO PROVIDE DETERRENCE BASED UPON ASSURED SECURITY RATHER THAN RETALIATION. THEREFORE, THE EFFORTS OF THE LASER '85 CONFERENCE ARE VITALLY IMPORTANT TO OUR NATIONAL SECURITY.

I AM HAPPY FOR THIS OPPORTUNITY TO WISH ALL OF YOU A SUCCESSFUL AND PRODUCTIVE CONFERENCE.

RONALD REAGAN

ACCEPTED 00024

1-PC

SPECIAL DEADLINE (printing, e.g.) Vec 2 - 6 DATE OF EVENT_ [Straight Wire/Telegram) [Special Delivery/Express Mail) send to Dr. Charles P. Wang Mail Stop M5/741 The Aerospace Corporation P.O. Box 92957 Los Angeles, CA 90009 send greetings to all those gathered Dear Dr. Wang: It is with great pleasure I offer best wishes for a successful LASER '85 Conference. for the As you are certainly aware, I believe the Strategic Defense Initiative to be the best hope for protecting our citizens and strengthening the peace by reducing the danger of nuclear war. In our quest for an effective, affordable alternative to mutual assured destruction, the topic matter of this conference will be critical to the SDI program. The use of directed energy, and a central lasers in particular, could play an essential role in all phases of a strategic defense, which is designed to provide deterrence based upon assured survival rather than retaliation. Z therefore wholeheartedly enderse the efforts of the LASER '85 Conference, are vitally important to our national security. If I am grateful for this apportunity to wish all of you a successful and estimulating conference.

clear final with NSC cc John Fin Rm 93 cc Jon; Stevens, Mil. off.

TELEGRAM

FULL RATE
(STRAIGHT TELEGRAM)
NIGHT LEITER

MAILGRAM

The Mhite House Mashington

STRAIGHTWIRE - December 3, 1985

Laser '85 Conference c/o Dr. Charles P. Wang Sahara Las Vegas Hotel 2535 Las Vegas Boulevard, South Las Vegas, Nevada 89109

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RONALD REAGAN

RR:DEFENSE:JWF:PN:AVH:reno PM38 cc: K.Osborne/Joni Stevens/C.Korte/J.Finn/CF EVENT: December 2 - 6 12/3 Laser '85

9610

OFFICE OF PRESIDENTIAL MESSAGES

REQUEST FOR CLEARANCE - COMMENTS

To:	WILLIAM MARTIN - NSC				
	WILLIAM PARTIN - NOC				
Date Due:	DEC. 4	Date of Event:	C. 2 - 6		
Subject:					
	LASER '85 Conference, Las Ve	gas, Nevada.			
Requested by:	Organizer				
Background:	.'				
-	Conference to discuss SDI pr				
-	Abrahamson is main speaker. Unfortunately, DOD held up getting draft to us in time to get message to				
_	event for opening session.				
	Telephone changes or clearance would be appreciated: call ext. 2941.				
	*				
	1 1				
Signature:	ANNE HIGGINSUPER Stry	Sus	Date: 12/3/85		
	Presidenti	al Messages			
		Office Building om 18			
	(202) 4	56-2941			
Your Recommendation/Comments:					
	<u> </u>		I .		
Signature:	at		Date:		

OFFICE OF PRESIDENTIAL MESSAGES

REQUESTFOR CLEARANCE - COMMENTS

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Signature:	ANNE HIGGINS		Date: 12/3/85			
	Old Executive Roc	al Messages Office Building om 18 56-2941				
Your Recom	mendation/Comments:					
Signature:			Date:			
		Constitution Control of the Control				

Status P. Wang

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Of Saraha Fatt Las Vegas Hatel

2535 Las Vegus Blod South

Lus Vegus, Herada 89109



OFFICE OF THE SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

November 29, 1985

JWF

MEMORANDUM FOR RICHARD P. RILEY

DIRECTOR

DIRECTOR
WHITE HOUSE MILITARY OFFICE

Si Stevens

WHITE HOUSE MILITARY OFFICE

Joni Stevens ATTENTION:

In accordance with a request from Claudia Korte to (Las Vegas)
Joni Stevens, attached is a fact sheet and draft reply to Mr. Charles P. Wang.

