

NATIONAL BUREAU OF STANDARDS REPORT

8196

REPORT ON INTERNATIONAL TRAVEL TO LATIN AMERICA

TO

PARTICIPATE IN THE DEVELOPMENT OF
PAN-AMERICAN STANDARDS FOR TEXTILES

August 21 - October 5, 1963

By

Josephine M. Blandford

Technologist (Textiles)

Polymers Division



U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

NATIONAL BUREAU OF STANDARDS REPORT

NBS PROJECT

NBS REPORT

0706-20-07239

February 26, 1964

8196

REPORT ON INTERNATIONAL TRAVEL TO LATIN AMERICA

TO

PARTICIPATE IN THE DEVELOPMENT OF
PAN-AMERICAN STANDARDS FOR TEXTILES

August 21 - October 5, 1963

By

Josephine M. Blandford

Technologist (Textiles)

Polymers Division

IMPORTANT NOTICE

NATIONAL BUREAU OF STANDARDS
for use within the Government.
and review. For this reason, the
whole or in part, is not authorized
Bureau of Standards, Washington, D.C.
the Report has been specifically

Approved for public release by the
director of the National Institute of
Standards and Technology (NIST)
on October 9, 2015

These accounting documents intended
to be subjected to additional evaluation
by listing of this Report, either in
the Office of the Director, National
Bureau of Standards, or the Government agency for which
copies for its own use.



U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

REPORT ON INTERNATIONAL TRAVEL TO LATIN AMERICA TO PARTICIPATE
IN THE DEVELOPMENT OF PAN-AMERICAN STANDARDS FOR TEXTILES

TABLE OF CONTENTS

1. Abstract
2. Sponsor
3. Discussions on Pan-American Standardization Activities on Textiles
 - 3.1 Guatemala City, Guatemala
 - 3.2 Bogotá, Colombia
 - 3.3 Lima, Peru
4. The International Seminar on Textile Products
 - 4.1 Introduction
 - 4.2 Delegates
 - 4.3 Agenda
 - 4.4 Opening of the Seminar
 - 4.5 Conduct of Seminar Meetings
 - 4.6 Accomplishments: Actions on Recommendations
 - 4.6.1 Section I, Colorfastness of Textiles
 - 4.6.2 Section II, Textile Fibers and Yarns
 - 4.6.3 Section III, Fabrics
 - 4.7 Related Activities
 - 4.8 Program Proposed for 1964 Meeting of PASC/C6
 - 4.9 Closing of the Seminar
 - 4.10 Saludos!
 - 4.11 Recommendations
 - 4.12 Appendix
 - 4.12.1 Agenda of the International Seminar on Textile Products
 - 4.12.2 Referenced Documents, Speeches, Round-table Discussions, Other Papers

1. ABSTRACT

This report gives (1) observations concerning the development of textile standards in Guatemala and Colombia, (2) an account of the International Seminar on Textile Products, a working meeting of Technical Committee 6 on Textiles of PASC, held in Lima, Peru, from September 2 through October 4, 1963, (3) comments on the 18 Draft PASC Recommendations approved by the Seminar, one which was tabled, and two withdrawn for further development, and (4) agreement reached on the time, place, and agenda for a 1964 meeting or Seminar of PASC/C6. Thirty textile standards, thought pertinent to the immediate needs of Latin America, were suggested as subjects for the agenda.

2. SPONSOR

This activity was sponsored by the National Bureau of Standards in cooperation with the American Standards Association (ASA) which represents both the industrial and Governmental interests of the United States in international standards organizations. The Pan-American Standards program of ASA is directed by Committee L23 of ASA. To accomplish this work, Committee L23 receives technical guidance from other national organizations concerned with the development of textile standards: Committee D-13 on Textile Materials of the American Society for Testing and Materials (ASTM); the Executive Committee on Research of the American Association of Textile Chemists and Colorists (AATCC); the National Bureau of Standards (NBS), assigned the responsibility for the Federal Standard Test Methods for Textiles of the General Services Administration (GSA).

3. DISCUSSIONS ON PAN-AMERICAN STANDARDIZATION ACTIVITIES ON TEXTILES

3.1 GUATEMALA CITY, GUATEMALA
August 23, 1963

United States Embassy

Mr. Jay Phillip Freres, Third Secretary

The organization, functions, and interrelationships of the American Standards Association (ASA), American Society for Testing and Materials (ASTM), American Association of Textile Chemists and Colorists (AATCC), National Bureau of Standards (NBS), and International Standardization Organization (ISO) were discussed with Mr. Freres. He was interested, also, in the background and future program of Technical Committee 6 on Textiles of the Pan-American Standards Committee (PASC/C6).

He spoke of the excellent talk given by Mr. Pio Gonzalez of the Instituto Centroamericano de Investigacion y Tecnologia

Industrial (ICAITI) to the Guatemala Chamber of Commerce. In it Mr. Gonzalez had explained the activities of ICAITI, the importance of standardization, its level in the United States, the work of the ASA and the ISO, and that of the United States in encouraging the development of standards throughout Latin America. He also stressed the importance of standardization in Central America and asked for the support and understanding of the people and governments of Central America.

The organization of the Central American Textile Association was not completed. ICAITI is working with the various Central American Governments in setting up textile standards and is assuming the leadership toward the Association's formation.

Mr. Freres wishes to be kept informed of developments relating to the Central American Textile Association, and to Central American integration and participation in PASC/C6.

Instituto Centroamericano de Investigacion y Tecnologia Industrial
(ICAITI)

Dr. Otto Stern, Director

Dr. Francisco Aquirre, Director of the Laboratories Division

Dr. Pio Gonzalez, Director of the Standardization Division

The Central American Textile Association is in the process of formation. There are many delays due, chiefly, to the lack of integration of activities in Central America and to the tremendous amount of additional work required of the staff of ICAITI to implement it.

It was evident that ICAITI is assuming leadership in the formation of the Association, and laying a good foundation: drafts of standards are prepared by ICAITI and distributed to all Central American countries. These are discussed in the respective national organizations, and their comments sent to ICAITI. Critical comments are again discussed. When all are resolved, the drafts are modified accordingly, and then published as standards. Copies of the approved standards reflect the varied nature of the standardizing activities of ICAITI in textile and other industrial areas.

ICAITI was extremely interested in participating in the activities of PASC/C6, and was sending Mr. Roberto Arriola as a representative to the International Seminar on Textile Products in Lima. Unfortunately, until the afternoon of August 24, neither the agenda nor copies of Recommendations had been received, giving but little time for their review and the preparation of technical comments on the standards proposed.

ICAITI had been represented at the April meetings of the Council of CPANT (Comité Panamericano de Normas Técnicas) by Mr.

Gonzalez who subsequently prepared a form for the preparation of recommendations. This form, or procedure, is to be distributed by CPANT in Spanish, Portuguese, and English.

Mr. Gonzalez will attend the 1964 General Meeting of CPANT in New York City where the procedure for the adoption of Recommendations as PASC standards will be discussed. ICAITI will join with others in implementing the acceptance of a procedure for the adoption of standards.

The library of ICAITI, aside from technical and scientific texts, has standards and specifications from 27 countries including those of the ASA, ISO, BSI, and the U. S. Federal Government. Dr. Stern desires to add to it those of the ASTM and the AATCC (These have been acquired since.), as well as the scientific journals of the NBS and other research organizations.

In the discussion of the technical and scientific publications of the National Bureau of Standards, Dr. Stern and Dr. Aquirre expressed particular interest in the Technical News Bulletin and the Journal of Research. They were told of the NBS program of the exchange of publications with other scientific organizations, and expressed a desire to participate. Upon request of the writer to Dr. Herbert F. Schiefer, NBS Consultant on Textiles, he and Mr. J. E. Carpenter, Chief of the NBS Publications Section, made this a reality: The NBS will receive from ICAITI the "Noticias de ICAITI y Normas Centroamericana", and send to ICAITI the following NBS publications: Journal of Research: Section A. Physics and Chemistry (bimonthly); Section B. Mathematics and Mathematical Physics (quarterly); Section C. Engineering and Instrumentation (quarterly); Technical News Bulletin (monthly).

