

MINUTES OF THE ANNUAL MEMBERSHIP MEETING
OF THE
FRICITION MATERIALS STANDARDS INSTITUTE, INC.

Sunday and Monday, June 7 and 8, 1992

La Quinta Hotel and Resort

La Quinta, California

ACTIVE MEMBERS PRESENT

Abex Friction Products
Allied Signal Friction Materials N.A.
Carlisle Corporation
Ferodo America, Inc.
Fibro Friction, Inc.
Friction Material Company, Inc.
Heavy Duty Friction (PMI) Echlin
HKM of California Corporation
ITT Automotive Parts Supply Div.
Raymark Friction Company
Reddaway Manufacturing Co., Inc.
TEK-Motive, Inc.
Total Brake Industries
U.S. Automotive Mfg., Co., Inc.
Wagner Brake
Wheeling Brake Block

ACTIVE MEMBERS - PROXIES TENDERED

Brake Parts Inc. (To G. N. Laycock)
Carlisle Corporation (To. W. Wood)
Coan Equipment (To G. N. Laycock)
Delco Chassis Division (To G. N. Laycock)
Friction Division Prod. (To G. N. Laycock)
Satisfied Brake Prod. Inc. (To G. N. Laycock)
Scan Pac Manufacturing (To G. N. Laycock)
S. K. Wellman (To G. N. Laycock)

OTHERS PRESENT

Abex Friction Products
Akebono America, Inc.
Allied Signal Aftermarket Brake Division
A.P.R.A. Technical Service
Asbestos Information Association /N.A.
Bonded Brakes, Inc.
Capital Tool & Design Limited
Conklin Equipment Company
Davison Conroy Company
Davison Conroy Company
Ferodo America, Inc.
Frictiontech Inc.
HKM of California Corporation
HKM of California Corporation
HKM of California Corporation
HKM of California Corporation

REPRESENTATIVES

Robert E. Nelson
Larry Mintman, President
Bill Wood
Rita Grisham, Vice President
Joseph Nir
Robert Scott
Paul Myers
Ronald Randall
Douglas Willsie
Doreen Tomao
Ed Eggert, Treasurer
Ronald R. Moalli
Alex Tabori (6/7)
Martin Chevalier
William Aymond
Lee Burgess (6/7)

PROXY FROM

Donald Delvy
Wayne Kinsey
D. Ted Shumate
Donald Emrick
Robert Carney
Stewart Kahan
Skip Scandrett
Fred A. Kowalczyk

Walter Britland
Takeshi Saito (6/7)
Judy Picone
Mark Kothe
Bob Pigg (6/7)
Pat Buda (6/7)
Ray Arbesman (6/7)
Dick Markano (6/8)
Bill Castle (6/7)
Terry Conroy (6/7)
Dan Cleeton
Bob Beaupre (6/7)
William Axelrod (6/7)
Skip Carroll (6/7)
Bob Mintz (6/7)
Mohammad Vakili

OTHERS PRESENT (con't)

Ohio Caliper Inc.
 Raymark Friction Company
 Reddaway Manufacturing Co., Inc.
 Sachs Automotive Products Co.
 Tenneco Brake
 Util Automotive, Inc.
 Util Automotive, Inc.
 Valeo Friction Materials, Inc.
 Payne Morehouse Shafer & Harlow,
 Counsellors at Law
 Friction Materials Standards Institute
 Friction Materials Standards Institute

Paul Schuck
 Pat Smith (6/7)
 F. William Barton
 Bill Vernier
 Chris Mores
 Hubert Frings (6/7)
 Joseph Rhodes
 Dennis Fox
 Thomas P. Weldy

 Lori Dinihanian (6/7)
 Gilbert N. Laycock,
 Secretary

Mr. Mintman, President, called the meeting to order at 1:37 P.M. June 7, 1992. As the first order of business, the President called for a roll call.

MINUTES OF PREVIOUS MEETING

The Secretary advised that minutes of the Membership Meeting of June 11-12, 1991 had been distributed. The President suggested that a reading of the minutes be dispensed with, as no corrections had been suggested.

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

RESOLVED: To accept the minutes of the Membership Meeting of June 11-12, 1991 as written.

PRESIDENT'S REPORT

Larry Mintman, President, delivered his report. Please refer to EXHIBIT 1 in the report booklet.

