MINUTES OF THE ANNUAL MEMBERSHIP MEETING

of the

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Wednesday and Thursday, June 18 and 19, 1986

at

Sawgrass, Ponte Vedra Beach, Florida

ACTIVE MEMBERS PRESENT	REPRESENTATIVES
Abex Corporation	Robert E. Nelson
Allied Automotive - Bendix	Francis E. Messier
Brake Systems, Inc.	James E. Bennett
Carlisle Corporation	Arthur V. Moore
Certified Brakes	Larry Mintman
Delco-Moraine Division (Proxy from D. Emrick)	John A. DiMatteo
Friction Division Products, Inc.	Robert D. Conger
Guardian, Cooper Industries	Robert Foscaldo
HKM of California Corp., Krasne Division	Ronald Randall
Nuturn Corporation	Rita Grisham
P.T. Brake Lining Company	Stuart Comins, President
H. K. Porter Company, Inc.	Larry Belans
Raymark Corporation	B. Web Luttenberger
Reddaway Manufacturing Co.	Edward F. Eggert
Virginia Friction Products, Inc.	W. Max Sleeth, Treasurer
Wheeling Brake Block Manufacturing, Inc.	Lee Burgess

OTHERS PRESENT	
Allied Automotive - Bendix	Richard E. Fasteson
Allied Automotive - Bendix	Ron Miskelley
Allied Automotive - Bendix	John Riopelle
Brake Systems, Inc.	William F. Wood
Canadian Metallic Brake	Michael Beri
Canadian Metallic Brake	Rick Carpenter
Canparts Automotive International	Andy Gagnon
Friction Division Products	William Carney
Guardian, Cooper Industries (Wagner)	John W. Kourik
HKM of California Corp., Krasne Div.	William Axelrod
HKM of California Corp., Krasne Div.	Steve Sleeth
Nuturn Corporation	Donald Loftis
Reddaway Manufacturing Co.	F. William Barton, Vice President
Harwood Lloyd, Counsellors at Law	Russell A. Pepe, Counsel
Friction Materials Standards Institute	Edward W. Drislane, Secretary

FMSI 01937

Mr. Comins, President, called the meeting to order at 1:30 PM, June 18, 1986. As the first order of business, Mr. Comins asked for a roll call.

MINUTES OF PREVIOUS MEETING

The Secretary advised that the minutes of the Membership Meeting of June 18 and 19, 1985 had been distributed. It was suggested that a reading of the minutes was not necessary. Upon motion duly made, seconded and unanimously passed, it was:

> RESOLVED: To accept the minutes of the Membership Meeting of June 18-19, 1985 as written.

PRESIDENT'S REPORT

Mr. Stuart Comins, President presented his report. Refer to EXHIBIT 1. Mr. Comins noted certain items to be covered later including the study of the fee formula, contingency planning for staffing the Institute, financial results, and the activities of the Board at its meeting in March 1986. In closing his report, Mr. Comins urged the Membership to continue support of the Institute.

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

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

BOARD OF DIRECTORS ACTIVITIES

The Secretary reported on activities of the Board of Directors since the June 1985 Meeting. This reviews Board actions since the report to the Membership at the June 19, 1986 Meeting.

(NOTE: The Secretary read this report which had been prepared from pencil notes, and inadvertently failed to read the last page of his notes at the Meeting. The full text is covered in this section of the minutes.)

At the meeting of the new Board of Directors following the Membership Meeting, the Board reelected Officers to serve through the 1985-86 fiscal year:

Stuart Comins, President
F. William Barton, Vice President
W. Max Sleeth, Treasurer
E. W. Drislane, Secretary

By mail ballot, the Board voted to accept the name change on the Institute's records of Brassbestos Manufacturing Company to BMC Corporation. In early 1986, the Board voted to terminate the Membership of BMC Corporation and Cougar Automotive for failure to pay the Membership Fees. (Both are in Chapter 11).

A special meeting was called by the Board of Directors to address three items: (1) The Product Liability Insurance Problem; (2) SAE Consideration of Effectiveness Measurements using the Inertia Dynamometer; (3) A Response to EPA on its Proposals to Ban Asbestos Products.