> Executive Secretary (Acting)

(discussing SDT)

Attachments

NOTE: Mil. aides office only in received this Today; I were been calling DOD about it for a week. clear final w/NSC

send to

Dr. Charles P. Wang
Mail Stop M⁵/741
The Aerospace Corporation
P.O. Box 92957
Los Angeles, CA 90009

pear/Divonal:

send greetings to all those gathered

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As you are certainly aware, I believe the Strategic Defense Initiative to be the best hope for protecting our citizens and strengthening the peace by reducing the danger of nuclear war. In our quest for an effective, affordable alternative to mutual assured destruction, the topic matter of this conference will be critical to the SDI program. The use of directed energy, and lasers in particular, could play an essential role in all phases of a strategic defense, which is designed to provide deterrence based upon assured survival rather than retaliation. I therefore wholeheartedly endorse the efforts of the LASER '85 Conference, which is designed to provide determined security.

If I am grateful for this opportunity to wish all of you a successful and stimulating conterence.

FACT SHEET

The Strategic Defense Initiative Organization supports the Laser '85 Conference. Dr. Gerold Yonas, Chief Scientist, and Dr. Louis Marquet, Director, Directed Energy Office, will both deliver keynote addresses (see attached). Dr. James Ionson, Innovative Science and Technology Office, will participate on a panel discussion on potential applications of lasers in the SDI program. In addition, Dr. Edward Teller, Director of Lawrence-Livermore National Laboratory, will also be a panel participant.

This conference is sponsored by the Society for Optical and Quantum Electronics and the American Institute of Aeronautics and Astronautics.



THE WHITE HOUSE

WASHINGTON

November 16, ±985

TO:

JONI STEVENS

Military Aide's Office

RE:

Laser '85 Conference

(DECEMBER 2 - Las Vegas)

Would you please refer this to DOD for advice and a suggested draft if they do recommend a message from the President.

Thank you.

CLAUDIA KORTE Presidential Messages

18-OEOB/Ext. 2941

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Society for Optical & Quantum Electronics p.o. Box 245 mclean, Va. 22101

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18 April 1985

Dr. Charles P. Wang Mail Stop M5/741 The Aerospace Corporation P.O. Box 92957 Los Angeles, CA 90009

The Honorable Ronald Reagan
President of the United States
of America
The White House
Washington, D.C.

Dear Mr. President:

It is a great honor for me to inform you that the central theme of this year's LASER '85 Conference is the application of lasers in the strategic defense initiative (SDI) program. We are inviting Lt.Gen. James Abrahamson, Director of SDIO or Dr. Gerald Yonas, chief scientist of SDIO, to give a keynote address in this conference. We have organized a panel discussion including Dr. E. Teller. The intention of these invitations is to explain to the laser community the merit of the SDI program and to get their support and contribution.

We would like to have your endorsement of our effort.

With Best Wishes,

Yours truly,

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Charles P. Wang Program Chairman LASER '85 Conference

CPW/ccq

We appreciate your endorsement

your endorsement

your endorsement

your endorsement

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6 June 1955

Special Marrows

Dec. 2-6, 1985



Society for Optical & Quantum Electronics p.o. Box 245 mclean, Va. 22101

18 April 1985

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Yours truly,

Charles P. Wang

Program Chairman LASER '85 Conference

CPW/ccq

Charles P. Wang



Charles P. Wang was elected a Fellow of the Optical Society of America by the board of directors at its meeting in October 1982. Dr. Wang received the B.S. degree in mechanical engineering from the National Taiwan University in 1959 and the M.S. and Ph.D. degrees in aeronautics from the California Institute of Technology in 1963 and 1967, respectively. His Ph.D. dissertation was in the field of high-temperature gas dynamics and plasma physics. From 1967 to 1969 he was on the technical staff of Bell-

