SUCCESSFUL CONFERENCE
SUCCESSFUL CHAIRMAN

With a backdrop of California palm trees, NCSL Chairman Andrew J. Woodington opens the 1965 Delegates Assembly, and prepares to step down from his second term of office. A hard-working, driving Chairman who has brought NCSL more sharply into focus in the eyes of metrologists throughout the United States, Andy Woodington deserves unstinted praise for the personal time and effort he has put into his job. Also, and equally important, General Dynamics/Convair management deserves the thanks of all NCSL participants for permitting and encouraging Chairman Woodington to give his "all."

WELL DONE, ANDY
ENGINEERING RETREADING

Editorial articles in the May 1965 issue of Electro-Technology continue to emphasize the growing concern which some companies are experiencing in relation to the high rate of technical obsolescence of their electrical engineers. In companies where positions require engineering to be practiced daily, a preference exists for engineers with degrees received since 1950. Companies questioned, stressed the emphasis which is placed on continuing education. They examine the engineer's ability to maintain a current state-of-the-art knowledge of new devices, techniques, and applications. Is the engineer maintaining his professionalism? Is he at the frontier of his technical discipline by participating in professional societies, publishing technical papers, keeping up with current books and periodicals, making progress in his career, registering patent applications? In summarizing the situation, a remark attributed to DR. ANDREW SCHULTZ, Dean of Engineering at Cornell University seems to express the situation succinctly: "Nowhere is the technological revolution having a more serious impact than among the individuals who are primarily responsible for bringing it about."

TO ERR IS HUMAN---OR IS IT?

This is the title of an editorial appearing in Electronic Design, August 30, 1965. It discusses the Zero Defect plan originated at Martin-Orlando in 1962, which has gained momentum under other titles in a number of other government contractor's plants. A more realistic appraisal of the problems which cause end-item failures leads to the belief that individual attitude is the most critical factor in eliminating defects. A number of companies now have in operation programs designed to appeal to the self-respect of the individual. The catastrophic penalties for failure are presented to all workers; every worker is made to feel the need for his cooperation in the entire ensemble. This is a program which should be stressed continually to all workers in standards/calibration activities. It is too easy to forget the far-reaching effect of carelessness in measurements. Even though "far behind the firing line" don't forget for one moment that metrologists must work for integrity in measurements at all time. As we say at AVCO/RAD "take PRIDE in your work" for Perfection Requires Individual Defect Elimination.
AUGUST WORKSHOP REPORT

Your editor found himself quite busy trying to perform several functions at the Los Angeles meetings August 18-20. The result was a vast accumulation of notes, pictures, impressions—all favorable. The work of DON DELAUER and his committee was outstanding. Most important was the attitude of the registrants—they displayed a remarkable attentiveness to the workshop sessions and wandering away was not noticeable. In fact, we found ourselves receiving visitors from an adjacent meeting of the American Society of Quality Control. Our visitors in general were men formerly associated with standards who have moved into the contiguous field of quality control. In particular, NCSL old-timers were happy to meet with LEE HACHEY, formerly Chairman of the Calibration Procedures Committee, and now with Litton Industries.

A meeting of the Board of Directors, scheduled for Wednesday evening, was drawn out while waiting for late arrivals from the East Coast. The balance of business was completed at a 7 AM breakfast on Friday, albeit a mite sleepily! Steps were taken to provide more help for Don and his committee’s activities, to fund for printing of the Membership Directory, and to iron out details of the biennial meeting scheduled for 1966.

The Workshops scheduled for starting at 9 AM Thursday were slightly delayed while the Sergeants-at-arms rounded up registrants who found it hard to tear themselves away from the registration desk. The reason is displayed below.

Receptionist - MRS. L. LANGEVIN, who is appreciated by typical delegates
NCSSL Chairman WOODINGTON welcomed the registrants, followed by a brief greeting from the Sponsor's delegate, BILL WILDHACK. Then Tom Lamoureaux prepared the session for the break-up into session assignments. Movement of speakers from meeting area to meeting area as arranged by Tom was a much more effective method of initiating new topics than by moving the audiences.

