FRICTION MATERIALS STANDARDS INSTITUTE, INC.
588 MONROE TURNPIKE, MONROE, CT 06468

MINUTES OF THE ANNUAL MEMBERSHIP MEETING

OF THE

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Sunday June 6, 1999

Longboat Key Club

Longboat Key, Florida

ACTIVE MEMBERS PRESENT	REPRESENTATIVES
ABS Friction Inc.	Ralph Neil
Anstro Manufacturing Inc.	Robert Bosco, Jr.
BRAKEPRO, Ltd.	Rudy Prosperi
Capital Tool & Design Ltd.	Michael Greenberg
Dana Brake & Chassis	Donald Delvy
Federal Mogul	Walter Britland, President
Friction Material Company, Inc.	Robert Scott
Motion Control/CARLISLE	Tom Sheikh
Nucap Industries, Inc.	Michael Dorney
Reddaway Manufacturing Co., Inc.	Pamela Barton
Superior Friction, Inc.	Patrick Healey, Treasurer
TEK-MOTIVE, Inc.	Thomas Moalli
U.S. Automotive Manufacturing, Inc.	Martin Chevalier, Sr.
Vaapco, Inc.	Richard Cross
Wheeling Brake Block	Rob Burgess

ACTIVE MEMBERS - PROXIES TENDERED	PROXY FROM
All Metal Machine (To G. N. Laycock)	Richard Lonetto
BBA Friction Inc. (To G. N. Laycock)	Lloyd Broadstreet
Bonded Brakes Inc. (To G. N. Laycock)	Pat Buda
BRAKEPRO, Ltd. (To Rudy Prosperi)	Russ Armer
CECO Friction (To G. N. Laycock)	D. Ted Shumate
E&D Manufacturing (To G. N. Laycock)	Leo Deutschmann
Gunn Metal Stamping (To G. N. Laycock)	Robert Beaupre
Morse Automotive (To G. N. Laycock)	Peter Morse
North American Friction(To G. N. Laycock)	Hugo Castrillon
Nucap Industries (To Michael Dorney)	Ray Arbesman
O.E. Quality Friction (To G. N. Laycock)	Norm Abbott
Reddaway Manufacturing (To Pamela Barton)	Todd Walker
Tabco Auto Parts (To G. N. Laycock)	John Svazic
Uni-Bond Brake (To G. N. Laycock)	Michael Grattan

OTHERS PRESENT	
ABS Friction Inc.	Rick Jamieson
Anstro Manufacturing Inc.	Richard Bochicchio
APRA Technical Service	E. Mark Kothe
Link Engineering	Tim Duncan
Link Engineering	Matt Link
Raybestos Aftermarket Products Co.	Doreen Tomao
REMSA of America	Bennett Kublin

OTHERS PRESENT (cont'd)

Sachs North America	Bill Vernier
TEK-MOTIVE, Inc.	Steve Thrush
Wheeling Brake Block	Lee Burgess
Morehouse Harlow & Weldy Attorneys at Law	Thomas P. Weldy
Friction Materials Standards Institute	Gilbert N. Laycock, Secretary

Mr. Walter Britland, President, called the meeting to order at 8:34 A.M. June 6, 1999. As the first order of business, Mr. Britland called for a roll call.

MINUTES OF PREVIOUS MEETING

The Secretary advised that minutes of the Membership Meeting of June 7-8, 1998 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 7-89 1998 as written.

PRESIDENT'S REPORT

Mr. Britland presented his report. Please refer to EXHIBIT 1 in the report booklet.

Mr. Britland welcomed all to the 1999 Annual Meeting and noted some of the changes that have transpired in the industry in the past several years and their effect on the Institute. Mr. Britland reviewed and gave a brief overview of the Committee Reports that would be presented over the course of the meeting. He thanked the various committee members for their participation and encouraged those who are inclined to participate to do so.

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

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

There was no discussion on this report.