In addition to the expansion of the library, Dr. Stern and Dr. Aquirre expressed other needs of ICAITI: an increase in the textile staff; a means of overcoming the difficulties encountered in printing their scientific papers and standards. Causes of the latter are: type keys are not yet available for scientific printing; printing costs are almost prohibitive although they had dropped in recent years. With the thought of reducing costs still farther, ICAITI is investigating the feasibility and expense of using a copying machine.

3.2 BOGOTÁ, COLOMBIA, August 28 and 29, 1963

Colanese Colombiana, S.A.

Mr. W. B. Reeson, Manager

Mr. B. V. Bilbao, Head, Textile Laboratories and Standards

There is not yet a Colombian Association on Textile Standards, nor are there any national standards as such. The textile industries

in Colombia are many and important, but each makes and dyes textiles by long-established and traditional procedures, none of which are standardized.

Asked about the value of our Spanish translations of U. S. methods, Mr. Reeson had seen none, but spoke of the varieties of Spanish spoken in the countries of Central and South America, and offered to appraise the translations if some were sent to him. Subsequently, several methods were sent to Celanese Colombiana where they were reviewed by Mr. Bilbao who considered the terminology quite intelligible to Spanish technicians in the textile mills.

An excellent activity of Celanese Colombiana is the following which may be an initial step in giving textile manufacturers an interest in, and understanding of, the economic benefits of standardization: Varieties of fabrics made by the different textile mills are purchased from retail stores and tested in the Celanese laboratories for many basic properties. Mr. Bilbao then sends forms to the mills asking that they indicate the properties of greatest interest to them. Upon reply, he reports on these and indicates whether the fabric passes or fails by Celanese standards. The increased participation in this program is most encouraging.

Mr. Bilbao stated that a stumbling block to an integration of interests in Latin America is the lack of understanding of definitions, and the need for standard terms and precise definitions. He was, consequently, greatly interested in the PASC/C6 Recommendations on terminology, and in ASTM D 123 on Terms Relating to Textile Materials, which has since been made available to Celanese Colombiana in a copy of the ASTM Standards on Textile Materials.

Instituto de Fomento Algodonero

Dr. Mario Londoño Beltran, Director

This Institute uses the U. S. Department of Agriculture standards for cotton classification in setting up the Colombian standards for grades of cotton. The cotton tested in its laboratories is obtained from producers and mills and tested for quality, length, strength, and fineness. The laboratory is small but well equipped, employing both the Fibrograph and Micronaire. The ASTM D 13 Standards on Textile Materials are frequently used.

Although Dr. Beltran had not known previously of the PASC/C6 Seminar in Lima, nor seen the Recommendations scheduled for discussion, he was most enthusiastic about the program and the proposed cotton methods. He expressed the hope that he might participate in the future, if not the 1963 Seminar, program of PASC/C6.

Instituto de Investigaciones

Dr. N. Young, Acting Director
Dr. Felix Moncada, Chemist
Mr. Gabriel Baquero, Chemist

With the exception of research on fique and other cordage fibers, the Institute does no research on textiles, feeling that the textile industry is big and financially able to support its own research. Hence, the policy and objective of the Institute is to help those smaller industries which cannot afford research.

At the time of my visit there was no national organization on textile standards in Colombia, although a real need existed for standards to promote economic growth. The Instituto Colombiana de Normas Tecnicas was mentioned as the institute organized to develop standards, and the one most familiar with any developmental work on Colombian standards. Since that time, the Instituto Colombiana de Normas Tecnicas has been officially designated by the Ministry to head up the standardization activities, inclusive of those on textiles, in Colombia. It is hoped that the Institute will participate in the 1964 PASC/C6 meetings.

Dr. Young was interested in the procedures used in the United States and in those proposed by PASC (although he had no knowledge of the PASC Seminar previously) for establishing standard testing procedures and developing specifications. He was interested, too, in the work of ICAITI.

The work of the National Bureau of Standards on paper and cordage fibers and that of the U. S. Department of Agriculture on plant fibers were of special interest to Dr. Young and his staff because of their research on cordage and bamboo fibers.

The physical and analytical laboratories and the sucrose pilot plant were visited. In these, research is being conducted on avocados, the lulo fruit, wheat flour, and new products from sucrose. It is hoped that research on the lulo fruit will create a future export market for the frozen juice concentrate. The research on the weight and fineness of wheat flour is conducted by Dr. Moncada who, in 1947, was a guest worker at the NBS.

3.3 LIMA, PERU, September 7, 1963

United States Embassy

Mr. Frank A. Mau, Second Secretary

The U. S. Delegation present at the Colorfastness Section of the International Seminar on Textile Standards - Dr. K. L. Hertel, Mr. C. A. Sylvester, Mr. G. Mandikos, and the writer - were

cordially received by Mr. Mau who expressed a genuine interest in the program and objectives of the Seminar. He was well informed on its background and the activities of PASC/C6.

Mr. Mau spoke of the progressive accomplishments of INANTIC, and mentioned that the U. S. Embassy, through the Agency for International Development (AID), was attempting to provide assistance to INANTIC.

Mr. Mau generously offered to help in any possible way the efforts of the U. S. Delegation in its activities at the Seminar, and made available to us facilities at the Embassy. The assistance of Mr. Mau and his staff on several editorial matters in the weeks following is gratefully acknowledged.

4. THE INTERNATIONAL SEMINAR ON TEXTILE PRODUCTS

4.1 INTRODUCTION

The International Seminar on Textile Products, under the auspices of the OAS, was a working meeting of Technical Committee 6 on Textiles of the Pan-American Standards Committee (PASC/C6). It was held in Lima, Peru, from September 2 to October 5 at the Instituto Nacional de Normas Tecnicas Industriales y Certificacion (INANTIC). INANTIC is the official standards organization of Peru, assigned the Secretariat for Pan-American Standards for Textiles.

The objective of the Seminar was to develop textile standards for Latin America, a continuing action on the program initiated in 1961 and advanced in 1962. Two reports by Dr. Herbert F. Schiefer, NBS Consultant on Textiles, detail the programs and achievements of these years. They are: NBS No. 7585, dated August 6, 1962; NBS No. 7770, dated December 19, 1962.

The seminar form of meeting was decided upon as a means of providing ample time for adequate discussion, development, and approval of a number of standards constituting a very ambitious program. Because of representation by the member countries of PASC, and of attendance by all the active members of the Technical Committee (Peru, the United States, Brazil, Venezuela, and Argentina), the Recommendations developed and approved at the Seminar are equivalent to one of the stages in the PASC procedures (Article 5 of the By-laws) for their acceptance, and thus accelerate their adoption as international standards for Latin America.

Delegates from nine countries participated in the Seminar: Mexico, Guatemala, Venezuela, Peru, Uruguay, Argentina, Chile, Brazil, and the United States.

The agenda for the Seminar comprised 21 PASC Recommendations. These had been decided upon at the November 1962 meetings of PASC/C6 as essential to the needs of the textile industries of Latin America. The tremendous amount of preliminary work required on these Recommendations, and the preparation for the Seminar were most ably accomplished by INANTIC in the interim.

Professor Juan V. Cabrerizo, Director of INANTIC and Chairman of PASC/C6 was Director of the Seminar. His direction of it, and the work of his dedicated staff, were superb. The atmosphere in which the Seminar was conducted, and the opportunities it afforded for the delegates of our American countries to know one another and to cooperate on matters of mutual interest, were excellent and most rewarding.

