LEAD INDUSTRIES ASSOCIATION, INC.
292 MADISON AVENUE
NEW YORK, N. Y. 10017
TELEPHONE - AREA CODE 212
OR 9-0080

March 22, 1966

SUBJECT: REPORT OF ASSOCIATION ACTIVITIES - 1965

To Members of the Lead Industries Association, Inc.:

Enclosed are:

1. Report of the Secretary for the year 1965.
2. Report of the Treasurer for the year 1965.
3. Current list of members.

Sincerely yours,

David M. Borcina

David M. Borcina
Secretary, Treasurer

DMB:so
Enc.

Look Ahead with Lead

GENERAL REMARKS

Continued growth in the activities of the Association was shown during 1965 with increased services for the members and, more importantly, for the consumers of lead. The overall advertising and publicity programs were increased substantially with the areas of activity remaining much as they were a year ago. Tangible results of the Association's activities are noted in the detailed discussions that follow.

One of the most interesting aspects of our promotional activities has been reflected in the type of inquiries we are now getting. All of these express an interest in lead and its products of course but more importantly they are beginning to ask how specifically can I use lead to solve my problem.

Following is a detailed discussion of the Association's more important activities.

TECHNICAL SERVICE AND STAFF

An addition was made to the staff during 1965 to assist in Safety and Hygiene activities. He is James C. Roumas, an industrial hygienist who was formerly coordinator of industrial hygiene services for the Continental Can Company and prior to that was with the U.S. Public Health Service. No other changes were made during 1965 and the staff and its basic duties remain as follows:

C. A. Baker	- Batteries, Cable
B. Feder	- Sound and Vibration
D. G. Fowler	- Health and Safety
E. D. Martin	- Architectural and Construction
J. M. McAward	- Advertising, Trade Shows
J. F. Smith	- Ceramics, Solder and Pigments
R. B. Travis	- Corrosion, Cable
R. I. Walley	- Accountant, Office Manager

The varied technical skills and disciplines that the staff provide makes it possible to handle the widely diversified problems that confront us each day. I should add that though we all have differing basic areas of interest the staff works so closely together that any one of us can supply at least a partial answer to questions that may arise during another's absence.

"THE LEAD MATRIX" L.I.A.'s MOVIE

The Association's first motion picture "The Lead Matrix" was completed in 1965 and had its premiere showing on November 29, 1965. Twenty-six minutes long, the film is 16 mm. in full sound and color. The comments of those that have seen it range from "very good" to "excellent." Widespread distribution is planned

for 1966 among professional audiences, universities, technical societies, adult groups and high schools. Television showings are prominently in our distributional plans. Over 100 prints will be working.

HEALTH AND SAFETY

A major effort during most of the year has been directed toward an effective presentation of the facts about lead in the environment, development of information material for use outside our industry, and design and institution of research to fill gaps in our knowledge about lead toxicology. Largely as a result of writings by a geologist, who claims concern over amounts of lead he has found in snow and water, we as an industry are considered by some to have been placed on the defensive as far as environmental health is concerned. While the allegations are mainly concerned with lead in the air, there have been alarming statements made concerning the total amount of lead in the environment. Most of the physicians and public health workers in this country have given little credence to geological statements about man's helath, but the Division of Air Pollution of the U.S. Public Health Service accepted the general thesis as being one that required further investigation and held in December a "Symposium on Lead in the Environment." While the meeting resulted in a considerable amount of publicity about lead in the environment, it turned out on balance to be a rather empty effort as far as stirring up any public or legislative indignation. However, it did help to spur Senator Muskie, Democrat from Maine and Chairman of the Senate Subcommittee on Air and Water Pollution, to announce that he would investigate lead in air pollution.

In our opinion the allegations made against lead as an environmental poison have been without value, but this has not meant that we could ignore them and our activities have largely been guided accordingly. In late 1965, the Board of Directors approved the hiring of Hill & Knowlton, a well-known and widely experienced public relations firm, whose efforts will be used in addition to those provided by our advertising agency in the Lead Information Program.

Quarterly distribution of the Kettering Abstracts on Lead Toxicology was made during the year to a controlled and limited list of about 400 people. The second of our series of Facts bulletins on lead toxicology entitled "Facts about Lead in Air Pollution" was prepared but has not yet been issued.

BATTERIES

LIA's effort to bring together the industrial truck and battery manufacturers and the electric power groups that supply the current to recharge the batteries really began to bear fruit in 1965.

First, there were successful truck shows or rodeos in 6 important industrial centers around the country. Probably the most exciting of these was at Kansas City in October where more than 800 VIP industrialists were exposed to 125 pieces of equipment and some very large orders were actually written on the exhibit floor.

Second, and aside from shows, there were some equally important market development programs instigated by our cooperative efforts with the two groups mentioned above. These programs took the form of mailing campaigns, sales contests, trade paper ads, and power company personnel training seminars: some incorporated all of these facets, others only part. These events were staged within 14 power supplier areas and results ranged from moderate to outstanding, depending on the time and effort expended. In every case our literature and/or ad reprints were utilized by the electric power utility.