comm, Inc., Washington, D.C. In 1969 he joined the faculty of the University of California, San Diego, in the Department of Applied Mechanics and Engineering Sciences. He has taught advanced fluid mechanics, laser applications in fluid mechanics, and quantum electronics. He has done research at the Institute of Pure and Applied Physical Science and, in 1972, was responsible for the successful development of a cw 150-W argon-ion laser. In 1974 he joined the staff of The Aerospace Corporation, where he worked on laser applications and diagnostics. Now he is a senior scientist in the Aerosphysics Laboratory, The Aerospace Corporation, where he has been responsible for the development of high-power pulsed ultraviolet lasers, stable hydrogen fluoride chemical lasers, and optical phase arrays for high-power chemical lasers. He is also an adjunct professor of engineering physics at the University of California, San Diego, and an Honor Professor of the Chinese Academy of Science. His work is well known in such fields as gas dynamics, laser development and application, and quantum electronics, and he has more than 60 publications and inventions. He was chairman of the U.S. Program Committee of the 1980 International Conference on Lasers and an organizer and chairman of the ultraviolet laser session in the Laser '79 and Laser '80 conferences. He is an associate editor of the AIAA Journal of the American Institute of Aeronautics and Astronautics, Inc. and a member of the Plasmadynamics and Lasers Technical Committee of the AIAA. He is also a member of many honorary and professional societies, such as Sigma Xi, the American Physical Society, AIAA, and the American Association for the Advancement of Science. He is also listed in Who's Who in America West and was president (1979-1980) and chairman of the board (1980-1982) of the Chinese Engineers and Scientists Association of Southern California.

LASER '85

TENTATIVE LIST

Panel Discussion on Potential Applications of Lasers in the SDI Program

Moderator:

S. S. Penner (UCSD)

Participants:

J. Ionson (SDIO)

C. Brau

(LANL)

D. Greenwood

(Lincoln Lab)

K. Patel

(Bell Lab)

C. Rhodes

(UIC)

R. Roberts

(IDA)

E. Teller

(White House Science Council)

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Invited Speakers

- T. Hansch (Stanford Univ), "Advances in High Resolution Laser Spectroscopy"
- R. Shen (UCB), "Nonlinear Optics"
- L. Goldman (Univ. Cincinnati), "Laser Applications in Medcine"
- S. Ezekiel (MIT), "Fiber Optics"
- C. Brau (LANL), "Recent Progress in Free-Electron Lasers"
- W. Warren (PAR), "Review of Chemical Lasers"
- J. Goodman (Stanford Univ), "Optical Information Processing, Past, Present and Future"
- A. Sawchuk (USC), "The Prospects for Digital Optical Computer"
- C. Rhodes (UIC), "X-ray and VUV Lasers"
- F. Yu (PSU), "Garden of White-Light Optical Signal Processing"
- K. Patel (Bell Lab), "New Physics with Opto-Acoustics"
- S. Kanstadt (Laser Lab, Norway), "Infrared Laser Photoacoustics and photo thermal radiometry"
- L. Champagne and A. Dudas (NRL), "Progress on the Scaling of the x-ray preionized and discharge pumped XeCl Laser
- G. York (LANL), "The Physics of Very Large Aperture KrF Lasers"
- I. McDermid, et al (JPL) "Spectral Line Narrowing and Continuous Tuning of Excimer Lasers"
- R. Sze, et al (LANL). "Narrow-band Tuning with Small Long Pulse Excimer Lasers"

Invited Speakers (continued)

- M. Mumma (NASA), "Interstellar Communication with Solar Powered Planetary Lasers"
- J. Pasour (NRL), "High Gain Free Electron Laser Oscillator in the Millimeter to Infrared Region"
- R. Measures (Univ. Toronto), "Laser Diagnostics in Plasma"
- R. Lucht, (Sandia Livermore), "Coherent Antistokes Raman Scattering Measurement in an Internal Combustion Engine"
- S. Suckewer (Princeton), "Researches on X-ray Laser Development"
- H. Rieger (NOSC), "pb Vapor Heat-Piper Stimulated Raman Convecter for XeCl Lasers"
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- R. Roots (Sparta), "Laser Surface Interaction Phenomenon"
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- A. Welch (Unvi. Texas), "Thermal and Optical Energy Distributions in Laser Irradiated Tissue"
- D. Miller (TFW), "Review of cw Iodine Lasers"
- R. Fisher (LANL), "Fundamental of Optical Phase Conjugation"

NEWS RELEASE

A panel discussion on "Potential Applications for Lasers in the Strategic Defense Initiative Program" will be held in the LASER '85 Conference in Las Vegas, Nevada, December 2-6, 1985. Prof. S. S. Penner (University of California at San Diego) is the moderator and the participants are J. Ionson (Director, SDI Innovative Science & Technology Directorate), C. Brau (Los Alamos National Laboratories), D. Greenwood (Lincoln Laboratories), K. Patel (Bell Laboratories), C. Rhodes (University of Illinois at Chicago), R. Roberts (Institute of Defense Analysis), and E. Teller (White House Science Council).