Sessions for the morning workshop as arranged by J. Van de Houten included:

- Calibration Intervals -- J. L. HAYES and W. F. SNYDER
- Work Flow Planning and Recall Methods -- J. L. WILSON and E. J. ARSENAULT
- Data Collection, Utilization, and Analysis -- R. G. MEYER and M. ROTHBART

In the afternoon, M. Angelo had prepared sessions as follows:

- Quality Control in the Standards Laboratory -- M. BILES
- Operation of a Standards Laboratory -- R. W. MCCUSKER
- Organization of a Standards Laboratory -- D. BURGESS
- Contribution of the Standards Laboratory to Company Profit -- A. L. KELSEY

Following a too-brief congenial hour at 6:30, we sat down (172 strong!) to a much-enjoyed dinner which featured JOE WALKER, Chief NASA Pilot on X-15, as the speaker. Mr. Walker was able to hold his audience with no trouble at all as he described some features of the programs he had participated in. His most-stressed point was the need for better read-out and presentation of precision data. In watching a short movie of the antics of a proposed Lunar Rescue Vehicle, his point could be comprehended quite readily. The strange assortment of piping, jets, and operator very quickly pointed up the need for attitude information feeding to the operator rapidly and accurately to prevent a crash on the surface below.

Friday morning, workshops resumed with the following subjects:

- Calibration Techniques -- W. WILDHACK, R. W. MCCUSKER, G. VINCENT
- Measurements Specifications -- W. WATERHOUSE, T. MUZZEY, G. GASTINEAU, H. DANEMAN
At noontime, the delegates combined business and pleasure by holding a Delegates Assembly immediately following lunch. Chairman WOODINGTON spoke of the successful Workshop in May held at Battelle Institute and praised ORVAL LINEBRINK, who could not be present in L. A., and his committee for the work in forming the meetings. BILL WILDHACK mentioned some of the difficulties which have presented themselves with regards to incorporating NCSL, if NBS is to retain its station as Sponsor. More investigation will have to take place within the Board of Directors. Chairman Woodington spoke of the work of the several NCSL Committees and expressed his deep appreciation and gratitude for the support given him during his two terms of office. He also mentioned progress in planning for the 1966 Conference to be held at Gaithersburg, Md., new site of the NBS Institutes. Harvey Lance reported the balance in the treasury and was complimented for his husbandry by the Chairman.

The Nominating Committee then presented the slate of officers and candidates for Board of Directors. No nominations were received from the floor. At the conclusion of the balloting which followed, the following positions were filled:
Following the Delegates Assembly, the registrants gathered once more for a concise briefing on the results of the Workshops. Highlights of the briefing are given below:

HAYES, head of USN Metrology-Pomona pointed out the lack of, and need for more scientific/technical control of calibration intervals. Sufficient encouragement from top management has not existed to study effects of lengthened intervals as a direct relationship to reduced operating costs. Disagreement exists among standardization activities concerning degree to which all instruments should be within accuracy tolerances, as a determinant of the cyclic-recall period interval. General discussion among workshop
participants established levels of 80% to 95% of all instruments to be within tolerance, as a desirable goal. WENDT of NBS presented the interesting observation that on-off switching of electrical/electronic equipment presented more degradation of performance than continuous operating over same chronological periods. An example given was the rewiring of a Memoscope to permit continuous energizing at reduced power which resulted in greatly increased scope-tube life, for an estimated saving of $25,000/year in one establishment (not identified).

ARSENAULT of General Electric/Missiles Systems reviewed data-recording practices as established by the Workshop. Most standards/calibration activities record measurement data (practice compulsory for government contractural work). Techniques used vary from Visicorder records to calibration data sheets which ultimately feed into a data processing system. When job totals per year are in excess of 5,000 to 10,000, most firms switch to EDP methods. Calibration data is used extensively to adjust calibration intervals, to justify facility purchases, and to establish and maintain reliability programs to evaluate instrument manufacturers/vendors. Some plants record instrument costs and accountability data in their calibration history files. Most plants establish work-efficiency criteria based on units/hour or hours/instrument. One laboratory has established a quota of work per technician; this was considered bad practice by most participants as a contributing factor toward lowered quality of work and increasing the need for 100% supervision of work.

