

Complaint

IN THE MATTER OF

THE BENDIX CORPORATION, ET AL.

ORDER, OPINION, ETC., IN REGARD TO THE ALLEGED VIOLATION OF SEC. 7
OF THE CLAYTON ACT AND THE FEDERAL TRADE COMMISSION ACT

*Docket 8739. Complaint, June 29, 1967 *—Decision, June 18, 1970*

Order requiring a major manufacturer of mechanical components and assemblies for the automotive, aerospace and other industries with headquarters in Detroit, Mich., to divest within one year all assets and properties of the Fram Corporation, one of the largest manufacturers of automotive and aerospace filters and liquid separators, located in Providence, R.I., any play of divestiture to be approved in advance by the Federal Trade Commission. It is further ordered that pending divestiture the property acquired from Fram be operated as a separate entity, that no Fram assets be disposed of without Federal Trade Commission consent, that the separate Fram Corporation be operated in a manner to maintain its competitive position in the filter industry, that Bendix hire no Fram employee for three years, that Bendix not acquire any filter and water separator manufacturer for 10 years without Federal Trade Commission consent, and that Bendix submit every 90 days a progress report on the steps it has taken toward complete divestiture.

COMPLAINT

The Federal Trade Commission, having reason to believe that The Bendix Corporation and Fram Corporation have violated the provisions of Section 7 of the Clayton Act, as amended, 15 U.S.C. Sec. 18, and the provisions of Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. Sec. 45(a)(1), through an agreement by which The Bendix Corporation is to acquire substantially all of the assets and business of Fram Corporation, issues its complaint charging as follows:

I

DEFINITIONS

1. For the purposes of this complaint, the following definitions shall apply:

(a) Filters: Mechanical devices, including complete filter units and elements, for the removal of contaminants from gaseous and liquid substances.

*Reported as amended by hearing examiner's order of December 19, 1967, by adding Count III and Paragraph Nos. 33 and 34.

(b) Automotive filters: Oil, air and fuel filters and filter elements for passenger cars, trucks, farm equipment, earth moving equipment, stationary engines, power lawnmower and similar engines, and outboard and marine engines.

(c) Aerospace filters: Fuel, air, lubricant, and hydraulic filters and filter elements for aircraft and missiles and for ground support equipment for aircraft and missiles.

(d) Liquid separators: Mechanical devices, together with their liquid separator elements, for cleaning and drying of a liquid product by the removal of entrained and emulsified water and solid contaminants in one pass at full flow through water coalescing elements. A principal use for liquid separators is for removing water and other contaminants from aviation fuels.

II

THE BENDIX CORPORATION

2. Respondent, The Bendix Corporation, is a corporation organized, and existing under the laws of the State of Delaware, with its principal office located at the Fisher Building, Detroit, Michigan.

3. The Bendix Corporation and its subsidiaries (hereafter "Bendix") is a diversified manufacturer of components and assemblies for aerospace, automotive, automation, scientific, oceanics and other uses. In 1966, Bendix had sales of \$1,052 million, net profits of \$38.7 million, and total assets of \$662 million. Sales and profits of Bendix in 1966 were the highest in its history. Bendix's sales of products for automotive uses were \$229 million in 1966, and Bendix' sales of products for aerospace uses were \$560 million in 1966.

4. During and since World War II, Bendix developed major research capabilities in basic and applied engineering and a large reservoir of technological know-how.

5. Bendix is one of the largest sellers of automotive products in the United States. Bendix sells its automotive products to automobile and other vehicle manufacturers for installation as original equipment in automobiles and other vehicles. Bendix also sells its automotive products to automobile and other vehicle manufacturers, warehouse distributors, jobbers, and other customers for automobile repair and replacement purposes. Traditionally, Bendix's products have been sold primarily to manufacturers of new equipment. In the past several years, Bendix has attempted to strengthen its position in the sale of automotive products for replacement purposes.

6. For a number of years up to and including the early 1960's, Bendix manufactured and sold automotive filters for use on auto-

mobiles and tractors. Presently, Bendix purchases some automotive filters for resale to several vehicle manufacturers.

7. For several years, Bendix held a minority equity interest in Wix Corporation, a substantial producer of automotive filters, and Bendix continued to hold such interest until the agreement for acquisition was reached with Fram Corporation. In the past several years, Bendix has surveyed most of the significant manufacturers of automotive filters with a view to acquiring one or more of such companies.

8. Bendix is a leading manufacturer of liquid separators and aerospace filters. The research capabilities and technological know-how described in Paragraph 4 above provide Bendix with an ability to significantly expand its sales of liquid separators and aerospace filters. Bendix has surveyed most of the significant manufacturers of liquid separators and aerospace filters with a view to acquiring one or more of such companies.

9. At all times relevant herein, Bendix sold and shipped its products in interstate commerce throughout the United States.

III

FRAM CORPORATION

10. Respondent, Fram Corporation, is a corporation organized and existing under the laws of the State of Rhode Island, with its principal office located in Providence, Rhode Island.

11. Fram Corporation and its subsidiaries (hereafter "Fram"), is one of the largest companies engaged in the manufacture of filters in the United States. It manufactures automotive filters at plants located at East Providence, Rhode Island; Greenville, Ohio; Clearfield, Utah; and in several foreign countries. It manufactures aerospace filters at its Aerospace Division plant at Pawtucket, Rhode Island; liquid separators at its Industrial Products Division plant at Tulsa, Oklahoma; and other products at these and other plant locations in the United States and abroad.

12. In 1966, Fram had sales of \$66.7 million, net profits of \$4.35 million, and total assets of \$39.1 million. Fram is a substantial, financially sound, profitable and growing company. Sales and profits of Fram in 1966 were the highest in its history.

13. Fram is approximately the third largest manufacturer of automotive filters in the United States. In 1966, Fram's sales of automotive filters were approximately \$37 million. Fram sells its automotive filters intended for use as original equipment directly to original equipment manufacturers. Fram's automotive filters in-

tended for replacement purposes are marketed through approximately 2,300 warehouse distributors, approximately 18,300 automotive jobbers and over 300,000 retail outlets, the latter consisting primarily of service stations and garages, and to major automotive, oil and rubber companies for redistribution through retail outlets owned by or affiliated with such companies.

14. Fram is a leading manufacturer of aerospace filters and a leading manufacturer of liquid separators.

15. For the past several years, Fram has engaged in a vigorous program to expand the size and scope of its operations.

16. In the past several years, Fram surveyed many companies engaged in the manufacture of automotive filters, aerospace filters, and liquid separators. It had conducted acquisition negotiations with several such companies.

17. For many years Fram has extensively advertised and promoted its brands of filter products. Fram filter products enjoy a high reputation.

18. At all times relevant herein, Fram sold and shipped its products in interstate commerce throughout the United States.

IV

TRADE AND COMMERCE

A. Automotive Filters

19. Automotive filters for use as original equipment generally are sold to vehicle manufacturers for installation on new vehicles. Automotive filters for replacement purposes generally are marketed through warehouse distributors and jobbers for redistribution to consumers through retail gasoline service stations and other retail outlets. Such filters also are marketed to operators of vehicle fleets. Automotive filters are sold directly to automotive, oil and rubber companies for resale through retail outlets owned by or affiliated with such companies.

20. A portion of all automotive filters is sold for use as original equipment on new vehicles. A larger portion of all automotive filters is sold as replacement items. Retail gasoline service stations generally are high-volume accounts and are an important factor in the sale of automotive filters for replacement purposes. Some automotive filters for replacement purposes are sold to automobile manufacturers for resale through the automotive service departments of automobile dealers.

21. Total sales of automotive filters in the United States are in excess of \$200 million annually. The total market for automotive

filters in the United States has been growing rapidly as the number of motor vehicles has risen.

22. The automotive filter manufacturing industry is highly concentrated. The AC Division of General Motors Corporation, Puro-lator Products, Inc., and Fram are the three largest manufacturers of automotive filters and together account for well over one-half of the sales of such filters. Each of the next two or three largest companies sells only a fraction of the automotive filters sold by any one of the three largest companies. The remaining companies are relatively small factors, frequently single or limited line companies. Concentration has remained high despite the growing market and the continued existence of these small companies.

23. For many years, the three largest companies have advertised and promoted their brands of automotive filters extensively. The preference for these brands by warehouse distributors, jobbers, retailers and consumers have enabled the three largest companies to maintain strong market positions in the sale of automotive filters for replacement purposes, particularly in the sale of such filters through retail gasoline service stations.

24. The three largest manufacturers of automotive filters in the United States, including Fram, sell such filters in numerous local markets. These three companies generally occupy leading market positions in local markets in the sale of such filters for distribution through retail gasoline service stations and other channels of distribution for replacement use. Fram is the leading or one of the three leading factors in the sale of automotive filters for distribution through retail gasoline service stations and other retail outlets in a substantial number of local markets. Smaller manufacturers sell such filters in fewer local markets and generally occupy lesser local market positions.

B. Aerospace Filters

25. The products of the aerospace filter industry are characterized by a high order of technical sophistication commensurate with requirements for filtering exceedingly small particles from fluids, often at high pressure and at a high flow rate. The manufacture of aerospace filters requires highly skilled, experienced labor and large engineering and laboratory facilities.

26. Aerospace filters are sold to manufacturers of aircraft, missiles and ground support equipment, commercial airline companies, and the Federal Government. A large portion of such filters are manufactured under general specifications established by agencies of the Federal Government. Only a limited number of aerospace filter

Complaint

77 F.T.C.

manufacturers have the technical and engineering ability and the funds required to meet such specifications.

27. Both Bendix and Fram have sought to expand their business in aerospace filters and both have demonstrated a willingness to invest substantial capital to increase that business. Bendix and Fram have competed aggressively against one another for aerospace filter sales.

C. Liquid Separators

28. The manufacture of liquid separators requires highly skilled, experienced labor and large engineering and laboratory facilities.

29. The liquid separator manufacturing industry is highly concentrated with approximately seven or eight manufacturers in the field. Bendix and Fram are among the leading manufacturers of liquid separators. Both Bendix and Fram have sought to expand their liquid separator business through internal growth and both have considered acquiring other companies in the field. Bendix and Fram have competed aggressively against one another for liquid separator sales.

V

VIOLATIONS CHARGED

30. On February 23, 1967, Bendix and Fram entered into an agreement which provides that Fram transfer to Bendix, and Bendix acquire from Fram, the entire business and substantially all of the assets of Fram. This agreement provides further that the transfer of assets from Fram to Bendix will take place on or about June 30, 1967.

Count I

31. The effect of the aforesaid agreement providing for the acquisition of Fram by Bendix, and the combination of Bendix and Fram resulting therefrom, may be substantially to lessen competition, or to tend to create a monopoly in the production and sale of automotive filters, aerospace filters and liquid separators in the United States and in various sections thereof in violation of Section 7 of the Clayton Act, in that:

(a) actual and potential competition between Bendix and Fram in the manufacture and sale of automotive filters, aerospace filters and liquid separators will be eliminated;

(b) actual and potential competition in the manufacture and sale of automotive filters, aerospace filters, and liquid separators, generally, may be substantially lessened;

(c) Bendix will eliminate Fram as an independent competitive factor in the manufacture and sale of automotive filters, aerospace

731

Complaint

(d) concentration in the manufacture and sale of automotive filters will be maintained;

(e) concentration in the manufacture and sale of aerospace filters and liquid separators will be increased substantially;

(f) Bendix will obtain a decisive competitive advantage in the manufacture and sale of automotive filters, aerospace filters and liquid separators, to the detriment of actual and potential competition;

(g) additional mergers and acquisitions may be fostered with a resultant lessening of competition in the manufacture and sale of automotive filters, aerospace filters and liquid separators; and

(h) the entry of new firms and the growth of smaller filter manufacturing companies will be retarded, discouraged or prevented.

Count II

32. The aforesaid agreement providing for the acquisition of Fram by Bendix, and the combination of Bendix and Fram resulting therefrom, constitutes an unfair method of competition in commerce, and an unfair act and practice in commerce, and is unlawful under Section 5 of the Federal Trade Commission Act, in that:

(a) significant competition between Bendix and Fram will be eliminated; and

(b) each and every allegation of Count I above and each subparagraph thereof is herein incorporated by reference, and all said allegations are reasserted as constituting violations of Section 5 of the Federal Trade Commission Act.

Count III *

33. On June 30, 1967, Fram transferred to Bendix, and Bendix acquired from Fram, the entire business and substantially all of the assets of Fram pursuant to an agreement entered into between Bendix and Fram on February 23, 1967.

34. The effect of the aforesaid acquisition of Fram by Bendix may be substantially to lessen competition, or to tend to create a monopoly in the production and sale of automotive filters, aerospace filters and liquid separators in the United States and in various sections thereof in violation of Section 7 of the Clayton Act, in that:

(a) each and every allegation of subparagraphs (a) through (h) of Paragraph 31 is herein incorporated by reference.

Mr. Mark W. Haase and Mr. William A. Zolbert supporting the complaint.

*Reported as amended by hearing examiner's order of December 19, 1967, by adding Count III.

Initial Decision

77 F.T.C.

Arnold & Porter, by *Mr. Victor H. Kramer*, *Mr. Abe Krash*, *Mr. Daniel A. Rezneck*, *Mr. Jack L. Lipson*, *Mr. Peter K. Bleakley* and *Mr. Jerome I. Chapman* of Wash., D.C., and *Mr. Charles F. Donnelly* and *Mr. B. G. Andrews* of Detroit, Mich., for respondents.

INITIAL DECISION BY JOHN LEWIS, HEARING EXAMINER
SEPTEMBER 12, 1969

INDEX

	Page
Statement of Proceedings.....	739
Findings of Fact.....	740
I. Identity and Business of Respondents.....	740
A. Respondent Bendix.....	740
B. Respondent Fram.....	744
C. Interstate Commerce.....	746
II. The Acquisition.....	746
A. Bendix's Motives.....	746
B. Fram's Motive.....	748
C. The Transaction.....	748
III. Market Conditions.....	749
A. Automotive Filters.....	749
1. The Product Market.....	749
2. Extent of Respondent's Participation.....	750
3. The Industry.....	752
4. Competitive Implications.....	760
B. Aerospace Filter Market.....	772
1. The Product Market.....	772
2. Extent of Respondents' Participation.....	774
3. The Industry.....	775
4. Competitive Implications.....	780
C. Filter Water Separators.....	782
1. The Product Market.....	782
2. Extent of Respondent's Participation.....	784
3. The Industry.....	784
4. Competitive Implications.....	788
Conclusions:	
I. Engagement In Commerce.....	789
II. The Relevant Markets.....	789
A. Automotive Filters.....	789
1. The Product Market.....	789
2. The Geographic Market.....	793
B. Aerospace Filters.....	794
1. The Product Market.....	794
2. The Geographic Market.....	796
C. Filter Water Separators.....	797
1. The Product Market.....	797
2. The Geographic Market.....	799
III. Competitive Impact.....	799
A. Automotive Filters.....	799
B. Aerospace Filters.....	803
C. Filter Water Separators.....	805
IV. The Certified Question.....	806
Final Conclusions of Law.....	807
Order.....	807

STATEMENT OF PROCEEDINGS

The Federal Trade Commission issued a complaint, on June 29, 1967, charging the above-named respondents with violations of Section 7 of the Clayton Act and Section 5 of the Federal Trade Commission Act, by reason of an agreement entered into February 23, 1967, providing for the acquisition of the entire business and substantially all of the assets of respondent Fram Corporation by respondent The Bendix Corporation. Pursuant to joint motion and stipulation of the parties, said complaint was thereafter amended, by order of the examiner dated December 19, 1967, to allege that the acquisition contemplated by the aforesaid agreement had occurred on June 30, 1967. The complaint, as amended, alleged that the effect of the aforesaid acquisition may be substantially to lessen competition, or to tend to create a monopoly, in the production and sale of automotive filters, aerospace filters and liquid separators in the United States and in various sections thereof. Respondents appeared by counsel and filed their respective answers to the complaint denying, in substance, that the acquisition was unlawful.