LASER '85 is the Eighth International Conference on Lasers and Applications.

The intent of the conference is to bring together in a single forum for discussions, the diverse interests in the laser field extending from the basic sciences to the variety of lasers applications. This year's program will emphasis lasers in the Strategic Defense Initiative Program. Other invited speakers including

T. Hansch (Stanford University) on "Advances in High Resolution Laser Spectroscopy";

R. Shen (University of California, Berkeley) on "Nonlinear Optics"; L. Goldman (University of Cincinnati) on "Laser Applications in Medicine"; S. Ezekiel (Massachusetts Institute of Technology) on "Fiber Optics"; C. Brau (Los Alamos National Laboratories) on "Recent Progress in Free Election Lasers"; W. Warren (Pacific Applied Research) on "Review of Chemical Lasers" and many others.

The Program chairman is Dr. Charles Wang (Aerospace Corporation) and the Conference chairman is Dr. Vincent Corcoran (Potomac Synergetics). Dr. Wang is a fellow of the Optical Society of America and an adjunct professor of the University of California at San Diego. He is active in laser development and applications, and has more than 70 Journal publications and inventions.

(For more information, please contact Dr. Charles P. Wang, Mail Stop M5/741, The Aerospace Corporation, P.O. Box 92957, Los Angeles, CA 90009, or call (213)648-7613.)

Charles P. Wang



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KEYNOTE SPEAKERS OF LASER XX CONFERENCES

1978	Ed Teller
1979	A. Kantrowitz
1980	T. Maiman
1981	W. Bridges
1982	A. Schawlow
1983	A. Yariv
1984	R. Zare



Las Vegas, Nevada USA

December 2-6, 1985

FIRST CALL for PAPERS

The Eighth International Conference on Lasers & Applications, entitled Lasers '85 will be held in Las Vegas, Nevada, December 2-6, 1985, at the Sahara, under the sponsorship of the Society of Optical and Quantum Electronics, a non-profit organization...

The intent of the conference is to bring together in a single forum for discussions, the diverse interests in the laser field extending from the basic sciences to the variety of lasers applications.

The location has been chosen to provide a casual environment that will maximize the interaction of the participants. In addition to the technical events, an extensive family program will be available on an organized or non-organized basis. The tentative organized program includes trips to Hoover Dam and other local attractions.

Original or important papers are solicited in such areas as:

LASERS

Gamma Ray, X-ray, UV, Blue-green, Submillimeter, Free electron, Nuclear pumped, Tunable IR, Excimer, Solid state, Color center, High energy

APPLICATIONS

Medicine and Dentistry, Industrial processing, Commercial, Military, Education, Graphic arts, Holography, Interferometry, Materials processing, Information processing, Ring lasers, Fiber communications, Fiber optic sensors

SCIENCE

Spectroscopy, Laser chemistry, Coherent infrared astronomy, Laser isotope separation, Biology, Laser driven particle accelerators, Laser assisted collisions, Atom & ion trapping. Biochemistry, Condensed phase systems

ENGINEERING AND TECHNOLOGY

 Phase conjugation, Nonlinear optics, Resonators, Detectors and mixing, Modulators, Fiber optics, Integrated optics, Picosecond effects, Combustion & plasma diagnosis

RADIATION AND QUANTUM THEORY

Atmospheric propagation, Propagation in media, Statistics, Speckle, Interaction with matter, Superradiance, QED, Turbulence effects

SYSTEMS AND **SPECULATION**

 Lidar, Precision guided munitions, Optical communications, Coherent laser radar. Space oriented systems, Lasers of the future, Future applications, Social impact.

Authors are requested to submit two copies of both a 35-word abstract and a 200-word summary of their paper. Since papers will be selected on the basis of the summary, it should include specific information.

