

MINUTES OF THE ANNUAL MEETING

of the

FRICION MATERIALS STANDARDS INSTITUTE, INC.

Wednesday and Thursday June 25 and 26, 1980

at

The Homestead, Hot Springs, Virginia

MEMBERS PRESENT

Abex Corporation
Bendix Corporation
Brassbestos Manufacturing Company
Delco-Moraine Division-General Motors Corp.
Lear-Siegler Company
Nuturn Corporation
P. T. Brake Lining Company
H. K. Porter Company
Raybestos-Manhattan, Inc.
Reddaway Manufacturing Company
Thiokol Chemical Corporation
S. K. Wellman Corporation
Wheeling Brake Block Company

OTHERS PRESENT

Bendix Corporation

Delco-Moraine Division (Retired)
Frenos-Venezolanos (Regional Member)
H. Krasne Manufacturing Company
Lear Siegler Company
Nuturn Corporation
P. T. Brake Lining Company

H. K. Porter Company
Reddaway Manufacturing Company
Wheeling Brake Block Company

Asbestos Information Association
Legal Counsel
Friction Materials Standards Institute, Inc.

REPRESENTATIVES

Robert E. Nelson
Francis E. Messier, Vice President
William Simon
Fred Yost (Proxy D. L. Emrick)
Robert Anderson
Joseph W. Greenen
Stuart Comins
W. Max Sleeth
David E. Cunningham
John M. Moore
John P. Gallagher
Gordon A. Carrigan, President
Lee Burgess

James W. Armstrong
Thomas Hernon
Ross E. Kettering
Georg Moser
William Osborn
Robert Mighton
James L. Mellow
Steve Doyle
Ben Kublin
George J. Bohrer
F. William Barton
Burgess L. Burgess
George Stratton
Bob J. Pigg (Guest)
Robert P. Gorman, Esquire
Edward W. Drislane, Secretary

Mr. Carrigan, President, called the meeting to order at 1:35 P.M.

MINUTES OF MEETINGS OF JUNE 13-14, 1979

The minutes of the Membership Meetings held June 13-14, 1979 had been distributed. No corrections were suggested.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: That the minutes of the June 13-14, 1979 Meeting be accepted as written.

PRESIDENT'S REPORT

Mr. Carrigan, President, read this report. Refer to EXHIBIT 1.

Mr. Carrigan discussed the changes which took place after Mr. Moalli's and Mr. Cutler's resignations. He noted the work that Mr. Moalli did during his time in office, the loss of Mr. Doug Ogilvie and Mr. Jack Black, and other subjects that would be discussed at this Annual Meeting.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the President's report as written.

BOARD OF DIRECTORS ACTIVITIES

The following is a report on activities of the Board of Directors since the last Membership Meeting in June 1979.

The Board of Directors elected Officers for the 1979-80 fiscal year. Mr. Ronald R. Moalli of Raybestos-Manhattan was elected President. Mr. Ronald L. Cutler of Abex Corporation was elected Vice President. Mr. William F. Messier of the Bendix Corporation was elected Treasurer. Mr. Edward W. Drislane of the Institute was elected Secretary.

The new Board approved retention of Counsel and Auditors for the 1979-80 fiscal year. They approved the recommended budget of \$96,410 and the new fee formula for the 1979-80 fiscal year. By mail ballot, the Directors approved wording of a trust agreement for direct pension payments to Miss Duschek. This wording of the trust agreement had earlier been prepared by Counsel. The Directors concurred in not recommending revisions to the Institute's Constitution and By-Laws to broaden the eligibility requirements for Licensees. The Board approved the name change of the Asbestos Study Committee to the Health and Environmental Affairs Committee. They also approved a new charter recommended by the Chairman for this Committee.

