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1970 TOTAL MARKETING PLAN

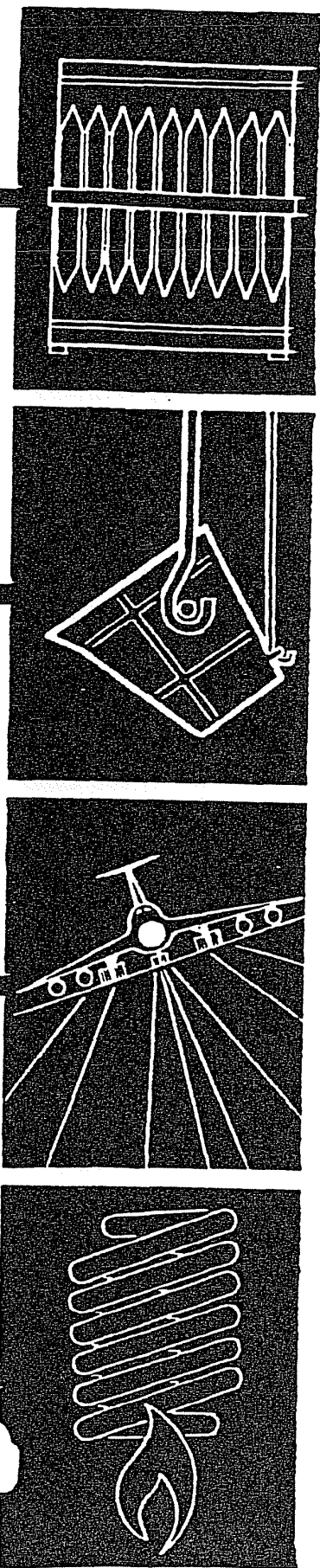
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Monsanto



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OVERALL BUSINESS - WORLDWIDE

	<u>SALES</u> (\$ Million)	<u>GROSS PROFIT</u> (\$ Million)	<u>GROSS PROFIT</u> (% of Sales)
1964	14.8	7.3	49.6
1965	15.8	7.1	45.2
1966	19.2	9.2	47.9
1967	20.9	9.4	45.0
1968	23.5	10.6	45.0
1969 (Est.)	20.8	8.8	42.5
1970 Budget	20.6	8.5	41.3
1971	23.9	-	-
1972	27.1	-	-
1973	32.4	-	-
1974	37.2	-	-

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1970 BUDGET

(\$1000)

<u>World Area</u>	<u>Industrial</u>	<u>Dielectric</u>	<u>Aviation</u>	<u>Heat Trans.</u>	<u>Total</u>
U. S.	3,992	6,349	3,130	1,428	14,899
Europe	1,086	1,515	580	630	3,811
Canada	156	529	63	77	825
Asia Pacific	8	-	181	-	189
Latin Amer.	79	289	94	43	505
Australia	17	184	3	5	209
Africa	-	-	32	-	32
I P C	<u>-</u>	<u>134</u>	<u>37</u>	<u>-</u>	<u>171</u>
	5,337	9,000	4,120	2,191	20,648

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SUMMARY

REVIEW OF 1969

Our 1969 Marketing Plan began as follows:

"The year 1969 will be one of major challenge and imaginative, aggressive effort for Functional Fluids Marketing."

Both aspects of this statement proved true, -with an abundance of indicators. We encountered many adversities, some of which had a greater negative effect on results than anticipated. The most significant challenges were:

- Intense competition in Skydrol from Stauffer and Oronite.
- Impact of polypropylene film technology on Aroclor requirements in capacitors.
- Cyclical turn-down in transformers and a protracted General Electric strike.
- Environmental questions about PCB products.

Through all of these experiences, we learned a lot about ourselves. We found we're able to respond to adversity well. We found we have the skills and aptitudes to win in competitive environments, and we found that we have a wealth of imaginative ideas and the inner drive to get them accomplished. Some of these highlights of accomplishment were:

- A 37% increase in domestic Therminol sales.
- Completion of plans for two new Pydraul product lines, phosphates esters and water glycols.
- Real progress in understanding of dielectric markets worldwide and translation into increased sales.
- Definitive progress of demonstration and commercial acceptance of new aviation products, Skylube 450, Skydrol 500C and LD and Santomelt.
- A revamping of our marketing organization to provide clear cut responsibility and action orientation.

Specific objectives for accomplishment were set out in the 1969 Plan. A review of how well we achieved the major results we set out for follows.

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OVERALL

1. Achieve minimum worldwide sales level of \$24.3 million and exceed ex-U.S. budget by 6%.

Not achieved -- Sales were \$20.8 million, primarily for reasons listed above. Ex-U.S. sales reached budget in spite of price attrition, but did not meet 6% over goal.

2. Meet the business Net Income After Tax Budget.

Not achieved -- Dollar sales short-fall prevented accomplishment.

3. Develop and implement specific long-term business plans in each market area.

Partially achieved -- Definitive progress made in Aviation plan. Industrial and Dielectric (Development Department) will be accomplished in 1970.

AVIATION

1. Maintain 95% of worldwide market and retain position with five major airline customers.

Partially achieved -- We demonstrated remarkable strength with customers, kept all significant ex-U.S. accounts and four of the five major airlines. Market share fell to about 70%, primarily due to loss of Boeing.

2. Develop total Jet Lubricant Strategy.

Partially achieved -- Concrete advancements were made on testing Skylube 450 with two flight tests and one ground test initiated. Total strategy is dependent on product performance.

3. Successfully introduce Skydrol 500C.

Achieved -- Both Skydrol 500C and LD were introduced to the market and test plans initiated.

DIELECTRICS

1. Insure long-term retention of our Aroclor customer position.

Achieved -- Customer needs were met. No situation occurred to cause pressure for competition.

2. Increase participation in European marketplace.

Achieved -- A re-evaluation of our goals was completed, providing a more aggressive approach. European sales increased 22%.

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HEAT TRANSFER

1. Initiate programs to capture new markets in petroleum, ships and textiles.

Achieved -- Specific concentration on short-term markets was instrumental in 37% sales gain.

2. Introduce Therminol 55 and gain initial sales of 50,000 gallons.

Partially achieved -- The product was successfully introduced and several systems are in operation. Sales did not meet the volume goal.

INDUSTRIAL

1. Obtain Factory Mutual approval for Pydraul 312 series.

Achieved -- Approval gained from Factory Mutual which allowed new commercial sales to several customers.

2. Develop and field test a water-based fluid.

Partially achieved -- Plans were completed for introduction of a water-glycol product early in 1970.

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1970 OBJECTIVES

This Marketing Plan abounds with new programs, new plans and new methods of accomplishment. We have made the adjustment in resources and thinking necessitated by 1969 market changes and financial results. Now our primary task is to translate our ideas into quick, tangible progress. Our emphasis will be implementation and we will accomplish this by concentrating our efforts on the most important priorities and by putting our time and our resources to the best possible use.

The goals we will achieve cover a wide spectrum of activities. Taken as a whole, they encompass a blend of three facets which are necessary to assure future growth in sales and profitability. The three are:

1. Profitable maintenance and growth of products and markets we hold.
2. Quick commercialization of new products.
3. Definitization of business plans to move us into diverse but related fields.

There are a considerable number of objectives outlined in this plan. Of all of them, certain are critical and will be achieved. These major objectives are:

DEPARTMENT

1. We will achieve our budgeted worldwide sales of \$20.6 million. In addition, we will meet the sales budget for each of our four individual businesses.
2. A new long-range manning table will be developed.
3. Our strategic planning matrix of customers/products/markets will be updated and revised.
4. We will complete and gain management acceptance of growth and diversification plans in Aviation and Industrial markets.
5. All aspects of the Organic Management System will be in effect, with special emphasis on economy of time, operation and expense, and on job performance to established objectives and goals.

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AVIATION

1. We will retain 65% of the Skydrol market worldwide.
2. We will regain 50% of lost Skydrol accounts, with special emphasis on Boeing and American.
3. Acceptance of a Monsanto fluid will be gained for the DC-10, Lockheed 1011, 747 and the Concorde.
4. Flight tests will be successfully completed on Skydrol 500C and LD.
5. A complete marketing plan, including profitability analysis, will be developed for Skylube 450. Product performance will be demonstrated in the marketplace. Achieve sales of \$90,000.
6. All compatibility and field tests will be achieved on Santomelt and we will sell \$100,000 of the product.

DIELECTRICS

1. We will reach satisfactory resolution with General Electric on transformer blend formulations.
2. We will define at all major customers, their Aroclor disposal situation and offer aid with suitable disposal procedures.
3. Concentrated world sales effort will be provided in Europe, India, Canada, Latin America and Australia and will achieve sales of \$2.6 million in these markets.
4. We will pursue possible joint ventures to make/sell electrical grade polypropylene film.

HEAT TRANSFER

1. We will commercially introduce a fluid which will be compatible and competitive to Dowtherm A.
2. Sales to the petroleum and petrochemical industries will be at least \$175,000.
3. A European source for Therminol 55 will be developed.
4. We will assist in development of a project to justify the manufacture of Therminol 66 in the U.K. and Japan.

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INDUSTRIAL

1. We will introduce a new phosphate ester fluid and sell 200,000 pounds. (Budget - 100,000 pounds)
2. A water/glycol fluid will be established in the market and sales of 100,000 gallons achieved.
3. A Pydraul marketing plan for Europe will be completed and implemented, including decision on use of distributors and local blending.
4. Local blending of Pydraul 312 will be initiated in Japan.

It is primarily on the accomplishment of these objectives that we will judge the merit and effectiveness of our total efforts.