The 35-word abstract, prefaced by the title of the talk, author's name, affiliation, complete return address and telephone number, must be $typed\ double$ -spaced on a single separate $8\frac{1}{2}^n \times 11^n$ sheet of paper. Abstracts longer than 35 words are unacceptable and may be returned for editing.

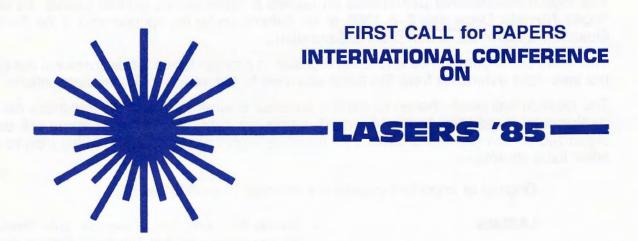
The 200-word summary must be submitted on $8\frac{1}{2}$ " × 11", single side, double-spaced typewritten paper. The author's name and affiliation must appear on the first page. Each subsequent page should include the author's name. If tables, photographs, or line drawings are included in the summary, the total text including the space occupied by the figures must be no more than two (2) typewritten pages.

Two copies of both summary and abstract should be forwarded to: LASERS '85, P.O. Box 245, McLean, VA 22101. The DEADLINE for receipt of ABSTRACTS AND SUMMARIES is JUNE 15, 1985. Earlier submission is appreciated.

The working language of the conference will be English. No material submitted for consideration will be returned to the author. Only summaries and abstracts should be submitted.

For further information call (703) 642-5835.

Please post or circulate to qualified staff members.



SOQUE P.O. Box 245

McLean, VA 22101

Las Vegas, Nevada USA

December 2-6, 1985

NON PROFIT ORG.
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McLEAN, VA 22101

LASERS '85 SPEAKERS

Keynote Address on Strategic Defense Initiative

Lt. Gen. J. Abrahamson, Director Dr. G. Yonas, Chief Scientist (SDIO)

Panel Discussion on Potential Applications of Lasers in the SDI Program

Moderator:

S. S. Penner (UCSD)

Participants:

- J. Ionson (SDIO)
- C. Brau (LANL)
- D. Greenwood (Lincoln Lab)
- K. Patel (Bell Lab)
- C. Rhodes (UIC)
- R. Roberts (IDA)
- E. Teller (White House Science Council)

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- R. Shen (UCB),
- "Nonlinear Optics"
- L. Goldman (Univ. Cincinnati), "Laser Applications in Medicine"
- S. Ezekiel (MIT).
 - "Physical Parameter Measurements with Fiber Optical Sensors"
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 - "Recent Progress in Free-Election Lasers"
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- H. Rieger (NOSC).
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- D. Miller (TRW),
- "Review of cw lodine Lasers"
- R. Fisher (LANL),
- "Fundamental of Optical Phase Conjugation"

- T. Hirschfeld and S. Milinovich (LLNL). "Advances in Fiber Optic Remote Chemical Analysis'
- B. Grant (JPL),
- "Ultrahigh Speed Opto-electronics"
- G. Mourou (Univ. Rochester)
 - "Ultrahigh Speed Opto-electronics"
- F: Leonberger (UTRC),
- "Applications of Integrated Optics"
- R. Chozko, J. Bernard, and
- H. Mirels (Aerospace),
 - "Power Extraction from C.W. HF/DF Chemical Lasers"
- L. Rosocha (LANL),
- "Beam Propagation Problems in the Aurora Laser"
- D. Mansfield (Princeton Univ.)
 - "Submillimeter Laser Cavity Design"

Conference Committee (Tentative)

- Conference Chairman:
- V. J. Corcoran, Potomac Synergetics
- Program Chairman:
- C. P. Wang, Aerospace Corp.
- Advisory Committee:
- A. Kantrowitz, Dartmouth College
- J. Caulifield, Aerodyne
- J. Gallagher, George Inst. Tech.

