292 Madison Avenue · New York, N. Y. 10017 · Telephone: (212) 679-6020

October 28, 1969

TO: ALL MEMBERS OF THE INDUSTRY DEVELOPMENT COMMITTEE
OF THE LEAD INDUSTRIES ASSOCIATION

1970 LIA Budget Meeting
Industry Development Committee

Submitted herewith are an agenda and budget proposal on the subject to cover LIA's activities for 1970.

These will be discussed on Thursday, November 13, during the meeting of the committee to be held at Association headquarters, starting at 9:30 A.M.

The meeting will follow the agenda given below:

1. Approval of minutes of previous meeting, held October 25, 1968.

2. Presentation of Budget proposal and discussion.

3. Motions covering recommendations to the Board on:

   a) Budget proposal

   b) Assessment rates

4. Such other business as may be pertinent to the purposes of the meeting.

5. Adjournment.

Arrangements will have been made for lunch and we hope you will join us. It is not possible to be specific as to whether the meeting will run into the afternoon.

Please advise if you will attend. Also, whether you will be with us for lunch.

Sincerely,

J. L. Kimberley
Executive Vice President

JLK:lm

N10064

PNYC00000323

Lead Industries Association, Inc.
292 Madison Avenue · New York, N. Y. 10017 · Telephone: (212) 679-6020

October 28, 1969

SUBJECT: 1970 Budget Proposal

TO: All Members of the Industry Development Committee

Attached are data and discussions to cover plans for the operation of LIA during 1970.

The presentation includes:

Table I - The course of the Association's
A. Budget Income, Expenditures and Operating Reserves for 1960 - 1969 inclusive

B. Assessments for the same period

Table II - A financial summary for 1969

Table III - 1969 Budget, Performance as estimated, - and 1970 Proposal:

A. Administrative

B. Advertising, Publications & Related Programs

C. Summary

Table IV - Projected Income, Disbursements, and Assessment Rates for 1969

The final (and largest) section, Program Details, discusses each of the proposals for advertising, publications and related promotion, motion picture distribution and Health and Safety.

Sincerely yours,

David M. Borcina
Secretary and Treasurer

DMB:lm

Approved

J. L. Kimberley
Executive Vice President

PNYC00000324

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Table I

A - Gross Budget, Income, Expenditures - Balances 1960-1969

	Approved Budget	Income			Expenditures	Operating Reserves Year-end
		Assessments	Other	Total		
1960	$374,450	$371,963	$3,818	$375,781	$332,944	$154,385
1961	369,350	340,545	4,460	345,005	319,624	179,766
1962	461,000	471,560	4,660	476,220	412,133	243,853
1963	483,125	391,248	6,141	397,389	459,477	181,765
1964	622,700	515,169	6,033	521,202	567,754	135,213
1965	699,162	643,345	5,371	648,716	685,139	98,790
1966	826,650	812,896	12,899	825,795	739,739	184,846
1967	913,700	878,340	17,574	895,914	753,253	327,507
1968	841,905	623,852	31,519	655,371	818,402	164,476
1969(est)	924,585	806,500	12,500	819,000	900,475	83,001

Of income, the special assessment for Health and Safety accounted for $96,657 in 1966 and $206,087 in 1967.

B - Rates in ¢ per ton

	Membership						Industry Development	
	Mining		Manufacturing & Smelt. & Refin.		Assembled Articles		Pig Lead Sales	
	Regular	Health & Safety	Regular	Health & Safety	Regular	Health & Safety	Regular	Health & Safety
1960	20¢		5¢		2½¢		$ .42	
1961	12		3		1½		.52	
1962	16		4		2		.65	
1963	16		4		2		.54	
1964	16		4		2		.80	
1965	16		4		2		1.05	
1966	16	2.4¢	4	.6¢	2	.3¢	1.10	15¢
1967	16	4.8	4	1.2	2	.6	.91	28
1968	16	-	4	-	2	-	.90	-
1969	20	-	5	-	2½	-	1.17	-
Req-								
Dec. 1970			5		2½		(1.08¢) + (9¢)	

Table II - 1969 Income and Disbursements

Balance, January 1, 1969	$164,476
Income 1969:	
Membership	123,500
Pig Lead Sales	683,000
Miscellaneous	12,500
	$983,476
Estimated Expenditures	900,475
Balance, January 1, 1970 (Estimated)	$ 83,001 (a)

(a) Includes a deficit of $14,538 in the Health and Safety Public Relations Program.