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AVIATION & AEROSPACE
PRODUCTS

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AVIATION AEROSPACE

Profit/Sales

(\$1000)

	<u>Worldwide Sales</u>	<u>Gross Profit</u>	<u>Gross Profit (% of Sales)</u>
1966	7,228	3,797	52.5
1967	7,585	3,686	48.5
1968	8,972	4,080	46.5
1969 (Est.)	4,898	1,758	35.9
1970 Budget	4,120	1,475	35.8
1971	4,887	-	-
1972	5,557	-	-
1973	8,163	-	-
1974	10,615	-	-

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AVIATION & AEROSPACE

LONG RANGE OBJECTIVES

1. Increase the worldwide sales of Skydrol 500 and LD series fluids from \$4.0 million in 1969 to \$4.9 million in 1974.
2. Fully qualify Santomelt and develop sales of \$6.3 million by 1974.
3. Achieve a sales volume for jet engine lubricants of \$2 million by 1974.
4. Increase the worldwide sales of Coolanol type products from \$.4 million in 1969 to \$1.0 million by 1974.
5. Search out new opportunities in the aviation market for products that will achieve a sales volume of \$11.7 million by 1974.

GENERAL STRATEGY

Have superior products in all areas where we have chosen to compete. Develop and maintain sales and good selling relationships at the major airline accounts, airframe manufacturers, large suppliers of equipment related to our A&A products, large operators of ground-bound aviation jets, and cold-climate large airport operators. Develop our individual and collective marketing abilities with formal training and challenging jobs.

1970 GOALS

1. Sell \$3.3 million (420,000 gallons) of Skydrol fluids.
2. Retain our position with all contract airline customers.
3. Flight test and get full qualifications on Skydrol 500C and Skydrol LD.
4. Gain Santomelt material compatibility approval for airframe and engines.
5. Sell \$100,000 (400,000 pounds) of Santomelt.
6. Get full Pratt & Whitney industrial jet engine approvals for Skylube 450.
7. Sell \$90,000 (10,000 gallons) of Skylube 450 to the industrial market.
8. Get full approval in three P&W engine classes within the aviation jet engine market.
9. Get service evaluation approval at Rolls-Royce for all turbo-jet/turbo-fan engines.
10. Get GE flight service evaluation approval.

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11. Sell \$.5 million of the Coolanol fluids, OS-59 and MCS-962.
12. Define and develop market for Coolanol fluids as laser coolants.
13. Actively explore product diversification through existing product and services extension, company acquisition and intra-company agreement or licensing and choose ten candidate products for detailed evaluation. Issue Business Plan.
14. Complete detailed evaluation of the candidate diversification products, select two products and initiate program to introduce these products to the aviation/aerospace market.

ACTION PLANS

1. Sell \$3.3 million (420,000 gallons) of Skydrel fluids.

<u>Who</u>	<u>What</u>		<u>When</u>
RSB	Abex	\$ 15M	12/70
TCW	Air India	25	12/70
RSB	Airesearch	8	12/70
TCW	Air France	5	12/70
RSB	Air West	5	12/70
TCW	Airlift Int.	20	12/70
TCW/RCH	American Airlines	50	12/70
TCW	Asiatic Petroleum	100	12/70
RCH	Aviation Fluids	10	12/70
RSB	Bendix	17	12/70
RSB	Bertea	50	12/70
RSB	Boeing	50	12/70
RCH	Braniff	150	12/70
TCW	British West Indian	8	12/70
TCW	B.O.A.C.	9	12/70
TCW	Cleveland Pneumatic	25	12/70
RSB	Continental Airlines	15	12/70
TCW	Delta Airlines	120	12/70
RSB	Douglas Aircraft	150	12/70
TCW	Eastern Airlines	250	12/70
TCW	El Al	22	12/70
TCW	Fairchild Engine	8	12/70
RSB	Frontier Airlines	30	12/70
RSB	General Metals	22	12/70
RCH	B. F. Goodrich	6	12/70
TCW	Goodyear Tire	11	12/70
TCW	Grumman	29	12/70
RSB	Hydre Aire	17	12/70
RSB	Lockheed-California	30	12/70
RCH	LTV-Garland	17	12/70

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<u>Who</u>	<u>What</u>		<u>When</u>
RCH	McDonnell-Douglas	\$ 10M	12/70
TCW	Mobil	50	12/70
TCW	Mohawk	30	12/70
TCW	National Airlines	25	12/70
RCH	National Waterlift	15	12/70
RCH	North Central	9	12/70
TCW	Northeast	10	12/70
RCH	Northwest	5	12/70
TCW	Octagon Process	18	12/70
TCW	Overseas National	6	12/70
RCH	Ozark	8	12/70
RSB	P.S.A.	5	12/70
TCW	Pall Corp.	17	12/70
TCW	Pan American	250	12/70
RSB	Parker Hannifin	16	12/70
TCW	Piedmont	5	12/70
RSB	Ronson	30	12/70
TCW	Seaboard World	23	12/70
TCW	Southern Airways	11	12/70
RCH	Texas International	12	12/70
RSB	Trans-International	9	12/70
RCH	T.W.A.	300	12/70
RSB	Ultramar	14	12/70
RSB	United Airlines	245	12/70
TCW	Varig	12	12/70
RCH	Vickers-Troy	21	12/70
RCH	Vickers-Jackson	7	12/70
RSB	Western	5	12/70
RSB	Weston	19	12/70
RSB	World Airways	39	12/70
	Sub-Total	\$2,500M	
	Other Accounts	800	
	Total	\$3,300M	

2. Retain our position with all contract airline customers.

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3. Flight test and get full qualifications on Skydrol 500C and Skydrol LD.

General Action Plan

<u>Who</u>	<u>What</u>	<u>When</u>
JFC	Get Skydrol LD approved at B.A.C.	1st quarter
RSB	Get Skydrol LD approved at Boeing.	2nd quarter
RSB	Flight test Skydrol LD at United.	3rd quarter
RCH	Flight test Skydrol LD at TWA.	4th quarter
TCW	Flight test Skydrol LD at Eastern	4th quarter
JFC	Get Skydrol 500C approved at B.A.C.	1st quarter
RSB	Get Skydrol 500C approved at Lockheed.	2nd quarter
RSB	Get Skydrol 500C approved at Boeing.	3rd quarter
TCW	Complete Skydrol 500C test at Pan American and convert to 500C.	2nd quarter
TCW	Get Delta 500C test underway and complete it.	4th quarter
RSB	Get fluid contract from Lockheed-California for Skydrol LD.	2nd quarter
RSB/TCW/ RCH	Write specific strategies for all contract accounts.	1st quarter

4. Gain Santomelt material compatibility approval for airframe and engines

<u>Who</u>	<u>What</u>	<u>When</u>
WWO/RBH	Obtain CDOT approval for the use of Santomelt on airport push-out areas for aircraft.	2/70 and continuing
JFH/WWO/ RBH	Successfully complete the airframe materials compatibility test at St. Louis and Monsanto Research Corporation, Dayton, Ohio.	3/70
WWO/JFH/ RBH	Successfully complete the field test at Radcliffe Air Force Base, Ottawa, Canada by Hovey Associates of Ottawa.	3/70
WWO/RBH	Obtain approval from Canadian Dept. of Transportation of Santomelt for airframe compatibility.	3/70
WWO/RBH	Obtain CDOT approval for use of Santomelt on airport taxi-ways and ramps.	3/70 and continuing
JFH/WWO/ RBH	Successfully complete the engine materials compatibility tests at EPPI Precision Products, Chicago, Ill. and obtain CDOT/Air Canada preliminary approval.	3/70

<u>Who</u>	<u>What</u>	<u>When</u>
WWO/RBH	Obtain full CDOT approval of Santomelt for all airport surfaces.	5/70 and continuing
WWO/JFH/ RBH	Prepare and issue a final Santomelt business plan if the program continues to be successful.	6/70
WWO/RBH	Obtain ATA, USAF, FAA and USA airlines approvals for USA airport usage.	7/70
WWO/RBH	Implement a European marketing program to obtain material compatibility approvals from the prime European agencies and to initiate field tests for the 1970-71 winter season.	7/70
JFH/WWO	Continue research through the year to improve the products and to further substantiate product data.	Continuing
WWO/JFH/RBH	Establish and implement initial pricing, manufacturing, distribution, marketing and technical support programs.	9/70

5. Sell \$100,000 (400,000 pounds) of Santomelt.

<u>Who</u>	<u>What</u>	<u>When</u>
WWO/RBH	If current technical problems are solved to CDOT's satisfaction prior to mid-February, obtain initial sales of Santomelt for airport "push-out" areas (potential \$56,000).	2/70
WWO/RBH	Select the initial sales targets--CDOT and 25 major USA airports--and obtain United Airlines support in the USA marketplace to obtain our first sales.	3/70 and continuing
WWO/JFH/RBH	Follow up with CDOT on the possibility of obtaining a Canadian research contract for ice control chemical (potential \$50,000).	3/70 and continuing
WWO/RBH	Obtain 1970-71 winter season orders of Santomelt from CDOT (potential \$100,000 this year).	10/70
WWO/RBH	Obtain application test orders from the USA market (potential \$50,000 this year).	11/70

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6. Get full Pratt & Whitney industrial jet engine approvals for Skylube 450.