Third, the highly successful brochure, "Industrial Trucks, What Do They Cost - to Own, to Operate, to Maintain?" was revised from the 1959 edition. More than 125,000 copies of the original have now been distributed and it also has been translated into seven foreign languages. The new version brings dollars up to 1965 levels, and still features easy-to-use nomographs for basic comparisons.

We are members of the Electrification Council, a splinter group of the Edison Electric Institute, and meet regularly with their sales promotion committee, as well as with the Electric Truck Committee of the Material Handling Institute. This important liaison will allow us to keep in close contact with the management level of both these groups which are so essentiel to continued success in selling more lead to the industrial battery market.

ARCHITECTURAL

At the beginning of the year L.I.A.'s new booklet "Lead Roofing and Flashing" was completed and mailed. Later in the year its selection for an award by the Producers Council in collaboration with the National Association of Home Builders was a measure of its usefulness. It has since served as a basic source for material in reply to requests for information on all sheet lead roofing or flashing problems. A companion piece, "Waterproofing With Sheet Lead" has filled in with useful information on waterproofing where membrane type installations are indicated. L.I.A.'s four page catalog for Sweets Architectural File was refurbished and supplied with an updated specification.

One of the major problems presented during the year by a leading architectural firm involved the use of sheet lead in what we believe will be the world's largest reflecting pool. Unlike other such pools however, the architect desires that the lead be left exposed, that is serve as the bottom of the pool without benefit of protection from any of the usual finishing materials such as stone or asphalt. A method of construction that we believe will avoid the problems of expansion and contraction was worked out. With the cooperation of a manufacturing member's laboratory and a lead burning contractor there is now under test a 900 sq. ft. test section incorporating L.I.A. recommendations. This was set out last spring and to date has successfully withstood a wide variety of temperature and weather conditions with encouraging results. Work on pool linings continues with background provided by the apparently successful test now under way being especially helpful. Several large pools on Washington are in process of construction, and a close check is being maintained on specification and final drawing preparation. Consultation with Federal architects in the National Park Service has resulted in lead being used in a building restoration in Independence National Historical Park in Philadelphia.

NOISE AND VIBRATION CONTROL

In 1965 we continued to run case-history ads about vibration pads and also advertised test results on sheet lead plenum barriers. Publicity included articles in LEAD and in the trade press on both vibration pads and noise control -- the articles including a story about the first architectural use of the pads in England, development of lightweight movable walls, and the successful [illegible] proofing of a lie-detector test room, among others. "Practical Sound Barriers," a 12-page technical report and manual was published and distributed. It has met with marked success and resulted in orders for lead by architects. Also, as a result of discussions with the architects the Federal Government is using sheet lead for sound attentuation in their standard prototype control tower for all airports built in the future as part of the Federal Airways program.

The year was marked by the clear establishment of thin, continuously-cast sheet lead as a preferred material for plenum barriers. Production and general availability of the product should now lead to substantial sales. A number of installations have been made and others underway that are using from five to seven tons of lead each.

CABLE SHEATHING

The primary purpose of L.I.A.'s modest advertising and promotional efforts in this area has been to keep engineers aware of the many advantages of lead cable sheathing. We are concentrating our efforts on power cable and using case-history types of

advertising describing both in-plant and electric utility applications. More than 18,000 copies of the L.I.A. 24-page booklet "Lead Sheathing for Power Cable" have been distributed since its publication in 1963.

CERAMICS

The use of lead in ceramics continued to show an increase in 1965. Major applications, such as glass and glaze ingredients, are growing with the industry generally. Last year, for the first time in several years, all porcelain enamelers of aluminum reported stepped-up production. Several other encouraging signs are evident: Minnesota Mining and Manufacturing Company has developed a technique for porcelain enameling of aluminum foil using leaded enamels. With an adhesive backing already applied by 3M, the market for this foil both as a wallpaper and for numerous exterior uses could mean a sizable increase in the tonnage of lead consumed for leaded porcelain. In another development, Kaiser Aluminum unveiled a process for porcelain enameling any aluminum alloy with satisfactory results, whereas previously, only a few aluminum alloys could be successfully enameled. A major automotive company which last year was reported to have great interest in the use of high lead content (20% Pb) ceramic permanent magnets for small electric motors in automobiles has now progressed to the stage where they are acquiring equipment for pilot plant operations. All indications are that lead ceramic permanent magnets will be their choice. If full-scale production is commended using the high lead system, consumption of lead for this single new application would be quickly pushed to 1,000 tons or more annually. As a present "doping additive" in the conventional barium ferrite ceramic permanent magnet, lead consumption continued to increase last year and amounted to over 300 tons. Another lead bearing ceramic, lead zirconate titanate, made its first commercial step in the final quarter of 1965. Clevite Corporation's Piezoelectric Division introduced a spark ignitor for use in portable stoves such as the Coleman camp stove and others. In addition, L.I.A. arranged for a meeting between Clevite personnel and parties at the American Gas Association in order to promote use of this ceramic in place of pilot lights in gas ovens, dryers and other gas appliances. A.G.A. was very enthusiastic and a pilot model stove is now under way which could be shown around the country to gas appliance manufacturers in order to demonstrate the feasibility of using lead zirconate titanate and to encourage these manufacturers to adopt use of the material. In addition to providing technical service and consultation in the above mentioned areas of ceramics, L.I.A.'s advertising and services were directed to the glass industry also which presently consumes a major portion of the lead used in the ceramic market.