The Board of Directors held a special meeting on December 4, 1979 in Saddle Brook, New Jersey. At this meeting the Board reviewed EPA proposals for controlling asbestos products as announced in their Advance Notice of Proposed Rule-making of October 17, 1979. In particular, they reviewed eleven questions by the EPA's Office of Toxic Substances concerning uses of asbestos and non-asbestos friction materials. The Directors agreed that the Institute and its Committee should work with the Asbestos Information Association as regards Office of Toxic Substances requests for information on voluntary training and labelling programs. They directed that a Task Force be organized to meet with the EPA and review the questions which EPA had suggested on asbestos and non-asbestos friction materials. The Directors approved a response to EPA on the allegations concerning high-exposure for brake repair workers. This response had earlier been drafted by the Health and Environmental Affairs Committee. The Directors asked that the Institute Office contact non-member manufacturers of friction materials asking for

their consideration of Membership in the Institute. The Board resolved that the Institute would not include information on use of metallic or other formula materials in its catalogs.

After the meeting, the Directors were notified of the intention of Mr. J. W. Greenen to resign as a Director. Subsequent to Mr. Greenen's resignation, Mr. Ronald L. Cutler who had served as Vice President and as a Director of the Institute resigned his position upon leaving Abex Corporation. In February 1980, Mr. Ronald R. Moalli, President of the Institute, and a Director resigned after his resignation from Raybestos-Manhattan, Inc.

With these resignations of Institute Officers and Directors, a special meeting of the Board of Directors was called for February 25, 1980, and was held in Southfield, Michigan. As one of the first items at this meeting the remaining Board members voted to return Mr. J. W. Greenen to the Board of Directors. The Board of Directors then elected the following as Officers to serve until June 30, 1980:

Mr. Gordon A. Carrigan	S. K. Wellman Corporation	President
Mr. Francis E. Messier	Bendix Corporation	Vice President
Mr. William F. Messier	Bendix Corporation	Treasurer
Mr. Edward W. Drislane	Friction Materials	Secretary
	Standards INstitute	

The Directors reviewed other problems at that meeting and recommended that a guest knowledgeable in the area of asbestos and asbestos regulations be invited to address our June Meeting.

During the 1979-80 fiscal year, the Board of Directors took several actions as regards new members in the Institute. The Board of Directors voted to accept the Licensee applications filed by Kashiya Press Industry Co., Inc. of Japan and Toledo Pressed Steel Company of Toledo, Ohio. In addition, the Board recommended that the Membership accept the applications filed by H. Krasne Manufacturing Company of Los Angeles, California for Active Membership, and Ferodo (Pty.) Limited of South Africa as a Regional Member of the Institute.

At the Board of Directors Meeting on June 25, 1980, the Board approved the minutes of the meeting held February 25, 1980. They approved the President's Report and the Membership Committee Report. They voted to terminate the Membership of Friction Materials Corporation of Dimona, Israel and Borg & Beck de Mexico of Mexico City for non-payment of the Annual Fee. At the meeting, they approved the Treasurer's Report, the report of the Investment Advisory Committee, and that of the Fee Formula Committee. They voted to retain the same fee formula for 1980-81 as had been used in 1979-80. The Directors reviewed category reporting by Regional Members using the Institute's copyrights and trademarks for marketing their products in the United States, and asked that Fras-Le re-declare their categories to include both Brake Blocks and Clutch Facings. While approving the report of the Public Relations Committee, the Board directed the Chairman of that Committee to recommend means for better informing the Members on public relations releases that are published by the media.

In reviewing the report of the Chairman of the Data Book and Technical Committee, the Board asked the Committee to clarify or correct their use of the term "hybrid" when referring to disc brake sets using integrally molded linings at one position with either bonded or riveted linings at the other.

They voted to discontinue publication of the EDP Numbers in Institute catalogs. The Directors considered the need for informing Members on original equipment use of metallic linings--with the semi-mets now used on disc brakes--and resolved that the Institute would inform the Membership on usage by bulletins, but would not list this information in its catalogs. It would be up to the individual manufacturer to decide on coverage and distribution of application information to the field. The Board of Directors approved the Data Book and Technical Committee report.