At this meeting, the Board received input from Frank B. Hall representatives as well as from Wyatt & Company (Actuaries). Additional input was received from Mr. Jack Carney's consultants, Kamp Associates. In summary, reinsurance is not available for those with any asbestos exposure. Any insurance which might be available would have an asbestos exclusion. Most Members do not have serious liability problems outside the asbestos area. Frank B. Hall and Wyatt were asked to give the Institute reports suggesting solutions.

Subsequent reports indicated that the Institute and its Members would have to make serious commitments in time and money in order to establish a captive insurer. No action was taken.

The Board considered the SAE Brake Effectiveness Task Force recommendations for an Inertia Dynamometer test for rating brake effectiveness, with the first product being brake blocks. The procedure would be based on testing a 16-1/2 x 7 Rockwell configuration with parts of the DOT 121 Air Brake Systems procedure. The Institute will monitor this work and both give input to the Task Force and inform the Membership.

The Board considered the EPA's proposals for the ban and eventual phase-out of asbestos as it concerns friction products. The Board asked Mr. Drislane and Mr. Riopelle to draft comments which would be consistent with earlier comments sent to OSHA on its proposals and to EPA on the NRDC petition to ban asbestos in friction products. A response was drafted and submitted to EPA.

The Board Members, by telephone, supported the Secretary's actions in moving the Annual Meeting to Sawgrass in Florida after the Sandpiper Bay Resort breached their contract for our June 1986 Meeting.

The remaining activities of the Board took place at their meeting on June 17, 1986. At that meeting the Board approved the reports of Officers and Committee Chairmen. The Board accepted an application filed by Reinz Wisconsin Gasket for Licensee Membership in the Institute. The Board terminated the Regional Membership held by R & D Friction of Canada for failure to pay its dues. (R & D Friction is in receivership.) In addition to considering the past due balances owed by three Mexican Regional Members (Pasta Clutch, Itapsa, Mex Bestos) and one Brazilian (COBREQ), and continuing service suspensions for past due accounts, the Board approved certain changes of status/name on Institute records for: Wagner Division, Cooper Industries, Guardian, Cooper Industries and HKM of California, Corp., Krasne Division.

In reviewing the Treasurer and Budget reports, the Board discussed the ratio of Retained Earnings and Budgeted Expenses for the year, and asked as to what would be excess accumulation of earnings per IRS for a Not-for-profit Corporation. It was stated that this ratio could exceed 3.1 without problems from IRS. The Secretary advised that he had just received a billing from former Legal Counsel Robert Gorman for $6,400 for alleged retainer, fees, and disbursements due for the 1982-83 period. The Secretary was asked to call Mr. Gorman and attempt compromise on this billing without confrontation.

The Board approved remaining with the 1985-86 Fee Formula for the 1986-87 fiscal year. In addition, based on a study of the formula and member product lines, the Board approved a new category formula for 1987-88. This will be put into effect with the fee billing of July 1, 1987. The new formula will have four categories: (1) Disc brake linings; (2) Drum brake linings; (3) Brake Blocks; (4) Clutch facings. This will add a disc brake lining category and drop the new-unlined shoe category. Disc brake linings are currently reported under the brake lining category (drum and disc). It is the Board's intention that in the first year the change will be "revenue neutral."

The Board discussed Member participation on Committees and the difficulties in gathering product information. Some difficulties are attributed to the increase in imports, and introduction of vehicles like Iveco, MAN and the imports into domestic producer's lines. The Institute will circularize the Membership indicating where it does not have product information and has no contacts. Also the Institute will ballot the Membership to amend the Constitution to permit full Committee participation by Licensees in an attempt to broaden information gathering activities.

As regards Director participation, the Board will ask the Secretary to request the resignation of a Director who is not participating in Board activities - meetings and ballots.

The Board discussed the three classes of Directors called for in the Constitution. It was noted that it was often difficult to have an actively participating company represented in all three classes, particularly when the Institute is attempting to have Officers who are not also Directors. It was noted that this balance in the classes should improve with the changes planned for the fee formula in 1987-88.

In discussing the Data Book and Technical Committee report, it was noted that the printer (Tweddle Litho Company) owns the computer program from which the type was set for our last Data Books.

The Directors reviewed Mr. Wood's report on activities of the Brake Performance Study Committee, particularly the Arne Anderson SAE Task Force recommendations for an Inertia machine procedure for rating brake blocks.