<u>Who</u>	<u>What</u>	<u>When</u>
TFM/SLR/RAL	Follow progress at Cos Cob test and issue necessary reports on fluid analysis results	For duration of remainder of 1000 hour test (complete 2nd or 3rd quarter)
TFM/TCW/RAL	Maintain inventory at Cos Cob facility.	Continue for duration of 1000 hour test
TFM	Assist Northeast Utilities and P&W in rating engines and issue test report.	2nd or 3rd quarter
TFM	Obtain official P&W approval.	2nd or 3rd quarter

7. Sell \$90,000 (10,000 gallons) of Skylube 450 to the industrial market.

7.1 Obtain initial sales in peaking power units.

a. Northeast Utilities

<u>Who</u>	<u>What</u>	<u>When</u>
CLB/TCW/RBH	Review pricing of current lubricants at Northeast Utilities.	2/70
FHL/RBH/ TFM/CLB	Establish pricing and container sizes, etc. for Skylube 450 to industrial market.	2/70
TFM/CLB/TCW	Review current engine tests for purpose of reaching decision on 8 new units scheduled for May start-up.	3/70
TFM/CLB	Commit Northeast to Skylube 450 and obtain contract.	4/70

b. Other peakers

CLB/TCW/ RSB/RCH	Call on following peakers to determine competitive situation and help establish pricing. 1. Southern California Edison 2. Philadelphia Electric 3. Commonwealth Edison-Chicago	2/70
TFM	Publish Utilities Sales Brochure.	4/70

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<u>Who</u>	<u>What</u>	<u>When</u>
TFM/CLB	Mail first edition of utilities brochure (peakers).	4/70
CLB/TCW/ RSB/RCH/TFM	Follow-up mailing with calls on major selected customers.	4/70
All	Obtain initial sales of Skylube 450 to peakers.	5/70
7.2 Obtain initial sales t Natural Gas Pumpers.		
TFM/CLB/RCH	Gather market intelligence from following gas pumpers relative to engine lubricants. 1. Southern Natural Gas Co. 2. Consumers Power 3. Texas Eastern 4. Columbia Gulf	2/70
TFM/CLB	Establish "gas pumper" mailing list and mail first edition of Utilities Brochure.	5/70
CLB/RCH/TFM	Follow-up mailing with calls on selected customers.	5/70
All	Obtain initial sales of Skylube 450 to "gas pumpers".	6/70
7.3 Obtain sales of Skylube 450 to Marine Installations.		
TFM	Determine operating experience of lubricants in existing and future marine installations through contacts at P&W and U.S. Coast Guard.	4/70
TFM/ T.Oneson	Investigate possibility of Canadian Navy Field test in DDH280 Class Destroyer.	5/70
TFM	Obtain initial sale of Skylube 450 to marine operator.	4th quarter

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8. Get full approval in three P&W engine classes within the aviation jet engine market.

<u>Who</u>	<u>What</u>	<u>When</u>
TFM/SLR	Implement JT12 engine test in Monsanto Sabreliner.	Continuing
TFM	Assist Monsanto flight operations and P&W in rating engine and issue test report.	End of 1000 hour test--probably 4th quarter 1970
TFM	Obtain full P&W approval JT12.	4th quarter
TFM/SLR/ RAL/TCW	Implement JT3D engine tests in PanAm 707 aircraft.	Continuing
TFM/RAL	Assist PanAm and P&W in rating engines and issue test report.	End of 2000 hour engine test-- 4th quarter
TFM	Obtain full P&W approval in JT3D.	4th quarter
TFM/SLR/RSB	Implement JT8D engine test in Aloha 737 aircraft.	Continuing
TFM	Assist Aloha and P&W in rating engines and issue test report	4th quarter 1970 or 1st quarter 1971
TFM	Obtain full P&W approval in JT8D.	1st quarter 1971

9. Get service evaluation approval at Rolls-Royce for all turbo-jet/turbo-fan engines.

<u>Who</u>	<u>What</u>	<u>When</u>
TFM/JFC	Obtain results of IAE gear test at RR.	1st quarter
TFM/JFC	If IAE gear test results are positive, submit product for full series of analytical tests.	1st quarter
TFM/JFC	Obtain flight evaluation approval in RR engines.	1st quarter
TFM/JFC	Obtain Spey and RB211 project engineer approval.	1st quarter
TFM	Initiate request to RR for engine tests in Monsanto's Gulfstream II Spey engines.	2nd quarter

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10. Obtain GE flight service evaluation approval.

<u>Who</u>	<u>What</u>	<u>When</u>
FHL	Obtain airline request to flight test Skylube 450 in GE CF-6 engines.	1st quarter
TFM	Submit product to GE and officially request flight service evaluation approval.	2nd quarter
TFM	Follow GE bench and engine testing of Skylube 450.	Continuing
TFM	Obtain flight service evaluation approval for CF-6 engine.	4th quarter

11. Sell \$500,000 of the Coolanol fluids, OS-59 and MCS-962.

- 11.1 Obtain available business from current customers and prospects.

<u>Who</u>	<u>What</u>	<u>When</u>
TCW	Raytheon (Hawk)	Quarterly
TCW	Eastern Industries	Quarterly
TCW	Sanders (AN/ALQ-100 ECM)	Quarterly
TCW	American Electronics	Semi-annual
TCW	IBM (AN/ASQ 38 BOMB/NAV)	Quarterly
TCW	GE-Phila. (Bio-Satellite)	Semi-annual
TCW	ITT (Radar)	Semi-annual
TCW	Litton (ECM)	Semi-annual
TCW	Grumman (ECM)	Quarterly
TCW	Westinghouse-Baltimore (AN/AWG-10)	Quarterly
RSB	Hughes (Phoenix)	Bi-monthly
RCH	Bird Electronics (Radar)	Semi-annual
RSB	Raytheon (ECM)	Quarterly
RSB	Autonetics (Mark II Radar)	Bi-monthly
RAS	Defense Fuel Supply Agency	Semi-annual
RCH	McDonnell (Gemini B)	Quarterly
RCH	General Dynamics (Phoenix)	Quarterly
RCH	Martin-Denver (Apollo applications)	Semi-annual
RCH	Texas Instr. (Bomb/Nau.)	Quarterly
RCH	LTV-(ECM)	Semi-annual
RSB	Boeing (SRAM & AWACS)	Quarterly

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11.2 Continue technical training of Field Salesmen.

<u>Who</u>	<u>What</u>	<u>When</u>
RAS	Calls on key customers and prospects with field salesmen.	Annually
RAS	Technical discussion and/or seminar with field salesmen.	Semi-annual
RAS	Technical data and background information.	As required

11.3 Improve relationships with government agencies purchasing and specifying Coolanol fluids.

<u>Who</u>	<u>What</u>	<u>When</u>
RAS	Defense General Supply Agency	Semi-annual
RAS	Defense Fuel Supply Agency	Semi-annual
RAS	ASD-Dayten	Semi-annual
RAS	NASA - Huntsville	Semi-annual
RAS	NASA - Houston	Semi-annual
RAS	ARMY - Redstone	Semi-annual

11.4 Continue promotion of MCS-825 for new applications, including lasers.

<u>Who</u>	<u>What</u>	<u>When</u>
RAS	Re-use mailing list.	2/70
RAS	Write MCS-825 introductory letter.	2/70
RAS	Mail introductory letter and bulletin.	2/70
RAS	Mail absorption bulletin.	3/70
RAS	Mail heat transfer bulletin.	3/70
RAS	Write paper on degassing of fluid.	2/70
RAS	Mail degassing paper.	4/70
RAS	Write follow-up letter.	3/70
RAS	Mail follow-up letter.	4/70

12. Define and develop market for Coolanol fluids as laser coolants.

<u>Who</u>	<u>What</u>	<u>When</u>
RAS	Develop list of prospects for laser coolants.	2/70
RAS	Discuss requirements with Wright Field.	2/70
RAS	Discuss AF Contractual work performed by Martin-Orlando.	2/70
RAS	Contact key customers and prospects at IEEE Meeting.	3/70
RAS	Recommendation for future action including marketing plan if applicable.	4/70

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13. Actively explore product diversification through existing product and services extension, company acquisition and intra-company agreement or licensing and choose ten candidate products for detailed evaluation. Issue Business Plan.

<u>Who</u>	<u>What</u>	<u>When</u>
RBH/WWO	Investigate Monsanto functional fluids strengths in the aircraft, aircraft accessory and airport fluids products and related products/services markets.	2/70
RBH/WWO	Investigate other Monsanto strengths in the Organic and other Divisions for tie in.	2/70
RBH/WWO/CLB	Research the aircraft, aircraft accessory and airport fluids products and related products/services markets including market forecasts. Determine the products technical, facility and pricing needs.	Initial report 5/70, then continuing to year end report
RBH/WWO	Research other markets than aviation/aerospace for needs and potential.	Initial report 5/70, then continuing to year end report
RBH/WWO	Evaluate all of the internal and external results, match the best product capabilities with the best market potential within a high ROI area and establish the optimum new product candidates.	5/70
RBH/WWO	Complete and issue a Diversification Business Plan which selects 10 candidates for active evaluation during the rest of the year.	6/70

14. Complete detailed evaluation of the candidate diversification products, select two products and initiate program to introduce these products to the aviation/aerospace market.

<u>Who</u>	<u>What</u>	<u>When</u>
RBH/WWO/CLB	Accomplish a detailed research of the aircraft marketplace including customer and related visits to determine specifically the best products within those previously selected. Impact of other markets - industrial, military, etc. - is also to be included.	9/70
RBH/WWO	Complete a detailed re-evaluation of Monsanto strengths which are best suited to the products selected above.	9/70

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<u>Who</u>	<u>What</u>	<u>When</u>
RBH/WWO	If internal product selected, initiate required development and research programs to define product and generate customer data.	11/70
RBH/WWO	If acquisition or intra-company agreement products, initiate action on the acquisition or agreement program. Follow through with and monitor the activities of cognizant Monsanto personnel.	11/70
RBH/WWO	Introduce the products selected to a selected group of customers and initiate a customer approval program.	12/70
RBH/WWO	Evaluate all of the factors from the external and internal investigation and select two candidate products.	9/70
RBH/WWO	Complete product marketing plans for each product selected and obtain approval to proceed with program.	Plan - 10/70 Approval - 11/70

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TRAN 003786

DIELECTRIC
Profit/Sales
(\$1000)

	<u>Worldwide Sales</u>	<u>Gross Profit</u>	<u>Gross Profit (% of Sales)</u>
1966	7,791	-	-
1967	8,522	-	-
1968	8,789	3,831	43.6
1969 (Est.)	8,319	3,377	40.6
1970 Budget	9,000	3,629	40.3
1971	9,853	-	-
1972	10,468	-	-
1973	11,197	-	-
1974	11,825	-	-

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TRAN 003787

DIELECTRICS

LONG RANGE OBJECTIVES

1. Increase sales volume worldwide from \$9.5 million in 1970 to \$11.7 million in 1974.
2. Maintain our present position as the supplier of dielectric fluids in the U.S.A., Canada and U.K.
3. Increase our competitive market participation in major world areas including India, Australia and Latin America.
4. Maintain alertness to the PCB pollution problem and take necessary steps to insure vitality of Aroclor usage in the electrical industry.
5. Gain standardization among customers of transformer Askarel blends.
6. We will continue work to enhance the use of Aroclor and other Monsanto dielectric fluids, especially for polypropylene film capacitors.
7. Pursue entry into the polypropylene film market in the U.K. or other world areas.
8. Become the leading European supplier of capacitor and transformer Askarels.

