



KRAISSL QUARTERLY

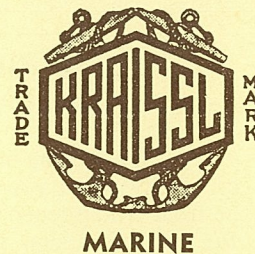
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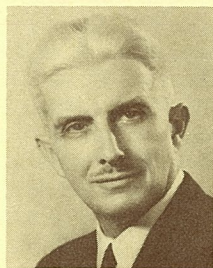
DO WE HAVE REPRESENTATIVE GOVERNMENT?

FREDERICK KRAISSL, JR., M. PHIL., P.E.

Chairman

The Kraissl Company, Inc.

I definitely believe in the principle of representative government. My family fought for it in the American Revolution, and I am proud to belong to the society that commemorates this achievement. I also appreciate that my church. The Old First Reformed Church in Hackensack permitted me to place a garland, during the Bicentennial Celebration, on the tombstone of one of my ancestors, who fought in the Revolution and is buried in the church graveyard. So much for yesteryear. How about today? It is my opinion that our ancestors would not approve the manner in which we are handling our heritage.



CONSULTING
ENGINEER

KRAISSL ASSOCIATES

Consider the matter of our canal over the isthmus of Panama. Almost anything can be proven by slanted statistics, but an editorial in a southern paper states that mail to our Congressmen was running ten to one against giving our canal away. It also went on to state deals that were being made to secure yes votes from doubtful senators. I travel the east coast and sometimes the country. In all my travels I only found one person who expressed the feeling of indifference to this giveaway. All the rest were vehemently against it. Who started this project and why? If we are interested in probes to the extent of Watergate, why not this one?

Then there is the matter of the Energy Crisis. The government is attempting to scare us into the belief that we have one, as related to the running of our automobiles. In a past issue of this publication, we came up with in-

formation on Gasohol. Since that time a large New York newspaper has conducted tests on its staff cars. Gasohol is generally agreed to be 10% alcohol. This newspaper ran its cars both on this and also on 15% alcohol and states it is planning to increase the percentage to determine when efficiency slacks off. As of the present it reports that their cars ran cleaner, cooler and slightly faster and put out much less pollution than it did on plain gas. Alcohol has a higher octane rating than gasoline and at one time was used to give gasoline a little more zip so cars accelerated faster. There is no reason to ever run out of alcohol. The report stated about one third of one billion gallons produced in the U.S. is liquor, made from fermented corn and other grains. The rest is made from oil. It mentions there are two kinds of alcohol which we chemists have always known, methanol and ethanol, and both can be produced from a variety of non-petroleum sources, such as garbage, wood chips, all kinds of crops and probably crop and timber wastes. The production potential seems limitless. It was recommended that ethanol be used for the tests as it mixes a bit better, and this from us, it is less poisonous and easier, in our opinion to produce. As a result of tests on a standard car with no equipment changes, poisonous carbon monoxide was cut more than 300%.

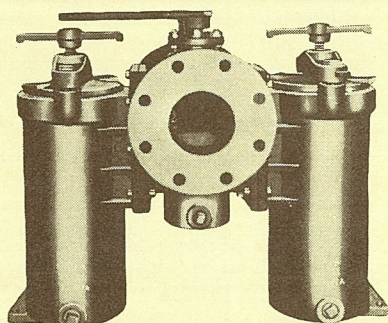
Now if the administration was sincere in that cutting gasoline consumption by 10% in 1985 was a goal, we have it made now by the use of Gasohol! If we go to 15% or better we can obviously improve the situation. Ethanol runs about \$1.35 per gallon, but not too expensive to keep gas stations in Illinois and Nebraska from selling Gasohol at competitive prices. A manager of one gasoline station is reported to have stated he bought ethanol at \$1.34 per gallon, blended it with \$.40 a gallon regular unleaded gasoline and sold 30,000 gallons in a week and a half at 72.9 cents a gallon. This gasohol pump was right alongside a premium gasoline selling at 75.9 cents a gallon. Bear in mind that alcohol upgrades gasoline into the premium bracket. It

seems automatic that increased and improved production would bring ethanol prices down. It is estimated that we could cut oil imports by 20% by replacing 10% of gasoline with alcohol. Why then all the high pressure scare tactics to worry our citizens about the future running of their automobiles? The only possible answer is bureaucratic domination. No one can tell an informed chemist that the government does not have these facts, but it may not be to the interest of the one worlders to reassure U.S. Citizens that we have an answer to this problem. Our automobiles are to this generation what the horse was to the cowboy. It is needed transportation. With the government the greatest contributor to inflation with its wanton use of the printing presses to produce money, most families are committed to a two earner economic status. This means two automobiles per family in most cases, not as a luxury but as a necessity.