Table III - Approved and Recommended Expenditures - 1969 - 1970

	A - Administrative & Technical Service	Approved 1969	Estimated 1969	Recommended 1970
1)	Salaries	$198,000	$198,000 (a)	$217,800 (b)
2)	Payroll Taxes	7,500	7,500	9,000
3)	Pension Premium	18,000	14,000	16,000
4)	Business Insurance	1,500	1,500	1,500
5)	Health Insurance	-	-	2,400 (c)
6)	Group Insurance	2,500	2,000	2,500
7)	Rent	16,500	18,000	24,000 (d)
8)	Travel & Expenses	45,000	40,000	40,000
9)	Annual & Committee Meetings	3,500	2,500	3,000
10)	Professional Fees	5,000	4,500	5,000
11)	Printing & Office Supplies	6,000	6,000	6,000
12)	Telephone & Telegram	6,000	6,000	6,000
13)	Postage & Express	7,000	7,500	7,500
14)	Subscriptions - Books & Periodicals	800	800	800
15)	Furniture & Equipment	2,000	2,000	5,000
16)	Office Services	8,000	6,500	7,000
17)	Technical Association Dues	1,000	700	700
18)	Miscellaneous	2,000	1,000	1,000
	Total Administrative	$330,300	$318,500	$355,200

Notes: (a) Includes $2,000 for temporary office help and $1,000 for employment Agency fees.

(b) This represents a 10 per cent across-the board salary increase for all staff in an attempt to make LIA competitive in the job market and to balance the inflationary spiral. At this time this matter has not been discussed with the Officers and Board of Directors.

Table III - (Continued)

Notes: (c) No hospitalization benefits are provided the employees and it is recommended that LIA absorb Blue Cross-Blue Shield charges.

(d) Provides for increased rental charges at present location. Does not provide for any costs involved in moving to other quarters.

	B - Advertising, Publications & Related Promotions	Approved 1969	Estimated 1969	Recommended 1970	
1)	Agency Fee	$74,500	$79,800	$80,000	
2)	External Public Relations	(included in Agency Fee)			
3)	Advertising Space Production	21,600	25,000	24,700	
4)	Architectural & Construction	81,900	74,700	84,360	- 64,360
5)	Cable	20,700	17,700	24,500	- 7,500
6)	Industrial Batteries	51,200	56,900	64,200	
7)	Pigments & Chemicals	22,700	22,700	26,600	- 19,100
8)	Other Product Prom.& Design	54,800	54,900	56,600	- 46,600
9)	"Lead" Magazine	40,000	42,000	45,000	
10)	Conventions & Exhibits	20,000	21,000	15,000	
11)	ZN-75 ILZRO Car	4,000	4,000	-	
12)	Lead Abstracts	14,000	14,000	16,000	
13)	Reprints of Technical Articles	10,000	7,500	10,000	
14)	Test Programs	10,000	-	5,000	
15)	Illustrations & Photography	3,000	1,000	1,000	
		$428,400	$421,200 (+32)	$452,960 #	- 398,460
	ZALIS & Special Studies (Approved by Board of Directors)				
16)	Study on off-the road electric vehicles	9,235	9,325	-	
17)	Detroit Field Man-Feasibility Study	10,000	-	10,000	
18)	Zinc & Lead Int'l Service (ZALIS)	28,000	28,000	15,400	
		$47,235	$37,325 (-12)	$25,400	
19)	Motion Picture Distribution :				
	a. General	15,000	15,000	10,500	
	b. Bureau of Mines	2,000	2,000	2,000	
		$17,000	$17,000 (-4)	12,500	

Table III - (Continued)

	New Programs:	Approved 1969	Estimated 1969	Recommended 1970
20)	Battery Powered Airport Buses	$ -	$ -	$13,000
21)	Battery Powered Golf Cars	-	-	~~5,000~~
		-	-	$18,000 — 13,000
	Miscellaneous and Contingencies:			
22)	Lead Book (Monograph)	4,000	1,000	3,000
23)	Corrosion Handbook	5,000	15,000	6,000
24)	Annual Review	1,000	2,200	2,000
25)	Apprentice Contest	1,500	1,200	1,500
26)	Organization Membership	2,150	2,150	2,900
27)	Miscellaneous Literature	-	3,400	3,000
28)	Contingencies:			
	a. General	3,000	1,500	3,000
	b. ILZRO	10,000	(see Item 23 above)	10,000
		$26,650	$26,450	$31,400
29)	Health-Safety Public Relations Program	75,000	80,000	200,000 — 100,000
C -	Summary			
	Administrative & Technical Service	$330,300	$318,500	$355,200
	Advertising, Publications & Related Promotions	428,400	421,200	452,960
	ZALIS & Special Studies	47,235	37,325	25,400
	Motion Picture Distribution	17,000	17,000	12,500
	New Programs	-	-	18,000
	Miscellaneous & Contingencies	26,650	26,450	31,400
	Sub- Total	$849,585	$820,475	$895,460
	Health & Safety Public Relations Program	75,000	80,000	200,000
	Grand Total	$924,585	$900,475	$1,095,460

Table IV - Estimated 1970 Income and Expenditures and Rates Per Ton

	Regular	Health & Safety
Balance January 1, 1970	$97,539	($14,538)
Income:		
Membership Assessments	130,000)	200,000
Pig Lead Sales	758,000)	
Interest Earned on Savings	5,000	
Miscellaneous	5,000	
	$995,539	$185,462 net
Expenditures	895,460	
Operating Fund Balance Dec.31,1970	$100,079	

1970 RATES PER TON

Memberships	General	Health & Safety
Mining	20¢	
Manufacturing	5¢	
Smelting & Refining	5¢	
Assembled Articles	2½¢	
Industry Development		
Pig Lead Sales in U.S. (Est. 650,000 tons)	$1.17	

$550,000 / 200,000

Recommended 1970 Budget - Program Details

AGENCY FEE - Table III B-1

		Fee	Out-of-Pocket Expenses	Total
Recommended	1970	$75,000	$5,000	$80,000
Approved	1969	72,000	2,500	74,500
Est. Expenses	1969	74,800	5,000	79,800

The Space Advertising, Production, External Public Relations and "Lead" editing and layout were budgeted in 1969 to include advertising agency commissions and fees. With Presidential approval the agency costs were converted in January, 1969 from percentages to a fee basis. As a result payments for these were sharply reduced but fee payments increased. The net was $2,900 saved.