4.2 DELEGATES

Delegates from nine countries participated in the Seminar: Guatemala, Mexico, Venezuela, Peru, Uruguay, Argentina, Chile, Brazil, and the United States. The names and organizations of all delegates are given in the Minutes of the Seminar, copies of which may be seen at the National Bureau of Standards in Washington, D. C., the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

The United States was represented by six delegates who were accredited by the American Standards Association, the United States member of PASC. These were: Dr. Kenneth L. Hertel, Director of the Fiber Research Laboratory, University of Tennessee; Miss Josephine M. Blandford, Polymers Division, National Bureau of Standards; Mr. Charles A. Sylvester, Assistant Manager, Textile Dye Sales, E. I. du Pont de Nemours & Co., Inc.; Mr. George J. Mandikos, Technical Secretary, American Association of Textile Chemists and Colorists; Mr. Richard R. Sitzler, Celanese Fibers Corporation of America; Dr. Ramon E. Esteve, Jr., Esteve Cotton Company.

Dr. Hertel, Leader of the U. S. Delegation, and Miss Blandford, Alternate Leader, attended the Seminar for the full five weeks; the other U. S. delegates were present for short periods, attending only those technical sessions relating to their areas of specialization.

4.3 AGENDA

The agenda for the Seminar comprised 21 PASC Draft Recommendations on subjects which had been proposed at earlier meetings of PASC/C6 as being essential to the needs of the textile industries of Latin America. The drafts were prepared by INANTIC, the Secretariat of the Technical Committee on Textiles. They were based on previously submitted methods of the ISO, ASTM, AATCC, BSI, and the United States Federal Standard Test Methods for Textiles. Prior to the Seminar, the Draft Recommendations had been circulated for review and comment within the member countries of PASC by the official national standards organizations in Central

and South America, and the United States. The combined comments were then considered by INANTIC, the drafts revised to accommodate the changes indicated, and the Recommendations again circulated for comment. The composite of opinions thus obtained represented the technical opinions of the countries represented, and were those expressed by the respective delegates.

The agenda, for purposes of discussion (sometimes at length and in five kinds of Spanish), arranged the 21 Draft Recommendations in three groups each representing an area of related standards. Consequently, the Seminar was divided into three corresponding sections: one on Colorfastness, with 8 Recommendations; another on Textile Fibers and Yarns, with 8 Recommendations; and a third on Fabrics, with 5 Recommendations.

The agenda is given in the Appendix.

4.4 OPENING OF THE SEMINAR

The Pan-American Seminar on Textile Standards was inaugurated at the Universidad de Ingenieria on the morning of September 2 at the formal invitation of Ing. Mario Samame Boggio, Rector of the University, and President of the National Commission on Technical Standards.

The program presented was under the auspices of the Organization de los Estados Americanos (OEA), Comité Panamericano de Normas Tecnicas (CPANT), and INANTIC. It was most interesting, informative, and cordial, and consisted of addresses given by important personages of the University, OEA, CPANT, AND INANTIC; A visit to the excellent laboratories of the Textile Institute of the University; and cocktail reception.

The major points of emphasis in the speeches were: the need of technical standardizing activities suitable to Pan America on both national and international levels; the necessity to integrate the efforts of Latin America for the common cause of advancing the productive level required by the present industrial developments; the role of standards as a basis for the development of regular trading relations within the American continent, and as an instrument of American economic integration; the historic importance of this first Pan-American Seminar, OAS Project 207 on Textile Standards, in initiating the removal of technological barriers to the promotion of trade and up-grading the living standards of the Pan-American people.

The names of the speakers, inclusive of the delegates' representative, are listed in the Appendix. Copies of the addresses may be consulted at the National Bureau of Standards in Washington, D. C., the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

4.5 CONDUCT OF SEMINAR MEETINGS

Professor Cabrerizo, Director of the Seminar, opened the first technical meeting of the Seminar, instructed the Delegation in the operating procedures for the conduct of meetings, and acquainted them with the CPANT and OEA rules and by-laws to which actions of the Seminar must conform. As the Seminar progressed, the additional citation of rules and their classification were provided by Professor Cabrerizo and Mr. Yermoli, Camp Director, OAS.

The rules to which the Seminar conformed required that:

1. Each country have one vote, that of the accredited leader or his alternate, representing the standards association of his country.
2. Delegates must make known their intentions through the leaders of their delegations.
3. Approval of actions is by unanimous ballot except on matters of "form" which require a majority vote.
4. Voting abstentions count as negative votes.
5. Seminar discussions and actions be confined to those subjects on the agenda.
6. Recommendations developed and approved during the time of the Seminar have the same status as others (on the agenda) being considered. This is permitted by the fifth article of the PASC by-laws which states that actions of a Seminar financed by national entities, and attended by representatives of the member countries of PASC and at least five active members of the Technical Committee, may be considered as accomplished by the Committee.
7. Each Section have a chairman and three secretaries, the delegates appointed as secretaries to serve each third session.
8. Editorial committees be appointed by the chairmen of the Sections to resolve matters of "form", and to revise drafts of Recommendations to conform with the requirements and modifications approved by the Seminar. (These to consider Spanish, English, and Portuguese terminology.)
9. There be no subcommittees; discussions to be by all delegates present.

10. The Section chairman may grant a 3-minute discussion period to a delegation upon request.
11. Proposals made during a technical session must be in writing, signed by the accredited delegation leader or his alternate, and presented to the secretary (for the purposes of voting and recording in the minutes).

Spanish was the spoken and written language of the Seminar. English translations were provided by those delegates who spoke both Spanish and English. All minutes, Recommendations, and other printed materials for the technical sessions were provided in both Spanish and English.

The Seminar was conducted most ably and in an atmosphere of harmony, respect, and cooperation. Discussions on form, text, and terminology, though at times intensive and extensive, were impersonal and resolved by agreement on an action deemed best suited to the needs of all Latin American countries.

The procedure followed in the conduct of these sessions was a conventional one. Following the reading and approval of the minutes of the previous meeting, the revised drafts of the Recommendation of the previous day (prepared in the interim by the Editorial Committee) were discussed and voted upon. Rarely were they returned to the Editorial Committee for further modification. Technical comments were then presented by the delegates on the next Recommendation on the agenda. These were discussed in detail and proposals made concerning their modification. Upon approval of the proposals, the Recommendations were referred to an appointed Editorial Committee which redrafted them.

Following each technical session, and on several occasions in lieu of a technical session, the Editorial Committee held a working meeting of the time required to complete the development and revision of the text and form of the Recommendation assigned.

4.6 ACCOMPLISHMENTS: ACTIONS ON RECOMMENDATIONS

Of the Recommendations considered, 17 of the 21 were approved, 1 new Recommendation was developed and approved, 1 was tabled, and 2 others considerably modified with work on them continuing. Those approved by the Seminar are but one stage away from their adoption as PASC Standards, i.e., formal approval by the member countries of PASC, which action is now in progress.

Copies of the Recommendations may be consulted at the National Bureau of Standards in Washington, D. C., the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

A detailed account of the action taken on each Recommendation, and pertinent information concerning it, follow.