One evaluation factor was given as the number of measured points per instrument multiplied by time consumed. Note however, that a factor such as this is of little value in an activity where there is a distinct variety or mix in types of instruments involved. The general consensus of opinion was that automated analyses of data are to be encouraged.

MEYER, of Lockheed Missiles, in reviewing Work Flow Planning stressed several prerequisites for good control. He included 1) better descriptions of calibration programs, 2) better control over subcontractors, 3) minimum number of suppliers in common categories of instruments. Other points brought up were the need for a) Standards Committee in every company to encourage use of and justification for sole-source procurement, b) Recommended
Practices in order to establish cost elements on a uniform nation-wide basis, c) improved Public Relations with top management to encourage systems calibrations (as contrasted with calibration of individual component-instruments) and limited calibrations (calibration over a restricted range or other parameter), d) an NCSL-sponsored check list to improve justification of budgets, purchases, and related matters, e) an educational program capable of informing and selling top management on the quality and economical need for calibration programs, f) standardized terminology to enable submission to management of comprehensible cost statements. WATERHOUSE of Veritek Corp. reviewed Workshop discussions concerned with Measurements Specifications. Specific points brought up by participants, were a) the need for adequate, honest, and precise manufacturer's specifications of instrument performance, b) statements of environmental limitations, stability of performance over a standard-time operation as related to operational environments, c) manufacturer's suggested interval between calibrations for instruments, d) presentation in one paragraph of all accuracy or performance tolerances, e) a statement from the manufacturer confirming existence in the open market of standards against which the instrument may be calibrated, or an explicit statement indicating instrument performance is at the state-of-the-art and cannot be calibrated via traceable means; f) an expression of the true or absolute accuracy of the instrument, g) the desirability of a calibration procedure developed by the manufacturer which may be adapted by the customer; such procedures might indicate, as an example, the recommended cardinal points to be calibrated. LAMOUREAUX of GD/Convair summed-up the discussions concerned with Calibration Procedures, noting that most laboratories have been forced to prepare their own procedures and have backlogs in writing procedures which are as much as three years behind. Procedure writers in many cases make use of calibration data sheets to evolve a procedure. Writing costs were estimated as ranging from $100 to $5000 per procedure, with averages figured as close to $450. CRANDON of USN BuWeps-Pomona discussed impact of MIL-C-21433 (SHIPS) - (Calibration Procedures; Preparation Of) upon procedure writing. A question raised, to be resolved, is whether procedures should include information pertaining to adjustments; many participants were against the practice feeling that this information was part of service/maintenance instructions. Presently the armed forces are divided with Navy and Air Force against the practice, and Army in favor. Another question raised
concerned "Confidence" or "accuracy" ratios involved in specific calibrations. MIL-HDBK-52, used by government inspectors as a check of contractors' calibration operations, specifies accuracy ratios of no less than 4 to 1 shall be used in calibration work unless "measurements approach the limits of knowledge for a given characteristic". It was made plain that procedures which could not assure accuracy ratios of at least 4 to 1 should specify the ratio in the introduction. Wide discussion ensued as to whether "limited-use" labels should be attached to instruments calibrated with low accuracy or confidence ratios--general feeling was that this approach was a good one inasmuch as both user and inspector were aware of calibration limitations at all times.

At the conclusion of the resume', the meeting was adjourned. It was apparent from the animated discussions which were continued that a good deal of constructive work had been completed and that the representatives had much to report back to their respective laboratories.

Your editor, at this time, would like to acknowledge the time and work of Al Schmidt in taking many of the photos appearing in this section. Thanks, Al and I hope to see you in Japan!

The success of the Conference is clearly evidenced by the expression on Don's face, who could hardly believe the figures given him by AL BAUGHMAN, floor manager for the meetings.
1. DELAUER-SAN fails to suspend his subject upon two swords

2. Whereupon Chmn. Woodington appoints a committee to write satisfactory procedures.

3. Bill Wildhack illustrates tensions at normal support points under study

4. The committee ponders a satisfactory approach
5. More pondering takes place between WHITE, HAYES, and WILDHACK.

6. and Nominating Committee Chairman WHITE announces the problem will be turned over to the new set of officers to be elected.