So that a direct comparison can be made with the 1970 recommendations, the 1969 approved budget figures are given less the fees and commissions.

EXTERNAL PUBLIC RELATIONS - Table III B-2

Recommended	1970	- (a)
Approved	1969	$35,000
Est. Expenses	1969	- (a)

(a) Now included in the advertising agency fee.

The general objective of LIA's external public relations program is to focus attention on lead's uses through feature stories prepared for general trade and industrial publications. These stories are written to get the broadest possible acceptance by the largest possible number of non-competing magazines.

During 1969, 12 feature articles will be completed, four of which have already appeared, one on low melting point alloys, two on battery power and one on lead in architecture. Eight other articles written or in preparation will cover such other diverse uses as lead for sulphuric acid service, lead sheathed cable, lead waterproofing, battery powered trains at the Houston airport and calking with lead wool. After two years of the program, LIA is satisfied that we can expect continued growth in the placement of articles in the trade press.

ADVERTISING SPACE PRODUCTION - Table III B-3

Recommended	1970	$24,700
Approved	1969	21,600
Est. Expenses	1969	25,000

As a result of the greater than anticipated use of case history type ads in the 1969 program, costs exceeded the approved budget by roughly $4,000. In 1970 LIA expects to use the same approach and is recommending approximately the same budget as was expended in 1969.

ARCHITECTURAL AND CONSTRUCTION - Table III B-4

Recommended 1970	Space Advertising	Sweet's Catalog Files	Booklets	Total
Architectural	$49,400	$12,160	$5,000	$66,560
Calking Lead	17,800	-	-	17,800
Total	$67,200	$12,160	$5,000	$84,360
Approved 1969				
Architectural	$44,800	$10,700	$5,000	$60,500
Calking Lead	17,400	-	4,000	21,400
Total	$62,200	$10,700	$9,000	$81,900
Est. Expenses 1969	$60,000	$10,700	$4,000	$74,700

It is recommended that the promotion of architectural applications of lead be continued at about the same level as 1969 and that within this total an increased effort be made in lead for sound insulation, what with the increasing demand by Government, industry and the public for more efficient means of controlling noise.

In this connection, LIA also recommends and has included in this program a small advertising effort on behalf of lead-asbestos anti-vibration pads. All indications are that this is a growing market, New York City now specifies them for all schools and city structures being built adjacent to subway lines. Also, Bolt, Beranek & Newman had requested load deformation data on various types of pads which was not available. However, with the cooperation of the National Lead Co. Research Laboratory who made the actual tests and John F. Abernethy Co. who supplied the pads, the data was developed and sent to Bolt, Beranek & Newman for their comments. It is expected that when these are received a paper will be prepared for publication.

The precipitous decline in the use of calking lead effected in 1967 seems to have reached a plateau at a level of just under 50,000 tons. Additional research by ILZRO on the actual neoprene cast-iron soil pipe gaskets completed this year confirms the earlier research which indicated this type of rubber is subject to rapid deterioration under accelerated corrosion tests. This further data should be most useful in our promotional efforts. LIA recommends this program be continued at the same level of expenditure.

Plenum barrier = 10,000 to 20,000

Continuance of the Roofing and Flashing, Sound Insulation and Waterproofing catalogs in Sweet's Architectural File, with the first two, also in Sweet's Industrial Construction File is recommended. Also, a new Sweet's catalog file on Interior Design will include this sound insulation catalog.

Though budgeted, no Architectural and Construction Bulletins will be prepared in 1969, it is however recommended that provision be made for such bulletins in 1970.

Could be cut at least by $3,000

CABLE - Table III B-5

		Space Advertising	Booklet	Total
Recommended	1970	$24,500	-	$24,500 drop by $3,000
Approved	1969	17,700	$3,000	20,700
Est. Expenses	1969	17,700	-	17,700

The use of lead in cable sheathing continued its decline to about 54,000 tons in 1968, with 1969 expected to be at about the same level. Under present conditions wherein the major consumers, the communications and power industries, use lead cable only where there is no alternative, the prospect of increasing applications in these areas appears remote. However, in a paper at the last annual meeting, Mr. C. N. Peters, Wisconsin Electric Power Co. offered the recommendation that an effort be made by the lead industry to develop a more rapid and economical method of splicing lead cable. He reported that "The promotion of single and three conductor solid dielectric insulated cables with lead sheaths is certainly in order. To gain widespread acceptance, however, it would be necessary to develop simplified techniques for handling lead on the joints and terminations." This recommendation has been referred to ILZRO and has received a high priority in their research efforts. LIA therefore recommends continuing its promotional efforts to the power industry at a reduced level at least until the research effort is completed.