Mr. Mintman commended Mr. Ron Randall for his diligence and attention to annual meeting site selection and requested comments concerning the revision of meeting schedule to take advantage of over weekend air fares and reduce time out of office. Changes in membership were reviewed. The financial condition was noted as being sound and final closure of the books on the Paramus, New Jersey office was covered. Mr. Mintman commented on the positive effect of the Institute's computer and software has had on catalog production and cost, by producing a larger catalog with reduced volume at the same cost as the 1990 catalog. New assignments and the work of the Data Book and Technical Committee were noted. Mr. Robert J. Pigg of the Asbestos Information Association North America was acknowledged as a guest speaker at the Annual Membership Meeting. The retirement of Mr. Don Emrick of Delco Chassis Division, a long time delegate and friend of the Institute, was noted with good wishes from the Institute. Mr. Mintman thanked all those who participated and contributed to the continued growth and stability of the Institute.

PRESIDENT'S REPORT (con't)

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

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

REPORT ON BOARD OF DIRECTORS ACTIVITIES

The Secretary reported on activities of the Board of Directors during this past fiscal year. As a portion of the activity is at the Board Meeting immediately preceding the Membership Meeting, there is no written report.

During this past fiscal year the Board of Directors approved the Membership applications of two Regional Members and one Licensee Member. The Board voted to produce the full Automotive Data Book on an annual basis eliminating the odd year Supplement.

The Board reviewed delinquent fees. One Active and one Regional Member had open fee billings going back 12 months they are: Fox Friction and Duramax S.A. de C.V. The Board recommended that a final notice be sent to these Members and if no dues payments are received within 30 days ballots will be submitted to the Board members for termination.

There was much discussion under the Membership topic concerning multi-national companies with several friction material manufacturing divisions. It was decided to review Membership criteria as called out in the Constitution. This review will be conducted by Institute Counsel and a combined committee consisting of Membership, Fee Formula Committees and volunteers. The board authorized the purchase of some new office equipment. The Board, based on the Fee Formula Committee Report, recommends that the fee structure remains the same. The scope of the Historical Sales Reporting was expanded to include sales in the U.S. and Canadian markets.

Several topics were discussed at length following the Brake Performance Study Committee Report. They were:

Work being done by both the heavy duty and passenger car groups concerning the SAE J1801; J1802 test procedures.

Letters received by various friction material manufacturers and distributors from NHTSA concerning testing and requests for product and product defect information.

The effect of the House of Representatives Bill HR 1790 called the "Design and Technology Protection Act of 1991 which could have serious impact on the automotive and truck aftermarket.

Based on several requests to release Institute files on electronic media, the Board considered the action and voted not to release any Institute files on electronic media.

REPORT ON BOARD OF DIRECTORS ACTIVITIES (con't)

At the request of the Institute Auditors an "Industry Statement" and a "Statement of Dissolution" were prepared, reviewed and approved by the Board. Also, the Board voted to have jackets optional for the Directors Reception and first Membership Reception and retain jackets suggested for the Membership Reception and Dinner.

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

RESOLVED: To accept the report on the Board of Director's Activities as read.

BUDGET COMMITTEE

Mr. Ron Randall, Chairman, presented the Budget Committee Report. Please refer to EXHIBIT 5 in the report booklet.

The Committee proposed an Expense Budget of \$163,940 for the 1992-93 fiscal year. This is an increase of approximately 5% over the expense budget for the year ending. The major portion of the increase is reflected in salaries which are approved by the Board of Directors. Other individual or grouped line items showed small or no change from the prior year's budget. Unchanged were: Rent, Professional Services, Meeting Expense, Meeting Travel and Depreciation. Those items showing increases were: Insurance Expense Payroll Taxes, Pension Expense, General Travel Expense and Utilities Expense. The single item showing a decrease was: Office Expenses. A new line item was added for State Property Tax.

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

RESOLVED: To accept the Budget Committee Report as written.

FEE FORMULA COMMITTEE REPORT

Mr. Robert E. Nelson, Chairman of the Fee Formula Committee, presented this report. Please refer to EXHIBIT 6 in the report booklet.

Mr. Nelson noted that there have been no changes in fees since the fee structure which was revised in 1987. The income from Membership Dues using the existing fee structure was projected to be \$146,800. The proposed expense budget is \$163,940 giving a net loss of \$17,140 comparing operating income to operating expenses. The projected investment income of \$15,505 reduces this net loss to \$1,635. Using the guidelines established in 1991, the Fee Formula Committee recommended that the fee structure remain unchanged for the coming year.