(At this point, the Secretary inadvertently failed to read the remaining notes on Board activities at the Membership Meeting. The balance of this report is presented below).

After Mr. Riopelle's report on the Health and Environmental Affairs Committee, the Secretary was asked to circularize the Members with copies of the NIOSH asbestos fibre counting procedure, Method 7400. The Secretary was asked to attend the EPA hearing on its proposed ban and phase out of asbestos products. The Directors discussed the new OSHA regulations which were reported by the media on June 13, 1986. No one at this time had full details on the regulations which were scheduled to be published in the FEDERAL REGISTER on June 20, 1986.

On liability insurance, the Directors discussed the earlier consideration of forming a captive. Based on a lack of interest and a lack of liability losses in other than asbestos areas, as shown on the Kamp Associates survey, and on what appeared to be substantial costs for organizing a captive as illustrated by Wyatt Company (Actuaries), the Board decided to take no further action on the insurance question.

As for the June meeting, the Board decided to book Marriott's Camelback Inn, Scottsdale, Arizona, based on their advertised $50 per night accommodations with other extras. The Secretary was asked to book Camelback, but hold Sawgrass as the alternate should there be any problem with the Camelback proposal.

On Historical Sales, the Board asked that the figures for the first three, six and nine months periods of 1985 be restated without the quantities from the one Member who did not report full year data in 1985. And lastly, the Board decided that spouses would be invited to all Institute social events at the June Meeting which are now open to the Membership. This would add the Wednesday night reception and dinner to the events to which spouses would be invited.

TREASURER'S REPORT

Mr. W. Max Sleeth, Treasurer, presented this report. Refer to EXHIBIT 3. In summary, this report projected an excess of income over expenses for the 1985-86 fiscal year of approximately $15,000. This figure may be adjusted for the unexpected billing by former Legal Counsel of $6,400, referred to earlier.

Mr. Sleeth's report showed an income/expense statement, a balance sheet and a review of certain financial figures for a seven year period from fiscal 1979-80 through 1985-86. The Data showed a strong financial position and that expenses were under budget and under control.

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

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

MEMBERSHIP COMMITTEE REPORT

Ms. Rita Grisham, Chairman of the Membership Committee, presented this report. Please refer to EXHIBIT 2.

Ms. Grisham reported on changes during the year where the Institute had a net loss of 1 Active Member, a net gain of 1 Regional Member and a gain of 2 Licensees. Two Active Members (U.S. Members) went into Chapter 11 proceedings during the year and were terminated as Members; Tappa Enterprises joined as an Active Member during the year. While losing Ferodo (Pty.) Limited and Mintex (S.A.)(Pty.) Limited of South Africa, the Institute added three Regionals: Fricciones Tecnicas y Maquinados of Mexico, Satisfied Brake Products of Canada, and Tormos Frictiemateriaal, B.V. of the Netherlands. In addition, BLD Products and Lucas Industries joined as Licensees.

As noted in the report on Board activities, Reinz Wisconsin Gasket was added as a Licensee on June 17, and the Board terminated the R & D Friction Regional Membership at the same meeting.

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

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

PRODUCT LIABILITY INSURANCE

The Secretary reviewed earlier decisions and actions taken on the subject of product liability insurance. The product liability insurance question and the suggestion that the Institute sponsor a captive insurer were discussed earlier at the Board of Directors Meeting. This had been one of the major agenda items at a special meeting of the Board of Directors on March 11, 1986. At that meeting, a Frank B. Hall representative and the Wyatt Company (Actuaries) were asked to give the Institute background on possible costs to establish a captive and to access the reinsurance market.

At that meeting, Kamp Associates, consultants hired by Friction Division Products (Jack Carney), indicated that outside the asbestos area, respondents to a questionnaire were not experiencing significant claims or losses. Kamp had indicated that liability coverage with asbestos included was not available. And, liability coverage, even with an asbestos exclusion, was not available as insurers were skeptical of court interpretations on coverage exclusions. Essentially, a reinsurance market does not exist where the insured has any asbestos exposure. Beyond this, the survey showed only small response, (8 replies). Those that did respond did not have losses and/or claims that were significant.

Mr. Robinson of Frank B. Hall subsequently wrote stating that establishing a captive would take committment both in time and in money. Wyatt presented a "business case" exhibit, which they emphasized was based on very preliminary assumptions. This "case study" was to point at possible costs in establishing a captive assuming 12 FMSI Members and 100 of their customers were to participate. Based on what are admittedly rough assumptions, the annual premium costs appeared prohibitive.