On the other hand, LIA feels that industrial users of electric power can be influenced to specify lead sheathed cable to insure reliability of in-plant power and is recommending that this phase of the program be increased.

In both instances, the programs will continue to stress the advantages of lead sheathed cable, reliability and impermeability, so that when cable systems are being designed lead sheathed cable will have an optimum opportunity of being considered.

In view of the proposed ILZRO research, LIA proposes that the cable booklet planned for 1969 be postponed.

INDUSTRIAL BATTERIES - Table III B-6

		Space Advertising	Film Maintenance	Literature	Exhibits & Misc.	Total
Recommended	1970	$60,200	1,000	1,000	$2,000	$64,200
Approved	1969	47,200	1,000	3,000	-	51,200
Est. Expenses	1969	47,200	5,200	2,000	2,500	56,900

This market after a sharp setback in 1967 attributed to lower sales for Government account, has recovered to the same peak level as the year 1966, as the following figures indicate:

INDUSTRIAL BATTERIES (Continued)

Lead Consumed
For Industrial Type Batteries *

	Short Tons
1960	34,394
1	31,610
2	37,896
3	40,164
4	46,914
5	51,226
6	58,964
7	52,130
8	58,447

* Source: Five Major Industrial Battery Mfrs.

Since its inception, the LIA has conducted a vigorous battery campaign that apparently is paying off.

LIA continues to work with battery manufacturers, Edison Electric Institute, individual power companies, industrial truck manufacturers and others to secure their cooperative support. In the main these efforts are proving successful with the possible exception of a few truck manufacturers who are indifferent to the matter of electric vs. gasoline power. An attractive replacement parts market, if anything, inclines them to promote the gasoline engine over the electric. This may change in view of the trend that appears to be developing wherein the truck manufacturers will be supplying their own brand-name batteries.

LIA is recommending a sharply increased space advertising effort to include two new areas of activity. The first of these is the mining industry which offers an excellent growth potential for battery-powered vehicles. The second is lead-acid batteries as an uninterrupted power source (UPS) for the operation of computer systems and the like. LIA has been informed that among others, American Airlines and IBM have such systems in service - for the airlines such systems not only back up the reservations computer but also support radar devices.

The 1969 approved budget figure for Film Maintenance was exceeded by roughly $4,000. This was occasioned by the fact that LIA was offered and accepted the opportunity of having a 2½ minute segment of the film "Lift Better Electrically" shown before first-rate theater audiences throughout the country.

Distribution of 94 of the 100 prints of the film "Lift Better Electrically" to power companies and others at cost have been made during 1969. Its reception by power company industrial salesmen has been most gratifying. No major new literature for this program is required for 1970. Additional prints of the film will probably be needed but inasmuch as this is almost self-sustaining a nominal amount is recommended.

PIGMENTS AND CHEMICALS - Table III B-7

		Space Advertising	Anti-Corrosive Paint Booklet	Lead in the Ceramic Industries Manual	Total
Recommended	1970	$19,100	-	$7,500	$26,600
Approved	1969	18,700	$4,000	-	22,700
Est. Expenses	1969	18,700	4,000	-	22,700

Continued promotion of lead pigmented paints to governmental agencies and industry in general on behalf of metal protective and yellow traffic marking paints is recommended at about the same level.

In the marine field LIA would recommend the same level of activity and plans to incorporate in this program an ILZRO development, an organolead containing paint for anti-fouling purposes. Research results indicate this product to be most effective.

Included in this program is a small advertising effort in the ceramic field and it is recommended that this be continued.

Since 1956, LIA has been distributing its loose-leaf booklet "Lead in the Ceramic Industries" plus supplements as published through the years; the last one was sent out in December, 1968. LIA believes the booklet to be an almost complete treatise on the use of lead in the ceramic industries and recommends publishing a "Manual" on the subject rather than reprinting the existing format which, because we expect our supply to run out early in 1970, would have to be done if we are to continue our promotional efforts in this field. We would recommend printing at least 5,000 copies at an estimated cost of $7,500.

OTHER PRODUCT PROMOTION AND DESIGNING - Table III B-8

		Space Advertising	Sweet's Catalog File	Booklets	Total
Recommended	1970	$51,600	$5,000	-	$56,600
Approved	1969	44,900	4,900	$5,000	54,800
Est. Expenses	1969	45,000	4,900	5,000	54,900

New lead products continue to be developed, e.g., lead phosphate coatings, lead impregnated iron, leadpolyurethane foam for sound insulation, that can benefit from LIA's promotional efforts.

A natural adjunct to this new product program is an effort to acquaint business management and other decision making people on the important role lead and its many uses plays in today's technological society. These in effect are the people who will decide whether or not lead will be used.