FEE FORMULA COMMITTEE REPORT (con't)

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

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

RESOLVED: That effective July 1, 1992, the annual dues for Active Members and Regional Members with Active member rights would be the total of a basic fee of \$1,600, and a charge for participation in each of the following categories: Disc brake linings; Drum brake linings; Brake Blocks; Clutch facings. The charge would be \$250 each for the first and second categories, and an additional \$500 each for the third and fourth category. (One category \$1,850; Two categories \$2,100; Three categories \$2,600; Four categories \$3,100.)

RESOLVED: That effective July 1, 1992, the annual fee for Regional Members (Regular) would be \$1,600; Regional Member (Association) \$2,600; Licensee: \$600.

MEMBERSHIP COMMITTEE

Ms. Doreen Tomao, Chairperson of the Membership Committee, presented this report. Please refer to EXHIBIT 2 in the report booklet.

Ms. Tomao noted that the Institute now has 88 affiliates down from 89 in June 1991, with Active Members decreasing from 37 to 34, Regional Members increasing from 29 to 30 and Licensee Members increasing from 23 to 24. The report details the specific Membership additions, consolidations and losses.

Ms. Tomao acknowledged the contributions of Mr. Don Emrick of Delco Chassis Division as a member of the Membership Committee and to the Institute and wished him well in his retirement.

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

RESOLVED: To accept the Membership Committee Report as written.

TREASURER'S REPORT

Mr. Ed Eggert, Treasurer, presented this report. Please refer to EXHIBIT 3 in the report booklet.

The report projected an excess of total income over expenses of \$5,738. Operating income is projected to be \$973 less than budgeted income due to membership consolidations and losses. There

TREASURER'S REPORT (con't)

were a number of variances from budget. The largest single variance was a favorable variance in postage expense. This was due to a reduction in the number of bulletins mailed. All variances greater than \$400 are detailed in the report. The report included a Balance Sheet projected for June 30, 1992, a Statement of Income and Expenses for the 1991-92 Fiscal Year and a Seven Year Financial Summary.

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

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

INVESTMENT ADVISORY COMMITTEE REPORT

Mr. Ed Eggert, Chairman, presented the Investment Advisory Committee report. Please refer to EXHIBIT 4 in the report booklet.

Mr. Eggert advised that the total investment assets projected to June 30, 1992 were \$250,995 versus \$241,759 at June 30, 1991. Current yields of Treasury Notes average slightly over 7% and Money Market yields less than 4%. Interest rates continue to be low and roll-overs on Treasury Notes will continue to reduce the overall average yield. The effect of these low interest rates will be felt for some years to come. The report also included a summary of the Institute's position in U.S. Treasury Notes.

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

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

INSTITUTE PENSION PLANS

The Secretary reported on the Institute Pension Plans. Please refer to EXHIBIT 10 in the report booklet.

The Secretary reported that there are two plans in effect. The Simplified Employee Pension Plan (SEPP) for current employees contributes 15% of eligible employees salaries to the employees IRA and a pension trust established by the Institute for benefit of Harriet G. Duschek. The trust pays Ms. Duschek \$550 monthly and as of December 31, 1991, has assets of \$35,962. It was noted that since 1980 the trust has paid Ms. Duschek \$79,200 and still has 65% of the principal remaining.

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

RESOLVED: To accept the report on Institute Pension Plans as written.

INSTITUTE PENSION PLANS (con't)

For the benefit of the many new members present the Secretary explained that Harriet G. Duschek was, for a period of 38 years, the Secretary of the Institute and its predecessors, The Clutch Facing and Brake Lining Institute and The Brake Lining Manufacturers Association. Ms. Duschek retired in 1971.

ANNUAL MEETING COMMITTEE REPORT

As a preface to the Annual Meeting Committee Report, Mr. Mintman asked for input from the Membership relative to the Annual Meeting. Because our fiscal year ends in June it is the logical meeting month but is the revision to over weekend better than a mid-week meeting? The Constitution was changed to allow over weekend meetings to take advantage of over weekend air fares and reduce time out of the office.

Mr. Ron Randall, Chairman, presented this report. Please refer to EXHIBIT 12 in the report booklet.

The Committee recommended Longboat Key Club in Longboat Key, Florida on the Gulf coast. It is 8 miles from Sarasota/Bradenton Airport or 70 miles from Tampa International Airport. The resort has 45 holes of championship golf, 38 tennis courts and miles of beaches as well as other amenities. Each unit is a condo unit. There are three restaurants on site and shopping at St. Armands Circle with over 100 specialty shops.