GENERAL STRATEGY

1. We will continue concentrated effort to promptly supply our customers, domestic and worldwide, with the highest quality at realistic competitive prices backed with the best technical service.
2. In-depth close relations with all customers worldwide will be pursued to constantly assure confidence and maintain our business posture.
3. Constant surveillance of the total Aroclor related dielectric market will be maintained, both that of customers and product applications.
4. Increase capacitor Aroclor sales in the non-domestic EEC market area.

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TRAN 003788

1970 GOALS

A. SALES

	<u>Fluids</u>	<u>Pounds</u> (Millions)
U.S.A. Domestic	Capacitor	27.7
	Transformer	17.0
U.S.A. Export	Capacitor	4.8
	Transformer	3.7
U.K. Domestic	Capacitor	3.2
	Transformer	1.2
ROW Ex-U.K.	Capacitor	2.2
	Transformer	1.0
MMK	Capacitor	<u>2.2</u>
		63.0

This is about \$9.5 million sales worldwide.

B. CAPACITOR DIELECTRIC GOALS - U.S.A.

1. Relative to the PCB pollution problem, establish proper and economical disposal of scrap.
2. Coordinate the worldwide marketing and competitive pricing of capacitor Aroclor.
3. Assess U.S.A. domestic price increase contemplated by mid-1970.
4. Establish U.S.A. and U.K. facilities to impregnate and life test experimental capacitor sections.
5. Firm Monsanto's posture relative to supplying HCL scavengers including GE's P-2.
6. Establish position for Monsanto in plastic film business in the U.K., via joint venture with GE and BCL.
7. Determine what must be done to cur MCS-962 to eliminate gassing or find some more suitable silicate ester.
8. Determine usefulness of alkyl benzene for capacitors.
9. Explore feasibility of adding sulfenes to a selected low-temperature isomeric blend of Aroclor "1242" to economically combat Pyralene 1500 and 1500S, which feature higher dielectric constant and better low temperature, at 10% premium.
10. Lay ground work for manufacture of Aroclor in India.

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TRAN 003789

C. TRANSFORMER ASKAREL GOALS - U.S.A.

1. In light of the PCB pollution problem, determine when and for what uses Monsanto will terminate higher chlorinated Aroclors.
2. Arrive at mutual understanding with GE on the pollution problem.
3. Formulate guidance for all transformer manufacturers regarding the pollution problem and the arc-formed gas problem.
4. Continue to search for another source of usable and economical chlorobenzene.
5. Establish required proper and economical disposal of scrap transformer Askarel in conformance with the PCB problem guidelines.
6. By mid-1970, assess need to increase the price of transformer Askarel.
7. Continue to explore possible improved insulation systems for use with transformer Askarel.

D. EUROPEAN GOALS

1. Increase capacitor Aroclor sales in the non-domestic market area by 35%.
2. Increase Pyroclor sales in the U.K. by 25%.

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1970 ACTION PLANS

CAPACITOR AROCLOR

<u>Responsibility</u>	<u>Action</u>	<u>When</u>
JGB/RG	Define at all capacitor makers, their Aroclor disposal situations and offer our aid with suitable disposal procedures, including incineration.	Immediately
RHM/WRR/PGB/MB	Explore possible joint venture with P. R. Mallory to make high DK films and thin film devices, e.g. deposition of barium titanate, etc. on the electrodes.	1st quarter 1970
MB/PGB	Explore desirability of acquiring H. H. Hilton, Inc. winding machine manufacturer. If favorable, explore addition of Banksbaugh Laboratories.	Immediately
RHM/CC	Continue evaluation of plastic films and pursue developments at duPont, Hercules and our customers worldwide.	Continuously
HSB/DC/WRR/PGB	Pursue possible joint venture with GE and BC Ltd. or Kalle in Europe to make and sell electrical grade polypropylene film. Explore metallizing films for capacitors.	Continuously
PGB/MMK	Explore with GE possible manufacture and marketing electrical grade polypropylene film in Japan.	Continuously
CC/PGB	Keep posted on European market area and worldwide about customer desire to use GE's Pyranol-2.	Continuously
RHM/CC	Explore scavengers other than P-2 of possible interest to Monsanto, such as Bayer's scavenger which seems the same as Dow's DER'332 which Dow may discontinue in the required purity. This material is used with the Weyerhaeuser "O" paper system which is now used by several of our customers to circumvent P-2.	Continuously

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<u>Responsibility</u>	<u>Action</u>	<u>When</u>
CC/RHM	Continue to explore plastic film compatibility with Aroclor and monitor the research work at English Electric Research Association.	Continuously
RG/JGB	Explore possible interest in silicate esters, MCS-962.	Continuously
WRR/CC	Explore possible manufacture of other superior silicate esters.	Immediately
JGB	Explore use of solid Aroclor to replace Halowax at GM.	Immediately
PGB	Coordinate the worldwide marketing and pricing of capacitor Aroclor.	Continuously
PGB	Up-date the world market strategies.	9/70
RG/JGB/PGB	Call at least once every quarter on all our major domestic capacitor Aroclor customers.	Through 1970
PGB/CC/JGB	Make required joint calls with International in South America, Canada, Europe, Scandinavia, India, Australia, Japan and Africa.	Through 1970
RHM	Explore means of achieving high DK fluids for addition to Aroclor and new dielectric fluids to replace Aroclor.	Through 1970
PGB	Keep posted on possible commercial interest in alkylbenzene as dielectrics for cables, switch gear, transformers, etc.	Continuously
WRR	Study the lower chlorinated biphenyls and terphenyls for biodegradable properties.	Through 1970
RHM/WRR	Explore possible business tie with Materials Research Corporation, Orangeburg, N. Y.	1st quarter 1970
DAO/PGB	Consider need to increase the price of capacitor Aroclor	Immediately
V.L.Narayan W.E.Coumou	Lay ground work to capture 80% of the Indian capacitor market.	Immediately

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<u>Responsibility</u>	<u>Action</u>	<u>When</u>
CC/RHM/PGB	Serve Indian capacitor technology from Ruabon Research, Mr. Coleman, supported by Dr. Munch and Mr. Benignus at St. Louis.	Through 1970
MMK/DD/WAK	Explore supplying Aroclor ex-MMK by 1973.	Through 1970
DD	Explore feasibility of producing biphenyl and Aroclor in India by 1975.	Through 1970
V.C.Gaerlan/ PGB	Develop capacitor Aroclor sales in Taiwan.	Through 1970

TRANSFORMER ASKARELS

RHM	Develop Aroclor rich blend acceptable to GE Rome and GE Pittsfield.	Immediately
RG/JGB	Convert all other transformer makers worldwide to Inerteen 70-30 blend.	1st quarter
PGB/RHM	If ITE, Allis Chalmers, Moloney or others elect to use 100% Aroclor 1242, Benignus and Munch must present laboratory findings about explosive limits of arc-fermed gasses and recommend that the user test prototype transformers to his satisfaction.	Continuously
JGB/RG	Define at all transformer makers their used askarel disposal situations and offer our aid with suitable disposal methods.	Immediately
RHM	Indicate to Westinghouse the possible use of high temperature insulation systems compatible with Aroclor 1242 to build smaller transformers.	12/70
RHM	Evaluate Japanese PPO for use by MMK and as a second and cheaper source of PPO for use in the U.S.A. and the U.K.	Immediately
Purchasing	Find another source of chlorobenzene.	Immediately
DAO/PGB/KS	Review with advertising the status and utility by our customers of the 1969-70 "pull-thru" program for transformer askarels. Decide whether to advertise askarel for pad-mount residential transformers.	3/1/70

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<u>Responsibility</u>	<u>Action</u>	<u>When</u>
PGB	Attend three ASTM meetings, IEEE and International Electrotechnical Commission Meetings.	Spring, Summer, Fall, 1970
PGB/JGB/RG	Provide technical assistance to the customers and offer symposiums as judged needed worldwide.	Through 1970
RG/JGB	Call on all major askarel transformer makers, selected contractors, architects, utilities. Explore possibility of askarel for pad-mounts.	Through 1970
PGB/ International	Coordinate worldwide transformer askarel marketing and pricing.	Continuously
PGB	Up-date worldwide strategies.	9/70
DAO/PGB	Consider possibility of raising the price of transformer askarel.	Immediately

CAPACITOR AROCLOR - EUROPEAN

PJAM/JH/CC	Investigate and develop a relationship with all major accounts in the non-domestic EEC area to find out what opportunities there are for business preferably on a temporary import basis if customer is within EEC.	9/70
JH	Identify fastest growing accounts as growing with them makes minimum disturbance in the marketplace.	9/70
JH/PJAM	Study in detail the economics of supplying any major account whether in EEC or EFTA to determine netbacks and hence profitability on any business we would choose to take.	3/70
JH	Check out variation of production costs with plant output for Newport.	3/70
DSC	Determine whether there are ways and means of working with Caffaro to secure a better share of the major non-domestic askarel market - Italy.	3/70
JH	As freight costs are an important loss of profit, initiate study of cheapest methods for handling electrical fluids Europe-wide.	3/70