This program has evolved into a catch-all type of promotional effort designed with enough flexibility to exploit various uses of lead that do not now fit into any of the other promotional programs recommended.

OTHER PRODUCT PROMOTION AND DESIGNING (Continued)

The mainstay of this promotional effort will continue to be aimed at the design engineers with an increased effort, reflected in the recommended figure for 1970, made to business management. An example of the latter program's effectiveness can be seen from the number and quality of inquiries generated by our recent ads featuring UPS (Uninterrupted Power Source) and sound insulation.

GENERAL SUPPORTING PROGRAMS

The following programs support and implement all of LIA's promotional efforts and are a major part of the total activities.

"LEAD" MAGAZINE - Table III B-9

Recommended	1970	$45,000
Approved	1969	40,000
Est. Expenses	1969	42,000

"Lead" magazine continues as LIA's major direct mail activity. During 1969, more than 5,000 names were added to our new, fully computerized mailing list, and at the same time, we were able to delete over 6,000 unwanted names. Along with normal attrition this resulted in a net loss of about 3,000 names for the year. "Lead" is currently being distributed to 64,000 individual readers in the U.S., and about 11,300 copies are sold at cost for distribution outside the U.S., making a total print order of 75,000. About 7,300 copies go to Canada for distribution there, and 4,000 copies are supplied to Lead Development Association, England and the Australian Lead Development Association. The increase recommended is to take care of expected higher printing and mailing costs as well as routine list maintenance.

CONVENTIONS AND EXHIBITS - Table III B-10

Recommended	1970	$15,000
Approved	1969	20,000
Est. Expenses	1969	21,000

Trade show participation offers in our opinion a most unique opportunity for the staff to discuss with engineers and technicians lead's applications in their own particular fields. LIA has noticed in recent years that the audience at these shows is composed predominantly of the younger engineer and technician, a group that needs to know more about lead if future markets are to be assured. The cost of a new exhibit is included in the 1969 budget and it will be used throughout 1970, thus the apparent reduced recommendation for 1970.

Exhibits are planned for 1970 in the following trade shows:

Construction Specification Institute
Design Engineering Show
National Plumbing Exposition
Plant Engineering & Maintenance Show

ILZRO CAR - ZN75 - Table III B-11

Recommended	1970	-
Approved	1969	$4,000
Est. Expenses	1969	4,000

The promotion of ZN75 is being handled almost entirely by the Zinc Institute and most successfully. In Detroit the car has been shown privately upon invitation to stylists and engineers of the four major automobile manufacturers. In addition it has been displayed upon invitation at the G.M. Technical Center, Ford Rotunda and at Chrysler and American Motors. Public showing at trade shows have been made at the Society of Body Engineers and planned for the Western Design Show, SAE, Montreal International Auto Salon, LIA-ZI annual meetings and the Design Engineers. No further funding is needed.

LEAD ABSTRACTS - Table III B-12

Recommended	1970	$16,000
Approved	1969	14,000
Est. Expenses	1969	14,000

Lead abstracts, a monthly publication prepared by the Lead Development Association, England, with LIA's financial support has been useful particularly to University, Industrial and Governmental libraries and research facilities. Approximately 1,500 copies are distributed monthly in the U.S. by LIA. London has served notice that increased costs force them to raise annual charges to LIA by $2,000.

REPRINT OF TECHNICAL ARTICLES - Table III B-13

Recommended	1970	$10,000
Approved	1969	10,000
Est. Expenses	1969	7,500

Reprinting of technical articles prepared by the staff, LIA's advertising agency and others outside LIA continue to be an economical source of industry literature. In many instances these reprints are distributed through direct mail to appropriate mailing lists. Though it is expected that actual expenditures during 1969 will not approach the approved budget, the increasing activity of LIA's publicity program in 1970 will necessitate the recommended $10,000.

TEST PROGRAMS - Table III B-14

Recommended	1970	$ 5,000
Approved	1969	10,000
Est. Expenses	1969	-

TEST PROGRAMS (Continued)

Battery Powered Lawn and Garden Tractor

The project financed in the 1968 budget at $5,000 from LIA and $5,000 from the Farm Electrification Council, was completed most successfully early in 1969. The test results were publicly announced at a press review held on May 5, 1969 in Chicago and as a result a number of reports appeared in the public and trade press. Since that time a number of manufacturers have asked for manufacturing and test details either from LIA the Farm Electrification Council or the contractor, Aircraft Dynamics, Inc. The General Electric Co. was one of these and (though not yet publicly announced) they have reported in their own internal news publication that General Electric Co. will be producing and selling a battery-powered lawn and garden tractor in the near future. No funding was required in 1969 nor is any anticipated for 1970.

Lead-Asbestos Anti-Vibration Pads

At the request of Bolt, Beraneck & Newman, one of the leading consulting firms in the sound and vibration attenuating field, a project to develop data on load deformation on a variety of pads to their design was conducted and completed during 1969 at no cost to LIA. We are however indebted to the National Lead Company Laboratories for their cooperation in conducting the tests and to John F. Abernethy Co. for supply of the test pads. The results have been sent to BB&N for their comments. When these are received a paper on the results will be offered for presentation at a technical meeting or as an article in a trade publication.