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

RESOLVED: To accept the Annual Meeting Committee Report as written.

NOMINATING COMMITTEE REPORT

Mr. Robert E. Nelson, Chairman delivered this report. There is no written report for the Nominating Committee.

The Board of Directors has five positions which run to June of 1993. They are:

Andy Gagnon	-	Frictiontech Inc.
Ronald Moalli	-	TEK-Motive Inc.
Ronald Randall	-	HKM of California Corp.
Douglas Willsie	-	ITT Automotive Parts Supply Div.
William Wood	-	Motion Control Industries

There are four Directors whose terms expire this year. They are:

F. William Barton	-	Reddaway Manufacturing Company
Rita Grisham	-	Ferodo America, Inc.
Robert E. Nelson	-	Abex Corporation
Doreen Tomao	-	Raymark Friction Company

NOMINATING COMMITTEE REPORT (con't)

Mr. Nelson discussed the Constitutionally mandated balance of the Board which must be maintained with respect to the mix of large (multi-category) and small (single category) manufacturers. This is made particularly difficult when one factors in that to be considered for the Board one must attend meetings.

The recommendation of the Nominating Committee for four Directors to serve a two year term until June 30, 1994, were:

F. William Barton	-	Reddaway Manufacturing Company
Larry Mintman	-	Allied Signal Friction Materials N/A
Robert E. Nelson	-	Abex Corporation
Doreen Tomao	-	Raymark Friction Company

The President asked if there were any nominations from the floor. There were no nominations from the floor.

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 for the election of Mr. F. William Barton, Mr. Robert E. Nelson, Mr. Larry Mintman and Ms. Doreen Tomao to serve two year terms until June 30, 1994. The Secretary advised that the ballot had been so cast. The Secretary advised that with the election of these four Directors, the Board had the required nine Members.

HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE

Ms. Rita Grisham, Chairperson, presented this report. Please refer to EXHIBIT 9 in the report booklet.

Ms. Grisham noted that there had been no meetings of the Health and Environmental Affairs Committee during the past year. The "Recommended Procedures" insert for the Automotive Data Book was updated for the 1992 Catalog taking into account the revocations of the EPA Ban on asbestos and incorporating current thinking about dust exposure in the workplace. Pending OSHA Legislation was reviewed. A partial summary of standards that apply to asbestos and non-asbestos manufacturing disposal and labeling was presented.

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

RESOLVED: To accept the Health and Environmental Affairs Committee Report as written.

MR. BOB PIGG, ASBESTOS INFORMATION ASSOCIATION - GUEST SPEAKER

Mr. Mintman introduced Mr. Bobby J. Pigg, President of the Asbestos Information Association, guest speaker for this meeting. Mr. Pigg joined the Asbestos Information Association/North America in 1974 and has served as Administrative Assistant, Executive Director and President of A.I.A./N.A. since 1985. He has also been President of the Asbestos Cement Pipe Producers Association since 1987.

Mr. Pigg's talk related and highlighted the events of the 12 years prior to the decision of the 5th Circuit Court in New Orleans totally reversing the asbestos ban. The beginnings of the asbestos ban went back to July 1979 with the EPA testimony in Washington that they were going to initiate action to phase out the commercial use of asbestos. On October 17, 1979, the EPA issued an "Advance Notice of Proposed Rule Making". In July of 1982 the EPA started to collect information from the asbestos industry. At that time the industry was not told that the "ban" was the center piece of the rule making. At that time there was much work done on work practices in the industry and the possibility of labeling requirements for asbestos products.

In 1985 the EPA announced that they were going to refer the asbestos work practice and label issues to "OSHA". Shortly thereafter, those who had worked with and negotiated with the EPA over the prior six years felt that their efforts were a total failure. On January 29, 1986, the EPA published its "Proposed Rule" which was a ban on the use of asbestos. At that time they estimated that the ban would avoid about 1,315 cancer deaths over a ten year period and of that number about 650 would be from friction materials. There were administrative hearings during 1986 and in September of 1986 cross-examinations occurred. The Asbestos Information Association and others worked very hard in presenting their case. The EPA went back to work for 18 months to reconstitute their case. They called in consultants, put out contracts and AIA estimated that the EPA spent about \$100,000,000, taxpayer dollars paid to consultants in investigating the asbestos issue. In April of 1988, EPA had reworked its case and estimated that the ban would avoid 316 cancer deaths over a ten year period and of those 280 would be from friction material. More cross examination occurred in October 1988 and on July 12, 1989, the final rule was issued. At that time the cancer deaths which would be avoided with the ban were 202 over a 13 year period some time in the 21st century. Of the 202 deaths they estimated that 144 would be from the friction material industry.