4.6.1 SECTION I - TEXTILE CHEMISTRY: COLORFASTNESS OF TEXTILES
Chairman: Mr. Felix E. Von Ranke (Brazil)

<u>Dates</u> <u>Discussed</u>	<u>Recommendations: Modifications of; Action on</u>
	<p>PASC 6-020, GRAY SCALE FOR ASSESSING COLOR TRANSFER</p> <p>Method approved after inclusion of Table I of ISO Recommendation R105, Part 2 which gives a description of the Gray Scale in terms of fastness ratings, corresponding color differences (in NBS units of color difference determined by the Adams chromatic value formula), and tolerances for working standards.</p>
9/3, 4	<p>PASC 6-021, GRAY SCALE FOR ASSESSING CHANGE IN COLOR.</p> <p>The draft on which this final document was based excluded Table II of ISO Recommendation R105, Part 2 for assessing the character of change in color as accepted in the November 1962 Recommendation PASC/C6-21. After much discussion, it was restored by unanimous agreement (6.6.5).</p> <p>The table in 6.6.6 was revised to incorporate English symbols and descriptive terms for recording qualitative changes in color.</p> <p>Following these revisions, the method was approved.</p>
9/3, 4	<p>PASC 6-014, METHOD OF TEST FOR COLORFASTNESS TO WATER.</p> <p>The final document as approved incorporates several basic changes: an increase in water in the composite specimen to 2 1/2 to 3 times the dry weight of the specimen; specifying a drying time of 4 hours in the standard procedure which employs the ISO reference cloth; adding as an alternate procedure that of the AATCC which uses the multi-fiber cloth and specifies a drying time of 18 hours to provide a test for fabrics which are exposed to more severe conditions in use.</p>
9/3, 4	<p>PASC 6-015, COLORFASTNESS TO BLEACHING WITH HYPOCHLORITE.</p> <p>Agreement could not be reached on this method because of the differences of opinion regarding the test temperature: The United States suggested substituting 27°C \pm 3°C for the 20°C \pm 2°C specified by the ISO, maintaining that the former was more</p>

Dates
Discussed

Recommendations: Modifications of; Actions on

PASC 6-015 (Continued)

representative of the alteration factor which takes place in practice.

Because of the lack of unanimity, the method was tabled and a decision made to conduct experiments to compare the results of the AATCC and ISO test methods employing these two temperatures. This study will be conducted by the PASC Secretariat.

9/4,5,6

PASC 6-016, METHOD OF TEST FOR COLORFASTNESS TO DAYLIGHT.

After much discussion on the use of the ISO Blue Scale and the proposal to include the AATCC Blue Wool Standards, agreement was reached to accept the ISO Blue Scale as the regular procedure and to include the use of the AATCC Blue Wool Standards as an alternate procedure.

The U. S. Delegation stated that the AATCC would be glad to provide swatches of blue wool for use by the Delegates. (They were subsequently received the week of September 23.)

9/4

PASC 6-017, METHOD OF TEST FOR COLORFASTNESS TO SUNLIGHT.

This method was deleted upon unanimous agreement of the Delegates who thought it closely related to PASC 6-106 for Daylight, and so not needed.

9/4

PASC 6-019, AATCC CHART FOR MEASURING COLOR TRANSFER.

This method, after much discussion, was deleted since the Delegates felt the use of the Gray Scale was adequate for the use of PASC, though its usefulness was recognized in the evaluation of colors. The U. S. observation, not pushed, was that it uses both the Gray Scale and the Color Charts; has endorsed the Gray Scale; that the Color Charts are used oftener; and that it would like to see the Color Charts used internationally as they give more clues, rather than just one, for evaluating staining.

9/5

PASC 6-018, ACCELERATED METHOD OF TEST FOR COLORFASTNESS TO WASHING: DOMESTIC AND COMMERCIAL

This method, as approved, is based on AATCC Standard Test Method 61-1962, Tests Nos. IA, IIA, IIIA, and

Dates
Discussed

Recommendations: Modifications of; Actions on

PASC 6-018 (Continued)

IVA. There is no ISO equivalent.

SUMMARY: SECTION I

Of the 8 Recommendations considered, 5 were approved, 1 tabled, and 2 deleted. Those approved were standards for evaluating staining, changes in color, and determining the colorfastness of textiles to daylight, water, and to commercial laundering. The final acceptance and use of these standards will do much to improve the colorfastness of textiles to these agents throughout Latin America.

4.6.2 SECTION II: TEXTILE FIBERS AND YARNS

Chairman: Jorge Rutemberg (Venezuela)

Dates
Discussed

Recommendations: Modifications of: Action on

9/9

PASC 6-009, SAMPLING COTTON FIBERS FOR TESTING.

This method, much discussed, is limited to the sampling of cotton before being processed, with the idea of drafting another method for processed cotton. (The word "raw" was deleted from the draft because in Peru cotton with seed is called "raw cotton".)

This method, as approved, is based on ASTM D-1441-54 of the same title.

9/9, 12

PASC 6-026, METHOD OF TEST FOR TENACITY AND ELONGATION OF COTTON FIBERS - FLAT-BUNDLE METHOD.

This is a drastic and much discussed revision of the former Draft Recommendation 2 of PASC/C6 No. 26, Method of Test for Strength of Cotton Fibers - Pressley Method, considered obsolete in referring to only one instrument, and not to the three currently used: Pressley; Stelometer; Clemson.

The revised method, PASC 6-026, includes procedures for these three instruments and is based on ASTM D 1445-60T, Strength and Elongation of Cotton Fibers (Flat-Bundle Method).

Included in it are a preferred and an alternate method for preparation of the flat bundle, two methods of placing the flat bundle in the clamps

Dates
Discussed

Recommendations: Modifications of; Action on

PASC 6-026 (CONTINUED)

(and applicable to the three instruments), and testing procedures for each instrument.

The revision of this recommendation during the Seminar was permitted by the fifth article of the by-laws of PASC.

9/9,10,11

PASC 6-027, METHOD OF TEST FOR THE DETERMINATION OF MICRONAIRE VALUE, MATURITY-FINENESS, OF COTTON FIBERS.

This is an extensive and much discussed revision of Draft Recommendation 2 of PASC/C6 No. 27, Method of Test for Determining the Micronaire Value of Cotton Fibers.

The term "fineness" is understood by countries not familiar with the "micronaire value." Hence, the present title is a compromise felt necessary to avoid relating micronaire index or value to fineness when, actually, it is more nearly related to maturity.

ASTM D1448-59, Micronaire Reading of Cotton Fibers, was a basic reference in preparing this method.

The revised Appendix includes a method of calibration of air-flow instruments, and descriptions of three models of the Micronaire (basing these on ASTM D 1448). The W.I.R.A. instrument is also described. Other air-flow instruments will be added to the Appendix as information concerning them is available.

The revision of this Recommendation during the Seminar was permitted by the fifth article of the by-laws of PASC.

9/9, 10, 13

PASC 6-028, METHOD OF TEST FOR THE DETERMINATION OF COTTON FIBER LENGTH BY FILROGRAPH.

The preliminary Draft Rec. 1 of PASC/C6 No. 28 of this method was discussed at length and in great detail and agreement reached on the need for a complete revision in the text, in editing, and in the use of Spanish words.

Dates
Discussed

Recommendations: Modifications of; Action on

Accordingly, it was extensively revised to include Manual, Servo, and Digital models of the Fibrograph, and, as an option, the Fibrosampler.

The method, as approved, is similar to ASTM D 1447-63T, Length of Cotton Fibers by Fibrograph Measurement.

The revision of this recommendation during the Seminar was permitted by the fifth article of the by-laws of PASC.

9/9, 10, 12

PASC 6-029, METHOD OF TEST FOR THE DETERMINATION OF COTTON FIBER LENGTH BY MEANS OF THE COMB SORTER

The need for this new method was apparent in previous discussions on the revision of the Fibrograph method, PASC 6-028. It was the unanimous feeling of the delegates that all methods for measuring the length of cotton fibers should be considered, and that a new standard be developed to classify fibers by means of classers of the comb-sorter type.

Its development during the time of the Seminar was permitted by the fifth article of the by-laws of PASC.

This method was drafted by a special Editorial Committee, discussed at sessions of the Seminar, and further refined. As finally presented, it received the unanimous approval of the delegates.

9/13

PASC 6-010, INTERPRETATION OF COTTON FIBER TESTS ACCORDING TO THEIR STRENGTH, FINENESS, AND STAPLE LENGTH.