I have been convinced for sometime that there is little difference between the Republican Party and the Democratic Party on major issues and basic motivation. Important principals of the Republican Party supported the canal giveaway. A few Republican senatorial votes could have stopped this transaction, which will probably be regretted by future generations. If there is any hope for a representative future in this country, it is my conviction that it lies with the Conservative Caucus, Inc. based at 7777 Leesburg Pike, Falls Church, Va. 22043. Governor Meldrim Thomson, Jr. of New Hampshire is National Chairman and Howard Phillips is National Director. I am contributing what I formally sent to political candidates to the Conservative Caucus, relying on them to support the candidates who are committed to the principles on which this country was founded. I believe this is the best definition of conservatism in political action. Entrenched power is the greatest enemy of representative government. It seems essential to the future of our country to replace those who do not represent the interests of the majority.

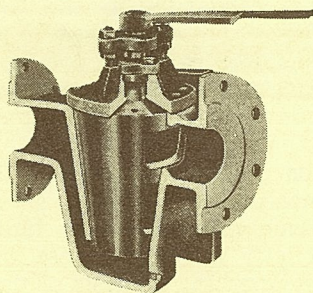
IT'S TOUGH TO BE THE LEADER

Yes, it's tough, but it's a challenge especially when you did not expect to be first. It happened like this. We were the first to design three piece duplex separators of the plug valve type. A duplex separator such as our design involves a rather complicated casting. If there is even a slight core shift you wind up with a thin wall on one side and an unusually thick wall on the other. By designing the valve center section separate from the side bodies, core shifts can be minimized. There are other advantages to three piece constructions which is used for the larger sizes and there are many overlaps in the smaller sizes where customers prefer the three piece design.



CLASS 72 INDUSTRIAL DUPLEX STRAINERS

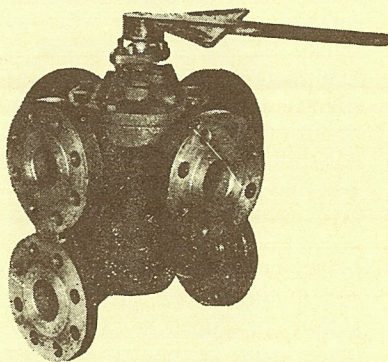
So it was not hard to visualize that clever design engineers would see the advantage of using our valve center unit and join this to their filter side bodies or heat exchangers or wherever in and out flow was desired with duplicate units. To make our three piece construction separators as compact as possible we designed the side body connection with rectangular flanges. When these units were used, it was necessary to weld companion rectangular steel plates on the shells to which our valves would be connected. However, this minimized flow restriction and is still a good option as these valves are much less expensive as well as providing lower pressure drop.



CLASS 72 VALVE ASSEMBLIES
BULLETIN A1869

However, some of our major customers approached us and asked whether we would supply our valves with ASA side ports, instead of the rectangular side flanges. We warned them that this would be more expensive as it entailed adding integrated cast elbows with machined raised face flanges and sufficient wall thickness to support the heavy ASA flanges. It also involved the more complicated cores that our initial design was offered to preclude. This has been borne out by our much lower rejection rate in the initial class assemblies.

CLASS 72AA INTEGRAL VALVE ASSEMBLY



DESIGNED FOR CONTINUOUS FLOW.
PORT INTERCONNECTIONS -
IN POSITION SHOWN - 1 & 2, 3 & 4.
IN OTHER POSITION - 1 & 2, 3 & 4.