After the ban was published, the AIA/NA along with the Asbestos Institute in Montreal, mounted a court challenge. 1990 was the year of briefs. Finally on February 5, 1991 oral arguments were heard in the 5th Circuit Court in New Orleans. On October 18, 1991, the Court reversed the 1989 Asbestos Ban wiping it "Totally off the Books". Mr. Pigg highlighted portions of the court's 57 page opinion presented when the decision was handed down. He also noted editorial comments hailing the court decision to rescind the ban from such sources as the British Magazine Nature and The Wall

MR. BOB PIGG, ASBESTOS INFORMATION ASSOCIATION-GUEST SPEAKER(con't)

Street Journal. Mr. Pigg noted that a study commissioned by the EPA in 1987 done by the American Society of Mechanical Engineers stated that the number of deaths caused by the use of non-asbestos substitutes could be higher than the deaths avoided by the asbestos ban. Additionally, he noted that there is an open question concerning the toxicity of the fibers used as asbestos substitutes. He noted that OSHA is considering a one fiber/cc exposure limit for fiberglass and EPA is collecting data on refractory ceramic fibers.

In summary Mr. Pigg stated that he did not believe that asbestos usage would return to its pre-ban levels but that there may be some return to asbestos. The AIA/NA advocates the "controlled use approach". At this time Mr. Pigg opened the floor to questions.

A question was asked concerning the amount of asbestos used in the United States. Mr. Pigg noted that last year there were 35,000 tons of asbestos used in the U.S. with roof coating being the largest user and friction materials second. The pre-ban usage was 600,000 tons annually. The world wide market for asbestos is still very large with the majority of consumption in asbestos-cement products (pipes and sheets).

There was a question concerning the process the EPA would have to take to institute a new ban. Mr. Pigg stated that the EPA could start with a proposed rule and start the process all over but he felt that it was unlikely.

A question was asked concerning the problem of disposal of asbestos containing products. Mr. Pigg noted that the only Federal regulation that applies to disposal, pertains exclusively to friable material, but, the disposal problem is mostly local state, county or town regulations.

One member noted that the Canadian Government has just ruled that friction material used in asbestos mines in Canada must be non-asbestos. Concerns were also expressed that with the rescinding of the asbestos ban we may see an influx of imported asbestos materials of questionable quality. It was noted that NHTSA does not regulate the quality of any aftermarket friction material (yet). It was noted that there have been instances of very close inspections concerning the labeling of equipment used in asbestos material manufacturing. Examples such as tubs used to transport raw mix must be labeled and vacuum cleaner bags destined for use with asbestos material must be labeled prior to use.

Secretaries Note: The Officers, Board of Directors and Members of the Friction Materials Standards Institute wish to thank Mr. Pigg for his interesting and informative presentation.

HISTORICAL SALES REPORTING

The Secretary reported on the Historical Sales Program for the past year. Please refer to EXHIBIT 11 in the report booklet.

The report covered the activities of the Historical Sales Statistics Program for the calendar year 1991. It was reported that a total of twenty two members reported sales statistics for the final quarter full year report, this is down from 23 in December 1990. A Ten Year Rolling Summary 1982-1991 was distributed to all members who reported during the final quarter. It was noted that for the 4th quarter 1991, 14 companies reported drum brake lining information, 7 companies reported brake block information, 16 companies reported disc brake information and 5 companies reported clutch facing information.

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

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

There was a discussion concerning the Board of Directors decision to report U.S. and Canadian Sales as total figures. The concern was that past U.S. data would lose its value if combined figures were reported.

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

RESOLVED: To report Historical Sales for U.S. and Canadian markets as separate listings.

DATA BOOK AND TECHNICAL COMMITTEE REPORT

Mr. Doug Willsie, Chairman, presented this report. Please refer to EXHIBIT 8 in the report booklet.