Based on the Kamp input at the Meeting and the Frank B. Hall/Wyatt reports, subsequent to the Meeting, no further action was taken as regards liability insurance. The Directors at the June 18 Meeting decided they would not take further action on this subject absent some new development.

One Member took exception to that decision. He stated that even if Institute Members were not interested, several of their customers were interested. A Member asked if the Membership could be surveyed again to determine interest. An Officer stated that while he had supported sponsorship of a captive insurance approach by the Institute earlier, he no longer felt it was feasible, and pointed to the money that Mr. Carney had spent with his consultants with the latter now indicating that accessing reinsurance markets was not feasible for any companies exposed in any way to asbestos.

A Member pointed out that larger groups had attempted to sponsor similar captives, and had given up. He cited the Automotive Service Industry Association (ASIA) and the Automotive Parts Rebuilders Association (APRA) as two groups who had backed off from the captive approach. In answer to a question, it was indicated that both organizations had included parties in the wholesale distributor end who would be the equivalent of Members' customers.

A Member stated that while this question did not have to be resolved at this meeting, that the Members were asking if the question could be resubmitted to the Membership for their input. Any such survey of Members' interests in the liability insurance problem would include input from their customers. It was pointed out that the survey would have to be sent to the party responsible for insurance at the Member company.

By a show of hands, the Members indicated that they wished the Institute to bring the Membership up to date on the liability insurance question and to ask for their ballots as to proceeding further with a study on a captive. The Secretary was directed to prepare a questionnaire on Members' (and their customers') further interest in a captive insurer, and a possible meeting on this subject for those interested.

INVESTMENT ADVISORY COMMITTEE REPORT

Mr. Barton, Committee Chairman, presented this report. Please refer to EXHIBIT 4.

Mr. Barton's report projected investment balances at a little over $265,000 at June 30, 1986, about a $17,000 increase over June 30, 1985. Also, investment income would be down about $2,000 to slightly over $27,000 this year, based mostly on no significant capital gains on maturing Treasury Notes this year.

The details on investment activity, past, present and projected were shown in the report. Projections for the coming fiscal year indicated that investment income would drop about $1,000 to approximately $26,000. This is based on the continuing drop in interest rates.

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

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

DATA BOOK AND TECHNICAL COMMITTEE REPORT

The report on Data Book and Technical Committee activities was prepared by the Secretary. Please refer to EXHIBIT 8.

Mr. Drislane noted that this Committee has once again lost its Chairman. Mr. Gordon Smith who had chaired this Committee since 1983 is no longer with Bendix and the Committee is currently without a Chairman.

Mr. Drislane noted the recent changes in the Automotive Data Book including the consolidation in 1982, the change in cover color in 1984 and the fact that the 1986 Automotive Data Book was set with computerized typesetting. This latter move facilitated up-dating the Catalog both at the Printer level and at the Institute Office when new data is being added. In addition, certain changes made in the 1986 Automotive Data Book were detailed.

Two items of concern to the Members were resolved during 1985-86. The continued assignment of FMSI 4311J for an Eaton 16-1/2 x 7 block with an inside radius change was reaffirmed. Eaton Brakes made an analysis of certain questions raised by our staying with the FMSI 4311J assignment. Also, the Institute commenced usage of a blocked series (FMSI 7800, 7900) for heavy duty disc brake linings.

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

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

A Director noted that the Institute's most important work is the gathering of product information on brake linings, brake shoes and clutch facings for vehicles used in North America. At the Board Meeting, the Directors discussed this information-gathering and are asking the Membership to help. Many times a change will occur in the field which Members may know, but which is unknown to the Institute. Members should advise the Institute on any such change or problem, so that the corrected information can be published in bulletins to the Members.

In other cases, Members may develop information on certain brakes or clutches used on vehicles for which the Institute does not have information. This happens most often on import vehicles or on vehicles manufactured in North America by European vehicle manufacturers. Examples would be Iveco, MAN, Volvo Truck & Bus, Mercedes Commercial, etc. If aftermarket manufacturers are servicing these vehicles, the Institute is asking for general lining dimensions or samples (which would be returned) and application data, even if fragmentary. The Institute is unable to get information from these vehicle manufacturers.