This Recommendation, after much discussion, was withdrawn by unanimous agreement of the delegates, and referred to the PASC/C6 Technical Committee with a request that it be reviewed, that the Committee attempt to obtain Pan-American accord on a revision establishing norms of cotton classification based on parameter measurements obtained by methods approved during the Seminar.

This action resulted from general dissatisfaction with the Recommendation which classified cotton strength by varieties and countries on the basis of length and fineness. The chief objections to this Recommendation were:

Dates
Discussed

Recommendations: Modifications of; Action on

PASC 6-010 (Continued)

1. Incomplete listing of varieties of cotton by the respective countries;
2. Difficult to issue and maintain a complete list of all types of cotton;
3. A list such as that proposed would not be reliable because of the continuing variations in cotton quality;
4. The proposed Recommendation is a descriptive standard of cotton classifications and not truly a PASC document; that it resembles an informative bulletin of the statistical type proper to the duties and functions of the Agricultural Departments of the various countries.

9/13, 14,
17, 18

PASC 6-012, YARNS, METHOD FOR THE DETERMINATION OF TWIST.

This long and detailed method is the third and approved revision of PASC/C6-12 effected by the Seminar. It has many refinements not given in the versions it supersedes:

1. The Scope, as modified, excludes application to asbestos yarns;
2. The definition of "twist" is identical to that given in ASTM D 123;
3. The Recommendation is confined to the "direct" method for measuring twist since it is the only exact method, and hence the only one worthy of acceptance as a Pan-American standard;
4. The "twist-untwist" procedure is excluded on the grounds that it is an inexact method and so not acceptable;
5. The requirement on "conditioning" is eliminated as being impractical for tropical countries;
6. The section on "sampling and selection" is modified to include directions for taking a bulk sample.
7. Measurements are given in metric units and English system equivalents: the metric system is the only one having legal status in Pan-American countries.

Dates
Discussed

Recommendations: Modifications of; Action on

9/16, 17, 20

PASC 6-013, YARNS, DETERMINATION OF COUNT - SKEIN METHOD.

This approved Recommendation is a drastic and extensive modification of PASC/C6-13, Method of Test to Determine the Linear Density of Yarn in Hanks - Skein Method.

There was much detailed discussion on all aspects of this Recommendation which, it was felt, was based on ISO and ASTM standards, not applicable to Pan-American use. It was emphasized that the delegates should not approve, disapprove, or follow blindly either ISO or ASTM standards; that Recommendation PASC 6-013 should be carefully studied, and that the Seminar should then prepare and complete a clear standard suitable to the needs of the respective Pan-American countries.

The revision of this Recommendation during the time of the Seminar was permitted by the fifth article of the by-laws of PASC.

The essential modifications in this method are summarized below, and are those incorporated in the approved Recommendation.

1. Scope was revised to establish a method of test for the determination of the "count" of yarns in package form - by the skein method.
2. "Linear density" and "count" were redefined for the purpose of this Recommendation.
3. A 125-cm reel was specified as the standard reel, and a 100-cm reel as the alternate.
4. The requirement on conditioning in the standard atmosphere for testing was modified to include two options for conditioning and weighing:
a. without removal of added substances; b. after removal of added substances; and to delete in the text the table of standard humidity and every reference to standard moisture regains and commercial allowances.

Discussions during the development of this Recommendation emphasized the need for others. Consequently, a proposal was approved "to recommend to the Technical Secretariat the urgent study of:

Date
Discussed

Recommendations: Modifications of; Actions on

PASC 6-013 (Continued)

a. A method for determining the moisture content in textile materials, and b. Specifications for commercial moisture regains and for content of nonfibrous materials in textile materials."

9/19

PASC 6-011, TEX SYSTEM TO EXPRESS THE COUNT AS A MEASURE OF LINEAR DENSITY.

This was a particularly difficult Recommendation on which to reach agreement, and one subject to extensive and intensive discussion and modification. Many divergent opinions were expressed by the delegates:

1. There were serious objections to the application of the tex system to sewing yarns and threads.
2. A metric system was preferred by a majority of delegates representing industry.
3. The tex system had been exhaustively studied in other countries who favor its adoption unless a better, and metric, system can be established.
4. Advantages in all stages of production were contrasted with legal and commercial aspects, cost and difficulties of conversion.
5. The voluntary usage of the tex system by countries was emphasized: It is not necessary for countries to accept the system if not applicable, but it is necessary to have available an international Pan-American Standard.

Finally, it was agreed to eliminate consideration of the legal and commercial aspects and to limit discussion to the study and development of a good system for Latin America. Further discussion was resolved by unanimous acceptance of two proposals:

1. "As the tex system has already been accepted by standardizing entities in 28 countries, and as there is no alternative proposal that satisfies everyone, the tex system shall be established and defined in this Seminar.
2. "When there is available an alternative metric system, it be sent to the Technical Committee for consideration as an alternate method."

Dates
Discussed

Recommendations: Modifications of; Actions on

Following these resolutions and further discussion, agreement was reached on the following modifications:

1. The "scope" was revised to (1) establish and define an international system for expressing the count as a measure of linear density, called the tex system, and (2) establish conversion factors to tex values, of numbers and counts expressed in other systems.
2. Separate definitions were included for count, linear density, direct and indirect systems, tex system, and tex.
3. Values corresponding to the Schappe system were deleted.
4. The tables on direct and indirect systems were modified, and a new table giving basic units for calculating conversion factors and constants was added.

The Recommendation, as revised, received unanimous approval of the Seminar.

SUMMARY: SECTION II

Of the 8 Recommendations considered, 7 were approved, 1 new Recommendation was developed and approved, and 1 was deleted. Of those approved, 5 were standards for sampling cotton fibers and determining their strength, length, and fineness; 1 was on the determination of twist in yarns; and 1 on the tex system for designating linear density. All of these, it was thought, will be of great benefit to the Latin American cotton industry.

4.6.3 SECTION III: FABRICS

Chairman: Sra. Susana Carrillo (Peru)

Dates
Discussed

Recommendations: Modifications of; Action on

9/25, 27

PASC 6-002, TERMINOLOGY AND DEFINITIONS RELATING TO FABRIC DEFECTS. (Fourth Revision of PASC/C6-2)

Because of the interest in, and importance of, terminology on fabric defects, a round table (chaired by Uruguay) was held prior to formal discussions in the Seminar. All countries felt the defining of defects and the acceptance of standard terminology

by Latin America were fundamental to the future establishment of standards for grading cloth (whether gray or finished) and, as a final stage, specifications with standards and tolerances to aid in the acceptance of typical end-use cloths.

There was general dissatisfaction with Draft Recommendation 3 on the basis of its limited scope and its content. The latter was thought to be incomplete, to contain too many uncommon terms, to exclude essential terms, to be poorly arranged (neither by code nor alphabet), and to not have acceptable Spanish terminology.

After much discussion, agreement was reached on:

1. modifying the scope to include both gray and finished cloth (exclusive of knitted and special fabrics),
- and 2. grouping the defects according to the source of origin:

1. Spinning defects;
2. Preparation for weaving defects;
3. Weaving defects;
4. Dyeing and finishing defects;
5. Miscellaneous defects

This discussion was continued at two subsequent sessions of the Seminar, and agreement reached on:

1. The preparation of the revision in the form of a Draft Recommendation 4 to be passed on to the Technical Committee for study by each country represented in PASC/C6. This was thought necessary since the modification was so extensive and the difficulty of supplying all Spanish and Portuguese terms so great, that it would be impossible to complete such a project within the time of the Seminar.
2. Listing alphabetically, within each group, the technical names of defects, and identifying each name by a code number (to facilitate their use by industry).
3. Including in an Appendix two additional listings: one, an alphabetical arrangement of recommended names of defects and other terms similarly used; the other, an alphabetical listing of all terms, the numerical code for each, and the recommended name.

These listing are now in preparation.