REPORT ON BOARD OF DIRECTORS ACTIVITIES

The Secretary summarized the activities of the Board of Directors transacted during the past fiscal year with mail ballots, primarily consisting of membership additions and terminations. Also the activities of the Board during its meeting of June 5, 1999 were reviewed. The Board of Directors activities are summarized as follows:

REPORT ON BOARD OF DIRECTORS ACTIVITIES (cont'd)

Mail Ballots

January 1999 - Approved the Regional Membership Application filed by Raybestos Aftermarket Products.

January 1999 - Approved the Licensee Membership Application filed by Link Engineering Company.

June 5 Meeting

- Voted not to endorse the recommendations of the Fee Formula Committee.
- Voted to terminate the Membership of Western Friction Industries, Montego Bay, Jamaica.
- Voted to conditionally terminate the Memberships of Total Brake Industries, Leling Gold Phoenix Brake Industries Ltd., and Ohio Caliper. Memberships will be terminated if dues in arrears are not paid by September 1, 1999.
- Voted to have the Institute stop all mailing to members who are six months in arrears in dues payments.
- Voted to approve the membership application filed by Fujian Guanlean Automotive Parts Industry Co., Ltd.
- Voted to recommend approval of the proposed Expense Budget of $213,585.
- Voted to pursue a revision of the Constitution to include assemblers of friction material and steel components in the Licensee Category.
- Voted to permanently designate four (4) pages of the catalog for a listing of Officers, Board of Directors, Active, Regional and Licensee Members.
- Voted to have the Institute price the catalogs with a higher margin as a way of increasing Institute income.

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

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

There was no discussion on this report.

MEMBERSHIP COMMITTEE

This report, presented by Mr. Pat Healey, Chairman of the Committee. Please refer to EXHIBIT 2 in the report booklet.

The report noted a net loss of eight members over the past year. The net loss of eight members came from a total loss of ten members and a gain of two members. Six of the losses were due to membership consolidation. Active Members lost five members. Regional Members lost three and gained one. Licensee Members lost two and gained one. The breakdown by membership type was: Active 39, Regional 35 and Licensee 10.

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

RESOLVED: To accept the Membership Committee Report as written.

A request was made to clarify the definition of assembler with respect to the proposed Constitution revision. The term assembler was used to denote companies that apply friction to steel backing plates for disc brakes or apply friction to drum shoes or clutch hubs. Assembler has a wider scope than rebuilder as disc brakes are not generally rebuilt or reconditioned. All rebuilders are assemblers but all assemblers are not necessarily rebuilders.

TREASURER'S REPORT

Mr. Gil Laycock, Secretary, prepared and presented this report for the Treasurer. Please refer to EXHIBIT 3 in the report booklet.

The Treasurer's Report projected a net loss of $2,856 for the fiscal year. The Operating Income was projected to be $192,988 and expenses were projected to be $210,620 for an operating loss of $17,632. Adding Investment Income of $14,776, gave the projected net loss. The report showed and analyzed eight variations from budget of more than $200. The report included a Balance Sheet Projected to June 30, 1999, A Statement of Income and Expense Projected for the 1998-99 Fiscal Year and a Seven Year Financial Summary. In a summary statement the report noted that this is the first year the Institute had an overall loss since Fiscal Year 1992-93. It further noted the declining income in the future is a concern.

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

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

There was no discussion on this report.

INVESTMENT ADVISORY COMMITTEE REPORT

Mr. Bob Scott, Chairman, presented the Investment Advisory Committee Report. Please refer to EXHIBIT 4 in the report booklet.

Mr. Scott reported that the total investment assets projected to June 30, 1999 were $253,459 versus $260,627 on June 30, 1998. Current yields on U.S. Treasury Notes average 5.25% down from 5.6% last year and Money Market yields have dropped to 4.47% down from 4.67% last year. The projected Investment Income for Fiscal Year 1998-99 is $14,776 down from $17,266 during the previous year. Estimated income for fiscal year 1999-2000 is $15,297. The report also included a summary of the Institutes' holdings 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.

