

NATIONAL BUREAU OF STANDARDS REPORT

9406

REPORT ON WEIGHTS AND MEASURES SEMINAR

BOGOTÁ, COLOMBIA, S. A.

by

T. M. Stabler
Office of Weights and Measures
National Bureau of Standards



U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

THE NATIONAL BUREAU OF STANDARDS

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July 25, 1966 - August 12, 1966

REPORT ON WEIGHTS AND MEASURES SEMINAR
BOGOTÁ, COLOMBIA, S. A.

by

T. M. Stabler
Office of Weights and Measures
National Bureau of Standards

to

Agency for International Development
Bureau for Latin America
Department of State
Washington, D. C.

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1. Introduction:

The second weights and measures training seminar for Latin American officials was conducted at the National University, Bogotá, Colombia, July 25 - August 12, 1966. (See National Bureau of Standards Report 8970.)

The program included instruction in weights and measures administration, in the field testing of commercial devices, and in laboratory calibration of length, mass, and volume standards.

2. Training Course:

George Fitch, Industrial Development Officer, AID/Bogotá, had sent invitations to the U. S. AID Missions in Latin America inviting each to send representatives to attend the 1966 metrology seminar. Three Venezuelan, two Guatemalan, and five Colombian officials participated.

Dr. Hernando Franco and Dr. Eduardo Silva of the Physics Department, National University, planned the three-week course and presented the lecture and laboratory material. T. M. Stabler, Office of Weights and Measures, National Bureau of Standards, participated in the laboratory instruction and in the planning meeting that followed.

The first week of the course was devoted to weights and measures administration and to laboratory calibrations, techniques, and computations. The broad significance of an effective weights and measures program was emphasized as was the necessity to standardize commercial weights and measures at the local level. Procedures were outlined for the laboratory test of field standards and instruction was given in the use of precision laboratory standards and instruments.

For the second week, instruction dealt with laboratory techniques and procedures. Each participant conducted calibrations in mass, volume, and length using the precision balances, pipets, burets, and length bench. Two days of the final week also were spent in laboratory calibrations.

For three days of the final week, field demonstrations were conducted in the testing of computing scales, platform scales, vehicle scales, gasoline pumps, vehicle-tank meters, and in package control. Several business establishments in Bogotá were visited and the various devices were observed in actual commercial operation.

Those in attendance at this seminar displayed exceptional ability in grasping the technical information presented and indicated that the instruction would be of considerable value in standards activities in their respective countries. All participants were university trained.

3. Future Planning:

At the conclusion of the seminar, August 12, 1966, a meeting was held to review the laboratory activities of the past year and to plan for future activities. The board of directors (COMET) met with representatives from the National Bureau of Standards, AID/Bogotá, National University, and ICONTEC (Colombian Standards Institute).

In a review of activities for the past year, the three major accomplishments cited were: (1) The establishment of the laboratory and the First Metrology Seminar (1965); (2) training at the National Bureau of Standards, Washington, D. C., for Dr. Eduardo Silva; and (3) planning for the Second Metrology Seminar (1966).

Calibration activity was limited primarily to standards within the University and Bogotá area, although an effort was made to contact Colombian industry and also other Latin American countries to inform them of the availability of the calibration service.

Several objectives were established for the year 1966-1967, and they included:

1. Plan and conduct a Third Metrology Seminar (1967).
2. Promote the standards calibration program and expand capability eventually to include electrical, density, pressure, illumination measurements, etc.

3. Plan for further training of the National University metrologist at the National Bureau of Standards, Washington, D. C.
4. Apply for membership in the International Bureau of Standards.
5. Support the adoption of a uniform weights and measures law for Colombia.
6. Contact other nations regarding a Latin American Conference on Weights and Measures (Legal and Scientific Metrology).
7. Obtain field standards in the metric system (field test weights, measuring flasks, and equal-arm balance).
8. Publish a report covering the course of instruction just completed.

4. Conclusions:

The Second Metrology Seminar was conducted by faculty of the Physics Department, National University, Bogotá, Colombia. Ten representatives of three Latin American countries participated in the program which included weights and measures administration, field inspections, and laboratory metrology.

Accomplishments in the laboratory program during the preceding year included the conduct of the second seminar, and training of the National University metrologist at NBS, Washington, D. C. Additional training this year at NBS could be in the areas of standards laboratory administration and electrical, density, gageblock, pressure, and illumination measurements.

A continuing effort is necessary to achieve uniform weights and measures supervision in Colombia. A study by the National University and ICONTEC of packaged commodities and commercial weighing and measuring devices could provide the necessary impetus for passage of a new weights and measures law--the first step toward effective supervision.

Attachment 1

The following is a list of participants in the Second Metrology Seminar, Bogotá, Colombia, July 25 - August 12, 1966:

CURSO DE METROLOGIA 1966

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