Sheet Lead Roofing and Pool Linings

Two tests are still underway by LIA with the continued cooperation of the National Lead Co. Laboratories who continually monitor the programs at no cost to LIA. The first of these is a new method of installing sheet lead roofs without conventional expansion joints. The test installation has now been on outdoor exposure for 30 months and continues to perform most satisfactorily. The second test, an experimental reflecting pool lining, now on exposure over 50 months, is also performing beyond our expectations. A number of architects have viewed these installations and at least one, Harrison & Abramovitz, have included in their Albany, N.Y. State Capitol redevelopment project a sheet lead lined reflecting pool and a lead roof using the same installation procedures used in the test projects. No funding was required in 1969 nor is any anticipated for 1970.

Calking Lead

At last year's meeting, LIA recommended and received approval to expend up to $5,000 to investigate the feasibility of a lead extrusion to replace the present method of calking lead joints in cast iron pipe. A program has since been suggested and work statement prepared by ILZRO to develop extruded lead forms suitable for test in jointing cast iron soil pipe, and as a result, LIA will not pursue further any program aimed at the same goals. LIA will work closely with ILZRO to provide as much backup as possible.

TEST PROGRAMS (Continued)

Automobile Body Solders

A sum of $5,000 was approved last year to cover possible development costs for any machinery, etc. that might evolve from cooperative efforts LIA planned with equipment suppliers and members on methods of improving body solder application. It turns out there is considerable divergence of opinion, however, as to what service LIA might render. We have had a number of interesting and useful exchanges with both supplier members and automotive firms -- who by the way, appear split in opinion as to how soon epoxies or other plastic materials will replace lead in this application. Further work will be done before year's end and any success will be reported to the membership at that time. It would appear that no expenses will be required this year but it is suggested that all or part of the recommendation for "Test Programs" for 1970 could be used for this purpose if necessary.

ILLUSTRATIONS & PHOTOGRAPHS - Table III B-15

Recommended	1970	$1,000
Approved	1969	3,000
Est. Expenses	1969	1,000

Included in this item are charges for miscellaneous photographs and illustrations for various promotional activities.

STUDY ON OFF-THE-ROAD ELECTRIC VEHICLES - Table III B-16

Recommended	1970	-
Approved	1969	$9,325
Est. Expenses	1969	9,325

? Contract on this project

Though not a part of the 1969 budget considerations, LIA received approval by letter ballot sent to the Executive Committee of the Board of Directors on July 16, 1969 to participate in a joint study to be financed equally by the Edison Electric Institute and LIA. The total cost of the study is $18,650. The study, a professional sampling survey to be conducted by Stevenson, Jordan and Harrison, will establish the magnitude of the potential market for industrial batteries for off-the-road electrical vehicles and for electricity used for recharging such batteries. The study will be conducted in two phases, the first of which is the financial responsibility of LIA and EEI and will include broad geographical areas and SIC industry classification numbers. Phase II to be financed by the cooperating utility company, will develop specific details in each utility's geographic area. The purpose of the study from the utility's standpoint is to determine the electrical load potential from the charging of battery powered vehicles and thus determine the promotional time and effort that each utility should expend in its area.

DETROIT FIELD MAN-FEASIBILITY STUDY - Table III B-17

Recommended	1970	$10,000
Approved	1969	10,000
Est. Expenses	1969	-

At the Board of Directors Meeting held on December 3, 1968 it was agreed that the sum of $10,000 be set aside for an exploratory effort by a Zinc Institute Detroit field man on a part time basis on behalf of lead's applications in the automotive and related fields.

Unfortunately because of the major work load placed on the Detroit office of the Zinc Institute by the introduction and display of ZN75 and LIA's New York Manpower shortage there was no action on this study in 1969. It is recommended however that the study be made in 1970.

ZINC AND LEAD INTERNATIONAL SERVICE-ZALIS - Table III B-18

Recommended	1970	$15,400
Approved	1969	28,000
Est. Expenses	1969	28,000

At the Board of Directors meeting held on December 3, 1968 it was agreed that LIA participate in the activities of ZALIS at a cost of $28,000 for 1969.

ZALIS has notified LIA that not all of the available funds were expended in 1969 and that the carryover will be sufficient so that only about $15,400 will be required for 1970. LIA's Executive Vice President will report on the activities of ZALIS in detail at a later date.

MOTION PICTURE DISTRIBUTION - Table III B-19

		Private Distribution	U.S. Bureau of Mines	Total
Recommended	1970	$10,500	$2,000	$12,500
Approved	1969	15,000	2,000	17,500
Est. Expenses	1969	15,000	2,000	17,000

LIA's film "The Lead Matrix" prepared in 1966, continues in strong demand and is possibly the only outlet the industry has in educating the general population on the importance of lead in today's society. LIA is particularly impressed with the growing interest in the film by TV broadcasters.