A Member noted that the Institute would be interested in contacts at these vehicle manufacturers if known to the Members. The Secretary was asked to prepare a bulletin or questionnaire to the Membership on the person to contact at the Member firm when seeking product information of this type.

FEE FORMULA COMMITTEE REPORT

Mr. Messier, Chairman of the Fee Formula Committee presented his report. Refer to EXHIBIT 6.

The Fee Formula Committee had been asked to consider changes in the Fee Formula that would include a separate fee category for disc brake linings. However, no action had been taken earlier in the year when the Institute gathered data on categories for the next fiscal year. Based on projections shown in the Budget Committee Report and the Investment Advisory Committee Report, it was recommended that the fee formula in effect for this past fiscal year be maintained for the 1986-87 fiscal year.

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

RESOLVED: To maintain the same Fee Formula in 1986-87 Fiscal Year that was in effect for the 1985-86 year.

	Basic	Per Category
Active Members and Regionals with Active Member rights	$1,150	$700
Regional Members - Individual	1,600	
Regional Members - Association	2,600	
Licensees	600	

FMSI 01944

As noted earlier, the Board approved a new formula for fee purposes to take effect with the 1987-88 fiscal year. Where the current formula has four categories, the 1987-88 formula will add a category for disc brake linings and drop the category for new unlined brake shoes. As disc brake linings are now reported under the "Brake Linings" category along with drum brake linings, this will become two categories in 1987-88. While there will be additional categories reported, it is the Directors' intent to have the change be "revenue neutral" in the beginning year, based on investment income and expense budget considerations. The Secretary was directed to advise the Membership on this change, and to gather data on the new categories when developing data for the Fee Formula Committee for June 1987.

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

RESOLVED: To accept the report of the Fee Formula Committee as written.

A Member noted that the 1987-88 fee category change would more evenly distribute fee levels in future years. This would permit improved compliance with the constitution's requirement of three classes of Members. Based on an analysis of the Institute's twenty-one Active Members, the new fee classes would be distributed as follows:

Four	(4)	Categories:	2	Members
Three	(3)	Categories:	5	Members
Two	(2)	Categories:	8	Members
One	(1)	Category:	6	Members

HISTORICAL SALES REPORTING

The Secretary prepared and read the report on the Historical Sales Reporting Program. Please refer to EXHIBIT 12.

In the report, the Secretary listed the companies reporting for each quarter of calendar 1985. It was noted that one Member failed to report the full 12 months sales at year end, where that Member had reported for the first three, six and nine months periods. This reporting affected the disc brake sales reporting category only.

At the earlier Board meeting, the Secretary was asked to have the Accountants provide a corrected report for the first three, six and nine months periods without the disc brake sales for the Member who failed to report for the full twelve month period. And further, he was directed to similarly have the quantities restated in the future where a Member fails to report for similar period as was the case in 1985.

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

RESOLVED: To accept the report on historical sales reporting as written.

HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE REPORT

Mr. Riopelle presented the report on activities of the Health and Environmental Affairs Committee. Refer to EXHIBIT 9.

Mr. Riopelle's report noted that the OSHA proposals on asbestos in the workplace were near release. He noted that the report (written several weeks before the meeting) was now a little late on this subject, as OSHA announced to the media on June 13 that the new OSHA standards would be published this week in the FEDERAL REGISTER. (Actual publication was on Friday, June 20).

In his report, Mr. Riopelle noted particularly the proposed rules which the Environmental Protection Agency (EPA) had published in the FEDERAL REGISTER on January 29, 1986, and their meaning to the friction products industry. At its March 1986 Meeting the Board of Directors outlined comments which were to be drafted by Mr. Riopelle and Drislane and sent to EPA. Those comments were circulated to the Board, the Committee and to Legal Counsel, and were sent to the EPA on June 13, 1986. The Secretary advised that the full Membership would be receiving a copy of the Institute's comments to EPA.

Further, the Secretary was directed at the Board meeting to attend the EPA Hearings on these proposals which are to be held on July 15, 1986.

An item of most concern to those attending the meeting was the release of the new OSHA Standards for asbestos exposure in the workplace. OSHA made its announcement to the media on Friday, June 13. Members were interested in effective dates, various significant changes in permissible levels, warning signs and labels, medical surveillance, etc. Mr. Kourik had received a copy of the OSHA release to the media. Certain highlights of the release were read to the Membership. (The Secretary made copies of this release and distributed them to the Membership at the start of the June 19 session).