PIGMENTS

Lead pigments for metal protective paints and lead chromate yellow traffic marking paints were promoted by the Association throughout 1965. Efforts on chrome yellow work stepped up considerably in anticipation of the ultimate introduction of a new sulphur-based coating material which preliminary tests touted as being cheaper and offering much longer life than ordinary yellow paint systems. In November of 1965 the Association produced and distributed an eight-page brochure on chrome yellow paints emphasizing their ease of formulation and application. Considerable emphasis was also placed on the safety aspects of chrome yellow where a sizable market for such paints exists. Red lead and basic lead silico chromate pigmented paints were advertised and their applications were written up in LEAD.

SOLDER

In spite of many attempts to replace solder with other joining materials, it has shown continued growth in usage. As noted last year, however, with its consumption concentrated in only three industries - automobiles, cans and electronics - loss or replacement of solder in any one of these markets could seriously impair its growth prospects. L.I.A.'s advertising and promotion effort, therefore, was directed throughout 1965 towards bringing about new applications and improving the efficiency and cost picture where it is presently used in order to assure continued growth in use. We feel that this effort has been highly successful thus far, and our 1965 advertising and promotion in this area generated a tremendous response from persons using solder or wishing to employ it, yet unaware of the new techniques available to assist in its use. Two articles which appeared in the trade press were prepared by the staff on the subject of new soldering techniques and solder alloys, and these have received wide distribution.

TERNE METAL

In our opinion this program has been most successful. It has aroused interest and demand, with the result that the steel companies are actively promoting this product. The two major producers have started advertising programs of their own and one of them has already published and distributed widely a 12-page booklet on the subject and the other has one under consideration. The other two producers have market studies underway and we are hopeful that their findings will justify additional production. One adverse element in the picture is the drive by the plastic industry to replace the present terne metal automotive gasoline tanks with molded plastic tanks. At least one major automobile manufacturer has these plastic tanks on test. If successful, this development would seriously affect the terne market temporarily, in our opinion, as we are sufficiently convinced that

there are innumerable untouched markets that could be exploited if production facilities were available.

PLUMBING

The marketing of the neoprene-type mechanical joints for cast-iron soil pipe is making serious in-roads in the use of calking lead. A recent article in the du Pont magazine reports that 10 million of these neoprene gaskets have been used in the last five years, with the use accelerating. The conventional calked joint in cast-iron uses from 1½ lb. to 3 lb. of lead per 2, 3 or 4 in. diameter pipe so it doesn't take much of a mathematician to figure the loss. The relative merits of the two types of joints are under investigation by I.L.Z.R.O. and it is hoped that the results of this work will provide the answers needed to minimize lead's losses in this market. The relatively minor advertising effort conducted in 1965 was literally swamped by the expenditures made by the cast-iron people themselves and by du Pont, manufacturers of the neoprene. Unless some satisfactory method of reducing the on-the-job labor required for lead calked joints or some faults in the substitute joints can be found, the possibility of regaining this market is minimal.

CHEMICAL CONSTRUCTION AND CORROSION CONTROL

Visits to the chief lead burning contractors in the eastern U.S. were made to evaluate the position of lead as a chemical construction material. (A similar survey of the western contractors was made in 1964.) All the contractors reported that there is a significant increase in the amount of chemical construction throughout the country. Seventy per cent said that their lead-work for this construction has increased or, at least, remained static. Most of the chemical work is lead linings that are going into the old standbys: sulphuric acid tanks, chrome plating tanks, pulp tanks and the few remaining rayon plants. We learned of no significant inroads being made by lead into new process equipment. All of the contractors mentioned cases in which lead has recently replaced, or re-replaced, some other material. Not surprisingly, when the appropriate customers were approached for details of the changes they either refused to give information or did not answer at all. While this look at the chemical construction industry showed a more encouraging situation than in the recent past, we could see no clear-cut evidence that an advertising campaign in the trade press would divert much additional business to lead.

It should be pointed out too that throughout the country the greatest part of the lead burning contractors' work is for radiation shielding in one form or another -- x-ray room walls, shielded irradiation chambers, shipping and other casks, etc.

RADIATION SHIELDING

A number of senior design engineers engaged in making reactors and other nuclear equipment were interviewed to elicit their opinions on two main points: 1) How important is lead in the construction of reactors and related equipment? and 2) would L.I.A. be performing a useful service or serving the interests of the lead industry by starting an advertising campaign? The ads were expected to be built around case histories of lead applications. While the engineers agreed that a great deal of lead is used in a wide variety of applications ("All in all, lead is a very sophisticated material and there are many valuable tricks you learn to do with it," said one) there was doubt that a series of ads would be very informative, or add much to the advertisements currently run by member companies. Our program now is to unearth as many of the "valuable tricks" as possible for use in LEAD magazine and for placement in appropriate trade magazines.

DESIGN ENGINEERING

Effort in this area is primarily one of educating design engineers in the many and varied uses of lead and lead products. We have continued participation in the Sweet's Design Catalog File, advertising in the Design magazines, exhibits at the Design Engineering Show and by personal contact. The emphasis has been to get these engineers thinking in terms of lead as a modern and versatile material that may solve their modern design problems.