The Directors reviewed the report of the Health and Environmental Affairs Committee (formerly the Asbestos Study Committee). The Chairman reported that the EPA is aiming for a ban on asbestos in disc brake linings by 1985, and that the hazardous waste disposal regulations issued under the Resource Conservation and Recovery Act (RCRA) will be effective on November 19, 1980. The Directors directed that the Institute Office and Committee improve information flow to Delegates and Alternates. The Board approved the report of the Health and Environmental Affairs Committee.

The Board reviewed the report of the Brake Performance Study Committee and approved that report. While the Directors received the report on the Annual Meeting, they decided to return in 1981 to the Homestead, Hot Springs, Virginia. With that major exception, they accepted the report of the Annual Meeting Committee.

The Board of Directors voted to terminate the Defined Benefit Pension Plan for Institute Employees, and replace it with contributions to a Simplified Employee Pension Plan (SEP) using Individual Retirement Accounts (IRA). The Board voted to authorize negotiations by the Secretary with the Landlord on the lease of Office Space at the Bergen Mall Office Center. The Board approved a plan for Indemnification of Officers and Directors for action taken in their capacity as Officers and Directors, and recommended its submission to the Membership in the form of an amendment to the Institute's By-Laws.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report on Board of Directors activities as read.

HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE

Mr. James Armstrong, Chairman of the Health and Environmental Affairs Committee read this report. Refer to EXHIBIT 9.

The Chairman summarized activities by Federal regulatory agencies such as EPA in Toxic Substances Control and Hazardous Waste Management, OSHA with its workplace standards and the NIOSH recommendations, the status of legislative activity relative to an asbestos hazards compensation act, and general Institute activities and replies and contacts with the EPA. He indicated that EPA was apparently aiming at a ban on asbestos in disc brake linings by 1985. In discussing the hazardous waste disposal regulations that were published in the Federal Register on May 19, 1980, with effective date of November 19, 1980, questions were asked relative to the exemption for generators of less than 1,000 kilograms (2,200 pounds) per month of hazardous waste. There is a question as to whether the identification of

asbestos as a hazardous waste in the May 19 notice included friction materials waste which is only part asbestos. In discussing this less than 2,200 pound exemption it was indicated that the small rebuilder will be exempted, but that if friction materials waste (used linings, drillings, and other dust) is considered a hazardous waste and goes over the 2,200 pound exemption level at larger rebuilders, they would be required to complete manifests and other compliance reports required by the regulations.

As regards the OSHA requirements in the work place, where the exposure limit for the 8 hour TWA is now 2 fibers per cc, this could go to 0.1, 0.2, 0.5, or 1.0 fibers per cc. There is little question but that OSHA will propose lowering the present 2 fiber per cc exposure limit. Any OSHA requirements will be in the exposure limits as well as in peripheral requirements such as medical exams, notification of workers, records and the like. If a ban were proposed, it would come from EPA, under the Toxic Substances Control Act (TSCA). Questions were asked concerning lead times if EPA proposed a ban. The Chairman suggested that if EPA were to attempt banning asbestos in commercial products, they might do this either of two ways: (1) Ban a product by product line--such as all disc brake linings; (2) Call for a reduction in asbestos use across the product line--such as from 50% to 30%. While EPA claims that the technology exists for banning the use of asbestos in disc brake linings, they may target 1982 for a ban, but it would more likely be 1984-85.

Questions arose on the possibly lower OSHA exposure limits. If the levels were reduced to 0.5 or 0.1 fibers per cc, how could these levels be measured? One approach would be to study the error that exists in the current optical microscopy techniques, and attempt to reduce these errors. The other approach could be the move to electron microscopy, which had been tried by the Department of Labor in California--this is expensive equipment and the counts will be considerably more expensive than with the optical methods.

At this point, a Member stated that his Plant had been cited for asbestos pollution by the EPA. In response to a question, he indicated that he was in EPA's Chicago Region. The fine that he faces could amount to \$25,000 a day since the date of alleged non-compliance. He indicated that at the alleged area of non-compliance that one could not find a "thimble-full" of asbestos dust. Another Member indicated that compliance is difficult. The only way one can prove compliance is by special monitoring, soil boring, and the like. The EPA monitors with a "black box," and where EPA is wrong one must refute EPA's allegations technically.