Ms. Grisham had called the Asbestos Information Association to get details on the new standard. Certain highlights of the new standard were discussed, but the full standard would not be published in the FEDERAL REGISTER until June 20. The effective date for the new standard will be July 21, 1986. Effective dates for the engineering control and work practice requirements to reach the new permitted levels will be July 20, 1988.

In general, the new permitted exposure level is 0.2 fibers per cc. Respirators may be used to reach this level for drilling and grinding operations. However, other operations must attain these levels with work practice and engineering controls. Regulated areas must be defined in 150 days. And, the action level for certain standard requirements is set at 0.1 fibers per cc.

The actual standard as submitted by OSHA took over 900 pages (double spaced copy). It is understood that this will take over 170 pages in the FEDERAL REGISTER. There are six mandatory appendices with two non-mandatory. There are appendices applying to the brake repair shop (non-mandatory).

It was noted that NIOSH Method 7400 for airborne asbestos fiber counting or its equivalent will be required by OSHA. OSHA will append NIOSH Method 7400 as the method for counting fibers. That or an equivalent method must be used for the count. Ms. Grisham has a copy of NIOSH Method 7400, and will send the Institute a copy so that it may be sent to the Membership. It was noted that this method should also be appended to the OSHA Standards and should be included when copies of that Standard are sent to the Membership.

It is understood that the new warning label is much more drastic, including the words "Danger" and "Cancer Hazard," as compared to "Caution" and "May Cause Serious Bodily Harm."

On another subject, a Member noted that the "Right to know" Hazard Communications regulations are being enforced. OSHA Inspectors are asking for proof of compliance and that Materials Safety Data Sheets are posted and workers are being instructed on possible hazards.

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

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

NOMINATING COMMITTEE REPORT

Mr. W. Max Sleeth, Chairman of the Nominating Committee, advised on current terms of the Directors and on its recommendation for nominating Directors to serve two year terms until June 1988. The Chairman noted that the following Directors were serving terms that will continue through June 30, 1987:

Francis E. Messier, Allied Automotive - Bendix
Larry Mintman, Certified Brakes, Lear Siegler Co.
Arthur V. Moore, Carlisle Corporation, Motion Control Industries

The Chairman, with the Committee support, recommended that the following be nominated to serve two year terms that run from July 1, 1986 to June 30, 1988:

Robert E. Nelson, Abex Corporation
Rita Grisham, Nuturn Corporation
Stuart Comins, P. T. Brake Lining Co.
Larry Belans, H. K. Porter Company

The President asked that these names be placed in nomination to serve two year terms expiring on June 30, 1988. The President called for nominations from the floor. No additional nominations 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 for the election of Mr. Robert E. Nelson, Ms. Rita Grisham, Mr. Stuart Comins and Mr. Larry Belans to the Board of Directors. The Secretary advised that the ballots had been so cast. Further, the Secretary advised that with the election of these three Directors, that the Board had the required seven Members.

ELECTION OF OFFICERS

Mr. Comins advised that at the meeting of the new Board of Directors the following Officers were elected to serve for the coming fiscal year:

Mr. F. William Barton, President
Mr. W. Max Sleeth, Vice President
Mr. Larry Mintman, Treasurer
Mr. Edward W. Drislane, Secretary

BUDGET COMMITTEE REPORT

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

This report recommended an Expense Budget of $132,960 for 1986-87, an increase over the past year's Expense Budget of about 5%. The report detailed line expense items with projections for the coming year. The largest items in the budget are salaries and related pension and taxes. By Board action at its earlier meeting, the salaries item was increased by $1,000 bringing the final expense budget to $133,960.

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

RESOLVED: To accept the Budget Committee report as written.

PUBLIC RELATIONS COMMITTEE REPORT

The Secretary read the report on Public Relations for this past year. Please refer to EXHIBIT 11.

We have not had a Public Relations Committee since Mr. Simon retired. The Secretary prepared this report. The only activity was the release to the trade press of a notice on the election of Officers at the June 1985 Meeting.

Mr. Belans offered to help the Secretary in circulating public relations releases to the automotive trade media.