MISCELLANEOUS

Statistics - The regular monthly statistical services for members were maintained and the Annual Statistical Review issued. In addition, we published a comprehensive booklet "Lead in 1964" that reviewed the lead situation as it affects both producers and consumers.

Information Bulletins - Seven of these were sent to members at intervals throughout 1965. Judging by the number of requests received from members for further information about the items included, this release appears to be very worthwhile.

The L.I.A. Battery Booster - Four of these bulletins designed to inform electric power and battery people about new lead-acid battery developments and applications were issued during the year. Approximately 1,800 individuals now receive copies.

Second International Lead Conference - The Executive Vice President attended the conference held in October, 1965, at Arnhem, Holland and presented several papers prepared by the staff.

Lead Abstracts - These monthly publications issued by the Lead Development Association, London, and partly financed by us were distributed to approximately 1,400 people in the U.S.

Research Digest - This semi-annual report of all I.L.Z.R.O. research projects relating to lead was distributed to a list of over 500 individuals and companies, all in the U.S.

NEW PUBLICATIONS

The following new publications were issued or distributed during the year and were sent to appropriate mailing lists in the quantities indicated:

Subject	Pages	Quantity
Lead (4 issues)	12	220,000
Lead Abstracts (12 issues)	varies	18,000
Lead Roofing and Flashing	16	14,000
Lead and Zinc-Free World Supply and Demand (Jointly with American Zinc Institute)	40	2,000
Annual Review - Lead 1964	16	2,000
Practical Application of Sheet Lead for Sound Barriers	12	14,000
Follow the Safety Line with Chrome Yellow	8	2,000
Facts about Lead and Industrial Hygiene	8	8,000
TOTAL		280,000

Additional copies of all of these have also been distributed as a result of inquiries and at trade shows.

REPRINTS

One of the most useful promotional tools involves the use of favorable articles written by the L.I.A. staff or others on lead's usage that appear in the trade press. These are reprinted and distributed, some in bulk to the various L.I.A. mailing lists and others to answer specific inquiries.

Those that were reprinted during 1965 included:

Subject	Publications	Quantity Distributed in Bulk Mailings
*Lead in Modern Chemical Construction	"The Encyclopedia of Chemical Process Equipment"	6,000
Ceramic Permanent Magnets	"Ceramic Age"	300
Organo - Lead Job Hunt	"Chemical Week"	300
*New Uses for Terne Coated Steel	"Materials in Design Engineering"	300
*Use Epoxies to Line Tanks with Lead	"Chemical Engineering"	300
It Takes a "Lifetime" to Paint the Frisco-Oakland Bay Bridge	"American Painting Contractor"	7,000
*Where to Use Terne Coated Steel	"Metal Progress	13,000
Isolation of Railroad-Subway Noise and Vibration	"Progressive Architect"	13,000
Cathodic Protection for an Offshore Structure	"Materials Protection"	14,000
There's Something New to Know About Battery Power	"Modern Materials Handling"	4,000
*Lead Roofing '65	"Roofing, Siding and Insulation"	300
*Soldering Alloys	"Machine Design"	300
	TOTAL	58,800

* Prepared by members of L.I.A. staff.

ADVERTISING

The total circulation of the space advertising in trade and business magazines in 1965 was over 1,200,000. Based on the number of advertisements appearing in each publication this resulted in over 12,000,000 individual advertising messages. A detailed list of the publications used in 1965 and their circulation follows:

	Pages	Circulation	Subject
American Ceramic Society Bulletin	4	9,383	Ceramics
American City	6	32,043	Paint, Calking Lead
American Painting Contractor	4	35,423	Paint
Business Week	13-2/3	500,000	Batteries, Pools, Roofing, Anti-Vibration, Sound
Ceramic Age	4	8,352	Ceramics
Ceramic Industry	4	5,654	Ceramics
Electrical World	8	29,612	Cable, Batteries
Engineering News Record	13	89,669	Roofing, Anti-Vibration, Pools, Paints
Factory	10	72,124	Batteries, Anti-Vibration Sound, Cable
Machine Design	6	71,227	Properties & Uses
Material Handling Engineering	4-2/3	50,982	Batteries
Materials in Design Engineering	6	33,375	Properties & Uses
Metal Products Manufacturing	6	17,711	Ceramics, Terne, Solder
Modern Materials Handling	4-2/3	50,039	Batteries
Plumbing-Heating-Cooling Business	6	29,945	Calking Lead
Product Design & Development	6-1/9	68,989	Solder
Product Engineering	6	70,655	Properties & Uses
Progressive Architecture	12	47,896	Pools, Anti-Vibration, Roofing, Sound Porcelain Enamels
Roofing-Siding-Insulation	6	11,693	Roofing
Rural & Urban Roads	4	42,026	Paint
TOTAL		1,276,798	

TRADE SHOWS AND CONTESTS

In 1965 the Association had display booths at six national trade shows as follows:

American Institute of Architects
Construction Specifications Institute
Design Engineering Show
Exposition of Chemical Industries
Industrial, Institutional & Commercial Building Exposition
National Plumbing-Heating-Cooling Exposition

We are convinced that participation in these shows is of considerable value in providing means of personal contact with users and potential users of lead that is not available in any other way. They also have the dual advantage of providing the staff with the opportunity of gaining first-hand knowledge of the needs and requirements of major segments of various industries.