7. which permits everyone to adjourn for dinner and to enjoy good fellowship.

THE END

Editor's Note: The preceding story is entirely fictional with the exception of picture #1. Your photographer was so interested in watching Don's sketch, he forgot to get pictures of a successful suspension which was based upon procedures, properly written, approved, and applied.
IEEE NEWS

A recent election for membership on the Administrative Committee of the Instrumentation and Measurement Group (G-IM) of the Institute of Electrical and Electronic Engineers was concluded with the following four candidates victorious - MYRON B. SELBY of NBS, MILTON ARONSON who is Editor of Instruments and Control Systems, FRANCIS L. HERMACH of NBS, and C. DALE OWENS of Bell Telephone Laboratories.

In addition, GEORGE E. SCHAFER of NBS was elected Chairman of G-IM and GEORGE F. BENoit of Raytheon, Vice Chairman. CHARLES E. WHITE of AVCO/RAD takes position as Junior Past Chairman.

The date for the 1966 Conference on Precision Electromagnetic Measurements (CPEM) has been established as June 21-23, 1966. As before, it will be held at the Boulder Laboratories of NBS. Jointly sponsored by IEEE G-IM, NBS, and the International Scientific Radio Union (URSI) US Commission 1, the Chairman is DR. JOHN T. HENDERSON of the Canadian National Research Council. DR. KIYO TOMIYASU of General Electric is Technical Program Chairman and JAMES BROCKMAN of NBS-Boulder is Executive Secretary.

At a meeting of the IEEE Executive Committee at Wescon, final action was taken on the merger of the IEEE Technical Committee on Standards No. 25 (TCS 25) with the IEEE Instrumentation and Measurement Group. Chairman C. D. OWENS of TCS 25 will be working closely with new G-IM Chairman G. E. SCHAFER to resolve any problems of overlap in the work formerly conducted by TCS 25 and the work presently conducted by the other Technical Committees forming part of G-IM. These are the TC on Electronic and High Frequency Instruments, B. O. WEINSCHEL Chairman, TC on Indicating and Integrating Instruments, F. L. HERMACH Chairman, and the TC on Electrical Standards, S. C. RICHARDSON, Chairman.

From the Boston Chapter of the Instrumentation and Measurement Group of IEEE comes word of elections and an interesting program.

A. Kalisky - Chairman
M. J. Geoghegan - Vice Chairman
R. G. Fulks - Secretary/Treasurer

For their fourth year of operation, the following topics have been assembled for discussions:

Sept. 14 "State of the Measurement Art, Internationally"
D. Strain of Electro-Scientific Instruments

Oct. 5 "Transducers," by a speaker from Baldwin, Lima and Hamilton
Dec. 7 "Applied Circuit Design," by a speaker from Sanborn Instruments
Mar. 8 "Phase Measurements," Dr. Y. P. Yu of Ad-Yu
April 12 "Modern Frequency and Time Standards," R. W. Frank of General Radio

SOME HIGHLIGHTS OF THE WORK-SHOP PROGRAMS

An attentive audience listens as Chmn. Woodington conducts the opening ceremonies and introductions. Tom Lamoureux briefs the registrants.

And the Work-shops swing into operation at high gear.
The August issue of an NBS publication "The Standard" had this to say about the recent calibration of a super load cell:

"Four 12,000,000-lb capacity load cells, manufactured by Baldwin-Lima-Hamilton Corporation, were recently calibrated at the Institute for Basic Sciences. The huge cell would be capable of weighing a total of 90,000 people the equivalent of F. C. Falkinburg, Engineering Mechanics Section, who was in charge of the calibration work of the cells." Mr. Falkinburg will now go down in history as the first human prototype standard in history to be considered in toto. After all, the Egyptian Pharohs contributed only an arm for the cubit, the English Kings the width of their hand for the span, and the German Kings the size of their feet for the foot!