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

RESOLVED: To accept the report on Public Relations activities as written.

INSTITUTE PENSION PROGRAMS

The Secretary prepared the report on the Institute's pension plans. Please refer to EXHIBIT 10.

The Institute has two plans: (1) The Simplified Employee Pension Plan (SEP-IRA) for active employees where the Institute contributes 15% of gross salary to employee IRA's, and (2) The Trust which was established for Miss Duschek on January 1, 1980.

The SEP-IRA arrangement is a simple pension contribution without the extensive paper work required for a qualified employee plan. Miss Duschek's pension is paid from a Trust to which the Institute contributed $55,000 in 1980. The Trust has been paying Miss Duschek $550 per month and as of December 31, 1985 had a little over $52,000 in assets on hand. The assets in the Duschek Trust will be returned to the Institute upon Miss Duschek's death.

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

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

BRAKE PERFORMANCE STUDY COMMITTEE REPORT

Mr. Bill Wood, Chairman of the Brake Performance Study Committee, presented this report. Please refer to EXHIBIT 7.

Mr. Wood discussed the meeting the Committee held in October 1985 concerning edge coding of brake friction material. It is almost universally agreed that the existing edge code as developed in SAE J661 (Vehicle Equipment Safety Commission Regulation V-3) is unsatisfactory. It was noted that the Truck/Trailer Brake Research Group (TTBRG) had earlier contacted the Institute and others in seeking a better friction rating system and specifically a more permanent lining identification. The TTBRG is a group formed by the American Trucking Associations, the Motor Vehicle Manufacturers Association and the Truck Trailer Manufacturers Association. While this group has no regulatory powers, it can pressure friction materials manufacturers to provide them with better technical information on which to base lining selections.

Mr. Wood discussed the work done by Mr. Arne Anderson's Task Force as regards recommended practices J1801 (Coding and Marking) and J1802 (Brake Block Effectiveness Rating).

Mr. Wood noted that there were several issues to be addressed by the Committee and he planned to call a meeting in the early Fall: (1) Monitoring of the Identifications; (2) Providing input to the SAE Committees/Task Forces; (3) Investigate the impact of any final recommended practice completed by the SAE.

Mr. Wood noted that the SAE Task Force (Arne Anderson) has fixed the foundation brake for block testing as the Rockwell 16-1/2 x 7 Q Brake. While there was some objection to any one brake, based on concerns on certain smaller diameter trailer brakes and on bus brakes, and the fact that a Rockwell brake was chosen, this is the most popular size and style of brake used on air brake systems. It is probably more representative of block usage than any other brake.

Mr. Wood also noted the "attributes" of brake lining called for in a Bureau of Motor Carrier Safety (BMCS) requirement:

> The brake lining on every motor vehicle shall be so constructed and installed as not to be subject to excessive fading and grabbing and shall be adequate in thickness, means of attachment, and physical characteristics to provide for safe and reliable stopping of the motor vehicle.

FMSI 01949

Mr. Wood will ask the Committee for guidance on this "requirement."

In discussion of the work by the SAE Task Force, it was observed that they are now concentrating efforts on a procedure and coding for brake blocks. When this part of the assignment is complete, the Task Force will probably begin work on rating brake linings for passenger cars and light trucks.

A Member commented on the identification and permanent friction coding recommendations in these drafts for a coding system. The J1801 coding recommendation calls for a machine-cut in the side of the block which indicates friction levels at different temperature conditions based on an Inertia Dynamometer test. This coding will cost money, both in fixture cost and in direct labor and overhead. The J1801 suggestion is expensive. In addition, this is only for permanent friction rating purposes. It does not address manufacturer, formula and date identification. It is possible that the industry could end up with both a machine-cut friction code and an ink stamped manufacturer/formula identification.

A Member noted that an SAE Recommended Practice did not make this "requirement" a rule. That could only develop if Federal or State regulations went to the SAE Recommended Practice to regulate materials, or if user groups such as the American Trucking Associations were to pressure suppliers to provide these identifications. The market place might be faced with the old and new identifications, but the industry would find it difficult if both systems were in use at the same time.

The Fleets may tell the brake block manufacturers what to do, but there will be a cost for machined-in identification beyond that of ink-stamped identification. The suggestion was made that cost data from the block manufacturer could influence ones choice of rating procedures and identification. An alternate cost might be figured using the proposed Inertia Dynamometer for testing (SAE J1802) with ink-stamping on the I.D. of the block.