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<u>Responsibility</u>	<u>Action</u>	<u>When</u>
CC/RHM	Market Dow's 332 to combat Bayer's thrusts with clophen and diepoxide.	3/70
CC/RHM	Market lower pour point, higher DK Aroclor 1242 to combat Prodelac's Pyralene 1500 and 1500S.	6/70
CC/JH/MT	Continue to probe customer interest in GE's Pyranol-2.	Continuously
CC/JH/MT	Continue to probe customer interest in Weyerhaeuser's "O" Paper-DER 332 System.	Continuously
CC/JH	Quantify the effects of plastic film technology on the capacitor askarel market.	9/70
HSB/PGB/DSC	Crystallize a BCL-GE-Monsanto PPL film business.	Continuously
CC/RHM	Probe effectiveness of wetting agents for PPL film (cooperative program with English Electric Research).	1st half 1970

TRANSFORMER PYROCLOR - EUROPEAN

JH	Develop low cost sources of TTCB and TCB for transformer askarel manufacture to combat low cost clophen blends using TTCB.	3/70
JH	Establish a better list of key accounts in the European non-domestic transformer askarel market.	3/70
MT	Introduce new promotion program to transformer industry and secure support of at least one major group.	3/70
MT	Educate area board engineers from the four largest consultancy areas, e.g. Midlands, London, to Pyroclor benefits.	1/70
MT/JH	Finish introduction of Pyroclor 70/30 blend.	3/70
CC/MT	Maintain constant flow of data on Aroclor 1242 transformer experience and transformer askarel promotion campaigns.	1970
Marketing/ Manufacturing	Insure adequate availability of bulk storage and bulk delivery capacitors.	1/70

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REALLY STAYS STAY FLUOPS

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TRAN 003796

HEAT TRANSFER

Profit/Sales

(\$1000)

	<u>Worldwide Sales</u>	<u>Gross Profit</u>	<u>Gross Profit (% of Sales)</u>
1966	672	-	-
1967	903	-	-
1968	1,414	602	62.0
1969 (Est.)	1,852	1,069	57.7
1970 Budget	2,192	1,256	57.3
1971	2,899	-	-
1972	3,628	-	-
1973	4,343	-	-
1974	5,127	-	-

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TRAN 003797

THERMINOL

THE MARKET SITUATION

1. Market Size

The market is the efficient transmission of heat necessary for personal comfort or for the production of goods.

Our Therminol products are a series of fluids with wide functional properties and price options. Our franchise, beginning with FR fluids, has been expanded to cover the market needs in a broad spectrum of cost performance.

Therminol is used as a liquid in heat transfer systems (like hot water) to transfer heat from the burner and fuel source to a use point.

Examples: Radiator or fan coil for space heating
Reactors for polyester or alkyd resins

The domestic market for fluids is estimated as follows:

	<u>1969</u>	<u>1974</u>
Dowtherm A	\$6.4M	\$ 9.0M
Petro. Oil	2.0	2.8
Therminol	1.0	3.8
Other	<u>0.5</u>	<u>0.7</u>
TOTAL	\$9.9M	\$16.3M (7%/year)

The sale of fluid is generally tied to a capital project. Consequently, the actual sale may be 6 months to 2 years in the future. These prospects must be identified in the planning and design stage.

2. Competition

The companies and products which satisfy the same market needs are:

- a. Dowtherm A, and its ex-U.S. equivalents; a biphenyl/biphenyl oxide mixture which has been in broad use for thirty-five years.
- b. Certain petroleum oils, particularly those supplied by Mobil and Humble, which have been used for fifteen to twenty years.
- c. Steam and water, which is the accepted standard up to about 350°F, particularly in space heating applications.

3. Our Position

We have a broad product line, fire resistant and non-fire resistant, low cost and high cost, temperature to 700°F and applications covering most industrial processes requiring heat. In addition, we have a few installations using Therminol to generate steam for space heating. Our Akron lab and office building is the first building to circulate Therminol throughout for heating.

GENERAL STRATEGY

Sell the need for fire resistance particularly in those applications where the conditions exist for possible loss of life and catastrophic interruption of production or service. When such conditions do not exist then sell non-fire resistant fluids.

Emphasize certain industries, applications and fluids so as to increase sales significantly.

LONG RANGE OBJECTIVES

1. Increase worldwide sales from \$1,811 M in 1969 to \$3,840 M in 1974.
2. Increase M/I from 10% in 1969 to 18% in 1974 (domestic).
3. Maintain fluid gross profit of at least 50%.
4. Expand the sales forces as well as advertising/promotion to increase leads for fluid heat transfer systems.
5. Attain sales penetration in the Dowtherm portion of the market.
6. Through acquisition, create a sales base of between \$10-20 million by 1974 with the capability of providing the key components of a heat transfer package system. (e.g. heaters, exchangers, selected valving, etc.)

LONG RANGE STRATEGY

1. Develop specific plans for key industries and applications such as petroleum, petrochemical and space heating.
2. Concentrate on industries and applications which are likely to increase sales significantly.
3. Develop increased sales in two key world areas -- Europe and Japan.
4. Continue to maintain the support of selected A & E's and original equipment manufacturers by influencing them to design for Therminol, and by monitoring their equipment to assure proper system design and the availability of suitable seals, gasketing, pumps, etc.

5. Through acquisition of key component manufacturers sell package heat transfer systems.
6. Continue a strong advertising/promotion program to develop sales leads.
7. Devise and implement a better means for providing design guidance, sizing systems, calculating heat transfer data, etc. of potential end user systems to assure the sale of Therminol.
8. Sell a fluid that is compatible and cost/performance competitive with Dowtherm A so as to penetrate that portion of the market.

1970 GOALS

1. Increase worldwide sales to \$2.2 million.
2. Add to product line a fluid which will be compatible and cost/performance competitive with Dowtherm A.
3. Sell at least \$175,000 of Therminol fluids to the Petroleum and Petrochem Industry.
4. Develop marketing plan for space heating market.
5. Market a Therminol 55 type product in the U.K. and Europe.
6. Manufacture Therminol 66 in the U.K. and Japan.
7. Redirect food cooking applications from FR fluids to Therminol 66.
8. Evaluate market for fluid heat transfer in textile fiber making and in fabric finishing and develop appropriate action plan.
9. Continue to be opportunistic in applications such as waste heat recovery and ships and barges but not at the expense of our targeted markets.
10. Increase sales of non-fire resistant fluids to 48% of sales.
11. Sell \$100,000 of Therminol 55 to bulk users by placing sales emphasis on large volume systems.
12. Sell FR fluids only where significant fire hazard exists otherwise sell Therminol 66.
13. Devise and implement a better means for providing design guidance, sizing systems, calculating heat transfer data, etc. of potential end user systems.
14. Develop Fluid life data on Therminols and competitive fluids.
15. Concentrate on the "quick sale", that is the conversion from Dowtherm A, petroleum oil or molten salt.

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TRAN 003800

1970 ACTION PLANS

<u>Responsibility</u>	<u>Action</u>	<u>Target or Review Date</u>
C.L.Curtis J.R.Fallon* D.E.Roush	Expand leads by redirecting "Ads", improving mail list, generating PR's, utilizing association lists for key industries and seminars with professional groups. (Example: Association of Plant Engineering)	Quarterly Review
R.F.Irwin J.S.Pullman J.J.Roder J.R.Fallon*	Develop with each heat transfer specialist a "quick sale" list. Therminol 66 for Dowtherm A. Therminol 55 for petroleum oil. Initiate action to make the sale.	4/1/70 complete
R.Davis* J.R.Fallon D.E.Roush	Continue to seek candidates for acquisition. (Example: heater, pump, valving, rotary joints, exchangers, chillers, heat users, etc.)	Quarterly Review
J.R.Fallon* D.E.Roush	Emphasize food cooking applications using Therminol 55, 66 and 77.	Continuous
J.R.Fallon* D.E.Roush D.R.Miller	Change present Therminol FR-1 and FR-2, food cooking applications to Therminol 66.	7/1/70 complete
J.R.Fallon D.E.Roush	Develop marketing plan for space heating market.	5/1/70 complete
J.R.Fallon D.E.Roush*	Develop a presentation or proposal on space heating with Therminol FR-1. Give it to at least 3 or 4 key building influences in the commercial or industrial construction field.	10/1/70 complete
J.J.Roder* J.R.Fallon D.E.Roush	Determine areas of the country where licensed operators are required, then contact selected A&E's in these areas re: space heating with Therminol FR-1. AIA--get list of A's specializing in schools, apartment buildings and shopping centers.	5/1/70 complete
D.E.Roush*	Document the Akron facility re: equipment, costs and cost of operation. Also revise the Kaiser hospital report so that it can be of more use to us and so that the source of the report is disguised but the context is useful.	2/1/70 complete

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*Denotes prime responsibility.