4. Illustrating the defects by means of photographs to be included in the final Recommendation. Consideration was given to means of obtaining representative photographs: ASTM photographs of defects were thought too automatic and too different from defects encountered in South and Central American mills; it was suggested that suitable photographs could be made in the Engineering University (Lima) or in the various countries and then reproduced in Lima. Presumably, this matter will be resolved and acted upon by the Technical Committee of PASC.

Dates
Discussed

Recommendations: Modifications of: Action on

9/27, 28

PASC 6-022, CLOTH: HAND METHOD FOR DETERMINATION OF LENGTH.

The Recommendation as presented contained six procedures for measuring length, five of which (the drum, clock, and others) were thought impractical for use in Latin America.

Unanimous agreement established as a Pan-American standard, for commercial use, the "hand method" which does not require calibration, is accurate and "fool-proof." Included in the revised method is the requirement (similar to that in ASTM D 1910) that when other procedures are used, their accuracy must be checked against that of the hand method.

The approved Recommendation contains no requirement on conditioning, deleted because conditioning is not possible in most Latin American countries.

In further action, the Seminar recommended to the Technical Committee of PASC that a draft be developed for a "laboratory method to verify length", and that the new method include a requirement on conditioning.

9/30

PASC 6-023, CLOTHS: METHOD FOR DETERMINING WIDTH.

This Recommendation, as modified and approved, contains two major changes: 1. deletion of the requirement for conditioning; 2. inclusion (as given in Recommendation PASC 6-024) a new section on random sampling.

Dates
Discussed

Recommendations: Modifications of: Action on

9/30

PASC 6-025, METHOD FOR THE DETERMINATION OF WEIGHT PER SQUARE METER - METHOD OF THE SMALL SAMPLE.

Although there was much discussion on combining this Recommendation with Recommendation PASC 6-024 (Weight of Pieces, Rolls, or Bolts), agreement was reached on maintaining each separately for reasons of practicality, and because of the differences in requirements for conditioning.

This method, as approved, is for weight per square meter of a small sample exclusive of selvages; it requires conditioning in a standard atmosphere for testing; and states the significant figures to which results should be reported (lacking in the previous draft).

9/30; 10/3

PASC 6-024, CLOTH: METHOD FOR THE DETERMINATION OF WEIGHT OF PIECES, ROLLS, OR BOLTS.

The Spanish terminology was much discussed, in Spanish, but finally resolved and incorporated in the method.

In the approved Recommendation, the wording is more precise, the significant figures to which results are to be reported are added, and previously approved PASC Recommendations are added to the Appendix for reference.

10/2

PASC 6-001, TERMINOLOGY AND DEFINITIONS RELATIVE TO TEXTILE FIBERS AND PRODUCTS.

Draft Recommendation 3 (November 1962), although not on the agenda of the Seminar, was included by the Technical Committee at the request of the delegates because of the need for precise definitions and their basic importance in the writing of Pan-American standards. (The request was made on the opening day of the Seminar.)

As presented, the draft was a composite of terms for fibers, fabrics, processes, properties, and textile machinery. After much general discussion, it was agreed to delete terminology on machinery and types of fabrics and products which could later comprise other and separate Recommendations.

PASC 6-001 (Continued)

Following a detailed review of terms, their definition and suitability for inclusion in the proposed revision, further work was turned over to an Editorial Committee.

Consideration of this Recommendation continued by the Committee through October 4, but was not completed on conclusion of the Seminar. Upon completion of this preliminary PASC draft, the Recommendation was to be sent to the Technical Committee of PASC for review and comment (via the usual procedure) by the membership of PASC/C6.

SUMMARY: SECTION III

In this Section, 6 Recommendations were considered: 5 on the agenda, and 1 previously reviewed by the member countries of PASC. Of these, 4 were approved and 2 designated for further development. Those approved standardize the procedures for determining the length, width, and weight of fabrics. The 2 being developed are on terminology and definitions relating to fabric defects and to textile fibers and products. The importance of these standards to industry and to the development of acceptable Spanish terminology and precise definitions cannot be overemphasized either in the formulation of standards or in national and international use.

4.7 RELATED ACTIVITIES

Round-table Discussions

Six round-table discussions were conducted during the time of the Seminar, but were considered separate from it. They were held between or after the hours of the technical sessions. Time for them was available because of the expeditious manner in which the sessions progressed. The round tables were informal in character. They provided opportunities for an exchange of information on topics of general and specific interest, and for discussions of the areas thought to need standardizing activities.

The subjects of the round tables were:

"Textile Research at the University of Tennessee."
Dr. K. L. Hertel, United States, Speaker and Chairman.

* "Suggestions Relating to a Standardization Program of First Priority for Wool." Mr. E. Goyret, Uruguay, Chairman.

* "Inter-American Standardization of Textiles." Dr. R. Haour, Textile Expert of CEPAL, Guest Speaker and Chairman.

- * "Textile Education in the Americas." Mr. G. V. Soria, Chile, Chairman.
- "Terminology and Definitions Relating to Fabric Defects." Mr. E. Goyret, Uruguay, Chairman.
- * "Obtaining Fibrogram from Frequency-Length Histogram." Dr. K. L. Hertel, Speaker and Chairman.
- * Copies of the recorded discussions may be consulted at the National Bureau of Standards in Washington, D. C., the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

Visits to Factories

Scheduled visits were made to five huge and modern textile factories where excellent impressions were obtained on the plant layouts, practices, and manufacturing processes. Each mill was well equipped and staffed and had, it appeared, a greater number of mill workers and a larger stock of replacement parts than a mill of comparable size and activity in the United States. In each mill all stages of manufacture, from raw material through finished product, were observed. The versatility and importance of these rapidly expanding Peruvian industries were quite apparent from the tours of these facilities, and from conversations with the mill executives who were most hospitable and communicative.

The textile factories visited were:

La Victoria Factory of the United Companies (cotton)
Textil Algodonera S.A. Factory (cotton)
S.A. Universal Textil Factory (natural and man-made)
Cinsa Woolen Mills (llama, alpaca, and blends of these;
also alpaca-reworked wool blends)
Textil Maridina S.A. (nylon fish nets)

Meeting and Reception

The Director of the Seminar and delegates were guests at a meeting with the President and Board of the Society of Textile Industries of Peru on October 2. Addresses were made by the President and Professor Cabrerizo who spoke of the nature, expansion, and needs of the Latin American textile industries, and of the opportunities for economic growth afforded by the accomplishments of the present standardization activities of PASC in the textile field. An exchange of knowledge on national standardizing activities between members of the Board and delegates followed. An informal and most cordial reception concluded the meeting.

4.8 PROGRAM PROPOSED FOR 1964 MEETING OF PASC/C6

Several observations were made and confirmed by the delegates prior to a detailed discussion of the plans and agenda for the 1964 meeting of PASC Technical Committee 6 on Textiles. These are worthy of consideration:

1. That the priority of subjects selected for future standards be based upon the immediate needs of the textile industries of Latin America.
2. That the delegates chosen to attend these meetings be specialists qualified to participate in and lead discussions on the subjects scheduled.
3. That the member countries of PASC/C6, in the interim between meetings, provide the Secretariat (INANTIC) with material pertinent to the Recommendations being developed, so that preliminary work may be done, and minor points of difference resolved, well in advance of the meeting.
4. That the work of the meeting could be accomplished more efficiently, and in a shorter period of time, if it could be confined to only major points of discussion and actions on Recommendations.
5. That the member countries of PASC/C6 receive the agenda and Recommendations well in advance of the date set for the meeting, so that competent delegates may be chosen and time will be available for careful study of the Recommendations and preparation for the meeting.

There was general agreement that the Recommendations for the 1963 Seminar came too late for adequate study, and that changes in the agenda made so near the time of the Seminar required modifications of the work and travel plans of the delegates. The latter, it was felt, could, if repeated, prevent the attendance of some delegates.