MOTION PICTURE DISTRIBUTION (Continued)

A summary of the film showings follows:

Private Distribution

	General		Professional		TV	
	Bookings	Audience	Bookings	Audience	Telecasts	Audience
1968	1,704	108,603	162	5,674	108	2,326,937
1969 (9 mos.)	1,252	68,955	165	3,789	424	8,681,285

Bureau of Mines

	General		TV
	Showings	Audience	Audience
1968	4,852	193,268	-
1969 (6 mos.)	6,756	288,683	2,500

Other Film Activity

Using the basic film "The Lead Matrix" LIA prepared approximately 2½ minute segments for special films prepared by our distributor, Sterling Films, for showing on TV and first-run theaters. The films have three or four other subscribing companies, each of whom provide a sequence for a total running time of 10 to 12½ minutes. The Theater film has a distribution life of one year (completed in 1969) and a summary of its appearances follows:

Theater Cavalcade

	Bookings	Times Shown	Audience
1968 (3 mos.)	157	2,923	616,619
1969 (8 mos.)	576	7,687	1,631,769

The television film is a continuing one and its costs are included in the recommendations for 1970. A summary of its appearances follows:

TV-The Paradox of Lead

	Telecasts	Audience
1968	75	1,404,377
1969 (9 Mos.)	144	2,744,260

NEW PROGRAMS

BATTERY POWERED AIRPORT BUSES - Table III B-20

Recommended	1970	$13,000
Approved	1969	-

Seven battery powered buses, 15 person capacity each, for use on inter-line connecting passenger service at the Los Angeles International Airport are being planned. They will be fully tested in actual operation for one year and at that time will be evaluated as to continued use. The cooperating companies and the amounts each will invest in the project are the following:

Yellow Cab Co. of Calif. (Yellow Cab will also supply the service bldg.)	Buses & Charges	$115,000
ESB Inc.	Batteries	$ 50,000

If the project does not prove out after one year, ESB Inc. has agreed to refund to the Yellow Cab Co. two-thirds of their investment. The project has the approval of the Los Angeles Department of Airports.

LIA has been asked to cooperate because of the inability of the Cab Co. to lease garage and charging space in the immediate area of the route. The location available, for recharging now proves to be some 7,000 feet away and will require an extra driver to take the vehicles to and from the charging station at an added cost of about $13,000 per year. The Cab Co. and ESB had negotiated long to reach agreement on the Buses and Batteries. The added cost of $13,000 threatens to stymie the project. LIA disclaimed interest until assured that all test figures and cost data will be made available, plus the right to publicize it as we may wish. LIA believes this use of small battery powered buses has great potential at airports, shopping centers, industrial complexes and other large areas where people must be transported comparatively short distances.

BATTERY-POWERED GOLF CARS - Table III B-21

Recommended	1970	$5,000 ? drop entirely
Approved	1969	-

Lead requirements for 1969 will be around 11,000 tons for new and replacement batteries for electric golf cars.

Battery-powered golf cars represent between 70 and 80 percent of current new car production. However, gasoline powered cars are being introduced that run quieter (in the past noise was the major objection to their use) and sales of this new type vehicle are making inroads into the electric vehicle market. The major obstacle to the continued growth of the electrics is that battery problems are a continuing and apparently growing source of irritation to many users. The fault is not with the batteries so much as it is with the kind of care they receive. Two of the reasons

BATTERY-POWERED GOLF CARS (Continued)

given for poor battery performance are (a) severe deep discharge of the battery caused by overuse and (b) poor maintenance procedures, (generally maintenance including re-charging is left to inefficient and unknowledgeable personnel.)

LIA would suggest working closely with battery and golf car manufacturers to develop booklets and wall charts on the proper type of battery to be used as well as proper maintenance procedures. Distribution of the booklets would be by direct mail, at the time of purchase of replacement batteries and as a so-called "Owner's Manual" by the vehicle manufacturer. No space advertising is planned.

LEAD BOOK (MONOGRAPH) - Table III B-22

Recommended	1970	$3,000
Approved	1969	4,000
Est. Expenses	1969	1,000

This book which has been more than 10 years in preparation is being updated wherever possible through contacts being made by LIA with the old authors and arrangements with new authors. A considerable amount of this updating has been completed. There have been criticisms expressed as to the timeliness of the contents of the book and it has been suggested that a Committee be appointed to review the manuscript. The publisher however has indicated that when the entire manuscript is in their hands they will circulate it to authorities in the field for their comments and criticisms.

CORROSION HANDBOOK (ILZRO) - Table III B-23

Recommended	1970	$ 6,000
Approved	1969	5,000
Est. Expenses	1969	15,000 (a)

(a) LIA has in its approved 1969 budget an additional item for $10,000 for "Publication of Completed ILZRO Projects" and recommends that the total of $15,000 be assigned to this project.

The Lead Corrosion Handbook which contains data developed at an ILZRO cost of $40,000 is now ready for publication. It is being designed as an "International Publication" to be printed in Great Britain. The LDA has provided us with the following cost figures:

Quantity	Unit Cost
5,000	$2.28
10,000	1.32
20,000	.81
Additional thousands	.32

CORROSION HANDBOOK (ILZRO) (Continued)

LIA believes that there is a definite lack of up-to-date corrosion data on lead that is readily available to engineers and in our opinion this book will serve the industry well and prove a most useful addition to the technical literature.