<u>Responsibility</u>	<u>Action</u>	<u>Target or Review Date</u>
D.E.Roush*	Expand sales in the petroleum and gas industry particularly offshore gas processing. Document the industry and applications by completing the " <u>Offshore Report</u> ".	2/1/70 complete
D.E.Roush R.F.Irwin* D.R.Miller	Quantify the fluid needs of the Trans Alaskan Pipeline and initiate activity to have Therminol specified and sold.	Review Quarterly
R.F.Irwin J.S.Pullman J.J.Roder D.E.Roush J.R.Fallon D.R.Miller	Be opportunistic in the following industries and applications: Fiber manufacturing, Textile Finishing, Non-woven Fabrics Production, Marine--Ships and Barges, Sulphur Producers, Waste Heat and Incineration, Paper Industry--Converters and OEM's. We will not develop any plans for these industries and will not pursue sales to them at the expense of our key opportunities--Petroleum and Petrochem and Space Heating.	Continuous Review Quarterly
C.L.Curtis D.E.Roush* R.F.Irwin	Provide technical assistance and assure smooth operation of offshore platforms now using Therminol. Contact Chief Engineers, publicize and document trouble-free system via direct mail and "ads". Use Oil and Gas Journal for ads and mail list. Place the emphasis on <u>safety</u> .	3/1/70 complete
D.E.Roush* R.F.Irwin J.H.Davidson J.S.Pullman	Use above information to give seminars to the following Brown & Root Fluor Corp. Procon Stress liquid phase heating, safety, applications, theory and chemistry. Tie it all in to the petroleum industry -- production, transportation and storage.	6/1/70 complete
G.F.Fague J.H.Davidson J.J.Roder*	Develop operating cost data on existing heating installations -- Detroit, Akron, west coast.	3/1/70 complete
J.H.Davidson* J.J.Pullman	Follow the Sheraton Hotel project and draw to conclusion favorable to <u>Therminol</u> .	Review

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ResponsibilityActionTarget or
Review Date

J. R. Fallon*
J. S. Pullman

Evaluate market for fluid heat transfer in textile fiber making and in fabric finishing and develop appropriate action plan companies like: American Enka, Monsanto, DuPont, Allied, Tenn-Eastman, Celanese; also OEM's like Artos, Devise, Butterworth; and mills like Peering-Milliken, J. P. Stevens, Burlington. Work through Vice President M. Dalton if feasible.

9/1/70

J.S.Pullman*
R.F.Irvia
J.J.Roder
D.E.Roush

Exploit sale of Therminol in the marine industry -- Humble tanker/icebreaker, Dravo Barges. Enlist Coast Guard support.

Review
Quarterly

D.E.Roush*
R.F.Irvia

Sell Therminol to the sulphur producers. Provide supportive data to the sales specialist for use at Brown-Roots, Freeport Sulphur and Texas Gulf Sulphur.

5/1/70
complete

D.E.Roush*
J.R.Fallon
R.M.Kountz

Emphasize the use of Therminol within Monsanto. Arrange and give a Therminol presentation to selected Central Engineering personnel.

6/1/70
complete

D.E.Roush
D.R.Miller*

Devise and implement a better means for providing design guidance, sizing systems, calculating heat transfer data etc. of potential and user systems.

12/31/70
complete

D.R.Miller*

Develop a Dowtherm A -- compatible and cost/performance competitive.

7/1/70
complete

D.E.Roush
C.L.Curtis

Initiate new sample analysis program, announcing it to our Therminol users.

2/1/70
complete

D.R.Miller*
D.E.Roush

Develop Fluid Life Data and organize it in a useful format for Therminol and competitive fluids.

6/1/70

D.S.Cameron*
J.N.Haggart

Market a Therminol 55 type product in Europe.

10/1/70
complete

D.S.Cameron*
J.N.Haggart
J.R.Durland*

Manufacture Therminol 66 in the U.K. and Japan.

8/1/70
complete

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INDUSTRIAL HYDRAULIC
FLUIDS

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TRAN 003804

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TRAN 003805

INDUSTRIAL HYDRAULIC			
Profit/Sales			
(\$1000)			
Worldwide Sales			
Gross Profit			
Gross Profit (% of Sales)			
1966	3,385	-	-
1967	3,888	-	-
1968	4,365	1,857	43.1
1969 (Est.)	5,636	2,568	45.6
1970 Budget	5,337	2,165	40.6
1971	6,300	-	-
1972	7,490	-	-
1973	8,667	-	-
1974	9,632	-	-

PYDRAUL

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LONG RANGE OBJECTIVES

1. Increase worldwide sales volume from \$5.4 million in 1969 to \$9,332,000 in 1974 with present and future industrial fluids.
2. Continue to increase our percentage of sales to the die casting, steel, aluminum and foundry markets.
3. Establish a position with General Electric, Westinghouse and other steam and gas turbine manufacturers to capture 50% of the fire-resistant lubricant business with our present Pydrauls or new phosphate esters by 1975.
4. Continue present effort toward underground coal mining industry. The product is developed, the market will not develop until federal legislation has passed Congress.
5. Through acquisition, develop sales to the primary metals market with products other than fire resistant fluids.
6. Achieve a total increase in sales of products other than fire-resistant fluids of \$5 million by 1974.
7. Successfully introduce a new fire-resistant phosphate ester fluid and sell 1.6 million pounds by 1974.

GENERAL STRATEGY

1. Develop and maintain specific marketing programs for each major market segment we are penetrating -- utilizing market research, identification of major OEM's, OEM contact and support, identification of major prospects, advertising, sales promotion and direct field sales efforts on major accounts.
2. Handle major markets on priority basis, concentrating on die casting, steel and aluminum first. Move into new area such as turbine equipment and mobile equipment as marketing plans are completed.
3. Select world areas that offer significant volume potential and develop these markets with strong commitment and support. Consider local blending where feasible. Do not expend effort in world areas of small volume potential.
4. Make a concerted and deliberate effort to win the support of original equipment manufacturers serving our major markets, by making it easy for their engineers to design for the use of Pydraul and by servicing our mutual customers in the field.
5. In working with the equipment manufacturers, assure proper system design and the availability of suitable seals, hoses and other non-metallics.
6. Define a business plan which, through acquisition, expands our present product line both within fluids and beyond fluids. In working with equipment manufacturers and customers, define needs and evaluate Monsanto's ability to satisfy them and make appropriate additions of products and services if profitable. TRAN 003806

1970 GOALS

1. Achieve a 10% increase over budgeted sales of:

	<u>1970</u>
Domestic	3993
International	<u>1258</u>
Total	5251

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2. Maintain current customer strategies on all major customers we sell \$100,000 or more. The target accounts list will be kept current and reviewed quarterly.
3. Develop marketing plan for steel and primary aluminum industry.
4. Complete successful trial of FR gas turbine lubricant at Alberta Gas Trunkline Limited and commercially introduce to other gas transmission companies in U.S. and Canada.
5. Establish working relationship with General Electric and Westinghouse for laboratory and/or full-scale evaluation of candidate steam turbine FR lubricant.
6. Introduce new FR phosphate ester fluid to OEM's and customers. Sell 200,000 pounds in 1970. Gain endorsements and approvals for the use of these fluids and conduct pump tests when necessary.
7. Introduce a water glycol FR fluid. Gain endorsements and approvals for the use of these fluids and conduct pump tests when absolutely necessary. Sell 100,000 gallons.
8. Further improve availability of suitable hoses (preferably nylon lined) for Pydraul fluids.
9. Obtain Factory Mutual (FM) and UL approval of phosphate ester fluid and FM approval of water glycol fluid only if absolutely necessary to obtain a significant customer's business.
10. Write Pydraul marketing plan for Europe. Evaluate direct solicitation versus present distributor program. Evaluate economics of local Pydraul blending.
11. Establish local manufacture and blending of Pydrauls in Japan. (Mid-1970)
12. Expand our present business beyond the fluid product line to fulfill our Fluids Business Charter of supplying other fluid related products or services.
13. Concentrate sales and support work outside the U.S. Analyze potential and establish in-depth marketing program in selected international markets, Canada, Australia, Japan, U.K. and Europe, involving synthetic-base and water-base fluids.
14. Continue promotion of Santosafe to U.S. mines and develop market plan if legislation passes Congress.
15. Advertise in appropriate journals and use direct mail to penetrate and provide leads to die cast, steel and aluminum mill markets and to major OEM's.

1970 ACTION PLANS

OEM MARKETS

Action

Call on each of the major OEM's at least twice each year to gain endorsement for Pydraul, to induce them to standardize on Viton packings and seals and to assure Pydraul sales in specific applications with our customers.

<u>Steel Market</u>	<u>Responsibility</u>	<u>When</u>
Ajax-Magnethermic	PDC	2X
Brown Boveri	PDC	3X
Concast	PDC	3X
Loma	PDC	2X
Inductotherm	PDC	2X
E. W. Bliss	JAH/PDC	3X
Powerdraulics (Engr.)	PDC	2X
United Engineering	JAH	3X
Mesta	JAH	3X
Koppers	JAH	3X
Blaw Knox	JAH	3X
Lectromelt	JAH	2X
Whiting Corporation	RAD	2X
Manco Manufacturing	RAD	2X
GPE	RAD	2X
Pecor	JAH	2X
American DeMag	PDC	2X
Western Gear Corporation	JAH	1X
Babcock & Wilcox	PDC	1X
Birdsboro Corporation	JAH	1X
Gamma Engineering Ltd. Whitby, Ontario	TWO	1X
Surface Combustion	GFF	2X
Swindell-Dressler	JAH	1X
Continua International Castings Italy	GA	1X
American Ligurian Corp. New York	PDC	1X
Danieli of America	PDC	1X
Dravo Corporation	JAH	1X
Voeest International, New York	PDC	2X
Treadwell Corporation	PDC	2X
Olsson	JAH	1X
Taylor Winfield	JAH	2X
Electric Furnace, Salem, Ohio	JAH	2X
Hill Acme, Cleveland	JAH	1X