The Member indicated that he would be in court with the EPA on June 30, 1980, and that if the EPA were to be sustained, he could be shut down. The EPA can make allegations of asbestos pollution of the environment from soil counts, or from tests showing leaching of asbestos into streams. Another Member indicated that they had refuted such allegations by making analyses of water upstream from the factory. It was suggested that a manufacturer's insurance carrier may have technical expertise to help in such cases, or at minimum be able to recommend outside consultants who would have this expertise.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Health and Environment Affairs Committee as written.

MR. BOB PIGG, ASBESTOS INFORMATION ASSOCIATION - GUEST SPEAKER

Mr. Gordon Carrigan, President, introduced Mr. Bob Pigg, the Institute's Guest Speaker for this Meeting. Mr. Pigg has served as Executive Director of the Asbestos Information Association, N.A. since September 1978, having earlier served as Administrative Assistant at the Association since 1974.

Mr. Pigg's remarks were prepared for this Meeting, and were a fresh update on what has happened, what is currently in the works, and what he foresees for the future. (A copy of Mr. Pigg's talk to the Membership was subsequently distributed to the Membership). He discussed the last ten years of regulation, with particular emphasis on those Agencies impacting the friction materials industry--OSHA and EPA. Noted were OSHA's recent rule on access to exposure and medical records, a new asbestos alert campaign, and the OSHA plans for revision of the workplace standards. Mr. Pigg stated that an advance notice of proposed rulemaking will probably be issued this Summer, with a final rule scheduled for later in 1981. It will undoubtedly call for a lower exposure limit than the current 2 fibers per cc.

In reviewing EPA activity, he noted that asbestos was the first substance to be regulated under the Toxic Substances Control Act (TSCA), and that this statute had more teeth than any other statute regulating industry. It was noted that EPA is considering several control options, but that his information indicated that EPA may avoid regulating individual products, and may more likely restrict the quantity of asbestos which may be mined or imported.

In Mr. Pigg's review of the regulations to be effective November 19, 1980, under the Resource Conservation and Recovery Act (RCRA), he particularly commented on the definitions of hazardous waste. He noted that asbestos was not listed as a hazardous waste in the proposal of December 1978, but that it was listed in the regulations published on May 19, 1980. Mr. Pigg indicated that the substances listed as toxic wastes are "commercial chemical products or manufacturing intermediates." He stated that the Office of Solid Waste (OSW) interprets this to include asbestos only as a "pure" material, and that this would not include manufacturing process waste that contains asbestos.

Mr. Pigg mentioned other actions now under study or planned by either the Congress or various State legislatures. These included such areas as compensation, asbestos in the schools, labelling and the like. And Mr. Pigg noted the on-going response that his Association has made to Federal and State initiatives in the asbestos area.

Mr. Pigg was questioned on the interpretation that only "pure" asbestos would be considered a hazardous waste in line with the regulations issued on May 19, 1980. Mr. Pigg cited statements by officials of the Office of Solid Waste (OSW), and in particular the "Comment" in Federal Register notice of May 19, 1980, Page 33,124, Section 261.33. The wording reads:

The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in.." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use. It does not refer to a material, such as a manufacturing process waste, that contains substances listed in.."

In the discussion that followed Mr. Pigg's talk, he noted that the Asbestos Information Association would be holding their Annual Industry-Government Conference again this September, and that Institute Members would be invited. Mr. Pigg advised that the Hart Bill on Asbestos Compensation was introduced on June 18, 1980. This pertains to the sharing of the liability for asbestos related disabilities by the "responsible parties." This has just been introduced, and it is felt that it has little chance of being enacted in its current form during this session.

One Member mentioned that in some mining applications where asbestos friction materials had been replaced with metallic materials, there was a reaction against the metallics because of sparks and attendant explosion danger.

On another subject, one Member stated that his Company was now labelling all friction products with the asbestos warning label whether additional machining or handling was likely or not. In response to a question, the Secretary advised that he would have copies of Mr. Pigg's comments out to the Membership "soon." (The copies were sent to the Membership on June 30, 1980).