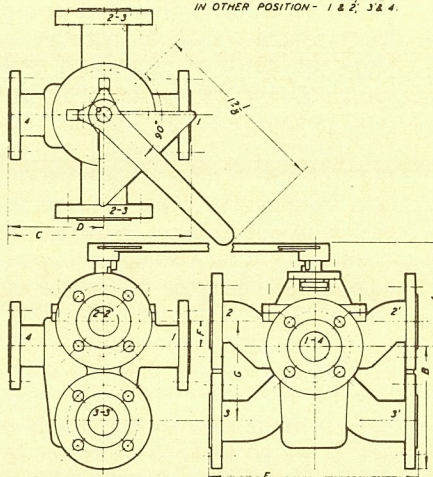


TABLE OF DIMENSIONS - INCHES													
MODEL	SIZE	FLG. DIA.	BOL. DIA.	R.F. DIA.	MIN. WALL TH.	MAX. W.P.	A	B	C	D	E	F	G
150# ASA FLANGES - 230 PSIG MAX. W.P.													
72-37	1 1/2	5	3 1/2	4	3/8	2 1/2	70	14 1/2	7 1/2	9 1/2	10	1	6 3/8
72-39	2	6	4 1/2	4	3/8	3 1/2	100	16 1/2	9 1/2	12	12	1 1/8	6 3/8
72-41	2 1/2	7	5 1/2	4	1/2	4 1/2	117 1/2	18 1/2	12 1/2	13 1/2	13 1/2	1 1/8	7 1/4
72-43	3	7 1/2	6	4 1/2	1/2	5 1/2	140 1/2	20 1/2	14 1/2	15 1/2	14 1/2	1 1/8	7 3/4
72-47	4	9	7 1/2	5	3/4	6 3/4	205 1/2	24 1/2	16 1/2	17 1/2	16 1/2	1 1/8	10 1/4
300# ASA FLANGES - 600 PSIG MAX. W.P.													
72-37	1 1/2	6 1/2	4 1/2	4	1/2	2 1/2	90	15 1/2	8 1/2	9 3/4	10 1/2	1	6 3/8
72-39	2	6 1/2	5	4	3/4	3 1/2	115	16 1/2	9 1/2	12	12 1/2	1 1/8	6 3/8
72-41	2 1/2	7 1/2	5 1/2	4 1/2	1/2	4 1/2	140 1/2	18 1/2	12 1/2	13 1/2	13 1/2	1 1/8	7 1/4
72-43	3	8 1/2	6 1/2	5 1/2	3/4	5 1/2	165 1/2	20 1/2	14 1/2	15 1/2	14 1/2	1 1/8	7 3/4
72-47	4	10	7 1/2	6	3/4	6 3/4	235 1/2	24 1/2	16 1/2	17 1/2	16 1/2	1 1/8	10 1/4
600# ASA FLANGES - 1200 PSIG MAX. W.P. (300° F MAX. TEMP.)													
72-37	1 1/2	8 1/2	5 1/2	4 1/2	1	2 1/2	115 1/2	18 1/2	10 1/2	11 1/2	11 1/2	1 1/8	6 3/8
72-39	2	8 1/2	5 1/2	4 1/2	1	2 1/2	140 1/2	20 1/2	12 1/2	13 1/2	13 1/2	1 1/8	6 3/8
72-41	2 1/2	9 1/2	6 1/2	5 1/2	1 1/4	3 1/4	165 1/2	22 1/2	14 1/2	15 1/2	14 1/2	1 1/8	7 1/4
72-43	3	10 1/2	7 1/2	6 1/2	1 1/4	3 1/4	190 1/2	24 1/2	16 1/2	17 1/2	16 1/2	1 1/8	7 3/4
72-47	4	12 1/2	8 1/2	7 1/2	1 1/2	3 1/2	265 1/2	26 1/2	18 1/2	19 1/2	18 1/2	1 1/8	10 1/4
PLUS 1/8" R.F. ON 150 # & 300 # FLGS. & 1/4" R.F. ON 600 # FLGS.													

Be that as it may, we of course acquiesced and this was the justification for our Class AA series. At the time we designed our valve center section, we were concerned that other manufacturers of duplex strainers and filters were constricting flow through the valves. It was our decision at that time to have the internal channels no less in area than the area of the nominal pipe size of each unit. This seemed reasonable until we were confronted with competitive pressure drop claims. When competition comes into the picture they have the target of the leader to shoot at. There is no patent, in our opinion, to duplicating interchangeable mounting dimensions and for talking points internal channels can be designed oversized so lower pressure drops can be claimed. As it is, when one casting is used for two of our sizes like the two and two and one half inch sizes, we design the channels for the two and one half inch size which makes them a little oversized for the two inch size. This may explain why the pressure drop in the smaller size is relatively lower in some of these assemblies.