Exhibits:

Verna A. Kerans

Program Committee (partial list):

- N. P. Barnes, LANL
- T. Barr, Jr., Univ. Ala.
- J. Craig. SDL
- W. Christiansen, Wash. Univ.
- G. Collins, Colorado State Univ.
- R. Conrad, MICOM
- P. Cheo, UTRC
- J. Daily, UCB
- J. Daughty, TRW

SESSION ORGANIZERS

Names and Organizations

- R. W. McMillan (GIT)
- H. Mirels (Aerospace) C. S. Liu (Westinghouse)
- G. Eden (Univ. IL)
- G. Collins (Colorado S. U.)
- R. Sze (LANL) T. T. Yang (RI)
- R. Waynant (NRI)
- J. Daughty (TRW) W. Christiansen (Washington U.)
- D. Spencer (Aerospace) G. Forrest (QA)

- Cavities & Propagation
- Chemical Lasers Blue-green Lasers
- Blue-green Lasers
- Metal Vapor Lasers **Excimer Lasers**
- Excimer Lasers
- Excimer Lasers lodine Lasers
- Solar Pumped Lasers Free Electron Lasers
- Semiconductor Lasers

- N. P. Barnes (LANL)
- J. L. Paul (NVEOL) R. Conrad (MICOM)
- T. Yang (TRW)
- R. R. Jacobs (Spectra Phys)
- P. Wu (PSI)
- L. Goldman (Univ. Cincinnati)
- Simpson (Marconi) R. Dwyer (USC)
- A. Giardini-Guidoni (ENEA)
- F. J. Duarte (Univ. Ala.) S. Liberman (Lab Aime Colton)

- Solid State Lasers Solid State Lasers
- Dve Lasers Diode Lasers and Array
- Laser Applications in Industry
- Surface and Material Interaction Laser Applications in Medicine
- Laser Applications in Medicine Laser Applications in Medicine
- Laser Applications in Chemistry Frequency Selection in Pulsed Lasers
- High Excited Atom

- R. Fisher (LANL) J. Murray (LLNL)
- H. D. Hendricks (NASA
- M. Sigrist (ETH) R. M. Measures (Univ.
- K. E. Harwell (Univ. Ter
- J. Daily (UCE) F. Yu (Penn. State Univ.
- J. Trolinger (SDL)
- W. B. Lucina (Hughes) J. Neff (DARPA)
- M. Allegrinini (CNR)

PEAKERS

S. Kanstadt (Laser Lab, Norway),
"Infrared Laser Photoacoustics and Photo Thermal

Radiometry"

L. Champagne and A. Dudas (NRL),

"Progress on the Scaling of the x-ray preionized and discharge pumped XeCl Laser

G. York (LANL),

"The Physics of Very Large Aperture KrF Lasers"

I. McDermid, et al (JPL),

"Spectral Line Narrowing and Continuous Tuning of Excimer Lasers"

R. Sze, et al (LANL),

"Narrow-band Tuning with Small Long Pulse Excimer Lasers"

M. Mumma (NASA),

"Interstellar Communication with Solar Powered Planetary Lasers"

J. Pasour (NRL).

"High Gain Free Electron Laser Oscillator in the Millimeter to Infrared Region"

R. Measures (Univ. Toronto),

"Laser Diagnostics in Plasma"

R. Lucht (Sandia Livermore),

"Coherent Antistokes Raman Scattering Measurement in an Integral Combustion Engine"

S. Suckewer (Princeton),

"Researches on X-ray Laser Development"

H. Rieger (NOSC),

"pb Vapor Heat-Pipe Stimulated Raman Convecter for XeC1 Lasers"

W. Laughlin (PSI),

"Progress in Laser Surface Interaction Experiments"

R. Roots (Sparta).

"Laser Surface Interaction Phenomenon"

D. Dew (Orlando Med. Center).

"Laser Micro-Surgical Repair of Soft Tissue"

A. Welch (Univ. Texas),

"Thermal and Optical Energy Distributions in Laser Irradiated Tissue"

D. Miller (TRW),

"Review of cw lodine Lasers"

R. Fisher (LANL),

"Fundamental of Optical Phase Conjugation"

T. Hirschfeld and S. Milinovich (LLNL),

"Advances in Fiber Optic Remote Chemical Analysis"

B. Grant (JPL),

"Ultrahigh Speed Opto-electronics"

G. Mourou (Univ. Rochester)
"Ultrahigh Speed Opto-electronics"

F: Leonberger (UTRC),

"Applications of Integrated Optics"

R. Chozko, J. Bernard, and

H. Mirels (Aerospace),

"Power Extraction from C.W. HF/DF Chemical Lasers"