6. That the form of the 1964 meeting be a seminar; that a period of 15 days would be reasonable and adequate; and that the meeting be held in Lima, Peru, or in Caracas, Venezuela.

During the initial discussion of areas where standards were needed, 55 subjects for Recommendations were proposed. At subsequent meetings these topics were discussed in detail, and the list condensed to 32 topics in five areas: 15 on fibers; 3 on threads and yarns; 12 on cloth; 1 on colorfastness nomenclature; 1 on statistical techniques.

Top priority was assigned to the development of Recommendations for wool, knitted fabrics, and the identification of textile fibers. A number of ASTM methods and several methods of the AATCC and ISO were considered pertinent to the preparation of drafts for these and the other Recommendations proposed.

Following are listed the subjects proposed for the 1964 agenda:

Fibers

1. Identification of Textile Fibers
2. Maturity and Weight per Unit Length of Cotton Fibers by the Causticaire Method
3. Number of Neps in Cotton Samples
4. Method of Determining the Moisture Content of Fibers
5. Method of Test for Determining the Foreign Matter in Cotton Fibers by Means of the Shirley Analyzer
6. Method of Test for the Elastic Properties of Fibers
7. Method of Test for Man-Made Fibers from Filament Yarns and Tows
8. Methods of Test for Man-Made Staple Fibers
9. Method of Test To Determine the Fineness of Wool Fibers
10. Method of Test To Determine the Length of Wool Fibers
11. Method of Test To Determine Vegetable Material in Wool
12. Method of Test To Determine the Effect of Laundering on Wool
13. Method of Test To Determine the Number of Neps in Wool
14. Method for the Classification of Wool
15. Method of Test To Determine Crimp in Wool

Yarns

1. Method of Test To Determine the Appearance of Yarns According to Standards
2. Method of Test To Determine the Strength and Elongation of Single Yarns and Yarns in Packages
3. Method of Test To Determine Irregularity of Yarns

Fabrics

1. Method of Test To Determine the Breaking Strength and Elongation of Cloth
2. Method of Test To Determine the Breaking Strength of Woven Cloth; Cut Strip Method
3. Method of Test To Determine the Breaking Strength of Woven Cloth; Ravel Strip Method
4. Method of Test To Determine the Diaphragm Bursting Strength of Fabrics of Low Resistance
5. Method of Test To Determine the Diaphragm Bursting Strength of Fabrics of High Resistance

6. Method of Test To Determine the Ball Bursting Strength of Cloth
7. Method of Test To Determine the Tearing Resistance of Cloth; Pendulum Method
8. Method of Test To Determine the Tearing Resistance of Cloth; Tongue Method
9. Method of Test To Determine the Shrinkage, Felting, and Relaxation of Wool Fabrics
10. Method of Test To Determine the Water Permeability of Cloth
11. Terminology and Definitions of Knitted Fabrics
12. Method of Test To Determine Yarn Count

Colorfastness

1. Nomenclature, Definitions, and General Principles of Colorfastness

Statistics

1. Statistical Techniques for Sampling and Evaluation of Results of Tests

4.9 CLOSING OF THE SEMINAR

The closing of the International Seminar on Textile Standards on October 4 was effected in three stages: a formal adjournment of the technical sessions at 12:00 Noon; a meeting "extraordinaire" at 6:30 P.M.; a reception by INANTIC at 7:30 P.M.

Formal Adjournment:

Professor Cabrerizo spoke of the innumerable problems solved in the preparation, developments, and achievements of this important Seminar; expressed satisfaction with its great accomplishments, realized because of the cooperation of all participants; and, for himself and Mr. Yermoli, congratulated the delegates for their good will, enthusiasm, and hard work. Commendations were extended to the Chairmen of the Sections for their excellent conduct of meetings, and to the secretaries, and members of the Editorial Committee.

The delegates were informed that a report of the accomplishments of the Seminar would be transmitted to the General Secretariat of PASC, to the Organization of American States, and to organizations representing the member countries of PASC.

Mrs. Susana de Carrillo, retiring chairman of the third section of the Seminar, thanked the delegates for their wonderful collaboration and labors to which the success of the Seminar was due.

In response, members of the United States, Central and South American Delegations complimented Professor Cabrerizo, Mrs. de Carrillo, and Mr. Yermoli on the preparation, conduct, and achievements of the Seminar; thanked them for their hospitality; and commented upon the atmosphere and spirit in which the Seminar was conducted. All commented with pleasure upon its great success.

The Delegation expressed sincere congratulations to the staff of INANTIC for the excellent and expeditious manner in which they had performed the hard and complex work demanded by the Seminar.

The Peruvian press was commended for its valuable work in disseminating information on the purposes, importance and accomplishments of the Seminar.

Following these actions, and the affixing of signatures to the minutes of the day, the technical sessions of the Seminar were declared officially closed.

Meeting "Extraordinaire":

This meeting was in a decidedly light mood and came as a surprise to the delegates who knew nothing in advance, although they had speculated, of its purpose.

Professor Cabrerizo called the meeting to order and then read a letter to be sent to Mr. Yermoli, Camp Director of OAS, telling him of the successful termination of the Seminar, and thanking him for his accomplishments toward its success. To it the delegates affixed their signatures.

Professor Cabrerizo then made a clever and charming speech to which Mr. Rutemberg replied in like manner for the Delegation. These served as an introduction to a very amusing document presented to each delegate, a parody titled "Seminary: Method of Conclusion." This unique document was in the form of a PASC Standard, the section on "specimens" consisting of humorous characterizations of the delegates as observed by the authors, Professor Cabrerizo and Mr. Rutemberg.

After considerable hilarity and friendly "ribbing", this extraordinary meeting was adjourned.

A copy of this entertaining document may be read at the National Bureau of Standards in Washington, D. C., at the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

Reception by INANTIC:

Against a background of the flags of all the member countries of PASC, guests at the reception were greeted by Professor Cabrerizo, Director of INANTIC, Mrs. de Carrillo, and other members of the INANTIC staff.

Guests at the reception included Ing. Mario Samane Boggio, Rector of the National Engineering University and President of the National Standards Commission; Mr. Jorge Ferrand, First Vice-President of the National Industries Society; the President of the Society of Textile Industries; executives of the Peruvian textile industries: Mr. A. J. Celemins of Fabrica de Tejidos "La Union"; Mr. M. A. Cerezales Carvo of Camara Algodonera del Peru; Mr. A. E. Holtig, Editor of "Peru Textil"; and delegates from the United States, Central and South America.

Professor Cabrerizo addressed the group. He expressed appreciation for the understanding and support given to the first Seminar on Textile Standards for Latin America; summarized the achievements of the Seminar, and emphasized the importance of the resultant standards to the economic growth of Latin America on both national and international levels. He praised the delegates for their fine spirit of friendliness and cooperation manifested throughout the Seminar, and thanked them for their knowledge, splendid collaboration, and contributions to the success of the Seminar.

Following excellent addresses by guests from the University of Engineering and the National Industries Societies, Mr. Jorge Rutenberg, Delegate from Venezuela, spoke for the delegates: their appreciation of the good will, understanding, and collaboration of official Peruvian entities; the hospitality and contributions of the Director and staff of INANTIC; and the gratification of all delegates in having participated in standardizing activities of such importance to the economy of each country in our hemisphere.

The sociability which concluded the evening was most agreeable and included the enjoyment of such gourmet delights as the national beverages and delectable Peruvian hors d'oeuvres.

Truly, this was an evening to be added, in memory, to the numerous pleasant experiences shared by all delegates to the Seminar.

A.L.C. VALDES!

To those who will long be remembered with pleasure and nostalgia for a wonderful, constructive, and rewarding experience:

INANTIC, for its dedicated and long hours of work; its cordiality; the salubrious atmosphere in which the Seminar was conducted; and for the wonderful Sunday sightseeing trips which showed the beauty and fascination of Peru, its people and customs.