There should be some logical limit to what should be expected. If it must be competition on the basis of pressure drop, it is always possible to redesign oversized internal channels. Then to use current terminology the last one in will be the next target.

Futhermore economics should be given consideration. The larger the internal channels, the heavier could be the unit and with the cost of steel constantly increasing, the increment could be substantial.

All of this might cause reexamination of the valves with the rectangular side ports. Some filter manufacturers are welding up the complete assembly. With this know how, it should be simple to weld rectangular side flanges on the shells of their housings and use the Class 72A valves.

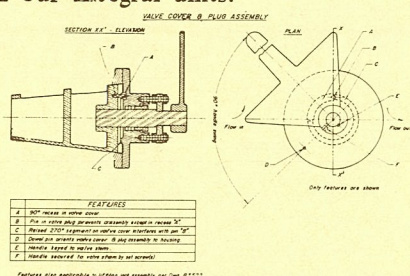
This would get rid of the pressure drop through the cast ASA side port channels, make use of units at much less cost as both weight and machine work is much less and reduce casting loss through a much lower rejection rate due to the elimination of the more complicated cores. It would seem that alert users of these components would find this an option for consideration.

Some time ago, one of our customers told us a sad story that involved a competitive valve. This valve was part of a lubricating system that supplied lubrication to a many thousand dollar turbine. It seems that the maintenance crew decided it was time to take the valve apart for either an inspection or service. When it was reassembled, it was put together in reverse so that

when it was expected that lubrication would be supplied, the reverse occurred—the lubricating supply was shut off and the multi-thousand dollar turbine was the victim.

So the word was passed to us that we better get on the job with ours so a device could be supplied that within human foreseeable limitations, misassembly would be precluded.

We did and patent No. 3,567,181 under which we are licensed by Kraissl Associates covers this arrangement shown in the indicated drawing. It is on our valves of current manufacture and we have ordered it as a component of our duplex separators as our transfer valves originated as the valve center section of our three piece duplex separators and, of course, are components of our integral units.



MORE ABOUT LEAK TESTING KRAISSL STEEL VALVES U.S. PATENT NO. 3567181

As reported in the April 1977 issue of Kraissl Quarterly, we do not take for granted that properly machined and assembled valves will not leak. *Every one is individually tested*, but that is not good enough. We have found that occasionally valves that have passed the hydraulic test have leaked in the field. The hydraulic test is conducted at working pressure plus fifty percent in accordance with standard test procedure and to minimize leaks the basic hydraulic test has been augmented as follows:

1. After a steel housing casting has been sufficiently machined to permit the assembly of closure plates, it is submerged and tested under water by an inert gas such as air or nitrogen at pressures in the vicinity of 280 psig where valves are of a size that submergence can be accommodated.

2. Those that show no signs of bubbles emerging from the casting are continued with machine operations to a conclusion and are assembled and tested by the usual hydraulic pressure test of working pressure plus fifty percent.

3. Those that pass this test are next tested by air, using the soapy water test, to determine whether anything has open up under the hydraulic test, that

could cause minor leaks, not detectable by the hydraulic test.

4. If we have reason to question the soapy water test, such units will be again subject to the submergence test.

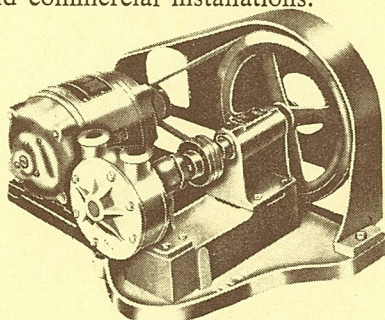
Many consider the soapy water test as good or better than any other. In the case of valves going to our customers, both tests have been successfully passed, except the very large ones where we are forced to rely on the soapy water test, which so far has proved satisfactory. To determine tiny leaks requires expert observation and we expect our inspection personnel to have this capability. However our procedure provides double inspection with inert gas under pressure with two separate tests before and after the hydraulic test, both of which are accepted as conclusive.