Mr. Willsie noted the roster revisions of the Committee during the past year and presented the current roster of the Committee. There was one meeting of the committee during the past year which took place in Pittsburgh, PA. There were 100 additions to the automotive disc and drum linings and shoes. There were no additions for brake blocks and clutch. Committee actions noted were: produce full catalog every year eliminating the odd year supplement; lining and shoe bulletins were consolidated to one and will be color coded to match current catalog; fractional dimensions were converted to decimal in the lining section except for bolt and rivet sizes; old identities were added back to catalog with the reference to the catalog year in which they last appeared as far back as the 1984 catalog; parking brake shoes were added to illustration section; generate an updated Brake Block I.D. Supplement to cover new additions (still have 2,000 I.D. books in inventory); continue work on HD shoe assignments; drop study for number system for motorcycle friction material; include all drawings for shoes in catalog regardless of volume; make new drum shoe assignments for drill pattern changes; drop project for

DATA BOOK AND TECHNICAL COMMITTEE REPORT (con't)

determining O.E. non asbestos usage (project had become moot with the rescinding of EPA Asbestos Ban). Mr. Willsie acknowledged those who had contributed information for new assignments and requested continued support from all members of the Institute.

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

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

Comments were made by several members that the information for new assignments published by the Institute is submitted by the membership and those who have not contributed information were encouraged to do so. The data published by the Institute is as good as the contributions of the members. It was noted that it is not necessary to submit a fully dimensioned manufacturing drawing. In fact, only those dimensions required to identify a part as a unique new part are necessary. Original equipment sets may also be sent to the Institute and the Institute will make a drawing and an assignment if the part is new. This is the general rule with most import sets.

A question was raised as to why the Institute no longer publishes a "Semi-Metallic" listing as it had in the past. Mr. Willsie explained that there were a number of materials that fell in a grey area that were between "organic" and "semi-metallic" and that any review by the Data Book and Technical Committee generally ended with a split decision. Also, the membership felt that an arbitrary decision would lock them into supplying a particular type of material when the list was published. Material technology is constantly changing and the members should decide the material type for a given application based on performance. The membership voted in 1990 to stop publishing the "Semi-Metallic" list. In place of the "Semi-Metallic" list the Institute would publish the edgecode on the O.E. sample used for making any new assignment. Actually, the Institute searched through files and compiled a listing of all available FMSI to O.E. Part Number to Edgecode information.

BRAKE PERFORMANCE STUDY COMMITTEE REPORT

Mr. William Wood, Chairman, delivered the Brake Performance Study Committee Report. Please refer to EXHIBIT 7 in the report booklet.

Mr. Wood presented an update of the status of SAE J1801 and SAE J1802 procedures for heavy duty block. The SAE J1801 marking procedure has been approved and the J1802 procedure is still undergoing comparative testing but he believes that the procedure for testing will be approved. After approval of the procedure guidelines must be established for the use of the data generated. The progress of the passenger car group was also reviewed.

BRAKE PERFORMANCE STUDY COMMITTEE REPORT (con't)

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

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

A question was asked concerning the cost of a heavy duty test using the new procedure. It was estimated that the test would cost about the same as an FMVSS 121 Test. But the test fixtures and drums would be very expensive. By comparison to the current cost for AAMVA Certification the full scale Dynamometer Test could range from 10 to 20 times the current costs. It was noted that no work has been done on heavy duty truck disc brakes with respect to even preliminary testing and passenger car work is still in the preliminary testing stages for disc brakes and no work has been done on passenger car drum brake. The "round robin" testing that has taken place on the heavy duty used a single fixture complete with shoes and linings which was moved from facility to facility for testing without being disassembled.

It was noted that at this time there is nothing in the specification that states what range of plus or minus allowance from the original specification would be acceptable. It is anticipated that after all the correlation testing is done that limits will be established for replacement linings within which they must test to be deemed a suitable "like for like" replacement. It was generally agreed that there is much more work to be done even on the heavy duty testing, which is further along than the rest of the testing.

The discussion moved to the National Highway Traffic and Safety Administration (NHTSA) letter which was sent to several friction material manufacturers and distributors.

The inquiries received by a few friction material manufacturers from the National Highway Traffic and Safety Administration (NHTSA) was discussed. The NHTSA inquiry requested information on product defect complaints resulting in accident since June 1 of 1991. It also contained a series of tests conducted by NHTSA where in some instances low friction front brakes were combined with high friction rear brakes apparently in an effort to create an unstable brake combination with rear lockup. The abstract from the NHTSA technical documentation page states: "This study was conducted to determine the effect on braking performance of light vehicles of installing aftermarket brake linings." After discussing the various tests run on rented vehicles (Phase I) as well as instrumented vehicles with various aftermarket linings (Phase II) their conclusion was: "There are aftermarket linings in the market that degrade braking efficiency, cause the rear wheels to lock before the fronts and reduce fade resistance below the O.E. level."