LIA would therefore recommend that 20,000 copies be purchased with the available 1969 funds. Distribution would be accomplished during 1970 and subsequent years through direct requests as a result of releases announcing the availability of the book and later offering it through selected mailing lists such as those listing corrosion, chemical and mechanical engineers. Also a similar offering be made to industrial and governmental libraries, University professors and their senior class students.

ANNUAL REVIEW - Table III B-24

Recommended	1970	$2,000
Approved	1969	1,000
Est. Expenses	1969	2,200

Expenses for this publication exceeded the budget by a wide margin for a number of reasons, among these being design and layout costs, the use of two colors and higher than anticipated printing costs. The review was well received however and LIA would recommend its continuance.

APPRENTICE CONTEST - Table III B-25

Recommended	1970	$1,500
Approved	1969	1,500
Est. Expenses	1969	1,200

Continued cooperation by supplying pipe, sheet and calking lead for this international contest of plumbers apprentices conducted at Purdue University each year is recommended.

ORGANIZATION MEMBERSHIPS - Table III B-26

Recommended	1970	$2,900
Approved	1969	2,150
Est. Expenses	1969	2,150

Recommend continuance of membership in the following organizations:

Electric Vehicle Council	$ 500
National Shooting Sports Foundation	650
Steel Structures Painting Council	1,000

It is further recommended that LIA participate in the activities of the United States of America Standards Institute (USASI) at a cost of $750 a year. With greater interest by the U.S. Government to set up multiple bureaus to approve National Standards for all materials, it is felt that LIA support of USASI, by becoming a member, would assist the organization in forestalling such activity and keep specifications in proper perspective.

MISCELLANEOUS LITERATURE - Table III B-27

Recommended	1970	$3,000
Approved	1969	-
Est. Expenses	1969	3,400

During 1969, LIA prepared and published two pieces of literature that were not included in the approved budget for 1969. One of these was a booklet entitled "Publication and Films" which lists and describes all of the literature and films available from LIA and it has proved most useful. Publication is on a "when needed" basis. The other was a supplement to the "Lead in the Ceramic Industries" manual.

MISCELLANEOUS PROMOTION EXPENSES (CONTINGENCIES) - Table III B-28a

Recommended	1970	$3,000
Approved	1969	3,000
Est. Expenses	1969	1,500

A contingency fund for minor promotional activities is recommended.

PUBLICATION OF COMPLETED ILZRO PROJECTS (CONTINGENCIES) - Table III B28b

Recommended	1970	$10,000
Approved	1969	10,000
Est. Expenses	1969	(a)

(a) Recommend allocating the $10,000 approved in 1969 for publication of the corrosion handbook -- See Item heading "Corrosion Handbook (ILZRO)."

For 1970 recommend a contingency fund for publication of completed ILZRO projects. LIA has been informed by ILZRO that a "Handbook on Inorganic Lead Compounds" will be ready for publication early in 1970.

HEALTH AND SAFETY PUBLIC RELATIONS PROGRAM - Table III B-29

Recommended	1970	$200,000 — 100,000 for 1970
Approved	1969	75,000
Est. Expenses	1969	80,000

In 1967 as a result of a special Health and Safety Assessment from all members, LIA was provided with $200,000 to be spent under the direction of a Public Relations for Health and Safety Committee of the Board of Directors, Messrs. Englehorn, Strauss and Unwin. This fund has now been spent -- in fact there will be a deficit of some $14,548 as of January 1, 1970.

The fund has in LIA's opinion served the industry well and has covered three years of activity with Hill & Knowlton, LIA's public relations counselor, the preparation of the "Facts Bulletins," distribution of the Kettering Abstracts and many relevent activities.

HEALTH AND SAFETY PUBLIC RELATIONS PROGRAM - Table III B-29 (Continued)

The national attitude (including that of the Federal Government) is becoming more sharply defined. Also in an accelerated fashion more critical of lead as a health hazard to the general population. Further, that lead in gasoline prevents the efficient operation of automotive clean-air exhaust devices.

LIA believes it is time to raise another $200,000 for perhaps a more accelerated effort and many proposals are at hand to indicate directions and activities which the industry might consider. The Fall of 1969 has been an extremely busy one, particulary in this area, and the LIA staff with its advisers, Hill & Knowlton, Inc., has not as yet had the opportunity to confer in detail with the public relations for Health and Safety Committee of the Board of Directors.

There is a firm staff conviction that the industry is reaching a crucial stage in its health and safety activities. Details of approach cannot be presented at this time but an Industry Development Committee recommendation to the Board of Directors that a Health and Safety fund of $200,000 be established which in LIA's opinion will provide the necessary funding for whatever program is evolved between this time and January 1, 1970.

LIA believes that there will be general acceptance of the fact that this is a comprehensive industry problem, and suggests that allocation of assessments be made more equitably than they were in 1967, at which time the pig lead sellers accepted roughly 85 percent of the total fund.

DMB:so

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