A series of prehearing conferences were convened before the undersigned hearing examiner, in Washington, D.C., on various dates between September 7, 1967, and June 6, 1968. During the prehearing process there was some narrowing and clarification of issues, appropriate discovery was permitted, various stipulations and admissions were made, and a considerable number of documents proposed to be offered in evidence by complaint counsel were marked for identification and received in evidence. The transcripts of said conferences were made a part of the public record, and the results thereof were embodied in Prehearing Orders Nos. 1-7.

Hearings for the presentation of testimony and other evidence by complaint counsel were held between July 22, 1968, and August 22, 1968, in Washington, D.C. Thereafter, hearings were recessed to permit respondent to complete discovery necessarily deferred. A further conference, in the nature of a prehearing conference prior to the commencement of defense hearings, was held in Washington, D.C., on November 18, 1968, at which a substantial number of documents proposed to be offered by respondent were marked for identification and received in evidence. Hearings for the presentation of testimony and other evidence by respondents were held between November 25, 1968, and December 6, 1968, in Washington, D.C. Rebuttal hearings were held on December 13 and 19, 1968. All parties were represented by counsel, participated in the hearings and were

afforded full opportunity to be heard, and to examine and cross-examine witnesses.

At the close of all the evidence, the parties were granted leave to file proposed findings of fact and conclusions of law, together with supporting briefs, and to file replies to opposing counsel's proposed findings and briefs. Proposed findings and supporting briefs or memoranda were filed by complaint counsel and respondent on April 1, 1969, and April 4, 1969, respectively. Replies thereto were filed on April 22 and April 24, 1969, respectively.

In addition to the substantive issues involved in this proceeding, the examiner also has before him for consideration an application by respondent Bendix for modification of an agreement with the Commission, so as to permit said respondent to employ the president of respondent Fram as an executive officer of Bendix. Said application was initially certified to the Commission by the examiner on March 4, 1969. The Commission remanded said matter to the examiner, by order issued March 24, 1969, for consideration on the basis of the full record and disposition thereof in his initial decision, with appropriate recommendations to the Commission.

After having carefully reviewed the evidence in this proceeding and the proposed findings, conclusions, briefs and replies submitted by the parties,¹ and based on the entire record, including his observation of the witnesses, the undersigned makes the following:

FINDINGS OF FACT²

I. Identity and Business of Respondents

A. *Respondent Bendix*

1. Respondent, The Bendix Corporation (hereinafter referred to as "Bendix"), is a corporation organized and existing under the laws of the State of Delaware, with its principal office located at the

¹Proposed findings not herein adopted, either in the form proposed or in substance are rejected as not supported by the evidence or as involving immaterial matters. References to proposed findings and briefs are made with the following abbreviations: "CPF" (for complaint counsel's proposed findings); "RPF" (for respondents' proposed findings); "RB" (for respondents' brief); "CR" (for complaint counsel's reply); and "RR" (for respondents' reply).

²References are hereinafter made to certain portions of the record in support of particular findings. Such references are to the principal portions of the record relied upon by the examiner, but are not intended as an exhaustive compendium of the portions of the record reviewed and relied upon by him. The following abbreviations are used in referring to the record: "Tr." (for transcript of testimony); "CX" (for complaint counsel's exhibits); "RX" (for respondents' exhibits) and "PHO" (for examiner's pre-hearing orders).

Fisher Building, Detroit, Michigan (Adm., Bendix Ans., par. 2).

2. Bendix, together with its subsidiaries, is a diversified manufacturer of components and assemblies for aerospace, automotive, automation, scientific, oceanic, and other uses. In the fiscal year ending September 20, 1966, its consolidated net sales and net income were, respectively, \$1.05 billion and \$38.7 million (Adm., Bendix Ans., par. 3; PHO No. 1, par. 3). In 1966, Bendix was the 69th largest industrial corporation in the United States. In 1967, it became the 61st largest industrial corporation in the United States (Tr. 2604-06; CX 337-B).

3. The original predecessor of respondent Bendix was founded shortly before World War I, as a manufacturer of starter drives for automobiles. During the 1920's it began to manufacture and sell brakes and brake parts to the automobile industry. In 1929 its name was changed to Bendix Aviation Corporation. Aviation became its major area of growth and development, and its sales in that field increased more rapidly than its sales of automotive products. It was a pioneer in aircraft instrumentation, power controls, and communications, and developed such devices as automatic pilot, automatic oxygen system and aircraft radar. Following World War II, when its sales in the aviation field declined sharply, it entered the field of space technology and contributed to the development of missile systems and rocket programs (Tr. 3450-54). The greater part of Bendix's sales in recent years has been concentrated in sophisticated products used in the aircraft, missile and spacecraft. In the early 1960's such products accounted for about 75% of its sales. However, as a result of a diversification program to lessen its dependence on government business, the proportion of such products declined to 53% by 1967 (Tr. 3450-54, 3458-59; CX 231, p. 2).

4. Bendix carries on its activities through various divisions and subsidiaries, which are organized into groups in accordance with the technologies involved and markets served. The main groups and the principal areas of interest of each are: (a) Aerospace Systems (systems related to defense and space exploration); (b) Aerospace Products (systems and components for aircraft, missiles and space vehicles); (c) Automotive (systems and components for vehicle manufacturers and for the replacement parts industry); (d) Automation-Scientific Instruments (instruments and machines for industrial measurement and for testing and analytical functions); (e) Oceanics (systems and components for military and commercial oceanics applications); and (f) Electronics (electronic products

distributed in commercial and governmental markets). In addition, a Bendix division operates a facility for the Atomic Energy Commission and another division operates research laboratories for basic and applied research in all areas of the company's activities, and on a contract basis for others (CX 113, pp. 17-18; CX 231; Tr. 3457-59).

5. Despite the fact that the greater part of its business is now in the area of aerospace, aviation and missiles, Bendix continues to be a technological leader in the automotive products field. Most of the products manufactured by it are of relatively high engineering and technological content. The various operating divisions and/or subsidiaries within Bendix's Automotive Group and the principal products of each are: (a) Motor Components (fuel pumps, starter drives and carburetors); (b) P&D Manufacturing Company (ignition components); (c) Brake and Steering (brakes, brake drums, power steering, power brakes, and universal joints); (d) Hydraulic (master cylinders, wheel cylinders, and miscellaneous hydraulic components for heavy-duty off-highway equipment); (e) Fuel Devices (carburetors, flame arresters and metallic filters, primarily for non-passenger car applications); (f) Friction Materials (material for brake linings); (g) Automotive Electronics (radios, speed controls and automatic temperature controls); and (h) Automotive Service (engaged in supplying products of the above-named manufacturing divisions to the automotive aftermarket). In addition to the foregoing divisions and/or subsidiaries within the Automotive Group, there is a Filter Division which is part of Bendix's Oceanics Group. This division produces some oil filters for heavy-duty trucks and off-highway equipment, in addition to filters for aerospace purposes and for the removal of water from jet fuels (Tr. 3533-38; 1514-1517, 3580-83; CX 33, CX 4-O, CX 11-N).

6. Bendix's total sales of products for automotive uses were approximately \$229 million in 1966. Excluding foreign and international sales, and sales to the military (almost all of which were shipped overseas), its total sales of automotive products for use in the United States were about \$162 million in 1966. While Bendix's sales of automotive products increased from \$102 million in 1961 to \$229 million in 1966, the proportion of its automotive sales to its total sales has declined in recent years. Between 1964 and 1967, it declined from 28% to 23%. By far the largest volume of Bendix's automotive product sales is that done by the Brake and Steering Division, which accounted for almost half of 1966 domestic automotive product sales, or \$73.3 million. The second and third ranking automotive product

manufacturing divisions in 1966 were Automotive Electronics, with \$29.1 million, and Motor Components with \$15.9 million. The two lowest divisions in sales volume were Fuel Devices with \$161,156 and Filter Division with \$840,288 (PHO No. 1, par. 3; Tr. 3552-56, 3526-27; CX 11-D; CX 231, p. 2; CX 232, p. 4; RX 80-A).³

7. The predominant portion of Bendix's sales of automotive parts are made to automobile manufacturers (principally Ford, General Motors, Chrysler, and American Motors) for installation in vehicles on the production line. Such sales to the original equipment market (referred to in the industry as "OEM"), amounted to \$121.6 million in 1966 and represented approximately 75% of its total domestic automotive product sales. The remaining 25% (\$40.6 million) was sold for replacement purposes in the so-called "aftermarket." Approximately half of the aftermarket sales were actually made to original equipment manufacturers for distribution through their parts and accessories departments. Such sales are made almost entirely in boxes which do not bear the Bendix name. The balance of aftermarket sales (approximately \$20 million) were made to warehouse distributors, jobbers and other customers for repair and replacement purposes. Such sales are generally made in boxes bearing the Bendix label (Bendix Ans., par. 5; PHO No. 1, par. 5; Tr. 3536, 3550-3551, 3558-63; CX 33 D-E; RX 80 A-G; RX 99).

8. Bendix sells to its original equipment customers by means of technically trained sales engineers, who deal with the engineering departments of the vehicle makers. It designs its products to meet the technical and engineering specifications of its customers (Tr. 3538, 3570). The continuation of such sales is dependent on the willingness of the vehicle manufacturers to buy from independent parts manufacturers, rather than to manufacture their own parts. From time to time, the vehicle makers conduct "make or buy" studies to determine the feasibility of manufacturing more of the components themselves. This has periodically resulted in a decision to manufacture a part, rather than to purchase it from Bendix or some other parts manufacturer. Thus, Ford now manufactures all of its starter drive requirements which it previously purchased from Bendix. General Motors now manufactures substantially all of its requirements for brake drums and power steering which it previously purchased from Bendix. Chrysler manufactures brakes and brake linings which it previously purchased from independent parts manufacturers (Tr. 2936-37, 3476-80, 3536-37).

³ The above figures do not include sales of \$18.1 million, made by the Automotive Service Division, of products produced by the manufacturing divisions (RX 80-A).

9. Bendix's sales in the aftermarket are made primarily through its Automotive Service Division (ASD), which purchases replacement parts from the company's various automotive parts manufacturing divisions, and packages, warehouses and sells them to the aftermarket. Approximately 48% of ASD's sales in the aftermarket are made to the parts departments of the vehicle makers. The balance is made primarily through warehouse distributors and direct jobbers (Tr. 3549-50; CX 33 A-D; RX 80 C-G). ASD has contracts with 160 warehouse distributors and 1,249 direct jobbers. The latter purchase only brake products directly from Bendix (CX 33 E-F). Several other divisions or subsidiaries make some aftermarket sales directly, and have contracts with warehouse distributors and jobbers. P&D Manufacturing Company has contracts with 100 warehouse distributors and 139 jobbers, and the Friction Materials Division, has contracts with 214 distributors (CX 33 H-J). Most of Bendix's products sold in the aftermarket to warehouse distributors and direct jobbers are ultimately resold to garages and repair shops, where they are installed by trained mechanics on vehicles being repaired (Tr. 3541-44; 2640-41; 3578-79).

B. Respondent Fram

10. Until its acquisition on June 30, 1967, respondent Fram Corporation (hereinafter referred to as "Fram") was a corporation organized and existing under the laws of the State of Rhode Island, with its principal office located in Providence, Rhode Island. On July 3, 1967, respondent Fram Corporation changed its name to FC Corporation. On July 21, 1967, FC Corporation was dissolved by decree of the Superior Court, Providence, Rhode Island (Adm., Amended Compl., par. 33; PHO No. 1, par. 10; CX 316 B-C).

11. Prior to its acquisition by respondent Bendix, respondent Fram was engaged in the manufacture and sale of various types of filters in the United States and several foreign countries. It manufactured automotive filters at its plants located in East Providence, Rhode Island; Greenville, Ohio; Clearfield, Utah; Dexter, Missouri; and in several foreign countries. It manufactured filters for aerospace and similar uses at its Aerospace Division plant in Pawtucket, Rhode Island. Such filters are now manufactured at its plant in Tulsa, Oklahoma. It manufactured, and continues to manufacture, filter water separators at its Industrial Products Division plant in Tulsa, Oklahoma (PHO No. 1, par. 11; CX 69; Tr. 1728-29, 3219-20, 3403).

12. In 1966, the last full year prior to its acquisition by Bendix, Fram had consolidated net sales of approximately \$66.7 million and consolidated net earnings of \$4.35 million. Its total consolidated assets as of December 31, 1966, were approximately \$39.1 million. Its sales, earnings and assets in 1966 were the highest in its history, and it was a financially sound, profitable and growing company (Fram Ans., par. 12; PHO No. 1, par. 12; CX 81-85; CX 274).

13. Fram was a pioneer in the manufacture and sale of automotive filters. The company was formed in 1934 by two individuals who developed a passenger car oil filter with a replaceable cartridge. After experiencing some difficulty in selling to the automobile manufacturers, who felt an oil filter was unnecessary, Fram succeeded in selling its filter to Studebaker in 1935 and to Ford in 1937. Oil filters subsequently became standard equipment on all new cars made in the United States. During the 1950's, Fram developed a dry-type carburetor air filter, as a successor to the so-called "oil bath" air filter with which most automobiles were then equipped. By the late 1950's, virtually all car makers had adopted the dry-type air filter. In 1956, Fram developed a "throwaway" or "spin-on" type of passenger car oil filter (Tr. 3212-14, 3260, 3426; RX 36, pp. 12-14).

14. Prior to its acquisition by Bendix, Fram had six operating divisions. These were: Automotive, Industrial Filter, General Products, Aerospace, International, and Mason Manufacturing Company Division. The largest of these was the Automotive Division, whose sales in 1966 were approximately \$37 million, or 55% of the company's total sales. The Automotive Division was primarily engaged in the manufacture and sale of oil, air and fuel filters for the automotive market, including passenger cars, trucks and other internal combustion engines. The bulk of the Division's sales consisted of filters for passenger cars and light trucks which were sold in the automotive replacement or "aftermarket." Out of total divisional sales of \$37 million in 1966, about \$32.5 million represented the sale of passenger-car type filters in the aftermarket (Tr. 3218-21; CX 81 E-K; RX 44-A).

15. The Industrial Division was engaged in manufacturing filter water separators and other industrial filters. The Aerospace Division produced filters of various kinds for use on aircraft, spacecraft, missiles, ground support equipment and machine tools. The activities of these two divisions are hereinafter described in greater detail. The General Products Division was engaged in manufacturing filters for oil burners and air conditioning units, and other commercial filters. None of the foregoing divisions had anything to do with the manu-

facture and sale of passenger car or other automotive-type filters. The International Division sold Fram products in countries other than the United States and Canada. The Mason Manufacturing Company Division made metal spools and stampings. After the acquisition, this Division was sold, with Commission approval, pursuant to Commission order issued June 14, 1968 (Tr. 3218-21; CX 81 E-K).

C. Interstate Commerce

16. At all times mentioned herein each of the respondents sold and shipped its products in interstate commerce throughout the United States (Adm., Bendix Ans., par. 9, Fram Ans., par. 18; PHO No. 1, par. 9, 18).

II. The Acquisition

A. Bendix's Motives

17. Bendix's acquisition of Fram was an outgrowth of its desire to decrease its dependence on governmental business. Since World War II, Bendix had come to rely heavily on government business. Its scientific and engineering skills enabled it to participate substantially in sales to the government during World War II and the Korean War, and it became heavily involved in the postwar missile and space programs. By the early 1960's, nearly 75% of Bendix's business was of a governmental nature. Bendix's management was concerned about this heavy dependence on government business, since it did not enjoy as high a rate of profit on such business as on private commercial business, and because of the cyclical nature of the government market (Tr. 2413-14, 3452-53, 3460-64, 3500; CX 231, pp. 3-4; CX 340, pp. 2-3).

18. In late 1960 or early 1961 Bendix established a Marketing and Commercial Product Planning Department, for the purpose of advising management as to possible new markets which would enable Bendix to broaden its activities in the private commercial area, and to aid Bendix's existing divisions in improving their marketing procedures (Tr. 3624-25). Among the fields which Bendix viewed as offering promise for decreasing its dependence on government business was the automotive field, in which it had some experience and competence. It recognized that the market for the servicing and replacement of automotive parts held an "important potential for future sales and profits," and centralized the aftermarket selling activities of the automotive parts manufacturing divisions into a newly-established Automotive Service Division in 1961, in order "to obtain a much larger share of the market" (CX 232, p. 5; CX 3-N).