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To thank Mr. Pigg for his detailed and interesting summary on the current status and future prospects of legislative and regulatory actions affecting the asbestos industry.

TREASURER'S REPORT

Mr. William Messier, Treasurer, prepared this report. Refer to EXHIBIT 3. The Secretary read Mr. Messier's report.

Mr. Messier's report, based on a trial balance of April 30, 1980, projected substantial excess of income over expenses for the full fiscal year. The projection was for an excess of \$17,000 of income over expenses. His report analyzed variances, with the most significant difference being the decrease in Pension Expense resulting from pension payments being made from a separate Trust rather than from the Corporation. To accomplish this change, \$55,000 was transferred on January 1, 1980 to an irrevocable trust for Miss Duschek's pension.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Treasurer's Report as written.

BUDGET COMMITTEE REPORT

Mr. Francis E. Messier, Chairman of the Budget Committee, presented this report. Please refer to EXHIBIT 5.

Mr. Messier's report presented an Expense Budget for 1980-81 of \$95,470, a slight reduction in budgeted expenses under that for 1979-80. This was due to the fact that pension payments to Miss Duschek would be paid from

the separate Trust which was established on January 1, 1980 for those payments. This dropped the Pension Expense item from \$6,000 to zero. Other line items in the budget showed either small increases--such as Salaries and salary related-items--with most items projecting the same or only slightly higher amounts for 1980-81 over those for 1979-80.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Budget Committee as written.

FEE FORMULA COMMITTEE REPORT

Mr. Greenen, Chairman, presented his Committee's report. Refer to EXHIBIT 6.

The report indicated categories reported by the Members for 1980-81. Active Members had 20 Basic Fees, and 36 Categories. Eight Regional Members marketing products in the United States market using the Institute's copyrights and trademarks reported 9 Categories. With the other Memberships (2 Regional Associations, 10 Regional Members--regular, and 12 Licensees), the current formula projected Fee Income of \$89,600 for 1980-81. This coupled with projected Investment Income of \$12,500, would produce an excess of income over expenses of about \$6,000, based on the Expense Budget.

At the Board Meeting on June 24, 1980, it was noted that the category participation by Don International and Colfriccion were reversed. Don participates in 2 categories and Colfriccion in one. At the Board meeting, the Secretary was directed to contact Fras-Le, as there is considerable evidence indicating their participation in two categories in the United States.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Fee Formula Committee Report as written.

The fee formula for 1980-81 will remain the same as in 1979-80, based on the Directors resolution at the June 24, 1980 meeting:

Active Member - Basic Fee \$1,150; Category \$700
Regional Member with Active Member rights - same
fee as Active Member
Regional Member (Regular) - \$1,450
Regional Member Association - \$2,400
Licensee - \$550

INVESTMENT ADVISORY COMMITTEE REPORT

Mr. William Simon, Chairman, delivered the report for the Investment Advisory Committee. See EXHIBIT 4.

The Chairman reported that there would be a net reduction in investments of about \$43,000 based on projections to June 30, 1980. This was attributable primarily to the \$55,000 contribution to the Trust for payment of Miss Duschek's pension. Investment Income would be down from about \$13,700 to

\$12,400. Investment Income for 1980-81 is estimated to be approximately \$12,500.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Investment Advisory Committee report as written.

MEMBERSHIP COMMITTEE REPORT

Mr. Carrigan had served as Chairman of the Membership Committee, and because of the many changes during the past year, continued with these responsibilities after assuming the Presidency. See the Membership Committee Report, EXHIBIT 2.

Mr. Carrigan reported on the changes in membership during the year, which showed a net increase in Active Members of 1 (Krasne), a net loss in Regionals of 1 (Add Ferodo Ltd., Lose Friction Materials of Israel and Borg & Beck de Mexico), and net increase of 2 in Licensees (Add Kashiyama and Toledo Pressed Steel).

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Membership Committee as written.

PUBLIC RELATIONS COMMITTEE REPORT

Mr. William Simon, Chairman, reported on Public Relations activity during 1979-80. Refer to EXHIBIT 12.