There is a real argument as to which is the best test, but where it is possible to submerge, the present consensus is to check the soapy water test by the submergence test, when in doubt.

After we have done our part, we will appreciate cooperation on the part of customers. There is no question that well designed steel components with more than adequate wall thickness can be sprung if enough pressure is put on them to make up joints. If the total weight of the piping they are supporting or the distance between adjacent companion flanges is more than just slide fit, extreme distortion pressure can be brought to bear when bolting to companion flanges. Should this cause leakage, it is probably beyond the expectation of human nature to expect the assembler to admit the cause. However, it is the only explanation we can give for items leaking in the field, if they do, after passing our double leakage test indicated above. Under such circumstances we hope for tolerance on the part of customers if we make a repair on any valves that are returned due to this claimed defect.

IT IS NOW OIL PUMP TIME FOR CONSIDERATION

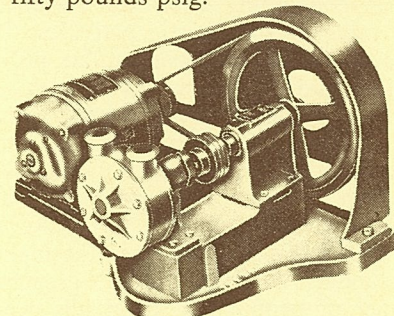
Return from the field has convinced us that we are on the right track in suggesting reduction drive pumps for light and heavy oil for most industrial and commercial installations.



CLASS 60 REDUCTION DRIVE OIL PUMPS

We now have the Class 60 series for pressures up to one hundred pounds psig.

The next is the look alike pump with our standard unit, but so much different bearing construction inside to handle the heavier bearing loads for pump pressures up to one hundred and fifty pounds psig.

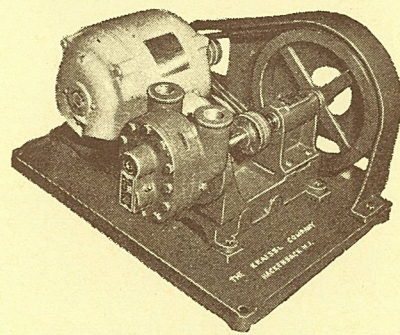


OUR NEW CLASS 60-H SERIES PUMPS

Finally there is the Class 66 series when pressures can go over one hundred and fifty pounds.

In all cases the reduction drive pumps are energy savers. Even when the use of light oil permits operation at direct motor speeds, pump selection must be made at a higher capacity with a reasonable overage. In watching sizing and selection we have noted that in most cases a pump is used much over capacity to reconcile with available motor speeds. This is a waste of electrical energy and motor cost. When our reduction drive units are used the pump can be slowed down or speeded up to reconcile with the needed capacity. After a time everything will wear. This with pumps produces a reduction in capacity. With our design all that is necessary, in many cases, is to speed up the pump to compensate for the reduction in capacity. In general our reduction drive pumps last much longer than the direct connected ones as a slower speed is conducive to longevity. Last but not least if a change to different grades of oil is involved this is easily accomplished.

The only comment that we heard from the field that was said with a smile of approbation was that the pumps last too long, but they would rather have it that way.



CLASS 66 HIGH PRESSURE OIL PUMPS

OUR SILENT REPRESENTATIVE

Our editors are the senior officers of this company and our policy permits each of us to express thoughts which we believe can be contributions to the voice of public opinion in business. It may have been noticed that we have been devoting much of our effort in bringing to the attention of our readers matters that have been worrying us concerning what we consider subversive or unpatriotic activities. If other organizations have similar publications and concur, we invite them to join us in the effort to keep our country free from foreign philosophies and maintain it as the land of Liberty and Freedom. We are supposed to be the world's greatest salesmen. We have a way of life that has produced the highest standard of living for the greatest number of people the world has ever known. We should be able to sell it and probably have judging by the number of people who have escaped or attempted to escape to our shores. Let us keep it that way.

VACATION NOTICE

The Vacation Period, while never painless, was found least disturbing last year when arranged for the last week in July and first week of August. We are scheduling complete shut down during this period.