19. In the early 1960's, the Bendix Filter Division was one of its smallest divisions and was losing money. Only a small portion of its sales involved automotive-type filters and the bulk of these were sold in the OEM market, rather than in the more profitable and expanding aftermarket. In 1962 and 1963 a series of meetings was held between personnel of the Planning Department and Bendix executives to determine what steps to take to eliminate the losses of this division. The alternatives presented were either to withdraw from the field entirely or to broaden the company's base in the industry. Since the filtration business was considered a large and profitable one, particularly in the replacement market, it was decided that the company should try to expand its operations in this field. Consideration was given to whether this should be done by acquisition or by internal expansion. Eventually it was decided that it would not be feasible to expand by internal development, and that efforts should be made to acquire another company in the field (Tr. 3628-42, 3486-87, 3489-92, 3496-97; CX 135, CX 157, CX 158, CX 160; RX 38).

20. At various times during the period from 1961 to 1966 Bendix gave consideration to acquiring an interest in one of several filter manufacturers. In 1961 it acquired a small stock interest in Wix Corporation, which was then manufacturing certain types of air filters for it. This stock interest never exceeded 6 or 7% of Wix's outstanding stock, and Bendix continued to hold a stock interest in Wix until February 1967 when it acquired Fram. Negotiations looking toward Bendix's acquisition of Wix were undertaken in 1963, but were broken off when the terms of the acquisition could not be agreed upon. Several further abortive efforts to acquire Wix were made in the succeeding few years. Consideration was given at various times to the acquisition of Walker Manufacturing Company, Donaldson Company, Inc., Hastings Manufacturing Company, and Purolator Products, Inc. No approach was ever actually made to Walker. Meetings were held with Purolator in March 1966 to consider the possibility of a merger or acquisition, but nothing came of the effort. Talks with Donaldson resulted in a counteroffer by Donaldson to buy Bendix's Filter Division. This was rejected. Brief discussions were had with Hastings Manufacturing Company, but resulted in no serious negotiations (Tr. 2575, 2015-27, 3487-89, 3643-47, 632, 2678, 2105; CX 316 A-B, CX 146, CX 165-172, CX 149, CX 152, CX 160 Z9-10, CX 352; RX 38).

21. Although unsuccessful in its efforts to acquire a filter manufacturer during this period, Bendix did enlarge its participation in the automotive products market by the acquisition of P&D Manufac-

turing Company, Inc., and a related company, in December 1965. P&D and its affiliate manufactured a full line of ignition parts, which they supplied to the automotive replacement market and to manufacturers in the automotive field. Their consolidated annual sales in 1964 were \$8.3 million (CX 2-G, CX 7-E).

22. Prior to 1966, Bendix had made several approaches to Fram with a view to acquisition, but the latter was not interested in selling at the time. However, in October 1966 Bendix's chief executive officer approached Fram's president to discuss a possible acquisition, and found an interest on Fram's part. Following several further meetings, a written offer to Fram was made on January 2, 1967, which was accepted the following day (Tr. 3497-99, 1716; CX 68 A-C).

B. Fram's Motive

23. During the spring of 1966, Fram's board of directors concluded that a merger would be in the best interest of the company's stockholders if a financially attractive agreement could be negotiated. Among the reasons for Fram's interest in a merger was its concern that the rapid growth of private brands in the passenger car filter business would affect the profitability of its own business, which involved primarily the sale of proprietary brands in the aftermarket. Another factor was the illness of both its president and the chairman of its board, the latter also being its principal stockholder. Negotiations looking toward a possible merger were undertaken with a number of other companies, including W. R. Grace Co., Thompson Ramo Woolridge, Rockwell-Standard, Textron and ACF Industries. The Bendix offer was ultimately accepted because it was the most attractive financially to Fram's stockholders (Tr. 3253-57, 3240-41, 3243-49, 3298-3300).

C. The Transaction

24. Fram entered into a formal written agreement with Bendix on February 23, 1967, providing that Fram would transfer to a Bendix subsidiary, and that the subsidiary would acquire from Fram, all of Fram's business and substantially all of its assets. The transfer and acquisition, pursuant to this agreement, took place on June 30, 1967. In accordance therewith, Bendix exchanged for each share of Fram common stock one share of Bendix "Series A \$3 Cumulative Convertible Preferred" voting stock. The convertible preferred stock so exchanged was valued at approximately \$75 million. The name of the existing Fram Corporation was then changed to FC Corporation and the corporation was later dissolved (PHO No. 1, par. 30; Order

Amend. Compl., 12/19/67; Tr. 3500; CX 234-A, CX 31 A-Z1, CX 316-C).

25. Immediately after the closing on June 30, 1967, Bendix transferred substantially all of the assets which it had acquired from Fram to a newly-formed, whollyowned Bendix subsidiary, Fram Corporation. Pursuant to an agreement between the Commission staff and Bendix dated June 16, 1967, the Bendix subsidiary, Fram Corporation, has been operated separately from the rest of the Bendix organization, substantially in the same form and manner as that in which the old Fram Corporation operated prior to the acquisition (CX 112 A-D).

III. Market Conditions

A. *The Automotive Filter Market*

1. The Product Market

26. Automotive filters are of three types, oil, air, and fuel, and include the filter elements which perform the actual filtration function. Such filters are designed for use on passenger cars, trucks, buses, tractors, farm equipment, off-highway equipment, stationary engines, and outboard and marine engines. (Complaint, par. 1; PHO No. 1, par. 1; PHO No. 6, par. 8; Tr. 606-07).

27. Oil filters are used to remove contaminants from lubricating engine oil. There are two basic types of oil filters: (a) The "cartridge" type, in which a replaceable cartridge is inserted into a permanent metal housing; and (b) the "spin-on" or "throwaway" type, which combines both the metal housing and filter element into one disposable unit. The latter is the type most commonly in use on passenger cars today. The filtering element in oil filters is generally a treated, specially-pleated paper, although some oil filters utilize a depth-type filtering element consisting of cellulose, cotton and/or other fibers. Filter manufacturers recommend that oil filters be changed every 4,000 to 6,000 miles. Oil filters account for the largest volume of automotive filters sold in the United States, representing approximately 76% of all automotive filter units sold (CX 317 B-D; Tr. 1728, 1920, 1998, 2078, 3290, 3403-3410).

28. Air filters remove impurities from the air before it is fed into the engine carburetor. An air filter consists of a replaceable cartridge inserted in a permanent housing. The filter element in the cartridge is generally pleated paper. Filter manufacturers recommend that air filters be changed every 10,000 miles or once a year. Air filters account for approximately 15% of all automotive filter units sold (CX 317 B-D; Tr. 3414, 3416).

29. Fuel or gasoline filters are used to filter out impurities in the fuel entering the carburetor of an automobile engine, in order to prevent clogging of the carburetor. They consist typically of a small metal or plastic housing and a resin-impregnated pleated paper element, with two pieces of rubber hose and clamps for use in installation. The filter is generally installed in the gasoline line, immediately ahead of the fuel pump. Manufacturers recommend that fuel filters be changed every 5,000 miles, but most motorists are unaware of the need for such change. Fuel filters constitute approximately 9% of all automotive filter units sold (Tr. 3418-19, 2045-49; CX 317 B-D, CX 256; RX 63, RX 95-96).

30. The parties are in apparent agreement that all three types of automotive filters (oil, air and fuel) may be combined for purposes of determining the appropriate line of commerce in which to assess the competitive impact of the acquisition. However, it is respondents' position that automotive-type filters which are designed for use on passenger cars and light trucks must be considered a different product line from heavy-duty filters used on large trucks, buses, farm equipment and other heavy-duty engines. Respondents also contend that passenger car filters sold in the OEM market must be considered to be in a different line of commerce from those sold for replacement purposes (RPF at 34, 41). Conversely, counsel supporting the complaint contend that passenger car filters and heavy-duty filters are part of the same product market, and that it is not proper to distinguish between OEM and replacement filter sales in determining the appropriate line of commerce (CPF at 20-25).

2. Extent of Respondents' Participation in Market

31. Respondents' distinction between passenger car and heavy-duty filters, and between the OEM and replacement market, coincides with the differences in the areas of emphasis which existed between Bendix's and Fram's participation in the automotive filter field prior to the merger. Bendix's participation in the automotive filter field was limited largely to the production and sale of a relatively small volume of heavy-duty oil filters for installation as original equipment on heavy-duty trucks, military vehicles and off-highway equipment. In 1966, the automotive product sales of Bendix's Filter Division amounted to \$840,288, consisting primarily of heavy-duty oil filters supplied as original equipment for military vehicles, tractors and other heavy-duty equipment. Of this amount, \$283,011 involved filters manufactured for Bendix by Wix and delivered by the latter to the customers. The Filter Division's automotive product sales repre-

sented approximately 13% of total divisional sales of \$5.9 million. The Filter Division was one of Bendix's smallest, accounting for less than six-tenths of 1% of the company's total sales volume (RX 101 B-C, RX 80-A; CX 11-D, CX 275-B; Tr. 3535).

32. The only other filter manufactured by Bendix with any automotive application is the Zenith fuel filter, which was manufactured by its Fuel Devices Division. The primary application of this filter is for stationary engines, marine engines and heavy-duty trucks. Its construction and installation are different from the ordinary automotive fuel filter. It has a metal filtering element in a glass bowl. It is not installed in the fuel line and is not a throwaway filter, as are most passenger car fuel filters. It sells for approximately three times the price of fuel filters designed for passenger car application (Tr. 3580-82, 3535, 3427). In 1966, the sales of the Zenith filter by Bendix's Fuel Devices Division amounted to approximately \$290,000. In addition, Bendix's Automotive Services Division sold a small quantity of Zenith filters, manufactured by the Fuel Devices Division. Such sales amounted to approximately \$46,000 in 1966, of which a negligible quantity may have been sold to warehouse distributors and jobbers for installation on passenger cars (RX 101-A, D).

33. The only filter product ever manufactured by Bendix specifically designed for passenger car application was an air filter element, which was manufactured by its Filter Division in the late 1950's for Ford and American Motors, for OEM installation. It ceased manufacturing this product around 1960, because it was losing money on the program and it sold its equipment to Wix. It continued to purchase small quantities of the filter elements from Wix until 1963, in order to complete existing contracts. None of the air filter elements manufactured and/or sold by Bendix was sold in the automotive aftermarket (Tr. 1519-23, 3732-34, 3683-88, 3621-23; RX 76, RX 101-B).

34. Unlike Bendix, which complaint counsel concede was a "small and peripheral member of the [automotive filter] industry" (CPF at 19), Fram was a major participant in the industry. It was engaged in the manufacture and sale of oil, air and fuel filters for the automotive market, including passenger cars, trucks and other internal combustion engines (CX 81-E). Whereas Bendix's participation in the industry was limited largely to heavy-duty filters which it sold in the OEM market, Fram's sales of automotive filters involved primarily passenger-car type filters, which it sold in the aftermarket. In 1966, Fram's aftermarket sales of passenger car filters totaled \$32.5 million and represented 88% of the total sales of Fram's Auto-

Initial Decision

77 F.T.C.

motive Division, which manufactured and sold its automotive-type filters. Only about 5% of its sales of passenger car filters were in the OEM segment of the market (RX 44-A; Tr. 3240).

35. Complaint counsel's position that passenger car and heavy-duty filters are both part of the same product market is based on their contention that most manufacturers produce both types, that they can both be manufactured in the same plant, and that the machinery used in producing them is similar (CPF at 23-24). The record does not wholly support complaint counsel's position. There were at least six manufacturers of automotive-type filters, each with automotive filter sales in excess of \$1 million in 1966, who sold no appreciable quantities of passenger car filters in that year, and at least four manufacturers of automotive-type filters who sold no appreciable quantities of heavy-duty filters (CX 345-D; RX 44-B, C).⁴ While heavy-duty and passenger car filters are sometimes manufactured in the same plant, different machinery is used in their manufacture. Heavy-duty oil filters consist of a large, cast-metal housing with a replaceable depth-type cartridge, whereas the typical spin-on passenger car filter is manufactured with a light metal shell and a pleated paper element. Bendix's heavy-duty Zenith fuel filter is made of a glass bowl seated in a heavy metal base, with a metal filtering element, unlike the typical passenger car fuel filter which is made of light metal or plastic with a paper element. The manufacture of the former requires die-casting and glass-blowing equipment, which is entirely different from that used in manufacturing passenger car fuel filters (Tr. 3423-24, 3427-33, 3441-42, 3579-81, 3583-84; RX 61, RX 63, RX 65-66, RX 97).

36. The examiner finds it unnecessary, at this point to resolve the dispute between the parties, as to whether heavy-duty and passenger car filters are part of the same product line. The record contains statistical evidence which reflects the status of the market and the position of the parties, both in terms of all types of automotive filters and in terms of the passenger-car segment thereof. Appropriate findings will hereafter be made on both bases, so as to provide a complete market picture and to aid in a resolution of the issues.

3. The Industry

37. The automotive filter industry is a substantial and growing industry. Sales of automotive filters increased from approximately

⁴ Air-Maze Division of North American Rockwell, Commercial Filter Co., Cummins Engine Co., Donaldson Co., Luber-Finer, Inc., and WBG Oil Clarifier, Inc., sold no passenger car filters or only negligible quantities. Approved Products Mfg. Corp., Filter Dynamics, Inc., Champion Laboratories, and Lee Filter Corporation sold no heavy-duty filters or only negligible quantities thereof.

\$213 million in 1963 to \$297 million in 1966, representing a growth rate of approximately 13% per year (CX 345-A, D). The major part of this increase has been in the passenger-car aftermarket segment of the industry. Sales of passenger car filters in the aftermarket by filter manufacturers have increased from \$122 million in 1962 to \$189.3 million in 1966 (RX 44-A). This increase has resulted from the substantial increase in motor vehicle registration and use, and is expected to continue for some time (CX 209-11; Tr. 2106-07).

38. The automotive filter industry is a highly profitable one. The net profit on sales (before provision for taxes) of most of the companies for which there is data in the record is in excess of 10% and has been increasing in recent years. Respondent Fram's net profit on sales (before provision for taxes) increased from 10.6% in 1963 to 13.0% in 1966. The net profit of its Automotive Division, which includes all automotive filter sales except for a small portion of private label sales, increased from 14.7% in 1965 to 17.1% in 1966. The favorable profit trend in the industry has included a number of the smaller companies, as well as the industry's leaders (CX 238 Z9-11, CX 81 T-U; CX 274-A, C; CX 323; RX 22, p. 4; Tr. 1954-55, 2000-01, 2107-08, 2197).

39. As previously noted, automotive filters are sold for installation on original equipment or for replacement purposes. Automotive filters for use as original equipment are sold to the vehicle manufacturers. Some sales are also made to the vehicle manufacturers for replacement purposes through their parts and accessories departments. Most sales for replacement purposes are made through warehouse distributors and direct jobbers. However, a substantial volume of sales is made to the oil and tire companies for distribution through their own or franchised outlets, and to other categories of direct customers, including mass merchandisers (such as Sears Roebuck), fleet operators and government agencies (Adm., Bendix-Fram Answers, par. 19-20; PHO No. 1, par. 19-20; Tr. 3284-92; RX 74).

40. Sales to original equipment manufacturers account for approximately 36% of automotive filter dollar sales in the United States, with approximately two-thirds being sold for installation on original equipment and one-third as replacement items. There is no significant difference in the manner of selling to original equipment manufacturers for installation as original equipment, and selling to them for replacement purposes. Approximately 41% of automotive filter sales are made to warehouse distributors and direct jobbers. Warehouse distributors resell primarily to jobbers. Jobbers, in turn, sell to service stations, repair garages and some new car dealers.

Initial Decision

77 F.T.C.

Sales to oil and tire companies, for redistribution through their retail outlets, constitute approximately 13% of automotive filter sales. Of the remaining 10% of filter sales, approximately 8% is made to other classes of customers, including mass merchandisers, fleet operators, the military, and other government agencies (CX 345-D, CX 94 A-C; Tr. 3231-32, 3285, 3288, 3386-89, 2323, 2370, 2090).