The August issue of "The Standard" also carried the story of the retirement of W. J. Youden from the Bureau. His work in mathematical statistics is well known to metrologists, and it is pleasing to note that Dr. Youden will continue his work in the future as a teacher in the College of Engineering at George Washington University.

Mention of George Washington University brings to mind the successful completion of another special Summer Session in June devoted to Standards Laboratory Operation and Management. The course was well attended and enthusiastically received. Below is a picture of Dr. Youden addressing the class on the subject of "Statistics in Measurement".

The continued demand for such courses has induced the University to repeat the course starting January 31, 1966. More information on this later.
Hugh Stewart of the NBS Boulder Laboratories Technical Information Office kindly forwarded information on Boulder activities.

The two-week course on Electromagnetic Measurements and Standards, starting August 9 was attended by over 125 registrants. Dignitaries recognizing the importance of measurements included P. H. Dominick, U.S. Senator from Colorado, and Congressmen R. M. McVicker, F. E. Evans. Included among the registrants were representatives from Canada, Sweden, France, Italy, Switzerland and Northern Ireland.

On the same day, a three-day training school at the Laboratories was opened for state, county, and city weights and measures officials. In this connection, it should be remembered that the Federal government does not regulate and control weights exercised locally. NBS provides technical assistance and advisory services only.

The Quantum Electronics Section at Boulder has been formed to replace and absorb the Microwaves Physics Section, and is headed by DR. R. MOCKLER. J. A. BARNES replaces Mockler, as acting chief of the Atomic Frequency and Time Standards Section. The reorganization was brought on by an attempt to reduce overlap in the research into quantum electronics, frequency, and time as conducted by several sections.

M. P. SELBY of Boulder reported on a recent meeting of the Working Group on High Frequency Quantities of the International Committee of Weights and Measures held in Paris. He noted procedures established which probably will lead to the installation of permanent high frequency measurements facilities at the International Bureau of Weights and Measures in Paris. Such an installation will encourage more intercomparison of national standards, mainly encouraged heretofore by the Radio Standards Laboratory at Boulder. Intercomparisons to date have included frequency and time via atomic clocks carried abroad, high frequency and microwave power attenuation, and permittivity at room temperature. In progress are measurements of noise at X-band, attenuation, and permittivity at very high temperatures. For the future, it is expected that intercomparisons will include complex permeability, voltage, current, impedance, capacitance, field strength, surface conductivity and standing wave ratio. NBS presently is scheduled to participate in three round-robin intercomparisons in 1965-66. These include power at 3 MHz with laboratories in the United Kingdom, Canada, USSR, and East Germany. The Tokyo Electrotechnical Laboratory is sponsoring a five-laboratory round-robin of power at 10 GHz which includes
NBS, Hungary, USSR, and East Germany. The National Physical Laboratory at Teddington, England is sponsoring a threelaboratory round-robin on permittivity, to include NBS and the USSR.

Boulder also reports that the NBS radio station WWV will be removed from Greenbelt, Md. to Fort Collins, Colo. during 1966. This is part of a long range program to bring together all major time and frequency broadcast facilities into a central complex near the NBS Radio Laboratories in Boulder. Plans call for construction of 8 transmitters for the new station. These will include four designed for 20 kw at 5, 10, and 15 MHz with one standby transmitter, and four designed for 5 kw at 2.5, 20, and 25 MHz with one standby transmitter. Normal transmissions will be at one-half the designed power.

Fairly well publicized has been the incorporation of the Central Radio Propagation Laboratory into the new Environmental Science Services Administration (ESSA) of the Department of Commerce. ESSA also includes the Weather Bureau and the Coast and Geodetic Survey. The new organization admittedly takes away from the Bureau a most valuable activity. All of the activities were involved in basic research, but did not overlap to any extent. They also are highly involved with the public through frequent communications. The merger should promote some sort of cooperation between oceanographers and meteorologists which did not exist when separate agencies were operating. Moreover, in view of the suddenly-accelerated movement of the US Navy into oceanography, it is believed that ESSA may serve a more important part in the Department of Commerce's activities than would be possible if all three units were independent contenders for funds.