As in the past, L.I.A. has continued to cooperate with the plumbers' Union in the conduct of their International Plumbers' Apprentice Contest held each year at Purdue University. One of the staff serves as a judge in the lead working phase of the contest and another (Homer Yetman, retired) serves as an instructor for refresher courses for teachers of apprentices. The necessary lead materials are also provided.

INQUIRIES

The total number of inquiries increased substantially in 1965 to an average of about 1,500 a month. Of these, roughly 200 a month were of a technical nature requiring the personal attention of one or more members of the staff.

The following table shows total inquiries received and handled by the staff, broken down by sources, in 1965 and 1964. The heading "Technical" means inquiries that require special handling such as by letters, phone calls or personal visits and "General" are those that are simply literature requests:

Source	1965 General	1965 Technical	1965 Total	1964 General	1964 Technical	1964 Total
Magazines	5,712	164	5,876	2,813	196	3,009
Press Releases	5,527		5,527	1,262		1,262
"Lead"	2,122	202	2,324	2,014	217	2,231
Exhibits	1,315		1,315	1,222		1,222
Telephone	(a)	1,309	1,309	(a)	1,307	1,307
Personal Contact		442	442		408	408
Other	1,015	204	1,219	839	217	1,056
	15,691	2,321	18,012	8,150	2,345	10,495

(a) Included in other categories

LITERATURE DISTRIBUTION

Literature distributed through inquiries totaled 93,884 copies in 1965 compared to 63,638 in 1964, a very sizable increase. As frequently happens one enquirer may write requesting a dozen or several hundred copies of our literature for his own distribution or a single enquirer may get four or five pieces of literature pertaining to his particular problem. It is for these reasons that the quantity of literature far exceeds the number of inquiries.

L.I.A. advertising and publicity and the new literature available from year to year have a strong influence on the subject and quantity distributed, but what is most interesting in the following breakdown is the wide diversity of interest in lead products shown by those requesting assistance:

	1965	1964
Alloys	33	135
Batteries	22,246	21,782
Bearings	128	158
Cable	496	894
Ceramics	4,912	3,635
Corrosion	10,367	3,150
Health & Safety	1,220	(a)
Paint	1,658	1,378
Plumbing	5,470	3,585
Radiation	1,419	2,021
Roofing, Flashing & Waterproofing	17,389	4,649
Solder	3,578	1,671
Sound Attenuation	12,473	9,853
Vibration Control	6,018	5,687
Miscellaneous	6,477	5,040
TOTAL	93,884	63,638

(a) Included in "Miscellaneous"

March 22, 1966

ANNUAL REPORT
for the YEAR 1965

TREASURER'S REPORT

The Treasurer respectfully submits the attached report of the audit of the accounts of the Association as of December 31, 1965 by Haskins & Sells.

DMB:so

As required by the New York Membership Corporations Law, the members of the Lead Industries Association, Inc., are advised that the Association has no real property and that its personal property consists of commercial and savings deposits in the following banks:

Commercial Banks

The Chase Manhattan Bank

Savings Accounts-Pension Fund

Emigrant Industrial Savings Bank

Harlem Savings Bank

Savings Accounts-LIA Funds

The Chase Manhattan Bank
The Dime Savings Bank of Brooklyn
Empire City Savings Bank
The Franklin Savings Bank
The Greenwich Savings Bank
The Kings County Savings Bank
Kings Highway Savings Bank
The New York Savings Bank
South Brooklyn Savings Bank

Verified by _____
President

Verified by _____
Treasurer

HASKINS & SELLS
CERTIFIED PUBLIC ACCOUNTANTS

TWO BROADWAY
NEW YORK 10004

March 7, 1966

ACCOUNTANTS' OPINION

Lead Industries Association, Inc.:

We have examined the balance sheet of Lead Industries Association, Inc. as of December 31, 1965 and the related statement of income, expenses, and reserves and the supplemental schedules of cost of publications, advertising and promotions, and research projects for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income, expenses, and reserves and supplemental schedules present fairly the financial position of the Association at December 31, 1965 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

/Haskins & Sells

LEAD INDUSTRIES ASSOCIATION, INC.

BALANCE SHEET, DECEMBER 31, 1965

A S S E T S

CASH:		
Operating funds (including savings bank deposits, $185,343.89)	$284,473.01	
Employees Pension Plan Fund (savings bank deposits)	6,357.50	
Total cash		$290,830.51
ACCOUNTS RECEIVABLE		1,002.25
ADVANCES FOR TRAVEL EXPENSES		3,050.00
AIR TRAVEL DEPOSIT		425.00
TOTAL		$295,307.76

L I A B I L I T I E S
A N D R E S E R V E S

ACCOUNTS PAYABLE		$ 4,504.02
MEMBERSHIP ASSESSMENT RECEIVED IN ADVANCE		58,785.00
RESERVES:		
General Fund	$ 98,791.62	
International Lead Zinc Research Organization Fund	126,869.62	
Employees Pension Plan Fund	6,357.50	
Total reserves		232,018.74
TOTAL		$295,307.76

See Notes to Financial Statements.