Mr. Simon pointed to this past year's changes with elections of Officers in June 1979 followed by the February 1980 elections, after the resignations of Mr. Moalli and Mr. Cutler, and the attendant press releases.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Public Relations Committee as written.

INSTITUTE DEVELOPMENT COMMITTEE

The President called for a report on the Institute Development Committee. Mr. Drislane advised that this Committee had been chaired by Mr. Ron Cutler of Abex. With Mr. Cutler's resignation, this committee had not been re-organized. The only activity assigned this Committee was the study of a possible redrafting of our Constitution and By-Laws to permit Licensee type Membership by non-manufacturers. This is illustrated by a shoe exchange house such as World Autoparts. The Committee decided not to make any recommendations on such a change.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Secretary's verbal report on activities of the Institute Development Committee for the past year.

NOMINATING COMMITTEE REPORT

Mr. James Mellow, Chairman of the Nominating Committee, read this report. In summary, of seven Directors serving the Board, one Director continues to serve the remainder of his two year term, Mr. F. E. Messier. There are six openings on the Board. Two of the positions are to serve one year terms, until June 1981. Four of the terms will be two year terms, to be served until June 1982. The Committee placed in nomination the following:

Mr. R. E. Nelson, Abex Corporation	2 years to June 1982
Mr. J. L. Mellow, Nuturn Corporation	2 years to June 1982
Mr. Stuart Comins, P. T. Brake Lining	2 years to June 1982
Mr. F. W. Barton, Reddaway Manufacturing	2 years to June 1982
Mr. W. Simon, Brassbestos Manufacturing	1 year to June 1981
Mr. J. P. Gallagher, Thiokol Chemical	1 year to June 1981

At this point, the President called for a recess so that others could consider placing additional names in nomination from the floor.

Upon resumption of the meeting, the President called for nominations from the floor. None were made.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: That nominations for the Board of Directors be closed.

The Secretary was directed to cast one ballot each for the election of Mr. R. E. Nelson, Mr. J. L. Mellow, Mr. Stuart Comins, Mr. F. W. Barton, Mr. W. Simon and Mr. J. P. Gallagher to the Board of Directors. The Secretary advised that the ballots had been so cast.

The President advised that with the election of these six Directors for the terms above indicated, and the carryover of Mr. F. E. Messier as a Director, that the Board now had the required 7 members.

HISTORICAL SALES REPORTING

The Secretary reported on historical sales reporting for the calendar year ended December 31, 1979. See EXHIBIT 13.

The report indicated that 15 out of 19 Active Members reported statistics at least once during 1979, and that three Regional Members with rights of Active Members reported. There were no comments on the report.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of Historical Sales Reporting as written.

ANNUAL MEETING COMMITTEE REPORT

Mr. J. M. Moore of Reddaway is Chairman of the Annual Meeting Committee, and read this report. Refer to EXHIBIT 14.

Essentially, Mr. Moore's report recommended that the Institute not return to the Homestead in 1981, but rather go to Sandpiper Bay, in Port St. Lucie, Florida. Before reading the report, Mr. Moore stated that the report was now moot, as he understood the Board had earlier decided to return to the Homestead in 1981. The Directors had rejected Sandpiper Bay not because of the resort area itself, but because they did not wish to meet in Florida in June--the heat, humidity, etc. A Member indicated that the East Coast of Florida (Port St. Lucie) is not as hot and humid as the Gulf Coast (Innisbrook).

The Chairman suggested a search for possible other places for the 1982 meeting. He mentioned particularly Shangri-La, in the Tulsa, Oklahoma area. He indicated this had fine golfing, and is a widely known resort meeting place in that area. Another Member stated that he did not like out-of-the-way places such as the Homestead, and would prefer something nearer a major airport. A suggestion was made that the Committee look at the possibility of meeting in Ontario, Canada. It would have good airport accessibility and there should be no weather problems in June.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Annual Meeting Committee, with exception that the Institute would return to the Homestead in 1981.

BRAKE PERFORMANCE STUDY COMMITTEE

Mr. Robert Nelson of Abex is Chairman of the Brake Performance Study Committee. Mr. Nelson presented this report. Refer to EXHIBIT 7.