THE KRAISSL COMPANY

INCORPORATED

HACKENSACK, NEW JERSEY 07601

RETURN POSTAGE GUARANTEED



YOUR
COPY
OF

KRAISSL
QUARTERLY

SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, Metropolitan New York, including the Hudson Valley, Long Island, New Jersey and eastern Pennsylvania less Philadelphia District for coverage by Kraissl Company personnel.

Northeast Region

Boston-Cooper Corp.
Manor Parkway
Salem Ind. Pkwy., Salem, N. H. 03079
Capt. C. V. Watson
Maiden Cove Lane
Cape Elizabeth, Maine 04107

Eastern Region

Filtration Unlimited
Buffalo & John Streets
Akron, N. Y. 14001
R. C. White Co.
3065 Enterprise Blvd.
Bethel Park, Pa. 15102
Gelman Industrial Equipment
1327 Barton Drive
Fort Washington, Pa. 19034
Jobe & Co., Inc.
2857 Greenmount Ave.
Baltimore, Md. 21218

Southeast Region

Power Equipment Co.
1307 West Main St.
Richmond, Va. 23201
Dillon Supply Company — Main Office
Raleigh, N. C. 27602
Dillon Supply Company
Durham, No. Carolina 27702
Dillon Supply Company
Rocky Mt., No. Carolina 27801
Dillon Supply Company
Goldsboro, No. Carolina 27530
Dillon Supply Company
Charlotte, No. Carolina 28201
Boiler Supply Company, Inc.
490 Craighead Street
Nashville, Tenn. 37204
601 Van St., N. W.
Knoxville, Tenn. 37921
Applied Engineering Co., Inc.
P. O. Box 506, Orangeburg, S. C. 29115
Spotswood Parker & Co.
721 Miami Cir. NE, Atlanta, Ga. 30324
Florida Filters, Inc.
5570 N. E. 4th Ave., Miami, Fla. 33137
Procter & Co.
Box 26158
Birmingham, Ala. 35226

North Central Region

Comb & Groves, Inc.
336 W. Eight Mile Rd.
Ferndale, Mich. 48220
Hetler Equipment Co.
P. O. Box 1904
Grand Rapids, Mich. 49501

Central Region

M. Huffman Sales Co.
3404 Upton Ave.
Toledo, Ohio 43613
W. G. Taylor Co.
1900 Euclid Bldg., Cleveland, Ohio 44115
The Jordan Engineering Co.
P. O. Box 30071
Cincinnati, Ohio 45230
T. A. Heidenreich Co., Inc.
2525 E. 54th Street
Indianapolis, Ind. 46220
Tobra Engineering Co.
5438 Milwaukee Ave.
Chicago, Illinois 60630
A. K. Howell Co.
2683 S. Big Bend Blvd.
St. Louis, Mo. 63143

South Central Region

Creole Engineering Co.
P. O. Box 23159, Harahan, La. 70183
Jack Tyler Engineering Co.
6112 Patterson Ave.
Little Rock, Ark. 72209
Albert Sterling & Assoc., Inc.
P. O. Box 66099, Houston, Texas 77006

Northwest Region

Baxter-Rutherford Inc.
P. O. Box 24324 Terminal Annex
Seattle, Washington 98134

Western Region

Jay Besore & Assoc.
1690 Plymouth St.
Mountain View, Cal. 94043
Power Engineering Co.
364 W. North 600th St.
Salt Lake City, Utah 84110
Killam Gas Burner Co.
1240 S. Bannock St.
Denver, Colorado 80223

Southwest Region

Wagner Hydraulic Equip. Co.
2089 Westwood Blvd.
Los Angeles, California 90025
Engineered Sales Co.
5150 N. 16th St., Suite A-126
Phoenix, Arizona 85016

Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.
375 Victoria Ave.
Montreal, Quebec, Canada H3Z 2N1
P. O. Box 508
Knowlton, Quebec, Canada
K. C. Hamilton Equip. Ltd. — Marine

Canada—British Columbia Province

Les Hall Filter Service Ltd.
346 E. Esplanade
North Vancouver, B. C. V7L 1A4

Canada—Alberta Province

H. F. Clarke Limited
5220-1A Street S. E.
Calgary, Alberta, Canada

Hawaii

Foster Equipment Co.
719 Ahua St.
Honolulu, Hawaii 96803

Mexico

Ingenieria Termo Industrial, S. A.
Apartado 20-360
Mexico 20, D. F., Mexico

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