FROM WASHINGTON, D. C.

We were pleased to hear directly from DR. A. T. McPHERSON, NBS (ret) who indicated he was far from dormant, even though retired. Among other things, he has been studying, writing, and speaking on the subject of synthesis of food materials in relation to the world food and population problem.

NEW CALIBRATION SERVICES

NBS-Boulder Laboratories are offering a new calibration service--measurement of calibration factor of 50-ohm coaxial bolometer mounts at 100 MHz and 1 GHz and bolometer-coupler mounts at 30, 100, 200, 300, 400, 500 MHz and 1 GHz. Uncertainty (error) limits are within 1% for units with a VSWR less than 1.05.
FOR THE LIBRARY

There are many books which should be part of the library of any metrologist. A well-rounded library does not consist of technical books only but includes also, those which broaden the mind and the philosophy of the individual. These may include publications such as Snow's "Two Worlds," Lapp's "Kill and Overkill," Overhage's "The Age of Electronics," Gamow's "A Planet Called Earth," Uris's "The Efficient Executive," Bursk and Chapman's "New Decision-Making Tools for Managers," plus many others. Your editor can supply these to you at less than list price, if you are interested.

An example of a recent issue which is exceptionally tutorial, is "Modern Science and Technology" edited by Colborn. This book contains state-of-the-art reports on current developments in the major areas of science and technology. It helps to relieve the problem of obsolescence in the technical man over forty, the men who have become successful in their narrow field but whose vision has narrowed. It also gives the younger men with ambition, a broader knowledge or insight into a new field in which the grass may be greener. The book will give you intellectual recreation, but it is not a "light" book. It consists of rapidly developing topics in physics and electronics, covers technical aspects of chemistry, space and astronomy, rocketry, earth science and oceanography, mathematics, computers and control. Assembled by the staff of International Science and Technology, it is a large book (746 pages, 583 color photographs) which will serve as a valuable reference alongside your copies of the Handbook of Physics and the Scientific Encyclopedia. If you're interested in a copy, the book which lists for $22.50 is available at a special price of $12.95. Send your check to the Newsletter Editor and receive your copy post-paid.

Recent technical articles worth filing are as follows:

1. "Errors that Afflict Vacuum Gauges," J. R. Roehrig; Environmental Quarterly, June 1965. All errors are not human errors!


Note that reference 22 in Newsletter issue dated June 15, 1965 should have indicated the source - NBS Technical News Bulletin July 1965. Your editor sometimes guesses incorrectly as to when NBS will schedule printing of an article for which he has received pre-release information!

Suggested filing--the Nobel Prize Winner's lectures delivered at Stockholm in December 1965, as presented in Science for 20 August 1965.

1. Semiconductor Lasers, N. G. Basov

2. Quantum Electronics, A. M. Prokhorov

3. Production of Coherent Radiation by Atoms and Molecules, C. H. Townes
Articles considered as broadening the viewpoint were noted as follows:


C. "What's Wrong With Federal R&D?" N. Heyward; American Engineer, February 1965. A review and discussion of a "colossal technological waste."

D. "That Durable Inch," B. Wiggin; American Engineer, May 1965. Author is not sold on necessity to abolish the English measurement system.

E. "Mariner IV Measurements Near Mars; Initial Results," Science, 10 September 1965. Excellent collection of articles on the many programs carried out.


H. "Telemetry's Shift to UHF Status Report," Dr. A. Hall's Address to the 1965 Telemetering Conference in Washington, as excerpted by Frequency, July-August 1965. The move to the UHF region which must be accomplished by 1970 means added emphasis in L- and S-band measurements for many testing and standards laboratories.