Mr. Nelson discussed the Institute's work with the Vehicle Equipment Safety Commission (VESC) relative to revision of the V-3 Procedure. The revision dealt primarily with the edge code, and a possible problem with the minimum 1/8" edge coding height, should new lining releases go below 1/8" in thickness. The Institute had called this to the attention of VESC. With this and some other considerations, VESC proposed revision to the V-3 Procedure. The Institute was represented at a Washington hearing by the Secretary, and the proposed changes to V-3 were in line with earlier recommendations. The Institute advised VESC that it was in accord with the changes as drafted after the January 1980 hearings.

The Institute continued its work with the Defense Construction Supply Center (DCSC) as regards revision to the Federal Specification for brake lining procurement HHL-361. The DCSC is recommending a procedure based on the V-3 (SAE J661a) Procedure. This was in accord with FMSI recommendations after DCSC had earlier proposed procedures based on full inertia dynamometer procedures. This has been under review for several years, and the Institute has maintained contact with DCSC and there should be no surprises in this area.

In a review of NHTSA activity, there does not appear to be any significant movement as regards a Federal Replacement Brake Lining Standard, and other NHTSA activities on DOT 121, 105, and 130 do not impact our industry directly at this time.

A Member asked concerning the Defense Construction Supply Center (DCSC) and their specifications. It was indicated that the DCSC had been involved with specifications for brake linings and other materials for not only the armed forces, but the GSA, the Post Office and other governmental agencies who may rely on their specifications. They have been attempting to write a specification (for some ten or so years) for brake linings which will give them the quality needed, with a spec that can be comparable using different vendors. They formerly were under the Defense Supply Agency (DSA). They are located in Columbus, Ohio.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Brake Performance Study Committee as written.

DATA BOOK AND TECHNICAL COMMITTEE REPORT

Mr. Phil Grim of Abex Corporation is Chairman of the Data Book and Technical Committee. In Mr. Grim's absence, Mr. Drislane read the Chairman's report. Refer to EXHIBIT 8.

The Secretary noted that Mr. Grim's report was written on a Committee Meeting in October 1979. There had in certain cases been actions taken on some of the items in this report that did affect the report contents. Also, there were actions taken at the Board of Directors meeting on June 24, 1980, concerning certain subjects covered in the report. Board actions were noted in the earlier report on Board of Directors activities during the past year.

Mr. Simon stated that the type of materials should be shown in the Institute catalogs. He suggested that a symbol be used to indicate where more than one type of friction material was used on a certain application. The Secretary questioned as to whether Mr. Simon was asking for a symbol or other information only where more than one type of material was used, or only where a metallic type was used. He indicated that this would be important, because there are several disc brake assignments where organic was used earlier and metallics came in as options later. This would contrast with the semi-metallic only releases on disc brakes on some of the newer cars. Mr. Nelson asked whether Mr. Simon was now asking if this subject on cataloging metallic linings was to be reopened, as it had been resolved at the Board Meeting on June 24 that the Institute would issue bulletins on metallic information, but would not list this information in its catalogs, and that presentation would be left to the individual member in his catalogs, application information sheets, and the like.

A question arose on the disclaimer that appears in the Institute bulletins and catalogs. This disclaimer states that "...the data....indicates dimensions only, and in no way refers to quality of any materials that may be embodied or used...." This specifically means no reference to the type of materials, whether they be metallic, organic or what. It was stated that this includes not only the semi-mets used on passenger car disc brakes, but also any metallic

types used in the heavy duty area. It was pointed out that there now is some activity with metallic type blocks in the heavy duty area.

The Secretary was directed to refer the question of identification of metallic type friction materials--and particularly disc brake metallics--to the Data Book and Technical Committee for their reconsideration.