L. Rosocha (LANL),

"Beam Propagation Problems in the Aurora Laser"

D. Mansfield (Princeton Univ.)

"Submillimeter Laser Cavity Design"

Conference Committee (Tentative)

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Solid State Lasers

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Optical Phase Conjugation and Nonlinear Optics
Optical Phase Conjugation and Nonlinear Optics

Fiber Optics

Photoacoustic Spectroscopy

Laser Remote Sensing

Laser Diagnostics in Fluids

Laser Diagnostics in Flames & Plasma

Optical Signal Processing

Industry Holography
Laser Technology for Space Based Systems

Optical Processing and Devices

Laser Assisted Collisions

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Don't gamble on an unknown.





8th INTERNATIONAL CONFERENCE on

LASERS '85—

DECEMBER 2-6, 1985 SAHARA HOTEL LAS VEGAS, NEVADA, USA

LAST CALL FOR PAPERS

LASERS '85, the Eighth International Conference on Lasers & Applications, will be held at the Sahara Hotel, Las Vegas, Nevada, December 2-6, 1985, under the sponsorship of the Society for Optical and Quantum Electronics, in cooperation with the American Institute of Aeronautics & Astronautics (AIAA).

Papers are solicited in the areas of:

LASERS
APPLICATIONS
SCIENCE
ENGINEERING & TECHNOLOGY
RADIATION & QUANTUM ELECTRONICS
SYSTEMS

Authors are requested to submit two copies of both a 35-word abstract and a 200-word summary of their paper to: LASERS '85, P.O. Box 245, McLean, VA 22101. The **Deadline** for receipt of Abstracts and Summaries is **June 15, 1985**. Earlier submission is appreciated.

Exhibits of the manufacturers of lasers, accessories and systems will be conveniently located to insure a good flow of traffic. Information on booth space can be obtained as indicated below.

The announcement of the Call for Papers or other information, including exhibit brochures can be obtained by writing:

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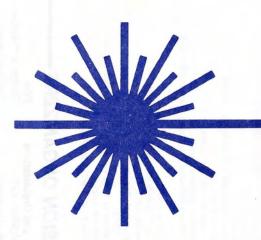
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LAST CALL FOR PAPERS
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STRAIGHTWIRE - December 4, 1985

Laser '85 Conference c/o Dr. Charles P. Wang Sahara Las Vegas Hotel 2535 Las Vegas Boulevard, South Las Vegas, Nevada 89109

It is with great pleasure that I send greetings to all those gathered for the LASER '85 Conference.

As you know, I believe our research under the Strategic Defense Initiative to be the best hope for protecting our country and our allies and strengthening the peace by reducing the danger of nuclear war. In our quest for an effective, affordable alternative to mutual vulnerability, the topic matter of your conference will be critical to the SDI program. The use of directed energy, and lasers in particular, are key aspects of our research and could play a central role in all phases of a strategic defense, a defense designed to provide deterrence based upon assured security rather than retaliation. Therefore, the efforts of the LASER '85 Conference are vitally important to our national security.

I am happy for this opportunity to wish all of you a successful and productive conference.

RONALD REAGAN

RR:DEFENSE:JWF:PN:AVH:NSC:reno PM38 cc: K.Osborne/B.Martin(NSC)/Joni Stevens/C.Korte/J.Pinn/CF EVENT: December 2 - 6 12/3 Laser '85

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To:	WILLIAM MARTIN - NSC				
Date Due:	DE . 4:	Date of Event: DEC. 2 - 6			
Sub je ct:	LASER '85 Conference, Las Ve	egas, Nevada			
Requested by:	Organizer				
Gionnatura	Conference to discuss SDI program. Lt. Gen. James Abrahamson is main speaker. Unfortunately, DOD held up getting draft to us in time to get message to event for opening session. Telephone changes or clearance would be appreciated call ext. 2941.				
Signature:	Old Executive Ro	Date: 12/3/85 tial Messages te Office Building toom 18 456-2941			
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Signature:	a	Date:			

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STRAIGHTWIRE - December 3, 1985

Laser '85 Conference c/o Dr. Charles P. Wang Sahara Las Vegas Hotel 2535 Las Vegas Boulevard, South Las Vegas, Nevada 89109

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