41. In 1966 there were 32 manufacturers of automotive filters in the United States, with total sales of \$296,747,000. Of these, 11 each had sales of under \$1 million. The top three companies accounted for 62.9% of industry sales, and the top six companies accounted for 79.6%. The first ranking company in the industry was General Motors Corporation, whose AC Division accounted for 32.4% of total dollar sales of automotive filters. The second ranking company was Purolator Products, Inc., which accounted for 18.3% of industry sales. Fram was the third ranking company, with 12.4% of all automotive filter sales. The next three ranking companies were Wix Corporation, Donaldson Co., Inc., and Walker Manufacturing Company (DeLuxe Division), with 6.5%, 6.4% and 4.0%, respectively, of industry sales. Respondent Bendix, with sales of slightly over \$1 million (including \$283,000 in filters which it had purchased from Wix), accounted for approximately 0.35% of automotive filter sales in 1966 (CX 345 A-D; RX 44-B).⁵

42. In terms of the passenger car filter aftermarket, which respondent contends is the appropriate line of commerce, the top three companies are the AC Division of General Motors, Purolator and Fram. In 1966 these three companies accounted for 71.3% of total aftermarket sales of filters intended for use on passenger cars and light trucks. AC was the leading company with 32.4% of sales in this market; Purolator was second with 21.7%; and Fram was third with 17.2% (RX 44-A).

43. The extent of concentration in the market has declined somewhat in recent years, both in the overall automotive filter market

⁵ CX 345 and RX 44 were both accorded *in camera* status because of the confidential nature of the data contained therein, most of which was obtained from third parties by subpoena *duces tecum*. The parties herein found it necessary to refer to portions of such data at a number of places in their proposed findings, and were given leave to file the principal portions of their findings *in camera*, under Section 3.45(d) of the Commission's Rules of Practice. The examiner has likewise found it impossible to present a proper market picture without referring to the above and other portions of *in camera* exhibits. Under subsection (a) of the foregoing Rule, the right of the examiner to disclose *in camera* data, to the extent necessary for the proper disposition of the proceeding, is specifically reserved. Aside from the necessity for such disclosure, the examiner has also taken into consideration that the most current data involved is now 3 years old and does not, therefore, have quite the degree of confidentiality it had when it was received.

and in the passenger car filter aftermarket. In the overall automotive filter market the share of the top three companies has declined from 69.8% in 1962 to 62.9% in 1966. In the passenger car filter aftermarket it has declined from 74.5% in 1962 to 71.3% in 1966. The share of the top ranking company, General Motors, has remained stable in the overall automotive filter market during this period, while its share of the passenger car filter aftermarket has increased from 28.0% in 1962 to 32.4% in 1966. The share of the second ranking company, Purolator, has declined from 20.2% to 18.3% in the overall automotive filter market and from 25.6% to 21.7% in the passenger car filter aftermarket. Fram's share of the overall automotive filter market has declined from 14.8% to 12.4% between 1962 and 1966, and its share of the passenger car filter aftermarket from 20.6% to 17.2% (CX 345 A-D; RX 44 A-B).

44. An important segment of the aftermarket consists of the retail gasoline service stations (Adm., Answers, par. 20; PHO No. 1, par. 20). Sales to such outlets are not made directly by filter manufacturers, but through warehouse distributors and jobbers, or through the oil companies which supply them with gasoline. The record contains no reliable statistical evidence as to the volume of sales of particular manufacturers' filters which reach the public through gasoline service stations. However, evidence in the record as to the availability of the brands of the various filter manufacturers in gasoline service stations in various metropolitan areas throughout the country, provides some indication of the standing of the various manufacturers in the gasoline service station segment of the market. Such evidence discloses that out of the 139 metropolitan areas surveyed, Fram was within the top 4 brands, in terms of availability, in 126 of the 139 areas served. It was first in 27 areas. Purolator ranked among the top 4 brands in all 139 metropolitan areas and ranked first in 66 areas. AC ranked among the top 4 brands in 137 areas, and was the first ranking brand in 43 areas (CX 242).

45. In recent years, the automotive filter industry has been affected by two significant trends: (a) The increase in direct participation in the market by the vehicle makers through vertical integration, and (b) the indirect entry into the market by petroleum companies, tire companies and mass merchandisers, through the medium of private brands. As previously noted, the General Motors Company, through its AC Division, has been a direct participant in the market for a number of years. As also noted, its share of the passenger car aftermarket increased from 28% to 32.4% between 1962 and 1966. The second ranking vehicle maker, Ford Motor Company, for many

years purchased its automotive filter requirements from a number of independent filter manufacturers. Such filters were installed as original equipment or sold to Ford new car dealers for replacement purposes, under Ford brand names. In 1966, Ford began to sell filters under its "Autolite" label to independent warehouse distributors, and in 1968 it began manufacturing passenger car oil filters, for sale in the aftermarket as well as for original equipment purposes. Ford expected to produce between 6 and 7 million oil filters in 1968, and within two years to increase its production to approximately 20 million. On such basis, it would rank about fifth among oil filter makers. (Tr. 2966-81, 3009-12, 3225-28; CX 317-D). Another potential entrant into the market is the Chrysler Corporation, which was in the midst of a "make or buy" study at the time of the hearings herein in November 1968 (Tr. 2950-53). The expansion of General Motors' activities in the aftermarket and the entry into the market by Ford, have resulted in substantially curtailing access to the OEM market by independent filter producers, and in making the automakers significant competitors in the replacement market.

46. Private label brands are manufactured by independent filter manufacturers for a number of the major oil companies, tire companies and mass merchandisers (such as Sears, Roebuck and Montgomery Ward). Such filters are generally sold by filter manufacturers at a lower price than their regular proprietary brands. Between 1962 and 1966 total sales of private brand passenger car filters in the aftermarket increased from approximately \$23.6 million to about \$39.4 million. In 1966, private brands accounted for approximately 20.8% of total aftermarket sales of passenger car filters in the United States (Tr. 2204-08, 2114-17, 1891-92, 1966-73, 2254-56, 3236-40, 3254-56A, 3293-3300, 3341-45; RX 44-A, G).

47. While some of the oil companies, such as Standard Oil with its "Atlas" brand, have been selling private label brands for a number of years, three of the major companies, Shell, Texaco, and Conoco, began to sell such filters through their service stations for the first time in 1966. In 1967, the first full year in which these companies conducted private brand programs, their aggregate sales of private brand filters to their retail service stations amounted to approximately \$12 million (RX 84-E, N, R; Tr. 3293-3300).

48. A survey conducted by Fram's Marketing Research Department in 1968 discloses that in 10 out of 11 selected cities the switch to private brands by Shell, Texaco and Conoco has resulted in a substantial decline in the percentage of service stations in which proprietary brands are sold. In almost every instance, the decline in the

"availability" of proprietary brands was matched by an increase in the "availability" of the private brands of Shell, Texaco and/or Conoco (RX 45-54; CX 347).⁹ Since approximately 70% of gasoline stations in which passenger car oil filters are replaced are owned or leased by petroleum companies (CX 219), the trend toward the purchase of private brands by petroleum companies could result in a significant decline in the sale of proprietary brands in the not too distant future.

49. Among the major companies, General Motors makes no sales of private brand filters. The second ranking company, Purolator, accounted for 33.3% of all private label passenger car filters sold in the aftermarket in 1966, making it the leader in sales of private brands in the aftermarket. Purolator was followed by Wix with 23.7%, Walker with 15.5% and Gould-National with 8.3%. Fram was a relatively poor sixth in private brand aftermarket sales, with 4.3% of that market. In sales to the oil company segment of the aftermarket, Purolator was also the leading supplier of private label filters, with 69.3% of this business, followed by Gould-National with 8.9% and Fram with 8.6% (RX-44 G, H).

50. The shift to private label filters has significant competitive implications for filter manufacturers because of (1) the lower rate of profit realized by filter manufacturers in contract production for private label distribution, and (2) the leverage which the large private label filter buyers have in shifting their patronage from one producer to another. This leverage is particularly strong in the case of the large petroleum companies, which have the power to control the sale of passenger car filters to gasoline service stations, the largest outlet for the sale of filters at the retail level (Tr. 3240, 3256-A, 3344-45, 2255, 1970-71, 2055-56, 2090; RX 86). For some years Fram was not an aggressive bidder for private label business because of the lower profit rate on such business. However, during the past year, in recognition of the increasing importance of such business, it has begun to bid on private brand business of the oil companies, and in 1968 was supplying half of the private brand filters purchased by

⁹ Complaint counsel suggest that the surveys are not accurate because, in some instances, they are based on universes which are only 75% complete (CPF at 54). However, the rebuttal evidence offered by complaint counsel (CX 354-57) fails to establish any substantial inaccuracy in the surveys offered by respondents. Complaint counsel concede that the rebuttal survey for the Washington, D.C., area varied "only slightly" from that offered by respondents for this area. However, they suggest that the variations might be greater in areas where the portion of the universe omitted was 25% rather than 12% as in Washington. Absent specific rebuttal evidence with respect to these areas, there is no record basis for the inference which complaint counsel seek to draw.

Shell and Texaco, and all of Conoco's private label filters (CX 117-B; Tr. 3281).

51. Most manufacturers sell to warehouse distributors at prices shown on their suggested jobber price schedules, less a specified percentage discount, which varies from one manufacturer to another. Additional discounts are also given for carload or truckload shipments and for cash payment. A number of manufacturers also issue price schedules of suggested resale prices at the dealer and retail levels. However, the distributors and retail dealers are not required to adhere to the suggested prices, and there is considerable variation from the suggested prices. In terms of the published price schedules, before the application of discounts, there is a considerable uniformity in the distributor prices of the major filter manufacturers. The price schedules of the larger companies reflect prices which are within a fairly close range of one another, and which are substantially higher than those of the smaller manufacturers. Thus, the average schedule prices of oil filters in the price schedules of Fram, AC, Purolator, Walker and Hastings, at the distributor level, are within a range of 48% to 54% above those of one of the smaller manufacturers, Filter Dynamics. Those of another medium-sized manufacturer, Wix, average 42% above those of Filter Dynamics. The average schedule price for air filters, listed by the same five major companies, is 26% to 29% above that of Filter Dynamics, while Wix's price is 21% higher. After the application of schedule discounts, the prices of the five above-mentioned major companies vary somewhat, but the differences are not substantial. Thus, on one model of oil filter the prices charged by such companies range from \$1.15 to \$1.19 and on another model from \$1.25 to \$1.30 (CX 346 A-C; RX 75; Tr. 1762, 1825-27, 1899, 2061-62, 2141-42, 2211, 2232, 2302, 3375-79).

52. The larger filter manufacturers endeavor to promote the sale of their products through various promotional and advertising programs, and by the employment of so-called "missionary men" who call on the jobbers and retail service stations to promote the sale of their product. Fram employs a force of 150 missionary men in its aftermarket sales force. Purolator employs a staff of approximately 122 men performing similar duties; AC has 100 missionary men; Wix has a staff of approximately 70 performing missionary work; and Hastings has approximately 100 such employees (Tr. 1746-48, 1804, 2002-03, 1861-63, 2086-87, 2149, 2152).

53. Among the promotional programs utilized by the leading filter manufacturers, including Fram, is the so-called "trading stamp" program. Under such programs the retail dealer is encouraged to pur-

chase the filters of a particular manufacturer by furnishing him with a certificate for a given number of filters purchased. The dealer is then permitted to receive a free gift of one filter or some other article for every given number of certificates which he accumulates. Such programs are largely self-supporting, as far as the filter manufacturer is concerned, since the warehouse distributor pays for the so-called "free" item at cost. The principal cost to the manufacturer is the profit which he would otherwise make on the filter or other item which is supplied to the distributor at cost (Tr. 1749-53, 1774-76, 1863-69, 1928-29, 2012, 2101, 2153-56).

54. The regular advertising programs of filter manufacturers are addressed to the wholesalers and dealers, rather than to the general public which relies on the dealers' judgment in the selection of a filter. Most of such advertising is inserted in trade publications which circulate among distributors and dealers. The expenditures for advertising of most filter manufacturers average about 4% to 5% of sales. Fram's total advertising expenditures in 1966 were \$1.4 million or about 5% of its total dollar sales of passenger car filters in the after-market (1822, 2029-30, 2062-64, 2103-04, 2129-30, 2172-73, 2186; CX 316-C).

55. Complaint counsel suggest that the level of advertising and promotional expenditures by the major filter manufacturers is a factor in dissuading new companies from entering the field (CPF at 18). The record fails to support this position. The level of advertising expenditures by filter manufacturers is not inordinately high in comparison with other industries. For example, the advertising expenditures of most manufacturers in the soap and cleanser industry range between 11% and 22% of sales. In the drug and cosmetic industry they range from about 10% to 24% (RX 55-A). While there are other industries where the average is lower than in the filter industry, an expenditure of approximately 5% of sales for advertising does not appear to be a significant barrier to entry. There is likewise nothing to suggest that Bendix's acquisition of Fram will result in any significant augmentation of the latter's advertising program. Bendix's expenditures for advertising were only two-tenths of 1% of sales in 1967. The advertising expenditures of its Automotive Service Division were only 1.5% of sales in 1966 (Tr. 3466; CX 316-C, D; RX 80-A).

56. Complaint counsel appear to concede that there are no important technological barriers to entry into the business of manufacturing automotive filters, and that the amount of capital required to enter the business is relatively small (CPF at 21). The manufacture

Initial Decision

77 F.T.C.

of most automotive filters involves relatively simple, unsophisticated and well-known technology, and there are no important patent barriers to entry. The metal parts of such filters are stamped and formed on standard metal presses. The paper elements are cured and pleated on standard machinery, which is readily available from a number of suppliers. A simple assembly line, some pressure-testing equipment, and storage and shipping space are all the additional equipment required to produce automotive filters. Most of the production work is done by relatively unskilled men and women, who can be trained on the job, under the supervision of a few experienced engineers. The most important ingredient for success, personnel-wise, is a good marketing and merchandising organization (Tr. 3424-26, 1983, 3541).

57. Efficient, automated plants for the manufacture of automotive filters can be constructed even by small companies with limited resources. Good quality filters can be produced economically in a plant of 10,000 square feet or less, at a cost of \$150,000 in equipment and \$50,000 in working capital. One small manufacturer, which entered the business in 1962, increased its business twofold each year up to 1966, and increased it by 50% between 1966 and 1967. In 1967 it erected a new, automated plant tripling its productive capacity (Tr. 2250-51, 2197, 3425).

4. Competitive Implications of Acquisition

58. Complaint counsel contend that Bendix's acquisition of Fram may adversely affect competition in the automotive filter industry by, (a) conferring certain competitive advantages on the Fram operation, in both the aftermarket and the original equipment market, and (b) eliminating Bendix as a substantial potential competitor in the automotive filter industry (CPF at 73-106). Respondents contend that the acquisition will not confer any competitive advantages on Fram in the sale of automotive filters, in either the aftermarket or the OEM market. They further deny that the acquisition will result in the elimination of competition, either actual or potential, since (a) Bendix was not engaged in the manufacture or sale of passenger car filters in the aftermarket, (b) to the extent it was engaged in the manufacture and sale of heavy-duty filters to the OEM, it did not compete with Fram to any significant extent, and (c) it was not a potential entrant into the passenger car filter market (RPF at 78-121). The examiner turns to a resolution of the conflicting contentions of the parties, in the light of the evidence of record.

59. Complaint counsel's contention that Bendix will obtain a competitive advantage for Fram in the aftermarket is based, essentially,

on their assertion that Bendix will be able to (a) combine the sales forces and the promotional and advertising programs of both companies, (b) obtain access for Fram in the warehouse distributors and other outlets served by Bendix, by virtue of Bendix's name and the leverage which it has in these outlets, and (c) obtain more business by offering customers "all vehicle service" (CPF No. 199, 203, 204). The evidence of record fails to establish that Bendix can confer any significant competitive advantage on Fram in the aftermarket.

60. It should be noted at the outset that Fram occupied a much stronger position in the aftermarket than did Bendix. Fram's sales in the aftermarket to warehouse distributors and other outlets (other than the parts departments of the vehicle makers) were \$32.5 million in 1966, compared to Bendix's aftermarket distributor sales of \$19.4 million (RX 44-A, RX 80-E, F). Bendix's Automotive Service Division (which handles most of Bendix's aftermarket sales) had sales contracts with 160 warehouse distributors, compared to 300 pure warehouse distributors and 2,000 combination warehouse distributors and jobbers served by Fram. While the ASD also had contracts with 1,249 jobbers, these were only permitted to purchase brake products directly and bought their other automotive parts requirements from warehouse distributors (CX 33 D-F, CX 94 A-B).⁷ Bendix's ASD had a sales staff of approximately 80 men handling the distribution of Bendix automotive products in the aftermarket, while Fram had a sales staff of over 140 selling automotive filters in the aftermarket (Tr. 3235; CX 33-G).