LEAD IN

STATEMENT OF
FOR THE Y

INCOME:
- Membership assesments.....
- Transfers between funds.....
- Interest on savings bank deposits.....
- Miscellaneous (including sales of publications).....
- Total income.....

EXPENSES:
- Salaries and payroll taxes.....
- Temporary office help.....
- Rent.....
- Office supplies.....
- Office services.....
- Travel (includes entertainment and luncheons).....
- Association dues.....
- Meetings (net of fees, $17,381.87).....
- Telephone and telegraph.....
- Books and subscriptions.....
- Business insurance.....
- Group life insurance.....
- Printing.....
- Mailing.....
- Test program.....
- Legal, accounting, and consultation fees.....
- Technical writing.....
- Pension plan costs.....
- Furniture and fixtures.....
- Abstracting service.....
- Foreign translation service.....
- Miscellaneous.....
- Cost of publications, net (see Schedule A).....
- Advertising and promotions (see Schedule B).....
- Research projects (see Schedule C).....
- Expenses - net.....

EXCESS (DEFICIENCY) OF INCOME OVER EXPENSES FOR THE YEAR.....

RESERVES, JANUARY 1, 1965.....

RESERVES, DECEMBER 31, 1965.....

( ) Denotes red figure.

See Note

DUSTRIES ASSOCIATION, INC.

INCOME, EXPENSES, AND RESERVES
EAR ENDED DECEMBER 31, 1965

TOTAL	GENERAL FUND	INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION FUND	EMPLOYEES PENSION PLAN FUND
$1,174,917.45	$643,345.45	$531,572.00	
	(12,000.00)		$12,000.00
9,344.96	3,869.72	5,083.25	391.99
1,501.73	1,501.73		
1,185,764.14	636,716.90	536,655.25	12,391.99
285,421.57	202,416.82	83,004.75	
1,567.82	483.25	1,084.57	
30,439.98	19,440.00	10,999.98	
14,493.12	5,225.09	9,268.03	
11,608.73	7,108.75	4,499.98	
55,550.27	38,031.07	17,519.20	
2,452.87	2,137.21	315.66	
6,128.86	3,401.55	2,727.31	
9,796.27	4,910.96	4,885.31	
2,281.16	1,044.19	1,236.97	
1,685.75	1,401.45	284.30	
1,154.25	719.86	434.39	
659.08	659.08		
10,882.85	7,372.42	3,510.43	
3,962.58	3,962.58		
17,111.68	3,756.39	13,355.29	
7,931.50		7,931.50	
29,780.00		5,516.00	24,264.00
3,848.71	1,772.56	2,076.15	
9,367.72	9,367.72		
621.00		621.00	
3,613.64	2,214.33	1,399.31	
81,748.11	81,748.11		
275,965.64	275,965.64		
396,495.11		396,495.11	
1,264,568.27	673,139.03	567,165.24	24,264.00
(78,804.13)	(36,422.13)	(30,509.99)	(11,872.01)
310,822.87	135,213.75	157,379.61	18,229.51
$ 232,018.74	$ 98,791.62	$126,869.62	$ 6,357.50

ns to Financial Statements.

LEAD INDUSTRIES ASSOCIATION, INC.

FOR THE YEAR ENDED DECEMBER 31, 1965

SCHEDULE A

COST OF PUBLICATIONS, NET

"Lead"	$ 38,213.21
Reprints	5,837.48
Supplements to "Lead in the Ceramic Industries"	1,301.21
Sweet's Catalogs	13,356.05
Roofing Handbook	975.54
Yellow Traffic Paint	2,930.35
Proceedings of International Conference	1,500.00
Hoffman Translation	1,000.00
Batteries	2,847.83
Improved Sound Barriers	848.10
Sound Attenuation	5,246.05
Annual Review	789.54
Picture Book	2,011.98
Anti-Vibration Pads	1,708.94
Joint Proceedings	3,181.83
TOTAL	$ 81,748.11

SCHEDULE B

ADVERTISING AND PROMOTIONS

Advertising space:	
Solder	$ 9,406.35
Terneplate	7,417.93
Batteries	33,513.34
Construction	24,207.57
Design	6,285.18
Ceramics	13,934.29
Vibration control	14,206.68
Noise	14,022.58
Cable	7,927.82
Pigments	14,681.32
Plumbing	6,099.21
Total	151,702.27
Advertising production	25,043.94
Conventions and exhibits	16,282.91
Apprentice contest	1,074.50
Health and Safety Information Service	25,811.64
National Sports Shooting Foundation	650.00
Motion Picture	54,305.23
Miscellaneous	1,095.15
TOTAL	$275,965.64

SCHEDULE C

LEAD INDUSTRIES ASSOCIATION, INC.