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<u>Steel Market</u>	<u>Responsibility</u>	<u>When</u>
SPO, Cleveland	JAH	1X
Selos, Dresher, Penn.	JAH	1X
American Bridge	JAH	1X
Automation Equipment	RAD/JAH	2X
Salem Brosins	JAH	2X
Sunbeam	JAH	2X
Dominion Engineering Works	TWO	1X
Montreal, Quebec		
Schloemann AG	KHG	1X
Dusseldorf, Germany		
Concast, AG, Zurich	GM	
Demag Stranggiess-Technik	KHG	
GmbH-Duisburg, Germany		
Continua International	GCA/GVA	1X
Castings, Italy		
Danielli SpA, Italy	GCA/GVA	1X
Vereinigte Osterreichische	KHG/KMS	
Eisen & Stahlwerke AG, Germany		
Distington Engineering Co. Ltd.	JMMT	
Workington		
MHI, Japan	TI	
<u>Die Casting Market</u>		
Bugler, Zurich	GM	
VWF, Germany	KHG/KMS	
Toshiba Machinery, Japan	TI	
<u>Aluminum Extrusion Press</u>		
Baldwin-Lima-Hamilton	PDC	2X
Farrell	JAH	2X
MHI	TI	1X
<u>Die Casting Market</u>		
Castmaster-HPM	JAH	2X
Kux	RAD	3X
Lester Engineering	JAH/DAH	2X
B & T	GFF	3X
Prince Mfg.	GFF	2X
Cleveland Automatic	GFF	2X
Press Automation	GFF	3X
H. L. Harvill	JHD	2X
<u>Hydraulic Presses</u>		
Sheridan-Gray	JHD	2X
Murdock	JHD	2X
USI Clearing	RAD	3X
MHI, Japan	TI	1X

<u>Mobile Equipment</u>	<u>Responsibility</u>	<u>When</u>
Allis Chalmers	RAD	1X
Clark Equipment	GFF	1X
Hyster	RAD	1X
Caterpillar	RAD	1X
Tow Motor	JHD	1X
Easton, Yale, Twone	RAD	1X
<u>Engineering</u>		
Bechtel	JHD	2X
<u>Turbine Market</u>		
General Electric	LRS/PDC	2X
Westinghouse	LRS/TWO	2X
Orenda	TWO	1X
Copper Bessemer	JAH	1X
Clark	JAH	1X
Hitachi	TI	1X
Brown Boveri	GM	3X
Sulzer	GM	1X
<u>Pump Manufacturers</u>		
Vickers	DFS/JAH	2X
	RAD/GFF/JHD/PDC	1X
	CC	1X
Racine & RVA	DFS/RAD	2X
Denison	DFS/GFF	
Oilgear	DFS/RAD	1X
DeLaval	DFS/PDC	1X
Yuken, Japan	TI	3X
Tokyo Keik (Vickers)	TI	2X

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CLEVELAND

<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Alcoa	200	HS-1120 C-150,220	Withdraw new formulation	RAG/NTJ	11/69
			Propose use of Pydraul 312	RAG/NTJ	11/69
			Initiate conversion from 150 to 135	RAG/NTJ	11/69
Allegheny Lundlum	30	Fyrquel HS Citgo FR-23	Push for trial 312	JAH/RAG	1/70
Bethlehem Lackawanna, N. Y. Johnstown, Pa.	30	HS-1010, 1120	Push for 312 trial	JAH	1/70
National Steel Weirton, W. V.	30	HS-1010, 1120	Define potential	JAH	1/70
			Shop trial	JAH	6/70
Republic Steel Warren, Ohio	50	Cellulube 90, 150, 220 HS-1010,1120	Push for conversion	JAH/RAG	1/70
			100% of business	JAH	12/70
U. S. Steel Lorain, Edgar Thompson, Irvin, Johnstown & Homestead	100	HS, Fyrquel	Gain MCS trial	JAH	6/70
Wheeling Pitts. Steel Steubenville	30	Cellulube	Follow up trial	JAH	1/70
			Achieve 100% of business	JAH	12/70
Chevy Tonawanda and Buffalo	65	Cellulube	Offer new P.E.	JAH	3/70
Precision Casting Cleveland	30	Cellulube HS-620	Obtain trial on 312	JAH	6/70

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Ford Stamping Buffalo	60	Irus	Obtain Detroit approval for 312	DAH/GPF	1/70
			Convert for 100% of business	JAH	2/70
			Follow up at other stamp- ing plants	RAG/JAH	3/70
			Obtain corporate M number	GPF/JAH	4/70
<u>ST. LOUIS-HOUSTON TERRITORY</u>					
St. Louis Diecasting	25	HS-620	Follow shop trial on Pydraul 312	CLC	1st quarter
			Offer seal conversion allowance	CLC	1st quarter
			Begin conversion of shop	CLC	2nd quarter
			Contact Keokuk, Iowa and Ripley, Tennessee for conversion to Pydraul 312	CLC	5/1/70
Laclede Steel	25	HS-1120	Make formal presentation on conversion to Pyd. 230	CLC	1st quarter
			Convert	CLC	2nd quarter
Rival Die Casting	25	HS-1120	Invite Moorehead to Carter Carburetor and SDCE	CLC	1st quarter
			Push for trial in 1 machine to overcome resistance to odor of 312	CLC	1st quarter
			Schedule call with V.P. level if 1 and 2 unsuc- cessful	CLC/RAG	3rd quarter

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
C. F. & I.	25	HS-620	Document present fluid volume	CLC	1st quarter
			Present formal proposal	CLC	1st quarter
			Follow new plant expansion for Pydraul	CLC	1st quarter
U.S.S. Baytown	Unknown	Unknown	Develop rapport and in-depth penetration with engineering personnel	CLC	1st quarter
			Have MCS fluids specified for new facility by coordinating with U.S.S. Research and other plant successes in U.S.S.	CLC/RAG	2nd quarter
Ford, Sheffield	200	W/G	Begin again	CLC	1/70
			Determine reclamation program	RAG/CLC/DER	2/70
			Make presentation on 312 or W/G	CLC	3/70
General Electric N. C.	75	W/G	Determine position, people and volume. Offer proposal for shop trial on 312 or W/G.	CLC	2/70
U. S. Steel Birmingham Fairfield	39	W/G	Determine position, people and volume. Offer MCS 528	CLC CLC	2/70 3/70

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CHICAGO

<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
American Oil	60	Fyrquel 220, 550	Send letter to purchasing reviewing product benefits, comparable Pydrauls for each location, conversion procedures	RAD	12/15/69
			Have purchasing send letter to each refinery recommending conversion to Pydraul	RAD	1/20/70
			Provide follow up information on objections of those refineries which do not accept the conversion recommendation to the appropriate salesman	RAD	3/20/70
Interlake Steel	25	Fyrquel 220, 550	Met lub engineer, present Pydraul and determine past objections	RAD	1/12/70
			Determine proper approach to penetrate this account and set additional realistic goals.	RAD	2/9/70
Kieckaeffer	50	H-620	Contact Pete Abele, V.P.D.C. to discuss P.M. approval	RAG/RAD	1/30/70
			If no progress with Abele, contact purchasing to discuss valve analysis	RAD	2/25/70
			If no progress, determine proper approach to penetrate this account and set realistic goals	RAG/RAD	3/31/70
National Lock	35	Quaker W/G	Run fire tests for lub engineer in St. Louis	RAD	4/30/70
			Gain Pydraul 312 trial	RAD	7/25/70

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Woodstock Die Casting	68	H-620, Ucon Hydrolube	Provide information on effects of 312 on temperature in B&T machines.	RAD	1/30/70
			Demonstrate how Pydraul can be reclaimed in antipollution systems utilizing Monsanto & Leonard Construction personnel. Gain Pydraul 312 trial.	RAD	4/15/70
New Products	25	Ucon Hydrolube	Present Pydraul to plant personnel.	RAD	3/1/70
			Gain Pydraul trial.	RAD	8/25/70
U.S. Steel Gary Works	50 (Caster)	Fyrquel 150 H-1120	Caster - Begin MCS-527 trial in 1000 psi system.	RAD	1/5/70
			Begin MCS-527 trial in 2000 psi system.	RAD	4/20/70
			Begin conversion on caster.	RAD	10/25/70
			Determine remainder of P.E. potential at Gary and initiate selling efforts.	RAD	3/15/70
Ford Stamping	66	Irus 902	Contact lub engineer and present Pydraul.	RAD	12/20/69
			Obtain stamping division M number.	RAC/GPF/RAD	2/1/70
			Gain Pydraul trial.	RAD	4/25/70
			Begin conversion.	RAD	9/15/70
Inland Steel	40	Fyrquel 150	Begin 135 trial in grinders.	RAD	2/28/70
			Begin conversion.	RAD	5/30/70
Precision Casting	33	H-620	Gain Pydraul trial in next machine purchased.	RAD	Continuous

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CINCINNATI

<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Chrysler Kokomo	70	Stauffer W/G	Obtain 312 trial & conversion	JAH/RAG/DPS	2/1/70(trial 9/1/70(conv)
General Electric Ft. Wayne, Ind.	30	Ucon W/G H-1120	Obtain 312 trial	JAH/RAG/DPS	4/1/70
Westinghouse Lima, Ohio	30	H-1120	Trial successful and fluid approved. Follow to insure conversion	JAH/RAG/DPS	1/1/70
Delco Products Dayton, Ohio	60	Ucon 200 HM W/G Special H-1120	Make formal presentation by 1/1/70. Obtain 312 trial by 4/1/70.	JAH/RAG/DPS	1/1/70 4/1/70
Delco Remy Anderson, Ind.	80	Ucon 150	Develop new approach to overcome failures of two past 312 tests	JAH/RAG/DPS	4/1/70

NEW YORK

Air Products	125	Fyrquel 550, 300	Continue to push for plant conversion	PDC	TRAN 003816	12/69
			Obtain 50% business	PDC		Continuing 6/70
Bethlehem Steel Bethlehem, Pa.	25	HS & Fyrquel	Define purchasing interest in 312	PDC	TRAN 003816	1/70
			Obtain shop trial	PDC		3/70
Bethlehem Steel Sparrows Point, Md.	50	EPH & Fyrquel	Obtain shop trial	PDC		3/70
Bethlehem Steel Steelton, Pa.	25	HS-1120, 620	Convert P-9 to 312	PDC		2/70
			Push for additional business	PDC		Continuing