61. While both Bendix and Fram sold automotive parts to warehouse distributors and jobbers in the aftermarket, the nature of the products sold by them and the channels through which the parts were redistributed to the consumer were significantly different. Filters are regarded in the trade as a "TBA" (tires, batteries and accessories) item, and the bulk of them reach the public through the gasoline service stations. The bulk of the automotive products manufactured by Bendix are of much higher technological content than are TBA items, and find their way to the public primarily through garages and automobile repair shops, for installation by trained mechanics, and not through service stations except where the latter maintain repair facilities and employ mechanics (Tr. 3541-43, 3579, 3262-62A).

62. The record fails to establish that it is feasible for Bendix to combine, or that it is likely to combine, its selling and promotional

⁷ As previously noted (par. 9, p. 744, *supra*), the Automotive Service Division was established to handle aftermarket sales of Bendix's automotive parts manufacturing divisions. However, several of the divisions continued to handle their own selling activities in the aftermarket.

activities with those of Fram. Bendix's personnel engaged in the sale of its products in the aftermarket are technically trained salesmen, who are familiar with the technological and engineering aspects of the type of product which Bendix sells. The selling of such products requires the ability to provide technical assistance and information, for use by the repair garages and other customers who ultimately install the products in the consumer's automobile. Passenger car filters, on the other hand, are sold by salesmen without extensive training in the technology of the product. Fram's salesmen concentrate on promotion of their merchandise through gasoline service stations by mass merchandise techniques, and are not required to engage in the technical selling and instruction characteristic of Bendix's salesmen. Automotive filters do not form a logical package to combine with Bendix's general type of product, for sale and distribution in the aftermarket (Tr. 3262, 3541-44, 3570, 3578, 2640-41, 2664).

63. Complaint counsel suggest that there is no reason why Bendix's "technically oriented" salesmen cannot sell products which are less technically oriented, and note that Bendix salesmen who sell brakes also sell brake fluids and that salesmen who sell carburetors also sell certain chemical cleaners (CPF at 78). The mere fact that Bendix's salesmen include in their line certain non-technical items which are ancillary to their principal technological line, hardly establishes the feasibility of combining wholly unrelated items in a single selling package. It is conceivable that a technically-trained salesman could include in his line unrelated non-technical items. However, whether this is in line with business realities is another matter. Indicative of the lack of feasibility by combining Bendix's and Fram's marketing organizations is the fact that even within the Bendix product line itself, there is a dichotomy of selling activities. The Automotive Service Division has two separate sales forces, one selling brake products and the other selling tune-up products (Tr. 2645-46).⁸ This is in keeping with the practice of other automotive parts manufacturers, such as General Motors and Purolator, which maintain separate selling organizations for accessory and nonaccessory items (Tr. 2167-68, 1893-94, 2330).

64. The record likewise fails to establish that there is any likelihood Bendix's and Fram's advertising and promotional programs can or will be combined, so as to effect any economies. As previously

⁸ While, as complaint counsel note (CPF No. 19), P&D's aftermarket sales staff was added to the sales staff of the Automotive Service Division after Bendix's acquisition of P&D, this did not result in any integration of selling activities. The transfer was made for administrative purposes, to provide P&D's salesmen with certain fringe benefits available to Bendix salesmen, but there was no combination of the selling functions of the two sales forces (Tr. 2626-27, 2645-46).

noted, the advertising and promotional activities of the two companies differ. Fram's activities are largely directed to the retail service station, through its trading stamp promotional activities and advertising in trade publications. Most of Bendix's advertising is of an institutional nature, rather than designed to promote particular products. Its Automotive Service Division did at one time attempt to promote the sale of its products in the aftermarket through a stamp program, but such efforts were unsuccessful and were dropped. The advertising and promotional expenditures of the Automotive Service Division were less than 2% of sales in 1966. Fram's expenditures were approximately 2% of its total sales and 5% of its automotive filter sales (Tr. 2641-42, 2660, 3466; CX 316 C-D; RX 44-B, RX 80-A).

65. Related to complaint counsel's argument, concerning the likelihood of a combining of Bendix's and Fram's selling and promotional activities, is their contention with respect to Bendix's policy of providing the customers of its Automotive Service Division (ASD) with "all vehicle" service. Complaint counsel suggest that the combining of selling and promotional activities is a natural concomitant of the "all vehicle" service policy, and that such a program "will enable [Bendix] to convince many of [its] warehouse distributors to take on the Fram line of automotive filters" (CPF No. 203, 204).

66. The so-called "all vehicle" service policy, upon which complaint counsel rely, appears in the 1963 Bendix Annual Report as follows:

The Bendix Automotive Service Division, meeting the changing character of distribution in the automotive parts replacement market, continues its policy of extending its product lines to provide "all vehicle" service to the Division's customers. [C- 4-0.]

Complaint counsel seek to interpret this statement to mean that the aftermarket distribution of automotive parts of acquired companies will be centralized in ASD, and that they will be promoted and marketed by the same personnel (CPF No. 192, 199). This interpretation is not warranted by the statement of policy, and is based on a complete misunderstanding of the testimony cited by complaint counsel.

67. The reference to "extending [ASD's] product lines to provide 'all vehicle' service to the Division's customers" has to do with the adding of the products of existing Bendix manufacturing divisions to ASD's cognizance. ASD was formed in 1961 to provide for the joint distribution in the aftermarket, of Bendix's manufacturing divisions, so as to "make available an overall Bendix automotive parts and service program for distributors, dealers and the vehicle owner"

(CX 232, p. 13). The products of additional divisions were added in 1963, to those initially assigned to ASD in 1961. However, it was not found to be feasible to combine the distributional activities of all divisions into ASD. As late as 1967, four out of eight operating divisions were still making their own sales in the aftermarket (RX 80-E).

68. Even with respect to the divisions whose products were marketed by ASD, the effort did not necessarily involve a combining of sales personnel and promotional activities, as suggested by complaint counsel. The purpose of providing "all vehicle" service, as stated in the 1963 Annual Report, was to aid customers through "a streamlined flow of Bendix parts and service material." This was achieved by "the installation of automatic packaging equipment and improved material handling and shipping facilities," and by "installation of the most advanced data processing equipment" for the purpose of "expediting of customers orders" (CX 4-O).

69. Complaint counsel suggest that the testimony of Bendix's board chairman supports their position, that the company's policy of providing all vehicle service "includes the combined promotion of Bendix's various aftermarket products, utilizing the same resources, and to a large extent, the same personnel" (CPF No. 192). Complaint counsel's position, in this regard, is based on a wholly erroneous interpretation of the witness' testimony. The witness did not testify as to any overall company policy of combining selling and promotional activities in a single staff, but was merely speculating as to why, in 1963 (two years before he became board chairman), the aftermarket selling activities of certain operating divisions had been turned over to the ASD. He made it clear that the reason for adoption of this policy was not within his field of competence, but that of the chief of ASD (Tr. 2450). The latter official testified that all automotive products were not combined into ASD, and that there were separate sales forces even for existing Bendix automotive product lines (Tr. 2645-46, 2648-49).

70. While the adoption of the "all vehicle" service policy may have had some validity, insofar as combining the aftermarket distributional activities of some of Bendix's existing hard parts manufacturing divisions, the record fails to establish the feasibility of extending such a policy to Fram's filter operation. As previously noted, the selling and promotional activities of the two companies differ significantly. The record also fails to establish that it is feasible to obtain any cost advantages by combining the warehousing and shipping activities of the two companies. Filters made by Fram's plants in

Rhode Island, Ohio, Utah, and Missouri cannot be economically warehoused at Bendix's ASD warehouse in South Bend, Indiana, and shipped from there together with Bendix's automotive products sold in the aftermarket. The impracticality of attempting to combine warehousing and shipping functions of products manufactured in different parts of the country is reflected in Bendix's experience when it acquired P&D. The latter company's products continue to be warehoused and shipped from its factory in Long Island City, New York, since there are no economies in warehousing them and shipping them from South Bend with other Bendix automotive products (Tr. 2661-62).

71. In addition to their emphasis on the alleged advantage that will be achieved by combining the marketing activities of the two companies, complaint counsel also place great stress on the advantage which Bendix will be able to bring Fram by providing it with entree to the warehouse distributors and jobbers which Bendix serves. Complaint counsel argue that:

A manufacturer offering a broad range of products is in a position to exert certain sanctions to persuade warehouse distributors to carry the full range of the manufacturer's products. The ultimate sanction of cutting off a warehouse distributor who declines to carry the full line . . . is available to some such suppliers (CPF No. 200).

Complaint counsel's position is wholly without support in the record, insofar as Bendix is concerned, since the evidence fails to establish that Bendix has such leverage in the automotive parts aftermarket as will enable it to compel or persuade any distributor to purchase any or all of its automotive parts from Bendix.

72. Bendix has substantial competitors in all of the automotive lines which it sells. The most important of the automotive products sold by it are brakes, which are mainly distributed in the OEM market not under the Bendix name. Its brake sales to distributors in the aftermarket constitute less than 5% of brake sales in such market. It has no leverage to compel the purchase of other automotive products with its brakes or to tie the sale of filters or any other product to any of its products (Tr. 2667-68; RX 28).⁹

⁹ Complaint counsel contend that the testimony of the witness Carlson (General Manager of ASD), upon whose testimony the above findings are in part based, is "speculative and incompetent" and was "specifically excluded from the record" by the examiner, and that RX 28 which was offered through Carlson is a "thoroughly impeached document" (CR at 13-14). Carlson's testimony generally, regarding the above subject matter, was not excluded from the record. The reference made by complaint counsel (Tr. 3605) involved the sustaining of an objection to a specific question addressed to the witness, and is in no wise inconsistent or in conflict with the witness' earlier testimony on a narrower aspect of the matter, which was received without objection from com-

Footnote continued on following page.

73. Bendix's distributors are not required to buy any or all of the Bendix lines. No warehouse distributor or jobber carries all Bendix's product lines. Even the larger Bendix warehouse distributors carry only a fraction of the Bendix product line. There is nothing in the record to indicate that warehouse distributors obtain any advantage in price or terms of payment by ordering additional Bendix lines. Ordering by distributors is done separately for each line. There are separate order pads and order dates for each Bendix line, and there is no saving in paper work to the distributor in ordering more than one Bendix line (Tr. 2655-57, 2304-05, 2308-09, 2645; CX 34-35; RX 27).

74. Both warehouse distributor and manufacturer witnesses called by complaint counsel agreed that full-line forcing is impossible in the automotive aftermarket. The market is a buyer's market. Warehouse distributors have many alternative sources of supply to which they could resort if a supplier attempted to engage in such practices. One of the few warehouse distributor witnesses called by complaint counsel who was a major Bendix distributor (23% of its business being Bendix products) declined to switch from another filter manufacturer to Fram when solicited, both before and after the latter's acquisition by Bendix. The same distributor also declined to buy P&D ignition parts after the latter's acquisition by Bendix (Tr. 2305-07, 2278-79, 2397-2401, 1984-85, 2667).

75. In addition to the alleged assistance which it can give Fram in acquiring business in the aftermarket, complaint counsel contend that Bendix will also be able to aid Fram in the OEM market. Complaint counsel apparently recognize that as far as the two largest OEM users of automotive filters are concerned, General Motors and Ford, Bendix can be of little assistance to Fram since General Motors manufactures substantially all of the filters installed on its vehicles and Ford is in the process of manufacturing its requirements of oil filters (which constitute over three-fourths of filter sales). However, complaint counsel contend that "there are dozens of other domestic manufacturers of vehicles which require oil, air and fuel filters . . . and Bendix, as a broadly based supplier of automotive products, is in an advantageous position to supply automotive

Footnote continued from previous page.

plaint counsel (Tr. 2668, lines 21-25). Despite some lack of first-hand knowledge on all aspects of the matters about which he testified, the examiner found him to be generally knowledgeable and worthy of belief. His testimony was supported by that of warehouse distributors, hereinafter referred to. RX 28 was not, as suggested by complaint counsel, "thoroughly impeached." It was received in evidence without objection and after voir dire examination by complaint counsel (Tr. 2671-72). No motion was ever made to strike the exhibit as unreliable.

filters to them" (CPF No. 205). The record fails to establish that there are "dozens" of other vehicle makers or what the dimension of the remaining "noncaptive" volume of OEM consumption of automotive filters is.¹⁰ More importantly, the record fails to establish that the supplier of a particular type of automotive part to original equipment manufacturers can influence its customers to purchase other types of automotive parts from it, or that Bendix occupies such a position of strength and prominence, as a supplier of OEM parts, that it can confer any competitive advantage on Fram which the latter would not otherwise have.

76. It should be noted that even before its acquisition by Bendix, Fram had already penetrated the OEM market as far as could reasonably be expected. It was supplying 60% of Chrysler's original equipment oil filters, 100% of its air filters and 50% of its fuel filters. It was also supplying 50% of American Motors oil filters and 60% of its air filters. Its principal customers included the three main passenger car manufacturers (other than General Motors), and a number of manufacturers of heavy-duty equipment. Fram began to deliberately de-emphasize its OEM automotive filter business because it was less profitable, compared to its replacement market business (CX 119-A, B; CX 117-C).

77. Complaint counsel suggest that Bendix could assist Fram in getting business from certain manufacturers of heavy-duty farm equipment to which Bendix was supplying heavy-duty oil filters (CPF at 88). Since Bendix was already supplying these manufacturers with oil filters, and there is no indication that there was any substantial volume of other types of filters which Fram could supply them, access to these accounts would appear to be of dubious value. Moreover, Fram was already supplying a number of the accounts to which complaint counsel suggest Bendix could gain access for Fram (CX 119-B).

78. Even if there were a significant remaining original equipment filter market (in either passenger car or heavy-duty filters) to which Fram did not already have access, the record fails to establish that Bendix could help Fram obtain access to such market. The OEM market consists of a relatively few vehicle manufacturers who purchase automotive parts on the basis of the ability and willingness of

¹⁰ General Motors' AC Division accounts for 47% of sales to original equipment manufacturers for original installation (CX 345-D). There are no figures in the record as to Ford's OEM consumption. However, as previously noted, its projected production of oil filters would make it the fifth largest vendor of oil filters in the overall automotive filter market (par. 45, pp. 755-56, *supra*). Presumably, in the OEM segment of the market, it would rank even higher.

a parts supplier to meet their engineering specifications, delivery requirements and price demands through competitive bidding. The ability of an independent parts manufacturer to sell one product to the OEM market does not carry over to any other product. The fact that Bendix supplies other parts, such as brakes, to a vehicle manufacturer will not enhance its ability to sell Fram filters to the company. In fact, the two types of products are generally purchased by different engineering and purchasing personnel (Tr. 3229-31, 3544-46, 3575-76).

79. In addition to the assistance which Bendix will allegedly be able to give Fram in obtaining business in the OEM and after-market, complaint counsel contend that competition will also be affected through the elimination of Bendix as a potential substantial competitor of Fram in the manufacture and sale of automotive filters. Complaint counsel assert that Bendix was already an existing competitor, albeit a "small, peripheral member of the industry," and that it had the "background, experience, capability, motivation and interest for expanding internally in the automotive filter business on a large scale." They claim that if it had not acquired Fram, "Bendix probably would have expanded internally and become a large and substantial factor in the automotive filter industry, particularly in the service station submarket" (CPF at 89). Complaint counsel's position that Bendix would have become a large competitor by internal expansion is based principally on, (a) Bendix's competence and know-how in the automotive parts field and (b) inter-office memoranda and reports purporting to indicate an intention by Bendix to expand in the automotive filter field by internal development if opportunities for acquisition did not develop.