PROFESSOR CABRERIZO, for his detailed and excellent preparation for the Seminar; his dynamic direction of its activities; his hospitality, energy, and warmth which reached out to each of us.

MR. YERMOLI, for his congenial presence; clarification of procedural technicalities; and his contributions to the success of the Seminar.

MRS. DE CARRILLO, for her energetic labors in all phases of the Seminar; her friendship; and constant good cheer.

THE DELEGATES, for their many Spanish translations; their friendship; and the understanding of our many mutual interests - personal, national, and international.

4.11 RECOMMENDATIONS

1. That the dates set for meetings or seminars of PASC/C6 be known months in advance so that ample time will be available to obtain competent technical representatives from industry and government as official delegates.
2. That all delegates be technically competent, and that each be carefully chosen to assure that his (or her) conduct be above reproach.
3. That industry be encouraged to send to the meetings of PASC/C6 experts in the areas selected as topics for discussion.
4. That technical papers and standards in the areas scheduled for future programs of PASC/C6 be submitted to the Secretariat of Technical Committee 6 for reference in the development of new Recommendations; that provision be made for the translation into Spanish of these papers so that both English and Spanish versions will be available for consideration.
5. To participate in the 1964 meeting or seminar of PASC/C6 and to provide, as official delegates, technically competent personnel capable of leading discussions on the subjects being considered.

4.12 APPENDIX

4.12.1 AGENDA OF THE INTERNATIONAL SEMINAR ON TEXTILE PRODUCTS
HELD FROM SEPTEMBER 1 TO OCTOBER 5, 1963 IN LIMA, PERU.
Project 207 - OAS.

	<u>Sept.</u>	<u>1. COLORFASTNESS OF TEXTILES</u>	
Monday (Morning)	2	Installation and opening of work sessions	
Monday (Afternoon)	2	PASC/C6-20	Discussion of Recommendation - Gray Scale for Evaluating Staining.
		PASC/C6-21	Discussion of Recommendation - Gray Scale for Evaluating Changes in Color.
Tuesday	3	PASC/C6-14	Discussion of Recommendation - Method of Test to Determine the Color-fastness to Water.
		PASC/C6-15	Discussion of Recommendation - Method of Test To Determine the Color-fastness to Chlorine Bleach; Cellulose Fibers.
Wednesday	4	PASC/C6-16	Discussion of Recommendation - Method of Test To Determine the Color-fastness to Daylight.
Thursday	5	PASC/C6-17	Discussion of Recommendation - Method of Test To Determine the Color-fastness to Sunlight.
Friday	6	PASC/C6-18	Discussion of Recommendation - Method of Test To Determine the Color-fastness to Laundering: Accelerated Domestic and Commercial Laundering.
Saturday	7	PASC/C6-19	Discussion of Recommendation - AATCC Chart for Measuring Transference of Color.
<u>2. TEXTILE FIBERS AND YARNS</u>			
Monday	9	PASC/C6-9	Discussion of Recommendation - Sampling Cotton Fibers for Testing.
		PASC/C6-26	Discussion of Recommendation - Method of Test To Determine the Strength of Cotton Fiber.
Tuesday	10	PASC/C6-28	Discussion of Recommendation - Method of Test To Determine the Length of Cotton Fiber Using the Fibrograph.

Sept.

2. TEXTILE FIBERS AND YARNS (Continued)

Wednesday (Morning)	11	PASC/C6-27	Discussion of Recommendation - Method of Test To Determine the Fineness of Cotton Fiber Using the Micronaire.
		PASC/C6-29 (New)	Method of Test for the Determination of Cotton Fiber Length by Means of Comb Sorter
Wednesday (Afternoon)	11	PASC/C6-10	Discussion of Recommendation - Evaluation of Cotton Fiber Tests According to Commercial Resistance, Fineness, and Width.
Thursday (Morning)	12	VISIT TO FACTORY	
Thursday (Afternoon)	12	PASC/C6-12	Discussion of Recommendation - Method of Test To Determine the Twist of Yarn.
Friday	13		"
Saturday	14		"
Monday	16	PASC/C6-13	Discussion of Recommendation - Method of Test To Determine the Linear Density of Yarn in Hanks - Skein Method
Tuesday	17		"
Wednesday (Morning)	18		"
Wednesday (Afternoon)	18	VISIT TO FACTORY	
Thursday	19	PASC/C6-11	Discussion of Recommendation - The Tex
Friday	20	"	System To Designate Linear Density of
Saturday	21	"	Fibers, Yarns, Yarn Intermediates and Other Textile Materials.
Monday	23	POSSIBLE VISIT TO CUZCO; ROUND-TABLES; EDITORIAL	
Tuesday	24	COMMITTEE MEETINGS	

3. FABRICS

Wednesday	25	PASC/C6-2	Discussion of Recommendation -
Thursday	26	"	Terminology and Definitions Relating
Friday	27	"	to Fabric Defects
Saturday	28	PASC/C6-22	Discussion of Recommendation - Length of Fabric.

3. FABRICS

Monday	30	PASC/C6-23	Discussion of Recommendation - Width of Fabric.
--------	----	------------	---

Oct.

Tuesday	1	PASC/C6-24	Discussion of Recommendation - Weight of Fabric: Piece, Roll and Half-Piece Method.
---------	---	------------	---

Wednesday 2 VISIT TO FACTORY
(Morning)

Wednesday (Afternoon)	2	PASC/C6-1 (Added to agenda)	Terminology and Definitions Relative to Textile Fibers and Products
--------------------------	---	-----------------------------------	--

Thursday 3 PASC/C6-25 Discussion of Recommendation - Weight of Fabric: Small Sample Method.

Friday 4 FINAL REVISION OF WORK DONE; EXCHANGE OF OPINIONS
ON THE TOPICS FOR THE NEXT SEMINAR ON TEXTILES.

Saturday 5 CLOSURE

4.12.2 REFERENCED DOCUMENTS, SPEECHES, ROUND-TABLE DISCUSSIONS,
OTHER PAPERS:

Copies of these may be consulted at the National Bureau of Standards in Washington, D. C., the American Standards Association, Inc. in New York City, or in the offices of the national organizations representing the member countries of PASC.

ADDRESSES AT THE FORMAL INAUGURATION OF THE SEMINAR, MADE BY:

Ing. Juan V. Cabrerizo, Program Director of the Pan-American Seminar on Textile Technical Standards

Ing. Arturo Yermoli, OAS Delegate and Camp Director of the Pan-American Standards Seminar, OAS Project 207.

Mr. Jorge Ferrand, First Vice-President of the National Industries Society, representing that entity.

Ing. Felix Von Ranke, Brazilian Delegate, in representation of the foreign delegates attending the PASC Textile Seminar.

Ing. Mario Samame Boggio, Rector of the National Engineering University, and President of the National Standards Commission.

Note: The above addresses are in English.

APPENDIX (Continued)

BY-LAWS OF SEMINARS ON STANDARDIZATION UNDER PROJECT NO. 207 OF
THE TECHNICAL COORDINATION PROGRAM OF THE OEA. (In Spanish)

MINUTES OF SEMINAR MEETINGS. (In English)

ROUND-TABLE DISCUSSIONS:

Suggestions Relating to a Standardization Program of First
Priority on Wool. (In English)

Inter-American Standardization of Textiles. (In Spanish)

Textile Education in the Americas. (In English)

Obtaining Fibrogram from Frequency-Length Histogram. (In English)

ADDRESSES AT RECEPTION CLOSING THE SEMINAR, MADE BY:

Ing. Juan V. Cabrerizo, Program Director. (In Spanish)

Mr. Jorge Rutemberg, Spokesman for the Delegates. (In Spanish)

SEMINARY: METHOD OF CONCLUSION - A Parody. (In English)