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Alcan Aluminum Osvego, N. Y.	40	HS-1120, 620	Define position and potential	PDC	1/70
			Obtain trial on 312	PDC	4/70
Armco Baltimore, Md.	25	HS, Fyrquel	Follow up use of 312 in Alliance Crane	PDC	1/70
			Presentation on ether Armco plants using 312	RAG/PDC	2/70
			Push for standard fluid	PDC	4/70
Carpenter Tech. Reading, Pa. Bridgeport, Conn.	25	Fyrquel 220, W/G	Follow success of 312. Main- tain contact for new busi- ness and conversion	PDC	1/70
Griffin Pipe Prod. Florence, N. J.	25	HS-1120	Obtain shop trial 312	PDC	2/70
			Maintain contact	PDC	Continuing
			Overcome toxicity problems	PDC	2/70
Sprague New Eng. Die Casting New Haven, Conn.	25	Oil	Sell need for FR fluid & 312	PDC	1/70
			Obtain shop trial 312	PDC	3/70
			Offer seal conversion allowance	PDC	3/70

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LOS ANGELES

U. S. Steel Geneva Works	Call on Geneva at least once during 1970 and determine: Present dollar volume of FR fluids used and suppliers of these fluids Short and long term FR fluids potential Decision makers on choice of fluids used Lubrication personnel's attitude toward MCS-528 and MCS-565 Determine advisability of making formal presentation to	JHD	By 10/70
		JHD/DAH/RAG	By 11/70

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
U. S. Steel Geneva Works			Geneva Works personnel on MCS-528 and MCS-565 with D. A. Hall		
U. S. Steel Torrance Works			Make joint call with R. A. Garcia in 1969:	JHD/DAH	11/69
			Determine total FR fluids potential		
			Outline U. S. Steel success on MCS-528 and MCS-565		
			Seek trial in at least one hydraulic system with MCS-528		
			Achieve successful field trial on MCS-528	JHD	By 6/70
			Attain 50% conversion	JHD	By 12/70
			<u>DETROIT</u>		
GMC Chevrolet Toledo, Ohio	36	HS-1120	Develop straight phosphate ester to compete with HS-1120	Research Development Product Group	1/1/70
			Present new fluid to pertinent personnel	GFP	3/1/70
			Obtain shop trial for new fluid	GFP	4/15/70
			Obtain at least half the busi- ness	GFP	9/1/70

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Great Lakes Steel Div. Nat'l. Steel Ecorse, Mich.	75	HS-1120	Determine Great Lakes plans for fluid changes	GFF	11/15/69
			Penetrate plant to higher level personnel, E.G. maintenance superintendent	GFF	1/1/70
			Obtain shop trial on either 312 or new phosphate ester fluid	GFF	4/1/70
			Obtain at least half the business	GFF	10/1/70
Marathon Oil Detroit, Mich.	40	Fyrquel 300	Submit bid on Pydraul AC	GFF/NTJ/RAG	12/15/69
			Obtain 100% of business		1/1/70
McLouth Steel Trenton, Mich.	65	Fyrquel 220	Submit and discuss formal proposal on 312 conversion	GFF	11/1/69
			Make all necessary engineering contacts and obtain shop trial for 312	GFF	2/1/70
			Complete successful trial and obtain 100% of business	GFF	7/1/70
Grand Steel Corp. Clawson, Mich.	25	HS-1120, 620	Obtain shop trial on 312	GFF	10/1/69
			Complete successful trial and obtain all HS-1120 business	GFF	2/1/70
			Change over all HS-620 machines to 312	GFF	8/1/70

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<u>Account</u>	<u>Potential</u>	<u>Product</u>	<u>Action/Objectives</u>	<u>Responsibility</u>	<u>When</u>
Ford Motor Rawsonville, Mich. Gen Parts Div.	85	HS-525	Present formal proposal on reclamation economics of 312	GFF	10/15/69
			Obtain shop trial on 312 at Rawsonville.	GFF	12/1/69
			Survey Rawsonville plant to determine feasibility and estimate on reclaiming	DPS/DAH/DER/ RAG/NTJ/GFF	1/1/70
			Convert Rawsonville plant to 312	GFF	9/1/70

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SUPPORT EFFORT

<u>Responsibility</u>	<u>Action</u>	<u>When</u>
RAG/NTJ/ Field salesmen	Review status of target accounts. Maintain customer strategies.	Quarterly
DAH	Write marketing plan for steel and primary aluminum markets including OEM list.	3/1/70
TWO/LRS/DAH	Initiate field trial of FR gas turbine lube at AGTL.	4/1/70
DRP/PDC/LRS	Contact GE and Westinghouse quarterly to establish evaluation of candidate fluids for FR steam turbine lubes.	Quarterly
NTJ/DRP/LRS/RAG/ Field salesmen	Introduce new FR phosphate ester fluid. Submit to customers for trial. Commer- cialize with industry and OEM's.	1st quarte 1970
DAH/NTJ/LRS/RAG/ Field salesmen	Introduce water glycol fluid. Obtain trials and commercialize.	1st quarte 1970
DAH	Contact hose OEM to encourage avail- ability of nylon lined hose.	1st quarte 1970
DPS/NTJ/LRS	Obtain FM and UL approval water glycol, phosphate ester.	If neces- sary
JHH/DSC/ Field salesmen	Write Pydraul marketing plan for Europe-consider direct ME sales- local blending.	6/1/70
RAG/Field Sales	Contact OEM's on regular basis (see OEM list). Review quarterly.	Continuing
DAH	Continue to follow U. S. coal mine legislation as it may effect Santosafe.	Continuing
CLC	Continue advertising with emphasis on steel industry, air compressor fluid market and OEM's.	Continuing
CLC/DAH	Complete new fire test movie, provide copies for worldwide use.	2/1/70
RAG/Field Salesmen	Review status of target accounts	Quarterly
RAG/Field Salesmen	Call on each major OEM to gain tech- nical support as described in Section 1.	Continuing
LRS/DPS/DAH	Run pump test trial and full scale fire tests on specific request from customer or OEM.	Continuing

<u>Responsibility</u>	<u>Action</u>	<u>When</u>
LRS/DAH/DRP	Define and field test one water-base hydraulic fluid.	2/1/70
DRP	Write industrial fluids business plan for acquisition and identify proposed new ventures and acquisitions.	6/1/70
GCA/DFS	Follow field test of Pydraul 312 at Fiat and present acceptable reclamation program.	3/1/70
CLC	Provide direct mail follow up for salesmen at potential accounts.	Continuing
DRP/Field Sales	Define market for FR fluids reclamation systems. Contact with key customers, OEM's.	1st quarter 1970
DRP/NTJ	Contact with CED and Biodize Group	1/70
DRP	Prepare business plan for reclamation systems business, if feasible.	2nd quarter 1970

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TRAN 003822

SANTOVAC

LONG RANGE GOALS

Our major goals are:

1. To retain our position as sole supplier of polyphenyl ethers to the vacuum diffusion pump fluid market and to secure a 50% share of those markets which could be satisfied by high performance silicone or other diffusion pump fluids.
2. To sell \$500,000 per year of Santovac fluids by 1973.
3. To do sufficient advertising and promotion to present customers and markets and identify specific leads for efficient direct follow up. We plan personal calls only on selected major accounts. A significant portion of our advertising and promotion program is designed to pull through the Santovac distributors.
4. After the initial research program on Santovac 5, keep sales and technical service expenses at a minimum unless we identify other markets large enough for the development of other fluids for the vacuum industry.

LONG RANGE STRATEGY

The preferred method of reaching our long-range goals is to develop within the company sufficient technical and marketing ability to satisfy the vacuum diffusion pump fluid market for polyphenyl ethers. We must make the OEM's and the customers well aware of the technical capabilities of our fluids and our staff and must have them cooperating with us. We will continue to sell Santovac directly and also through the distributor network. We should continue to become aware of opportunities in the vacuum pump market for fluids which arise from other research and development programs such as a synthetic mechanical pump fluid. When a suitable product is identified, we should market it along with Santovac 5.

A part of our long-range strategy should be to negotiate with Consolidated Vacuum Corporation with a view toward reducing the royalty fees on Santovac sales or eliminating them through a specified cash payment or some other inducement. This would give us flexibility to lower Santovac prices as competition or price/volume information dictate.

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1970 GOALS

By the end of 1970 we plan to have accomplished the following:

1. Sell \$182,000 of Santovac 5 and OS-124 for vacuum use.
2. Retain all of CVC's polyphenyl ether business either directly or indirectly.
3. Improve and retain the support of major pump manufacturers.
4. Make Monsanto and Santovac better known in the marketplace and demonstrate the ability to sell Santovac by advertising and direct mail promotion and through distributors.
5. Rewrite and distribute new Santovac 5 technical bulletin.
6. Learn enough about the superiority and/or deficiencies of our product through research to improve our present product literature and also to provide information and data for technical articles in appropriate journals and other presentations such as the AVS Symposium.

1970 MARKETING PLAN

<u>Responsibility</u>	<u>Action</u>	<u>When</u>
RHM/DAH	Document the superiority and/or deficiencies of Santovac 5 as compared to silicone in actual applications research program.	Continuing
DAH/NTJ	Review efforts of individual Santovac distributors and withdraw contracts from those who are not productive.	3/70
PDC/GFF/RAD/ JAH/JHD/CC	Call on recognized large potential accounts, OEM's and distributors.	Continuing
CLC	Advertise in appropriate trade journals.	1970
CLC	Send literature to ad responses.	Continuing
PDC/DAH	Continue to call at Goddard Flight Center to induce in-house comparison of Santovac 5 with DC-704.	Two times in 1970

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