80. There is no doubt that prior to its acquisition of Fram, Bendix had considerable competence in the automotive parts field. However, virtually all of its automotive products (like its products in the aerospace field) were of relatively high technological content. They were the products of extensive research and development by Bendix scientists and engineers. It did not manufacture any TBA items, which are of relatively low technological content, for distribution in the aftermarket. The company lacked an extensive marketing organization experienced in the mass selling of TBA products, such as filters, in the highly competitive TBA market. The aftermarket sales organization of its Automotive Service Division was relatively small and was not adapted to selling and promoting low-technology, consumer-type products, such as automotive filters (Tr. 3538-42, 3550, 3570-1, 3489-90, 3633-35, 3642, 3690, 3709-10). Bendix's prior ven-

tures into the mass merchandising of consumer-type products had resulted in substantial losses, because of its lack of experience in selling to a mass market, and were abandoned (Tr. 3456-57). Accordingly, it does not follow that because of Bendix's technological and management competence in the automotive products field, it was necessarily a potential entrant into the automotive filter field, particularly in the area of mass produced passenger car filters sold in the replacement market through gasoline service stations.

81. The reports and memoranda which complaint counsel contend support their position were an outgrowth of the effort, previously referred to, to lessen Bendix's dependence on government business, resulting in the establishment of a planning department around 1961 (Par. 18, p. 746. *supaa*). Among the areas considered for possible expansion was that of automotive parts, since it was one in which Bendix had some competence (CX 238 A-Z37; Tr. 2434-36). Those engaged in the planning studies specifically considered the area of filters as a desirable business for Bendix to enter. At that time Bendix was losing money in its limited filter operation, and consideration was given to whether it should withdraw from the field entirely or enter it on a larger scale. Studies made by the planning department showed that "replacement-type filters of all types" were a "profitable and growing business," and it was concluded that the filter business was one "in which a company like Bendix can take a significant position" (CX 158-A).

82. Complaint counsel's argument that Bendix would have entered the replacement market by internal development if it had not been able to acquire Fram rests largely on a statement appearing in several memoranda by planning department employees in April 1963, following a meeting with company officials, to the effect that the company's chief executive officer was "in favor of moving [Bendix] out in filters anyway, even if [we] can't acquire" (CX 145-A), and that the same official stated: "If we can't go via acquisition [he] is in favor of internal development" (CX 160-Z 10). According to Bendix officials who participated in the meeting and discussions, the possibility of growth by internal development was considered, but it was rejected as impractical, insofar as low-technology, high-volume automotive filters were concerned. The only area in which it was considered feasible for Bendix to expand by internal development was in the area of high-technology, industrial-type filters such as Bendix was then producing (Tr. 3489-90, 3632-36, 3640-42, 3673-77, 3709-20).

83. Complaint counsel suggest that the testimony of the Bendix

officials not be accepted since it is contradicted by the contemporary documents quoted by them, and there is no contemporary documentary evidence to support the testimony of such officials (CPF at 90-91). The examiner does not consider the testimony of the Bendix officials to be at variance with the documentary evidence relied on by complaint counsel, and there are contemporary documents which support their testimony. Thus, as early as March 1962, when the scope of the filter planning study was under consideration, the recommendation was made that the study not be directed "to automotive filtration," but on ways "to strengthen our position in industrial areas with promising growth potential" (CX 131). Among the questions posed was: "How can we broaden the filter business into a major industrial activity or into markets other than automotive and aircraft-missile." The same memorandum and several others refer to Bendix's lack of success in the high-volume, low-profit automotive filter market, and to the fact that it had to subcontract out its automotive filter business to Wix (CX 127-B, CX 137-A). The planning department official, whose memorandum citing the opinion of Bendix's chief executive is quoted by complaint counsel, expressed his own opinion on the subject to top management as being that the building up of Bendix's own filter capacity "would not really optimize our LONG RANGE position in the overall attractive replacement-type filter business." In his view it was "very doubtful if this would really provide real opportunity for BX [Bendix] to achieve a truly significant position in this field" (CX 160-C). The chief executive himself, in a memorandum recording the results of the same meeting at which his opinion, recorded by someone else, is cited by complaint counsel, stated: "Everyone agrees we should grow by acquisition and not attempt it by internal development" (RX 38). According to this official, any reference to expansion by internal development related to industrial or aerospace filters in which Bendix had some competence, and not to high-volume automotive filters (Tr. 3640).

84. All of the objective evidence appears to indicate that if there were a possibility of Bendix's entering the automotive filter replacement market by internal development of its existing filter capability, it was extremely remote and tenuous. The Bendix Filter Division, which produced the filters then sold by it, operated a relatively small plant which was in poor physical condition and had none of the equipment or machinery necessary to produce high-volume passenger car filters (Tr. 3617-21; CX 131). The bulk of the filters produced by it were of relatively high technological content, for aerospace

and industrial use. Its activities in the automotive filter market were confined primarily to heavy-duty filters for the OEM market. Of the division's total filter production, 90% were OEM and 70% of these were specially engineered (CX 128-A). In the late 1950's Bendix attempted, on a limited scale, the type of expansion by internal development which complaint counsel contend it is capable of. It brought into the Filter Division an individual with experience in "high volume, low profit manufacturing" and began to supply automotive filters to Ford. This resulted in the loss of over half a million dollars in a single year. Its effort to expand its volume and supply another vehicle maker with "high volume, cheap filters" resulted in a further loss. This experience caused Bendix to abandon its effort to expand internally in automotive filters and to turn over to Wix whatever business remained in "high volume, cheap filter manufacturing" (CX 135 A-B, CX 131). Bendix planning officials recognized that the Filter Division was "a quality producer which cannot make high volume, cheap stuff," and that it did "not understand single process mass production" (CX 135-B, CX 126-B).

85. While consideration was given to expanding Bendix's Filter Division by internal development, the area in which this was considered feasible was in high-technology filters, such as aerospace and industrial filters which the company had been successfully producing. Cognizant planning and management officials appeared desirous of avoiding any attempt to expand internally in automotive-type replacement filters, because of limitations in personnel, facilities and funds needed to successfully market such product (CX 126 A-B, CX 128-A, CX 131, CX 133, CX 135-B). While the possibility of internally expanding Bendix's existing automotive filter business was discussed, the conclusion seems to have been that the prospect of success was limited, and that Bendix could not achieve a significant position in this area merely by expanding its existing operation (CX 158-B, CX 146-A, CX 160-C). The fact that Bendix did not take a single step to expand internally into the automotive filter replacement market in the three or four years following the breakdown of its negotiations with Wix hardly suggests that it ever gave serious consideration to entering that market by internal development. Based on the documentary evidence discussed above and the credible testimony of Bendix officials, it is the opinion and finding of the examiner that complaint counsel have failed to sustain the burden of establishing that Bendix was a potential entrant into the automotive filter replacement market by internal development.

B. Aerospace Filter Market

1. The Product Market

86. The so-called aerospace filter product market, which complaint counsel contend constitutes a line of commerce for purposes of this proceeding, consists of filters (including their assemblies, housing and elements) which are intended for use on aircraft (including spacecraft), missiles, and ground support equipment for aircraft and missiles. Complaint counsel seek to include, as a single product market, five different types of filters used for filtering five different types of fluids and gases on aircraft, missiles and ground support equipment, *viz*, hydraulic fluids, fuels, lubricants, cryogenic fluids, and air and other gases (CPF No. 265). Respondent contends that each of the five different types of filters constitutes a separate product line and, further, that such product line should not be limited to filters used in connection with aircraft and missiles, but should include similar types of filters used on naval vessels, military vehicles and industrial machine tools (RPF No. 194).

87. Hydraulic filters are used to remove contaminants from the hydraulic fluid in a hydraulic system which actuates or controls landing gears, stabilizers, elevators and various attitude controls of aircraft, submarines and other types of equipment (CX 20-J, CX 182-C; Tr. 799, 809). Fuel filters are designed to prevent contaminants from interfering with the operation of fuel pumps, fuel controls and fuel manifold sections of engines operated by various types of aviation gasoline or jet fuels (CX 181-J). Cryogenic filters are intended to remove contaminants from a cryogenic liquid, which is a gas reduced to a liquid by a reduction in temperature (Tr. 801; CX 181-Q). Lube filters are intended to remove contaminants from lubricating oils (CX 181-O). Air filters are designed to separate contaminants from moving air streams (CX 181-P).

88. The five different types of so-called aerospace filters are distinguishable from one another in terms of design and function, and are generally not interchangeable. The fluids or gases filtered by each have their individual and distinct characteristics, temperatures and pressures. Not all firms in the industry manufacture all types, and there are various firms which specialize in the manufacture of certain types of filters within the overall field (Tr. 3181-83, 3186-88, 3197-98, 1066-68, 1098-99, 801-02, 858, 882-87, 1133-34; RX 56-B, E).

89. So-called aerospace filters are made of three principal parts, (a) the filtering medium, which is a porous substance that performs the filtration function; (b) the element, which is a device that holds

the porous medium; and (c) the housing, which is a metal container in which the element is enclosed. The filtering medium may be made of either a fine woven wire mesh, which is cleanable, or of paper or other disposable material, which is not cleanable and is periodically replaced. Filter elements made of wire mesh media are more sophisticated than those made of paper media, and can withstand higher pressures and temperatures, and have a longer life. The original cost of such filter elements is approximately three times greater than that of paper element filters. The manufacturing processes and physical construction of metal and disposable filter elements are distinct. Some firms specialize in making one or the other (Tr. 801-04, 824-25, 851, 1068, 1102, 1133-34, 3169, 3173, 3176; CX 20-C, CX 294-E; RX 68-69).

90. In addition to differences in the nature of the filtering medium, filters used for aerospace purposes also differ in terms of whether they involve a closed-end or open-end system. In a closed-end system the fluid constantly recirculates through the filter, while in an open-end system the fluid is merely transferred from one place in the aircraft to another, where it is consumed. Closed-end systems operate under much higher temperatures and pressures than open-end systems, and are required to perform a much finer filtration function. Hydraulic filters are a typical example of a closed-end system, while fuel filters are typically open-ended. A hydraulic filter must be able to filter out particles as fine as 5 to 25 microns, while a fuel filter may accept impurities with a micron rating of as much as 200 or 300 (Tr. 856-58, 995, 1067-68, 3180-82).

91. Despite differences among the various types of aerospace filters, such filters as a group possess a number of common characteristics which distinguish them from other types of filters, particularly from automotive filters. They require a greater engineering input than do automotive filters. They have to withstand much greater temperatures, pressures and vibrations. They are essentially a high-technology, low-volume product, as compared to low-technology, high-volume automotive filters. Strict quality control is required in their production, and tests are run on each filter element, unlike the testing on sampling basis which is done on automotive and industrial filters. All raw materials used in aerospace filters must be traceable to their original sources. Such filters are in an entirely different price bracket from automotive filters. Whereas a typical automotive filter may sell for around \$5 or less, the more sophisticated aerospace filters, such as hydraulic filters, sell for around \$6,000 (Tr. 851-53, 909-911, 1021, 1066, 1079-80; CX 319).

92. Hydraulic filters are among the most sophisticated of aerospace filters. They are used for the filtration of hydraulic fluids on aircraft, missiles and supporting ground equipment, as well as on naval vessels and various types of military vehicles (such as army personnel carriers and tanks). Since the Federal Government is a major customer for hydraulic filters, manufacturers of such filters desiring to sell to the government are required to meet exacting government specifications prescribing materials, design, construction, performance standards, testing procedures, pressure and temperature standards, and quality controls. Of the five types of so-called aerospace filters described above, hydraulic filters are the only class for which government specifications have been issued. Hydraulic filters must be able to operate under much higher pressures and temperatures, and must provide a much higher degree of filtration, than other aerospace filters. They must be capable of filtering contaminant particles as fine as 5 microns under one government specification and 15 microns under another (Tr. 1067-68, 1098, 816-18, 822-23, 857, 3181-82; CX 281).¹¹

2. Extent of Respondent's Participation in Aerospace Filter Business

93. Bendix produces several types of so-called aerospace filters at a plant operated by its Filter Division in Madison Heights (Royal Oak), Michigan. The same plant also produces filter water separators and various types of industrial filters. The plant is primarily engaged in manufacturing metal-element filters and filters used in closed-end systems. Almost two-thirds of the dollar volume of aerospace-type filters produced in the plant in 1966 consisted of hydraulic filters. The plant also produces some lube and some specialty fuel filters, and an insignificant quantity of pneumatic and cryogenic filters (Tr. 3616-19, 1515-16, 1535-36, 1556; CX 308-B, CX 19-20; RX 56-B, E).

94. For the fiscal year ending September 30, 1966, the sales of aerospace-type filters by Bendix's Filter Division were \$1,932,000, of which \$1,062,000 involved hydraulic filters. The Division's aerospace filter sales in 1966 were the highest in the five-year period 1962-1966. Its sales in the preceding year, 1965, were the lowest in the 5-year period, *viz.*, \$537,000, and the average sales for the period were \$1,214,000 (RX 56 B-D). The sales of the Filter Division as a whole (including sales of filter water separators, industrial filters and other products) were \$5,927,508 in 1966, with a net profit of

¹¹ A micron equals one-millionth of a meter, or approximately one twenty-five thousandth of an inch.

\$651,042. During the period from 1955 to 1966 the Filter Division operated at a loss in six of the 12 years, with the average loss being \$419,206 for the period. However, during the five-year period 1962 to 1966, it operated at a loss during only one year, 1964 (CX 275-B; RX 37; Tr. 3618-19).

95. Fram's aerospace filters were manufactured by its Aerospace Division at a plant located in Pawtucket, Rhode Island. At the time of the hearing, this plant was in the process of moving to Tulsa, Oklahoma. The Aerospace Division manufactured no products other than aerospace filters. It was engaged primarily in manufacturing disposable paper element fuel filters for open-end systems. It also produced minor quantities of hydraulic, pneumatic and cryogenic filters (Tr. 3156, 3160, 3169-70, 3185-87). Its total sales of aerospace filters in 1966 were \$1,152,000, of which \$127,000 involved aerospace hydraulic filters. Its 1966 aerospace filter sales represented an increase over sales of \$863,548 in 1965 and \$827,797 in 1964. However, the Division operated at a loss in each of the three years, with the loss in 1966 being \$138,013, compared to losses of \$46,184 in 1964 and \$167,056 in 1965 (CX 120-D, CX 274-C, CX 308-B).

3. The Industry

96. In 1966 there were 28 companies manufacturing one or more of the five types of aerospace filters described above, with total sales of \$31,467,000. Of these, eight were negligible participants, with sales of less than \$100,000 each, and seven more were minor participants, with sales of less than \$500,000 each. The top four companies accounted for 56.9% of industry sales in 1966, representing a decline in the position of the top four companies from 72.1% in 1962. The top eight companies accounted for 80.8% of aerospace filter sales in 1966, which represented a decline from 89.9% in 1962 (CX 308-B).

97. The top ranking company in the industry is Pall Corporation (Aircraft Porous Media Division), which accounted for 29.1% of sales of the five classes of aerospace filters which complaint counsel contend constitute the overall aerospace filter market. Pall, which entered the filter business in 1954, has been the top ranking company in aerospace filters each year since 1962 (the earliest year for which there are data in the record). The second ranking company is Purolator, which accounted for 11.6% of the five-product market in 1966. The third ranking company is The Carborundum Co., with 8.1% of aerospace filter sales. The fourth ranking company

in 1966 was North American Rockwell's Air Maize Division, with 7.9%. Bendix was the seventh ranking company in 1966, with 6.1% and Fram the eighth ranking company with 3.6% (CX 308-B; RX 56-B; Tr. 901-02).

98. As previously noted, respondents contend that each of the five types of so-called aerospace filters constitutes a separate product market, and that it is improper to make any analysis of the market in terms of the combined sales of all five types. The only market-share data in the record was introduced by counsel supporting the complaint, and consists of the overall sales of the five products, by each company whose records were subpoenaed, with a break-out of sales by individual product only for hydraulic filters, which complaint counsel contend constitute a submarket within the overall aerospace filter product market. Respondents contend that the market-share data for hydraulic filters are understated, to the extent that they are limited to hydraulic filters manufactured for use on aircraft, missiles and associated ground equipment, and do not include figures for hydraulic filters used on naval vessels, military vehicles, and industrial tools. The examiner will reserve for later consideration the question of whether the other types of filters are part of the hydraulic filter submarket.