A Member questioned shoe identification in the Brake Shoe Identification Catalogs, and in the bulletins and Supplements that are posted to the Catalogs. This relates to the shoe number assigned to a disc brake part. Where more than one lining drilling is used, there can be difficulties in the field if the rebuilder, for example, receives shoes with one drilling and linings with another drilling. One example is the Mustang-Capri assignment of FMSI 7083-D-151. The lining has two drilling assignments: (1) 7083A, the original drilled organic, and (2) 7083B, the optional--standard on some models--semi-metallic with different drilling, somewhat more removed from the edges. The Secretary indicated that this problem had been raised by a member earlier, and is on the agenda for a Committee Meeting. In response to a question, the Secretary indicated that Mr. Grim plans a meeting probably in September, and that this will be discussed and hopefully resolved at that meeting. A member stated that this was not just a problem with disc brakes, but it held with drum brakes as well. This question has come up at many meetings and has been resolved several times where drum brakes are concerned by maintaining the present system. The ruling for drum brakes has been that no new drum brake shoe assignment will be made where the only change in the shoe is in the table drilling pattern. This too will be added to the Committee's agenda for its September meeting.

A member criticized the coverage for imported car brakes in the Institute's catalogs. The Secretary advised that we carry only popular imported cars sold in the North American market in the Brake Shoe Catalog, and that our current coverage runs to over 99% of the imports sold in the United States. The question was reworded that the coverage is late. The Secretary advised that he receives no imported car information from imported car manufacturers and must rely on information sent in by members. He particularly cited the Certified Division as providing the bulk of the information on imported cars disc brakes. A question was asked as to why the coverage was not as complete as Certified's. The Secretary indicated that we do not list cars sold in Australia, models that are sold in their native country or in South America but not in North America, and certain very low activity models sold in the United States. The coverage is decided at Committee meetings, and if the Institute adds data it not only adds pages to the catalogs, but some Committee Members and others feel the data is not necessary. One member noted a particular assignment that was not available from the Institute, causing the member to make his own assignment. The Secretary suggested where the member has information of this type he send it to the Institute Office so that information can be released. A member suggested that the Institute send out a request to its members for information and prints on brake linings used on imported cars.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Data Book and Technical Committee as written.

INDEMNIFICATION OF OFFICERS AND DIRECTORS

Legal Counsel advised that at the Board of Directors meeting on June 24, 1980, the Board had approved his recommendation for indemnification of Officers and Directors, for losses suffered by them because of acts done in their capacities as Officers and Directors. The actions must have been made in good faith.

As such indemnification can be adopted by a change in the By-Laws, it must be submitted to the Membership for balloting. It is not felt that there is sufficient pre-notification to the Members to ballot at this Meeting, so the indemnification plan will be submitted to the Membership by mail ballot.

OTHER BUSINESS

Questions were raised about non-member manufacturers of friction materials. One mentioned was Canparts, in Cambridge, Ontario, Canada. The Secretary was advised that they were now in production of friction materials, in particular disc brake pads. A Member showed a listing where FMSI Numbers were used by Canparts. The Secretary was advised to contact Canparts concerning Membership. Another Member questioned Virginia Friction Products of Tappahannock, Virginia. The Secretary stated that he has written several times to Mr. Bill Carreras of Virginia Friction Products and to Mr. Joe Goodreau of Midco, who purchases materials from Mr. Carreras. He has had no reply. Also, the Secretary indicated that he had no catalogs, listings or other information on Virginia Friction Products showing that they were using the Institute's copyrights or trademarks. The members were asked that if anyone has literature showing Virginia Friction Products use of the Institute's copyrights or trademarks that they send such information to the Office.

Questions were asked as to what constituted infringement of the Institute's copyrights and trademarks. This subject was addressed by the Institute's copyright attorneys, Shenier & O'Connor, in 1975. Mr. Gorman had not received a copy of this report from Shenier & O'Connor, and the Secretary will send on a copy. Use of the Institute's catalogs, bulletins, or sheets therefrom is an obvious infringement. Use of the Institute's FMSI and FMS is a violation of the trademarks. Condensation is an infringement. The listing showed for Canparts is obvious infringement.

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There being no other business brought to the attention of the Membership, upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To adjourn

Adjourned at 9:50 A.M.

E. W. Drislane
Secretary