There was no discussion on this report.

BUDGET COMMITTEE

Mr. Martin Chevalier, Chairman, read the report. Please refer to EXHIBIT 5 in the report booklet.

Mr. Chevalier reported that the Committee proposed an Expense Budget of $213,585 for the 1999-2000 fiscal year, which was an increase of 0.02% over Fiscal year 1998-99. Budget line items that were increased were: Telephone, Stationery & Supplies, Bank and Broker Fees and General Travel. Line items decreased were: Service and Repairs, State Unemployment Insurance, Depreciation and Insurance. Line items that were unchanged were: Rent, Postage, FICA Taxes, Federal Unemployment Insurance, Dues and Subscriptions, State Property Tax, Miscellaneous, Legal, Audit, Pension Expense, Transition Provision, Meetings General, Meeting Travel, and Catalog Travel.

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

RESOLVED: To accept the Budget Committee Report as written.

There was no discussion on this report.

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

RESOLVED: To approve the Expense Budget of $213,585.

NOMINATING COMMITTEE REPORT

Mr. Gil Laycock delivered this report. There is no written report for the Nominating Committee.

NOMINATING COMMITTEE REPORT (cont'd)

There are four Director positions with terms that run to the year 2000. They are:

Richard Cross	-	Vaapco Inc.
Don Delvy	-	Dana Brake & Chassis
Pat Healey	-	Superior Friction, Inc.
Open (Formerly J. Nir)		

There are five Director positions with terms that expire this year. They are:

Rob Burgess	-	Wheeling Brake Block
Martin Chevalier	-	U.S. Automotive Manufacturing
Paul Myers	-	Haldex Brake Product Corp.
Robert Scott	-	Friction Material Company
Open (Formerly W. Wood)		

Mr. Laycock reviewed the constitutionally mandated diversity of the Board of Directors and noted that there is turnover in the Board Membership with the current board being totally new since 1993.

The recommendations of the Nominating Committee for five Directors to serve a two-year term until June 30, 2001, were:

Rob Burgess	Martin Chevalier
Michael Greenberg	Paul Myers
Robert Scott	

The Committee's nomination for a Director with a single year term running until June 30, 2000 was:

Ralph Neil

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 Martin Chevalier, Rob Burgess, Paul Myers, Robert Scott and Michael Greenberg to serve two-year terms until June 2001 and Ralph Neil to serve a one year term until June 30, 2000. The Secretary advised that the ballot had been so cast. The Secretary advised that with the election of these six Directors, the Board had the required nine Members.

Mr. Britland acknowledged the attendance of Mrs. Pam Barton and offered condolences on behalf of the Institute to her due to the passing of her husband Bill. He noted that Bill's many contributions to the Institute will be missed.

FEE FORMULA COMMITTEE REPORT

Mr. Walter Britland, Chairman, delivered the report of the Fee Formula Committee. Please refer to EXHIBIT 6 in the report booklet.

The report detailed the income generated from Membership Dues for the various types of membership and projected fee income of $172,650 for Fiscal Year 1999-2000, using the existing fee structure. Using the fee income of $172,650 plus estimated income of $12,000 from catalogs, prints and bulletins minus the projected expenses of $213,585 gave an operating loss of $28,935 for Fiscal Year 1999-2000. Adding projected investment income of $15,297, reduced the projected loss to $13,638. Combining the projections and estimate with audited results, the report calculated three-year averages for the years 1996-1999 and 1997-2000 and compared them to the guidelines established in 1994 for fee formula adjustments. It also examine the "bottom line" figures for the four years from 1996 to 2000, noting an average decline "in the bottom line figure" of "just under $8,400 per year". The Committee recommended that fees be increased for the next fiscal year.