99. In 1966 there was a total of 20 companies manufacturing hydraulic aerospace filters of the type which complaint counsel contend are part of the product submarket. Of these, 8 had sales of under \$100,000, and another 4 had sales of less than \$500,000. Total sales of hydraulic aerospace filters in 1966 were \$13,720,000. The top four companies accounted for 81.9% of sales of this product. This represented a decline from 90.3% accounted for by the top four companies in 1962. The top 8 companies accounted for 95.0% of the market in 1966, compared to 98.0% in 1962 (CX 308-B; RX 56-E).

100. The dominant company in the manufacture and sale of aerospace hydraulic filters is Pall Corporation, which accounted for 40.4% of the market in 1966. The second and third ranking companies in 1966 were Textron Corporation's Hydraulic Research Division with 16.7% of the market, and Purolator with 16.0%. Respondent Bendix was the fourth ranking company in hydraulic aerospace filters, with 7.8% of the market, which represented a decline from its 1962 market share of 11.1%. Respondent Fram was the tenth ranking company (out of the 20 companies in the industry), with 0.9% of the market (RX 56-E).

101. The principal customers for aerospace filters are: (a) air

frame manufacturers (*e.g.*, Boeing, McDonnell-Douglas, Grumann, Lockheed, North American, and General Dynamics), (b) engine manufacturers (*e.g.*, Pratt & Whitney, General Electric, Avco, and Air Research), (c) component or sub-system manufacturers (*e.g.*, Ronson, Whittaker, and Weston), (d) the United States Government, and (e) the major commercial airlines. Air frame, engine and component manufacturers buy filters for both original equipment and replacement purposes. Purchases by the government and the airlines are generally for replacement purposes only. The United States Government is the largest single customer, in terms of the quantity of filters purchased (Tr. 869-70, 899, 1077, 1092-94, 1535, 3184-85; RX 1, pp. 30-37, RX 5).

102. Aerospace filters are largely sold on the basis of competitive bidding. This is true even of purchases by non-governmental customers, since the latter frequently purchase the filters under a government prime contract or a subcontract, for aircraft, engines or components. In the case of direct government purchases, invitations to bid are sent to all qualified vendors. Where the purchase is made by a private company, invitations to bid are usually sent to a representative number of qualified filter manufacturers, which may vary from two to five in number (Tr. 869-70, 873-76, 1078-79).

103. In the case of hydraulic aerospace filters, there are rigorous government specifications which prospective vendors are required to meet. The specifications are based on the recommendations of an industry committee (the Contamination and Filtration Panel of the A-6 Committee of the Society of Automotive Engineers), and prescribe the materials, design, construction, performance standards, testing procedures, pressure and temperature standards, and quality control requirements for aerospace hydraulic filters (Tr. 792-97, 813, 817, 857, 1068, 3189; CX 281 A-Z7). These specifications have become successively more rigorous in their requirements. The original basic specification for aerospace hydraulic filters was Mil-F-5504. A more rigorous set of specifications was issued under the number Mil-F-8815, and several revisions of the latter have been issued, designated Mil-F-8815A and Mil-F-8815B. The 8815 revision of the 5504 series was necessary because of the increased pressure and temperature requirements that aerospace hydraulic filters are required to withstand (Tr. 842-844, 941-42, 959, 1118; CX 281-A). In order to be eligible to bid on an 8815 filter, a manufacturer must be on a qualified products list (QPL). To appear on such a list, it is necessary to submit evidence that the filter has passed certain preliminary tests (Tr. 929-931, 1077; CX

295 F-I, CX 278). Customers who purchase hydraulic filters which are to be used in an aerospace product being supplied under government contract, require that their suppliers meet comparable specifications (Tr. 1118-1120, 982).

104. Counsel supporting the complaint contend that the "aerospace filter industry is one that is characterized by high barriers to entry." The basis of this contention is the allegedly high costs which are involved in qualifying aerospace filters to meet government specifications, including expensive testing equipment, special manufacturing equipment, and fees charged by the government for qualification testing. They contend that this results in high design and engineering costs to obtain an initial development contract, which only the larger companies can afford, and that once such a company obtains a development contract, it has an advantage in obtaining the follow-on production contract (CPF at 144-45). Respondents dispute complaint counsel's position, contending that the evidence as to the necessity of meeting rigid government specifications is limited entirely to hydraulic filters, that the costs of meeting government specifications and requirements are not so high as to constitute a barrier to entry even in the case of hydraulic filters, and that an initial supplier under a development contract has no necessary advantage in obtaining follow-on business (RR at 85-86; RPF at 161-166).

105. Much of the testimony relied upon by complaint counsel relates to costs which are incidental to meeting the requirements of the government specification for hydraulic filters (Mil-F-8815), and is not applicable to aerospace filters generally.¹² While design, engineering, and testing requirements for other types of aerospace filters may be higher than those of automotive or industrial-type filters, the record fails to establish that they are of such severity as to constitute a formidable barrier to entry. The only piece of equipment referred to in the testimony cited by complaint counsel which may not be limited in its application to hydraulic filters is a so-called bubble-testing device, which can be made for as little as \$300-\$400 (Tr. 3168).

106. The record likewise fails to establish that the cost of meeting government specifications for hydraulic filters constitutes a sub-

¹² Of the three witnesses whose testimony is cited by counsel supporting the complaint (CPF No. 322), it is clear that one (Marino) was familiar only with hydraulic aerospace filters (Tr. 936-37, 927, 961-63); the second (Farris) was the general manager of his company's Hydraulic Division (Tr. 791), and his testimony related primarily to hydraulic "high precision" filters (Tr. 810-11, 819-23, 915); and the third (Capka), insofar as his testimony related to the importance of design and technological requirements, was "talking . . . of hydraulic filters" (Tr. 1069).

stantial barrier to entry into the hydraulic filter market or into the aerospace filter market generally. Complaint counsel contend that development testing costs for the Mil-F-8815 hydraulic filter "run between \$30,000 and \$35,000" and that it "easily could cost a new company \$100,000 or more to break into the field of Mil-F-8815 aerospace hydraulic filters (CPF No. 329). The testimony relied upon by complaint counsel does not support their position. The \$30,000-\$35,000 testing cost is applicable to testing a number of different models of the filter, rather than a single model, and the testimony of other witnesses indicates that development testing costs are of a lower order of magnitude, *viz.*, around \$10,000 (Tr. 971, 975, 1126). The \$100,000 investment cost referred to by complaint counsel includes approximately \$80,000 for testing equipment (Tr. 1074, 1105). However, the record establishes that it is feasible to have testing done by outside laboratories (Tr. 930, 1132-33, 1539, 3150-51, 3193). In any event, testing and development costs have not been shown to be so high as to constitute a significant barrier to entry.¹³

107. The record affirmatively establishes that there are no major barriers to entry into the aerospace filter industry, or in any particular segment of it. A capital investment of no more than \$25,000 to \$50,000 is considered ample to enter the business (Tr. 1095, 1132, 1157). The equipment used in manufacturing the filters is found in ordinary machine shops. Large engineering facilities are unnecessary (Tr. 1156-57, 1539, 3163-65, 3176-77). Relatively few engineers and scientists are required, and the bulk of the labor is performed by unskilled personnel (Tr. 1153-57, 3164-69, 3192-93, 1070-71). The basic materials used, wire mesh or paper for the element, and castings for the filter housing, are all readily available (Tr. 3163, 3166-67, 3179-80, 1156-57). There are no patents that would give the holder a competitive advantage (Tr. 3194, 1539, 1555-56, 1135). Technological data regarding filter media are published. Standard government procurement contracts require the filter supplier to surrender his proprietary rights, thus enabling smaller companies to bid on follow-on business without incurring their own design costs (Tr. 3193-94, 834-35, 870-71, 1156). While laboratory facilities are a convenience, the costs thereof are not inordinately high and, moreover, it is common for filter companies

¹³ The witness whose testimony is cited by complaint counsel indicated that his company's decision not to qualify on the 8815 filter had nothing to do with a lack of capital, but was due to the fact that the probable volume of sales of the filter was not considered to be sufficient to justify the investment (Tr. 1102-03).

to use outside testing laboratories (Tr. 3193, 3200, 1539, 3150-51, 1074, 1132-33, 930). The fact that the number of companies, in what is essentially a small industry, has grown from about 4 to 28 in the last 15 years hardly suggests that there are formidable barriers to entry in the aerospace filter industry (Tr. 893; CX 308-B).

4. Competitive Implications

108. Complaint counsel contend that competition in the aerospace filter industry and the aerospace hydraulic filter industry will be adversely affected by reason of the elimination of "substantial competition between Bendix and Fram" (CPF Nos. 328 and 335). The record fails to support complaint counsel's position in this respect, since it fails to establish that Bendix and Fram were in substantial competition. Bendix was engaged principally in the manufacture of metal element, closed-end hydraulic filters, and Fram was engaged primarily in the manufacture of disposable paper element filters for open-end fuel filters. Out of total aerospace filter sales of \$1,932,000 by Bendix in 1966, \$1,062,000 involved sales of hydraulic filters. Out of total sales of \$1,152,000 by Fram in 1966, only \$127,000 involved the sale of hydraulic filters (RX 56-B, E). Fram's production of paper-element disposable fuel filters accounted for 98% to 99% of its filter production in units, and represented 65% to 75% of the dollar volume of its Aerospace Division (Tr. 3169-70, 3185-87). Bendix was not a substantial competitor in the manufacture of aerospace fuel filters. The bulk of the fuel filters it produced were of woven wire mesh and were specialty, high temperature filters, largely for space vehicles. It did make a small quantity of disposable element filters, but they were custom designed and were not mass produced (Tr. 3618-20, 1535-36; CX 20-C; RX 100).

109. The only evidence of the existence of competition between Bendix and Fram which is cited by complaint counsel involves the 8815 hydraulic filter and other hydraulic filters (CPF Nos. 304, 317, and 320). Bendix qualified a number of its filters under the original Mil-F-8815 specification. Under the revised specification, Mil-F-8815A, Bendix was able to qualify only a single size of the filter. Fram has never qualified any of its hydraulic filters under Mil-F-8815 or the revisions thereof (Tr. 947-48, 964, 970; CX 278 A-C). However, despite this lack of qualification under the specification, Fram did bid on one procurement out of six procurements for the 8815 hydraulic filter made by the Aviation Supply

Office of the Navy (ASO), in the fiscal years 1966 and 1967, but it never received an award. Bendix submitted bids on five procurements for the 8815 filter during the fiscal years 1966 and 1967, but Fram had not submitted a bid in any of these instances. Bendix received two awards during this period, totaling approximately \$43,000 (CX 306 A-N).

110. The only direct government procurement in which Fram and Bendix competed was for the earlier model of the 8815 hydraulic filter, *viz.*, the Mil-F-5504 filter. During the fiscal years 1966 and 1967, the Navy ASO sent out invitations for bids on 11 occasions. Bendix submitted bids on each occasion and Fram on six occasions. Bendix was the low bidder five times, receiving awards totaling approximately \$22,000, and Fram was low bidder once, receiving an award of \$14,725 (CX 286 A-Z3).

111. The only other evidence in the record of competition between Bendix and Fram in the aerospace filter line involves bids submitted to General Dynamics, in connection with its prime contract for the F-111 aircraft. Both Bendix and Fram submitted bids to General Dynamics in 1964, in response to the latter's request for proposals on a Design, Development, Test and Engineering (DDT & E) contract for three types of hydraulic filters and two pneumatic filters. Eight companies, including Bendix and Fram, submitted bids. Bendix received the award for the DDT & E contract, amounting to \$67,000. However, its proposal on the follow-on procurement contract was unsatisfactory and General Dynamics, in 1965, solicited bids from three other companies, including Fram. The latter received the major part of the award, which was for \$445,000, spread out over a four-year period (Tr. 980-81, 990-95, 1008, 1011-12 A, 1022-23, 1034, 1049-50; CX 212 Z1-4, CX 297-303).

112. In addition to the alleged elimination of competition between Fram and Bendix, particularly in the hydraulic filter line, complaint counsel contend that competition will also be affected as a result of the fact that "[c]ombining the engineering facilities and personnel of the two companies will result in technological advantages over other members of the industry" (CPF Nos. 326 and 333). Even assuming that there is a likelihood Bendix and Fram will combine their engineering facilities and personnel (as to which there is no evidence in the record), there is no basis for any finding that this will confer a competitive advantage on them. As previously found, there are no major barriers to competition as a result of engineering and personnel requirements in the indus-

try. The record discloses that small and medium-sized companies have been successful in receiving awards and, conversely, that large companies with no lack of capital at their disposal, have been unsuccessful in competing for business against smaller companies (Tr. 968-70, 1536, 1054-55; CX 212 Z1-4, CX 338).

113. Finally, complaint counsel contend that the merger will result in a significant increase in concentration in the aerospace filter industry as a whole, and in the hydraulic filter submarket (CPF Nos. 327 and 334). Assuming that the aerospace filter industry as a whole may be considered a proper market, for purposes of determining the competitive impact of the acquisition here under challenge, the acquisition will result in no increase in the share of the market held by the top four companies since neither Bendix nor Fram was among the top four ranking companies. However, since Bendix was the seventh ranking company with 6.1% of the market and Fram was the eighth ranking company with 3.6%, the share of the top eight companies would be increased slightly since the combining of the market shares of Bendix and Fram would make Vacco Industries, with 2.7% of the market, the eighth ranking company. Considering the relatively small size of the industry, with only 12 companies having market shares in excess of 2%, this slight increase in concentration among the top 8 companies is hardly impressive. However, combining the market shares of the two companies would make them the third ranking company in the industry. In the hydraulic filter product market, where Bendix was fourth ranking and Fram was eighth ranking, the addition of Fram's 0.9% of the market to Bendix's 7.8% would not result in any improvement in their overall rank.

C. Filter Water Separators

1. The Product Market

114. Filter water separators are mechanical devices which remove entrained and emulsified water and solid contaminants from a liquid product in one pass, at full flow, through water coalescing elements. Virtually the only use for filter water separators is the removal of water and dirt from low viscosity fluids, mainly aircraft fuels (*i.e.*, jet fuels, gasoline and kerosene). Less than 1% of filter water separators are used for purposes other than removing water and contaminants from aviation jet fuels. Filter water separators are not used on the aircraft itself, but at various transfer points for aircraft fuel, such as refineries, pipeline terminals and airports, with the

latter being the biggest user (Tr. 1213-15, 1233-36, 1277, 1399-1400, 1403; CX 25-A, CX 180-B).

115. A filter water separator consists of three major components, a pressure vessel, a coalescer element and a separator element, the latter two being enclosed within the vessel. The vessel is a large, heavy metal tank which may be six or seven feet in height and four or five feet in diameter. The vessel controls the velocity of the fluid passing through it; the coalescer element removes solid contaminants and entrained water from the fluid and collects the entrained water into droplets; and the separator element prevents the coalesced droplets which have not already been removed by gravity from continuing downstream with the filtered fluid. A filter water separator unit may include a number of coalescer elements, and it is not unusual for a vessel to have as many as 20 or more such elements. The coalescer elements are replaced, rather than being cleaned, usually about once a year, depending on the amount of use that the vessel gets. Separator elements are rarely replaced (Tr. 1215-26, 1276, 1328, 1398-1403, 1405-06, 1479-1480, 3043, 3080-81; CX 25, CX 180-B, F-R, Z11-Z19).

116. Complaint counsel contend that the relevant product is not merely filter water separators and their elements, but also includes fuel monitors (CPF No. 355). The latter device is used to collect and trap contaminants in aviation and jet fuels. Such contaminants may include water. If there are solid contaminants or too much water in the fuel, the fuel monitor will automatically shut off the flow of fuel. It does not actually filter out the water, as does a filter water separator, but merely detects its presence. Such devices are sometimes used downstream of a filter water separator to act as a check on whether water has been removed by the separator. At some small airports, which cannot afford to purchase a filter water separator, a fuel monitor may sometimes be used to alert the operators to the presence of contaminants in the fuel (Tr. 1344-46, 1482-92; CX 20 Z-2, CX 26 B-C, CX 29 B-D, H, S, Y, Z13, Z15-16, Z34-38, Z62). Respondents contend that fuel monitors are not part of the same product market as filter water separators since, as the evidence discloses, they do not perform any filtration function and cannot therefore be substituted for filter water separators (RR at 90-91; Tr. 1333-37, 1345-46, 1483, 1527-30, 1562-63, 3121-22). The examiner will reserve, for later disposition, the question of whether fuel monitors should be considered to be part of the same product market as filter water separators.