A Member questioned if this was the Friction Materials Standards Institute, why couldn't the Institute develop the standard. The Secretary replied noting that the "Standards" in the Institute's name has caused all kinds of misunderstanding. The Institute's more appropriate name would be the Brake Lining Manufacturers Association (BLMA) which was the name until 1948 when that association was dissolved as a result of a Justice Department anti-trust suit. The new association formed after break-up of BLMA was the Clutch Facing and Brake Lining Institute, which name was subsequently changed to Friction Materials Standards Institute. The Institute has no test equipment, nor fleet of cars for testing. The "Standards" in the name was probably a public relations ploy, but can probably be supported by the standard numbering system for friction materials configurations. Institute Committees and individuals, usually working with the SAE which drafts recommended practices, can influence standards. The SAE adopted their Recommended Practice J661 for friction machine testing, and that became the basis for various State standards with input from Members as well as users.

A Member noted that if the Task Force Recommended Practices J1801 and J1802 were to be approved by SAE and get into the SAE Handbook, they would still not be requirements. The obligation to conform to J1801 and J1802 could only be established if the State or Federal Governments were to issue regulations based on these practices, or if the customers insisted on supplier conformance to the regulations, and were willing to pay for this additional cost. The Committee will continue to follow any proposed SAE recommended practices and give input where appropriate.

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

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

ANNUAL MEETING COMMITTEE REPORT

Mr. Ed Eggert as Chairman of the Annual Meeting Committee presented this Committee report. Please refer to EXHIBIT 13.

Mr. Eggert's report recommended a return to LaCosta in Carlsbad, California for 1987. As an alternate, and for possible following year consideration, his report suggested locations on the Monterey Peninsula, California, about 120 miles south of San Francisco.

The report also suggested consideration of three locations that the Institute had used in previous years: Sawgrass, The Homestead, and Innisbrook. The report noted that it was based on this recommendation that Sawgrass was contacted for the 1986 meeting after Sandpiper Bay cancelled the 1986 meeting in Port St. Lucie.

It was noted that the Board of Directors, meeting on June 17, 1986, reviewed this report, but based on cost considerations had selected Marriott's Camelback Inn, Scottsdale, Arizona, as the site for the 1987 Meeting, with Sawgrass as the alternate should Camelback negotiations not work out.

The Camelback decision was made based on a brochure offering accommodations for $50 per night, with other enticements such as free coffee breaks and free tennis. In blocking space for both LaCosta and the Monterey Peninsula, the Secretary had been advised of per night room costs in the $175 to $200 range. Mr. Eggert noted that if the decision was to be based on room charges, the Committee should be given guidelines as to what range the Institute will consider.

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

RESOLVED: To accept the report of the Annual Meeting Committee as written, with exception of the earlier Board decision to select Marriott's Camelback Inn as the 1987 meeting site.

It was noted that the Membership had not been advised of the change in structure of future Membership Meetings. Based on decisions made at the earlier Board of Directors Meeting, the June 1987 Meeting will invite spouses to attend Institute sponsored social events now open to the Membership. This will, in effect, open the Reception and Dinner scheduled for the Membership on Wednesday evening to spouses. The Tuesday evening reception is already open to spouses.

OTHER BUSINESS

The Secretary discussed the review by a special ad hoc committee to consider notching of the O.D. of clutch facings to facilitate identification of non-asbestos facings. Those involved were shown the sample facing sent the Institute with the 180° notching. The Secretary will draft a report on this suggestion based on comments received from facing manufacturer companies.

Based on earlier discussion noted in the minutes of the Data Book and Technical Committee work, and the insurance question, the Institute has been asked to send a questionnaire to the Membership. This questionnaire will include not only questions on gathering application data, but will indicate services provided by the Institute and ask for input from the Membership on service needs of the Members. A Member noted that this questionnaire should ask for the name of the person in charge of that Member's insurance coverage.

Another Member noted the booklet put out by the Institute a few years back which highlighted services to the Members, and included a history of the Institute. It was recommended that the Secretary up-date that booklet and either offer it to the Members or make an additional distribution when revised.

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 June 19, 1986, at 9:45 AM.

E. W. Drislane
Secretary