One Board member commented that their method of testing was flawed. However, flawed or not, their tests could be used to justify legislation that would put considerable burdens on the aftermarket friction material manufacturers. There was a question as to how

BRAKE PERFORMANCE STUDY COMMITTEE REPORT (con't)

many letters went out from NHTSA. An estimate of 10 or 12 was noted. A member who did not get an inquiry asked if he could get a copy of the NHTSA letter. Several members noted that since the NHTSA letter contains test data from various manufacturers it would not be appropriate to circulate the document. Another member noted that he did not feel we should be commenting on this. Those members who received the inquiry have submitted their comments and that portion is done. The fact that because one attended the FMSI meeting and became aware that NHTSA was making inquiries of several manufacturers should be considered good information to know and by the time we meet next year NHTSA may have made another series of inquiries. It was suggested that FMSI could become a clearing house for information by possibly publishing a quarterly news letter advising the membership of such things as new standards for fiber counts or any programs such as the NHTSA inquiry to manufacturers. It was noted that the information published to members would only be as good as the information received. Just as with new part assignments, if no information is received none is published.

Referring to the SAE J1801 and J1802 again, one member noted that as part of the marking specification they reserved an area of the side of the block for their coding, but, when asked about manufacturers identifier they said that it was not in their charter to specify that type of information. One member questioned that statement because SAE does just that for brake hose.

The House of Representatives Bill H.R. 1790 - "Design Innovation and Technology Act of 1991" was also discussed. The bill would give "design protection" similar to a patent to the designer of a part for a 10 year period. This would in essence eliminate all aftermarket business opportunities for a period of 10 years after design release. The scope of the bill is wide, protecting almost every type of product. Another member noted that the bill is still active and a listing of co-sponsors of HR 1790 was given to the Secretary to be made available to all members along with a sample letter prepared by ASIA with the recommendation that it be sent to your Representative.

One member noted that under the New Clean Air Act that each state is responsible to create a committee and a program to directly work with small companies. He urged those affected to contact their State Department of Environmental Protection. He will forward the part of the bill containing this information to the Institute for distribution.

OTHER NEW BUSINESSCONSTITUTION REVIEW COMMITTEE

There was recap of the Constitution Review Committee. This Committee was established to review the Constitution to insure that it is in line with the current state of the industry. Mr. Moalli volunteered to serve on the Committee. The Constitution will be reviewed by Legal Counsel and recommendations and/or areas of concern will be given to the Committee. The Committee consists of:

Membership Committee -	Doreen Tomao William Wood
Fee Formula Committee -	Robert E. Nelson Larry Mintman
Volunteers -	Ed Eggert Ron Moalli

A member asked if copies of the Constitution could be distributed. Mr. Mintman asked for a show of hands of those who would like a copy of the Constitution. Based on the response a copy of the Constitution will be mailed to all delegates and alternates.

USE OF FMSI NUMBER SYSTEM

Mr. Mintman asked Mr. Eggert to review the customs alert for companies using FMSI numbers that are not members of FMSI. Mr. Eggert noted that he often receives offerings from companies using FMSI numbers from all over the world. By checking the roster list he knows that these companies are not FMSI members. He asked that members be watchful for these companies. If any are found send the information to the Institute perhaps with a copy of their price sheet or catalog showing the use of FMSI numbers. The Institute then can approach the company advising them that they are violating our copyright and suggesting that they apply for membership in the Institute. If no positive response is received, U.S. Customs can be notified that the company is importing to the U.S. market and is in violation of our copyright.

A question was asked concerning the use of FMSI part numbers by rebuilders. The Institute has a mechanism by which a rebuilder may obtain permission through a member to use FMSI numbers. Any member selling semi-finished linings for bonding or riveting pucks for riveting or facings to a rebuilder who wishes to use FMSI numbers in cataloging or price sheets may request permission for that rebuilder as his customer to use FMSI numbers. The Institute will grant permission, conditioned upon continued purchase of material from the requesting member, for the rebuilder or customer to use FMSI number system.

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 10:00 A.M. June 8, 1992

G. N. Laycock
Secretary