RESEARCH PROJECTS
FOR THE YEAR ENDED DECEMBER 31, 1965

Lead Powder Metallurgy - Rennsilear	$ 1,000.00
Lead Powder Metallurgy - U. of British Columbia	14,025.16
Reinforced Lead - I. I. T.	1,270.47
Sound Attenuation - Goodfriend & Associates	6,940.24
Joining Lead to Lead - AS&R	4,375.51
Lead Powder Metallurgy etc. - AS&R	8,847.29
Lead Metallurgical Fellowship - Queensland U.	3,981.19
Plumbing Applications of Lead	1,900.00
Further Development of the D M Process - Broken Hill	101.67
Ceramic Fellowships	22,080.00
Lead Organic Compounds - Organisch T.N.O.	41,126.85
Organolead Chemistry - Quartermaster, U. S. Army	10,591.79
Pigments for Water Soluble Vehicles - Eagle-Picher	7,881.02
Air Drying Water Reducible Paints - Eagle-Picher	4,624.96
Lead Compounds as Lubricants - Ethyl	12,921.51
High Speed Plating of Lead - Graham, Savage & Associates	27,613.53
Corrosion Research Council	500.00
Abstracting Service	8,004.35
Litharge Glycerine Cement - Yarsley Research	4,710.48
Improving Textile Materials, etc. - U. S. Dept. of Agriculture	9,166.00
Lead Concentration in an Ambient Atmosphere - Ketterin	35,000.00
Lead Composite Cable Sheathing - Dynatech	19,284.47
Properties of Molten Lead & Lead Alloys - Canadian Lead Zinc	4,874.22
Corrosion of Lead in Various Media - Battelle	13,977.05
Effect of Oxygen on Lead Fatigue Cracking - U. of Melbourne	9,269.12
Anti-Fouling Marine Paints - Litter Labs	69.71
Application of Powder Metallurgy to Lead Acid Batteries - Eagle-Picher	11,219.20
Lead Coatings for Concrete - Ethyl	5,301.91
Support of Naval Research on Lead Acid Batteries - Eagle-Picher	15,628.00
Joining of Particulate Lead Products - Budd	6,880.00
Fundamental Surface Relocation of Lead - U. of British Columbia	3,002.75
FORWARD	$316,170.45

(Continued) - 1.

SCHEDULE C

LEAD INDUSTRIES ASSOCIATION, INC.
RESEARCH PROJECTS, ETC.

FORWARD	$316,170.45
Chemical and Electrochemical Corrosion of Lead Alloys	2,148.40
Lightweight Lead Sheet Roofing System - Southwest Research Institute	7,759.97
Lead Glazes for Dinnerware - Rutgers	5,227.00
Opacification of Lead Bearing Porcelain Enamels - Ferro Corporation	11,415.00
Lead Compounds for Wood Preservation - British Columbia Research Council	1,501.25
Application of Lead for Acoustical Use in European Building Partitions - Technischen Universitate	4,328.30
Refractories for Manufacturing Lead Glasses - Centro Ricerche Metallurgiche	3,501.90
Biochemical Approach to Lead Toxicity - Harvard Medical School	25,710.26
Lead Pigments in Electrophoretic Paint Disposition - Eagle-Picher	4,128.06
Large Scale Phase Diagram - Pennsylvania State University	2,000.00
Commercialization of Lead Filled Fiber Metal - I.I.T.	500.00
Mechanism of Anodic Corrosion of Lead Alloys - Bujn Maur	2,500.00
Decorative and Protective Finishes for Lead - Eagle-Picher	3,106.38
Paintability of Lead and Lead Alloy Surfaces - Eagle-Picher	1,923.64
Kettering Abstracts	2,500.00
Flame Spraying of Low Temperature Leaded Enamels - Battelle	2,074.50
TOTAL	$396,495.11

(Concluded) - 2.

LEAD INDUSTRIES ASSOCIATION, INC.

NOTES TO FINANCIAL STATEMENTS

1. Expenditures for furniture, fixtures, and equipment are not capitalized, but are charged to expense at the time of purchase.

2. In 1963, the Association changed from an informal plan of funding the Employees Pension Plan Fund by actuarially determined deposits in savings banks to an approved insured plan by entering into a non-contributory participating deposit administration group annuity contract with Bankers Life Company effective from January 1, 1963. The Contractholder's Fund balance at January 1966 was $132,986.54.

   The aggregate balance of $6,357.50 remaining in the Pension Fund's savings bank deposits is earmarked for increased costs in subsequent years resulting primarily from revisions to the Plan for basing credits on the average salary for the final 120 months of employment, and for increasing the past service credit from 1 per cent to 1-1/2 per cent.

3. Administrative expenses in the International Lead Zinc Research Organization Fund are paid, for the most part, to American Zinc Institute which handles the accounting for the program.

4. Membership assessments in the General Fund include $93,450.75 of general membership subscriptions.

March 31, 1966

MEMBERS OF THE LEAD INDUSTRIES ASSOCIATION, INC.