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

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

In addition to the written report, Mr. Britland discussed the Board of Directors decision to increase the margin on the Data Book as a source of income to the Institute. He noted that due to the timing of the catalog printing and the fiscal year of the Institute, the 1999-2000 fiscal year will show a decrease in catalog income because in fiscal year 1999-2000 the catalog income is from the 1999 Catalog and the catalog cost is for the 2000 Catalog. The 2000 Catalog will be more costly because it will be a library edition. The full effect will be realized in the fiscal year 2000-2001.

There was a question asked by a member if any thought had been give to the amount of income that would derived by the addition of assemblers as Licensee Members. No one had any firm number of potential new members that the Institute might see from this change.

The Board of Directors had recommended that the fee structure remain the same for the upcoming fiscal year.

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

> RESOLVED: That the fee structure be unchanged for the upcoming fiscal year.

Mr. Britland noted that, in anticipation of a dues increase, Mr. Laycock had prepared a paper posing, and answering the hypothetical question; FMSI did not exist, what would be the cost for each friction material, shoe and plate manufacturer

FEE FORMULA COMMITTEE REPORT (cont'd)

material, shoe and plate manufacturer to generate its own part numbers, cross indices and catalog? The paper analyzed the cost of doing product research on O.E. parts fiche, identifying the new part numbers, buying the new part numbers, analyzing the new parts, maintaining a catalog department, printing a catalog, producing cross indices and the incidental costs to support these functions. The paper also estimated that each member would have to spend in excess of $217,000 annually and the cost to the entire industry could be more than $15,000,000 annually. By this analysis the FMSI dues of between $2,050 and $3,300 annually are a bargain.

ANNUAL MEETING COMMITTEE REPORT

This report was prepared by Mr. Rob Burgess, Chairman. Please refer to EXHIBIT 11 in the report booklet.

Two possible sites for the 2000 Annual Meeting were proposed. They were:

Ocean Reef Club - Key Largo, Florida - A very exclusive, private 4,000 acre resort on the northern tip of Key Largo, Florida with room rates of $115 - single or double plus 11.5% room sales tax.

Sawgrass Country Club & Resort - Ponte Vedra, Florida - This is the Marriott at Sawgrass, southeast of Jacksonville, FL. Room rates range from $125 for hotel accommodations to $195 for condo type suites, plus 9% tax.

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

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

A straw vote was taken to guide the new Board of Directors who vote on the meeting site. The unanimous choice of the Membership was the Ocean Reef Club. There was some discussion as to the frequency of west coast meetings. Recently we had been alternating east and west, but, with the 2000 Meeting being in Florida, this will be the second east coast meeting in a row. It was suggested that next year's Meeting Committee Report offer east and west coast options.

DATA BOOK AND TECHNICAL COMMITTEE REPORT

Mr. Don Delvy, Chairman, presented this report. Please refer to EXHIBIT 7 in the report booklet.

Mr. Delvy listed the Committee Roster and reviewed the changes in its membership. He noted that the FMSI new part number assignments were up considerably from last year, particularly in the disc brake category. The report detailed the number of assignments by category. The 1999 Catalog was discussed,

DATA BOOK AND TECHNICAL COMMITTEE REPORT (con't)

noting there were over 1,000 shoe illustrations. Mr. Delvy thanked the contributors of new assignments and carry-over information. The report included a detailed list of contributors of new part number assignments.

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

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

Mr. Britland noted that we were moving through the agenda rather quickly and there was an opportunity to finish the agenda in a single session. He said that if no one had any objections to doing that, we would do so. There were no objections.

BRAKE PERFORMANCE STUDY COMMITTEE REPORT

The Brake Performance Study Committee Report is in two parts: Passenger Car and Heavy Duty. The passenger car portion was prepared by Mr. William Mild of Federal Mogul and the Heavy Duty portion was prepared by Paul Myers of Haldex Friction Products. Please refer to EXHIBIT 8 in the report booklet.