I. "Lasers," A. Schawlow; Science, 2 July 1965. A leading worker in this field presents a tutorial approach.

J. "The Myth of the Corporation," M. Pease; The Microwave Journal August 1965. An editorial suggesting that the key to achievement is to take on more than the responsibilities you have been assigned.
SOCIETY NEWS

The advance program for the 20th Annual ISA Conference and Exhibit to be held in Los Angeles October 4-7 offers a number of sessions which appear to be of interest to our readers. These sessions are listed below:

13.2 Measurement of Flow
8.1 Bringing Teaching into Technology
8.3 Teacher Education for Instrumentation at the Technical Institute
13.3 Factors Influencing Measurements
17.3 Measurement of Extreme Pressure and Acceleration Environments
17.9 Heat Flux Measurements - Part 1
17.12 Heat Flux Measurements - Part 2
17.3 Vibration and Acceleration Measurement Techniques
17.15 Temperature Measurements - Cryogenic to 1500 F
14.1 State of the Art in DC Measurements
33.1 Dimensional Measurements
42.1 Microwave Measurements, Standards, and Applications
14.2 Recent Advances in Electrical Measurements Standards
33.2 Metrology Education
42.2 Modern On-Site Calibration Techniques
33.3 International Cooperation in Measurement Standards
14.3 Temperature Measurement Standards
42.3 Calibration Intervals
14.4 International High Frequency Impedance Standards
42.4 Methods, Techniques, and Application of Infrared Measuring Equipment
42.5 Frequency Measurement and Control
14.6 Organization and Management of Company Standards Laboratories
42.7 Design Concepts of Standards Laboratories
14.8 Measurement Processes in Action

It will be noted that in addition to the technical presentations, many sessions offer material in the fields of activities of several NCSL Special and Standing Committees. Your editor is unable to advise you at the date of this printing what steps are required to obtain copies of these Session's papers. Presumably they will be available at the Conference, and later from ISA Headquarters in Pittsburgh.

We have just received notice from Loebe Julie that tentative plans to hold a special 'performance criteria' meeting as part of the doings at the ISA meeting in Los Angeles, have been cancelled by ISA President W. A. Crawford. Basic reasons appear to be overlap with some regularly-scheduled sessions, and the desire to wait for release of data on standards presently being originated by several organizations.
In a communication just in from DEAN A. BRUNGART, he had news of the installation of a new corps of officers and directors for Precision Measurements Association, September 1. The names:

D. A. Brungart - President
R. Stayberg - Vice President
H. McConnell, Jr. - Secretary
A. K. Edgerton - Treasurer
R. Rathbone - Director
L. Riffle - Director
H. Richardson - Director
H. Kittleson - Director
F. Thoma Jr. - Jr. Past President

NCSL - GAITHERSBURG CONFERENCE 1966

Except for some minor adjustments in program planning brought about by the fluid date for dedication of the NBS facilities at Gaithersberg, Maryland, Chairman WOODINGTON reports the program for the 1966 NCSL Standards Conference as becoming firm. An exact date has not been announced, but it is anticipated that May 10-13, 1966 will be established shortly as the official dates. The NBS dedication ceremonies were originally considered as the focal point around which the conference would revolve. These probably will be postponed until September to accommodate slippage of dates for personnel moves from Washington, and also because of the difficulty in confirming a date suitable for President Johnson to attend.

Still included are opening addresses by top NBS officials ASTIN or HUNTOON, a luncheon program headed by DR. W. G. AMEY as speaker, a dinner program in which a speaker (not identified at this time) will discuss the "Corporate Management View on Standards Laboratories," and conducted tours through the new NBS facilities.

The work program for the Conference will include a look at the state of the national standards in the U.S.; a review of calibration requirements revealed by industry; discussions of the several government calibration systems; reviews of standards laboratories organization and operation in the several categories of production, R&D and university, corporate, and commercial; evaluation, selection and training of laboratory personnel; calibration procedures; performance criteria for standards and instruments; work load control; information retrieval; accuracy inter-comparison programs; viewpoints of liaison technical and professional organizations regarding measurements standards laboratories. In addition it is planned to research the activities in foreign countries which are analogous to those of NCSL, with the possibility of having leading foreign representatives presenting their own story.
MORE HIGHLIGHTS FROM THE WORK-SHOP CONFERENCE

ED ARGENAULT discusses Work Load Control problems

A. KELSEY takes up Organization & Operation of Labs

and an animated question-answer period concludes.
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C. E. WHITE - Editor