Allied Smelting Corp.	5115 W. Lincoln Avenue	Milwaukee, Wis. 53214
Alpha Metals, Inc.	Box 34, Bergen Station	Jersey City, N.J. 07304
American Metal Climax, Inc.	1270 Ave. of Americas	New York City 10020
American Smelting & Refining Company	120 Broadway	New York City 10005
American Zinc, Lead & Smelting Company	Paul Brown Bldg.	St. Louis, Mo. 63101
The Anaconda Company	25 Broadway	New York City 10004
The O. A. Avril Company, Lead Products Division	P.O. Box 12050	Cincinnati, Ohio 45212
Bers and Company, Inc.	Ashland & Lewis Streets	Philadelphia, Pa. 19124
*Broken Hill Associated Smelters Proprietary Ltd.	95 Collins Street Box 1291 K	Melbourne C1, Australia
*Broken Hill South, Ltd.	Box 194 C, GPO	Melbourne, Australia
The Bunker Hill Company	Box 29	Kellogg, Idaho 83837
C & D Batteries Eltra Corporation	Washington & Cherry Sts.	Conshohocken, Pa. 19428
Cambridge Smelting Company	100 Pacific Street	Cambridge, Massachusetts
Cerro Sales Corporation	300 Park Avenue	New York City 10022
Circle Wire & Cable Co.	5500 Maspeth Avenue	Maspeth, L.I., New York
*Compania Minera Asarco, S.A.	Apartado 38 Bis	Mexico 1, D.F.
*The Consolidated Mining & Smelting Co. of Canada Ltd.	630 Dorchester Blvd. W.	Montreal 2, Canada
Day Mines, Inc.		Wallace, Idaho 83873
Delco Remy Division, General Motors Corporation	2401 Columbus Avenue	Anderson, Indiana 46011
Dickson Weatherproof Nail Co.	Box 590	Evanston, Illinois 60204
Dixie Lead Company	Box 8625	Dallas, Texas
E.I. du Pont de Nemours & Company		Wilmington, Delaware 19898
Eagle Picher Company	American Building	Cincinnati, Ohio 45201
The Electric Storage Battery Company	Box 8109	Philadelphia, Pa. 19101
Ethyl Corporation	100 Park Avenue	New York City 10017
Evans Lead Division, National Lead Company	Box 1467	Charleston, W. Va. 25325
Federated Metals Division, American Smelting & Refining Company	120 Broadway	New York City 10005
Aaron Ferer and Sons Co.	101-19 S. Eighth St.	Omaha, Nebraska 68102
The Firestone Tire & Rubber Company	Box F, Firestone Park	Akron, Ohio 44317
Gardiner Metal Company	4820 South Campbell Ave.	Chicago, Illinois 60632
Goldsmith Bros. Division, National Lead Company	111 North Wabash Avenue	Chicago, Illinois 60602

(Continued)

Hammond Lead Products, Inc.	5231 Hohman Ave.	Hammond, Indiana
Hecla Mining Company		Wallace, Idaho 83873
Homestake Mining	100 Bush Street	San Francisco, Cal. 94104
Houston Chemical Corporation	200 Madison Avenue	New York City 10016
International Smelting & Refining Co. (Anaconda Sales Co., Agents)	25 Broadway	New York City 10004
Industrial Smelting Company	19430 M & Elliott Ave.	Detroit, Michigan 48234
Knepp Mills, Incorporated	23-15 Borden Ave.	Long Island City, N.Y. 11101
Lead Products Company, Inc.	Box 1341	Houston, Texas 77001
Lucky Friday Silver-Lead Mines Co.		Wallace, Idaho 83873
John R. MacGregor Lead Co.	4520 W. Fifteenth St.	Chicago, Illinois 60623
Metalead Products Corp.	2901 Park Blvd.	Palo Alto, Calif. 94306
Metals Disintegrating Co.	Box 290	Elizabeth, New Jersey
Murdock Lead Company	Box 5298	Dallas, Texas 75222
Nalco Chemical Company	6216 W. 66th Place	Chicago, Illinois 60638
National Lead Company	111 Broadway	New York City 10006
Newmont Mining Corporation	300 Park Avenue	New York City 10022
*North Broken Hill, Ltd.	Box 1903R, GPO	Melbourne, Australia
The L.R. Oatey Company	4700 W. 160th Street	Cleveland, Ohio 44135
Olin Mathieson Chemical Corp.		East Alton, Illinois
Ozark Lead Company	P.O. Box 250	Ellington, Missouri 63638
Pend Oreille Mines & Metals Co.	Old Natl. Bank Bldg.	Spokane, Washington 99208
Phelps Dodge Copper Products Corp.	300 Park Avenue	New York City 10022
Revere Copper & Brass, Inc. Foil Division	196 Diamond Street	Brooklyn, N.Y. 11222
Revere Smelting & Refining Corp.	387 Avenue P.	Newark, New Jersey 07105
St. Joseph Lead Company	250 Park Avenue	New York City 10017
Shattuck Denn Mining Corp.	320 Park Avenue	New York City 10022
*Societe Miniere et Metallurgique de Penarroya	12 Place Vendome	Paris 1, France
Sunshine Mining Company	P.O. Box 1080	Kellogg, Idaho
*Tsumeb Corporation, Ltd.	300 Park Avenue	New York City 10022
U.S. Smelting, Refining & Mining Company	P.O. Box 2137	Boston, Massachusetts 02106
The Victory White Metal Company	6100 Roland Ave.	Cleveland, Ohio 44127
Hyman Viener & Sons	P.O. Box 573	Richmond, Virginia 23205
Vulcan Lead Products Company	1545 W. Pierce St.	Milwaukee, Wis. 53204
Western Lead Products Company	P.O. Box 1229	City of Industry, Calif.
Willard Lead Products Company	101 E. Griffith St.	Charlotte, N.C. 28203
*The Zinc Corporation, Ltd.	Box 384 D, GPO	Melbourne, Australia

* Associate Member