The Passenger Car Report was read by Mr. Richard Cross. The report summarized the efforts of the Friction Material Committee of the Brake Manufacturers Council to produce more accurate brake effectiveness characterization test procedures using full scale brake dynomometers. It summarized the evolution of SAE J1652 which was combined with SAE J1653 to make the SAE J2430 test procedure. The report detailed the objectives of the current phase of the test procedure development. It was noted that the SAE J2430 procedure has been finalized and is in the process of SAE balloting.

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

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

It was noted that the SAE J2430 procedure is a test procedure only. It does not give pass/fail values. There must be another document, not issued by SAE, that will establish pass/fail values using the SAE J2430 procedure.

The Heavy Duty Report was prepared by Mr. Paul Myers and read by Mr. Richard Cross. The report gave an update on SAE J1801/1802 procedures. Computer modeling supported by the Heavy Duty Brake Manufacturers Council and the American Trucking Association. It also updated the American Trucking Association-Maintenance Council RP628 qualification testing. It addressed changes in FMVSS 105 for hydraulic brakes 10000 GVW+ which were effective March 1, 1999 and changes in FMVSS121 for air brakes effective March 1, 1999. It noted that Federal Highway Works Administration is exploring the use

BRAKE PERFORMANCE STUDY COMMITTEE REPORT (cont'd)

of a roll dynamometer for roadside commercial truck brake inspection.

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

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

HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE

This report was prepared by Mr. William Mild of Federal Mogul and read by Mr. Walter Britland. Please refer to EXHIBIT 9 in your report booklet.

The Health and Environmental Affairs Report gave an update on asbestos. It noted that the EPA, which had been considering a proposed Significant New Use Rule (SNUR) on asbestos-containing friction materials under the Toxic Substances Control Act Section 5, is no longer planning the SNUR. It noted that the Brake Manufacturers Council (BMC) recently created a new technical subcommittee called the Product Environmental Committee (PEC) to deal with environmental concerns related to raw materials used in the manufacture of friction materials. The formation of this committee was primarily driven by the copper (allegedly attributed to brake lining) found in south San Francisco Bay. It noted that the EPA is looking to formulate a Maximum Available Control (MAC) Technology Standard for "smoke stack" emissions from friction material manufacturers including basic manufacturers and assemblers of friction material. This proposed standard is to be announced in March 2000.

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

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

Mr. Rob Burgess noted that he has been in contact with the EPA with regard to having representatives speak at the next FMSI Meeting concerning the MAC Technology Standard. Mr. Britland noted that Proposition 65 in California entails a list of about 2800 materials that cannot be in friction products. Some of the materials are regularly used in friction material. This information was just obtained and is not complete but it is something to be aware of and to be looking for in the future.

INSTITUTE PENSION PLANS

This report was presented by Gil Laycock, Secretary. Please refer to EXHIBIT 10 in the report booklet.

Mr. Laycock noted that the Institute Pension Plan which was initiated in 1981 contributes at a rate of 15% of eligible employee wages. The contributions for 1998-99 were projected

INSTITUTE PENSION PLANS (cont'd)

to be $18,537. The employees direct the investment of contributions. Deferred contributions are allowed with all employees participating in this option.

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

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

NEW BUSINESS

Mr. Britland noted that increasing membership is a priority. Any current member who deals with or has contact with a company that, by the nature of its business could be a member of the Institute, should make an effort to have that company get membership information. Mr. Britland noted that Mr. Tim Duncan of Link Engineering had volunteered to be Chairman of the Brake Performance Study Committee - Passenger Car and Light Truck. Mr. Laycock gave an update on the progress of the year 2000 Library Catalog. He noted that the Institute is on target with most of the text being done and the illustrations, which were never on computer files, 65% complete.

* *

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 11:15 A.M. June 6, 1999

G. N. Laycock
Secretary