2. Extent of Respondent's Participation in Filter Water Separator Business

117. Bendix, through its Filter Division, is engaged in the manufacture of filter water separator elements, and in the assembling of complete filter water separator units from vessels purchased from others and separator elements which it manufactures, for sale as complete filter water separators. In 1966, its total sales of filter water separators and elements were \$353,000, of which \$334,000 consisted of coalescer and separator elements. In addition, the Division also manufactures a fuel monitor, which is known as the "Go-No-Go Gauge." The sales of the gauge amounted to \$651,000 in 1966 (CX 307-B, CX 26; RX 57-A; Tr. 1503-04, 1526-27).

118. Fram, through its Industrial Filter Division (formerly known as the Warner Lewis Industrial Filter Division), is engaged in the manufacture of filter water separators and elements. Prior to its acquisition of Fram in 1954, the Warner Lewis Company was the developer of the first filter water separator. Fram manufactured and sold both complete filter water separators and the elements therefor. Its total filter water separator sales in 1966 were \$3,650,000, of which \$1,721,000 involved the sale of separator and coalescer elements. Its filter water separator sales accounted for approximately 75% of the sales of Fram's Industrial Division and about 5% of the company's overall sales. The Industrial Filter Division operated at a loss in two of the three fiscal years 1965 to 1967, and its profits had been declining since 1960 (CX 274-A, C, CX 307-B, CX 81-I, CX 179-B, CX 180-E; RX 57 A; Tr. 3078-80).

3. The Industry.

119. In 1966, there were 11 companies engaged in the manufacture of coalescer and separator elements for filter water separators, of which only four had sales in excess of \$100,000. In the same year there were 16 companies (including most of the foregoing) who were engaged in the manufacture and/or assembly of complete filter water separator units. Five of the latter companies did not manufacture the coalescer or separator elements incorporated in the completed filter water separator units and one manufactured only the vessels. Of the 16 companies engaged in the manufacture and/or assembly of filter water separators, only six had sales in excess of \$100,000. The total sales of filter water separator units, and coalescer and separator elements, amounted to \$9,558,000 in 1966, of which \$5,061,000 represented the sale of coalescer and separator elements. The record does not contain complete data on the total sales of fuel monitors. How-

ever, the sales of the four principal companies amounted to \$761,000 in 1966 (CX 307-B).

120. In 1966, the four top-ranking companies engaged in the manufacture of filter water separators and the elements therefor accounted for 90.7% of the market. This represented a decline from 93.0% in 1962. The eight top-ranking companies accounted for 96.1% of the market in 1966 and 98.6% in 1962. Fram was the top ranking company, accounting for 38.2% of the market in 1966. This represented a substantial decline from its 1962 market share of 57.1%. Bendix was the fourth ranking company, with 3.7% of the market in 1966 and 4.6% in 1962.¹⁴ The other two leading companies, after Fram, were Bowser, Inc., and Filters, Inc., which accounted for 25.3% and 23.2%, respectively, of the market in 1966. Bowser's 1966 market share represented a small increase over its 1962 market share of 23%. That of Filters, Inc. reflected a very substantial increase over its 1962 market share of 7.8% (CX 307-B).

121. In terms of filter elements alone, the top four companies accounted for 95.0% of the market in 1966, which represented an increase from 92.9% in 1962. The top eight companies accounted for over 99% of the market in both 1966 and 1962. Fram was the second ranking company in the manufacture of filter elements (coalescer and separator elements), accounting for 34.0% of the market in 1966. This represented a substantial decline from its 1962 position, when it was the leading company with 49.7% of the market. Bendix was the fourth ranking company in the manufacture and sale of filter elements, accounting for 6.6% of the market in 1966 and 3.9% in 1962. The top ranking company in the sale of filter elements in 1966 was Filters, Inc., which accounted for 38% of the market. This represented a very substantial increase over its 1962 market share of 14.3%. The third ranking company in 1966 was Bowser, with 16% of the market (CX 307-B).

122. The principal customers for filter water separators and replacement elements are the United States Government, oil companies, airports and airline refueling companies (the latter having contracts at airports for the refueling of aircraft). The U.S. Government is the largest single customer, in terms of the volume of purchases. Government purchases are made primarily by the military agencies for use in filtering contaminants from jet fuel used in air and ground vehicles at military airfields (Tr. 1234, 1236, 1253, 1255, 1259, 1271-72, 1281-82, 3049-52). Sales to the government are made pursuant

¹⁴ The above concentration and market rank figures would not be significantly different if sales of fuel monitors were included. However, Bendix's market share in 1966 would be increased to 9.7%.

to published invitations to bid or requests for proposals. Sales in the non-governmental commercial market are made through regular sales personnel, who call on prospective customers (Tr. 1281, 1289-90, 1293-95, 3052-53, 3058-59).

123. Filter water separators and elements sold to the United States Government must conform to government specifications for design and performance. There are no standardized specifications used in the non-governmental commercial market. However, a number of important commercial customers, such as the Port of New York Authority, which operates the airfields in the New York metropolitan area, utilize government military specifications. Despite some differences in material, construction, configuration and design, filter water separators used by the government and commercial customers have generally the same basic performance and flow rate characteristics (Tr. 1253-54, 1270-73, 1284-85, 1314-15, 1564-65, 3100-01, 3124-25). Despite differences in size, the separator elements of one manufacturer will generally fit into another manufacturer's vessels, although a conversion kit may sometimes be required (Tr. 1241-42, 1296-97). There is a wider range in prices in filters sold in the commercial market from those sold to the U.S. Government. Prices of filter water separator units sold to the Government range from \$2,000 to \$3,500, while those sold to commercial companies may range in price from \$1,000 to \$7,000. Replacement coalescer elements sold to the government cost under \$3.50, whereas those sold to commercial customers from \$6.00 to \$30.00 (Tr. 1260-62, 1338, 3065).

124. Respondents contend that the government and commercial markets are two separate and distinct markets, despite the technological similarities in the products sold to each type of customer (RPF at 172). Complaint counsel contend that the both areas are part of one market (CR at 27). Although sales to both government and commercial customers (CX 307-B), it is estimated that approximately 60% of total industry sales of filter water separators are made to commercial customers and approximately 40% to the U.S. Government (Tr. 1290). The examiner will reserve for later disposition in his conclusions the question of whether government and commercial customers are part of the same product market.

125. Complaint counsel contend that the filter water separator industry is characterized by high barriers to entry because of the high cost of testing equipment and high expenditures required for engineering and design (CPF Nos. 385 and 389). Respondents disagree with this assessment of the industry (RPF at 186; RR at 95). The record does not sustain complaint counsel's position in this respect. While the products of the industry are not wholly unsophisticated,

the technological, testing and capital requirements are not such as to constitute a major barrier to entry.

126. The vessels themselves, which account for approximately one-half of the total filter water separator business, are standard pressure vessels which any of numerous tank fabricators can make. In the government market, vessel design has been standardized and this segment of the market is now open to tank fabricators who formerly sold the vessels to other manufacturers of filter water separators for assembly with the coalescer and separator elements. General Steel Tank Company, which manufactures only the pressure vessels, began selling in the government market in 1963 and has become one of the leading companies in the market. It received four out of six government awards of contracts involving the sale of vessels in 1966-67, compared to none received by Fram (Tr. 1232-33, 1243-45, 1258-59, 1264, 1279-80, 1291, 1302, 4047-48, 3067, 3114; CX 307-B; RX 57-A; CX 293-Z59, Z71, Z75, Z87, Z101).

127. While there is a certain amount of engineering skill required to design the coalescer and separator elements, this can be performed by engineers without any unusual training in the field. For example, the current chief engineer of Fram's Industrial Division, who is responsible for all engineering involved in the design and production of filter water separators, had no experience in the field prior to assuming his present position. The labor used in the manufacture of coalescer and separator elements consists of unskilled female labor (Tr. 1230-32, 1264, 3070-72, 3098). The cost of laboratory testing equipment and of the tests themselves is relatively low. A recent entry into the business in 1968 began with testing equipment costing \$12,000. The cost of the testing equipment of Bowser and Fram, two of the leading companies in the industry, is only \$75,000. The cost of testing coalescer elements for sale to the government is only about \$4,000 (Tr. 1425, 1251, 3074, 3092, 3096-97, 3102, 3122-23).

128. The increase in the number of companies in this essentially small industry hardly suggests that the barriers to entry are excessively high. When the filter water separator was first developed in the early 1950's, the principal companies in the business were Warner Lewis, Bowser and Purolator. When Warner Lewis was acquired by Fram in 1954 its assets were only about \$100,000 (Tr. 3043, 3046). Since then, Filters, Inc., and General Steel Tank have entered the business and risen to leading positions. Filters, Inc., entered the business in 1958 with a total capital of \$5,000 and is now the leading company in the sale of replacement elements to the government and is second in sales to commercial customers. Its sales currently exceed \$4 million and its profits and sales have risen since it entered the

business. General Steel Tank, which entered the business in 1966, has increased its sales substantially since that time (Tr. 1258-59, 1288, 1290, 1302, 3047-48; CX 307-B; RX 58). Banner Engineering Company entered the business in May 1968, with a working capital of only \$30,000. At the time of the hearings, it was in the process of qualifying to sell coalescer elements to the Government (Tr. 3091, 3093-95).

4. Competitive Implications

129. Counsel supporting the complaint contend that competition will be adversely affected by (a) increasing the technical capability of the combined companies in the filter water separator industry, thereby further increasing barriers to entry, and (b) eliminating competition between Fram and Bendix and thus increasing concentration in the industry (CPF at 173-177). As previously found, the record fails to establish that there are significant barriers to entry as a result of the technological requirements of the industry. The evidence likewise fails to establish that the combination of Fram's and Bendix's technological facilities and capabilities will confer any competitive advantage on them or further increase barriers to entry.

130. Complaint counsel suggest that as a result of the acquisition Bendix dropped its plans to build a facility for the fabrication of separator vessels, and will be able to put the funds required therefor to use in increasing its research and technological facilities (CPF No. 386). The fact is that Bendix did proceed with its plans to construct a tank fabricating facility, despite its acquisition of Fram (Tr. 1544-45; CX 235-C). Even if the acquisition had resulted in eliminating this project, the saving in cost (\$80,000) would hardly have enabled Bendix to make any major improvements in its research and technological facilities. Complaint counsel also suggest that the availability of Bendix's "great technical skill and research facilities" will be of advantage to Fram (CPF at 174). However, the record fails to establish that Fram, as the leading company in the industry, lacked for skills or facilities which Bendix could supply to it.¹⁵

¹⁵ Complaint counsel cite the Go-No-Go-Gauge as an instrumentality which will become available to Fram, to the latter's competitive advantage. However, the record fails to establish that the lack of such a product operated to Fram's competitive disadvantage. The single incident in 1964, which complaint counsel cite (CPF No. 386), is hardly persuasive in this regard. The record fails to establish that filter water separators are normally sold in combination with fuel monitors. Furthermore, the record establishes that Fram had developed its own fuel monitor and was in the process of tooling up for the fabrication thereof (CX 50-G). In addition, the evidence discloses that fuel monitors are used primarily with regular aviation gasoline, rather than for the jet fuels for which filter water separators are primarily designed (Tr. 1529).

131. With respect to complaint counsel's argument that competition between Fram and Bendix will be eliminated and concentration increased, the fact is that actual competition between them was minimal. All of Bendix's sales of filter water separators and elements were made to the government. It made no sales to commercial customers, to whom Fram made 75% of its sales (Tr. 1258, 1292-93, 1341-42, 1526, 3049, 3065, 3067-68). Fram and Bendix rarely bid against one another on sales to the government (CX 293).¹⁶ Insofar as the alleged increase in concentration is concerned, the addition of Bendix's 3.7% of the filter water separator market to Fram's 38.2% would not change Fram's overall market standing and would fall far short of even restoring it to its 1962 market share of 57.1%, which it was unable to maintain in the face of competition from smaller companies. In the coalescer element submarket, the addition of Bendix's 6.6% to Fram's 34.0% would result in restoring Fram to its former number one position, but would fall far short of returning it to its 1962 market share of 49.7%. Furthermore, these bare figures are of limited significance when viewed in the context of the negligible amount of competition between the two companies which was eliminated.

CONCLUSIONS

I. Engagement In Commerce

1. The record discloses, and respondents admit, that at all times mentioned in the complaint each of them sold and shipped its products in interstate commerce, throughout the United States (Answers, Bendix and FC Corp., par. 9, 18) ; PHO No. 1, par. 9, 18). It is, accordingly, concluded and found that at all times relevant in this proceeding each of the respondents was a corporation engaged in commerce, as "commerce" is defined in the Clayton Act and the Federal Trade Commission Act.

II. The Relevant Markets

A. *Automotive Filters*

1. The Product Market

2. As heretofore noted (Par. 30, p. 750, *supra*), the parties are in disagreement as to what is the relevant line of commerce. Complaint

¹⁶ Out of 40 government contracts in 1966 and 1967 for filter water separators and replacement elements as to which there is evidence in the record, Bendix and Fram bid against one another for the same contract on only three occasions. In none of these did Bendix receive the award, and Fram received it on only one instance (CX 293-Z4, Z30, Z46, Z51).

counsel contend that all automotive filters constitute the relevant product market and line of commerce (CPF at 111). Respondents contend that the relevant product line should be limited to filters designed for use on passenger cars and light trucks, and that it should include such filters only to the extent that they are sold for replacement purposes, *i.e.*, in the aftermarket. Respondents would exclude from the relevant line of commerce heavy-duty filters which are designed for use on heavy trucks, buses, tractors, farm equipment, off-highway equipment and similar uses, and would also exclude all types of filters which are sold for use as original equipment (OEM) rather than for replacement purposes (RPF at 34-36, 41).

3. It seems evident that the conflicting positions of the parties, as to what constitutes the appropriate line of commerce in automotive filters, are based on the differences in the vantage points from which they approach the issue. Since respondent Bendix's participation in the automotive filter business at the time of the acquisition was limited almost entirely to heavy-duty filters sold in the OEM market, and the bulk of Fram's filter business consisted of passenger car filters sold in the aftermarket, respondents have a natural interest in seeking to separate the two product and distributional areas, in order to minimize the extent of competition between the acquired and acquiring companies. Conversely, counsel supporting the complaint have an interest in combining the two areas in order to maximize the existence of competition between the two companies. Complaint counsel suggest that respondents are trying to "gerrymander" the automotive filter market, in order to hide the pre-acquisition competition which existed between them (CR at 5).

4. As heretofore found, the only two automotive-type filters manufactured by respondent Bendix at the time of its acquisition of Fram consisted of a heavy-duty oil filter and the Zenith heavy-duty fuel filter, both of which were sold almost entirely in the OEM market (Par. 31-32, pp. 750-1, *supra*). It is complaint counsel's position that such filters are part of the automotive filter product line because they are similar to filters designed for use on passenger cars and light trucks, are manufactured in the same plants, and are considered to be part of the product line manufactured by automotive filter manufacturers (CPF at 23-24). Respondents emphasize the differences in the methods and machinery used in manufacturing the two groups of filters, the fact that a number of firms in the industry specialize in manufacturing one or the other, but not both types, and the differences in price which exist between the two types (RR at 19-22).

5. The record discloses that the heavy-duty oil and fuel filters manufactured by Bendix are somewhat different from oil and fuel filters designed for use on passenger cars and light trucks. As heretofore found, the heavy-duty oil filters consist of a large, heavy, permanent housing, with a replaceable cartridge, as compared to the ordinary passenger car oil filter now in use, which is a spin-on, throwaway type, manufactured of a light metal shell and pleated paper filter element (Par. 34, p. 751, *supra*). While they are sometimes manufactured in the same plant, they are made on different machinery. Similar differences exist between the Zenith fuel filter and fuel filters used on passenger cars. The former requires the use of die-casting and glass-blowing equipment, whereas the latter does not. In the case of both types of heavy-duty filters, they are substantially more expensive than passenger car filters. In terms of the existence of specialization in the industry, the record discloses that most firms manufacture both heavy-duty and passenger car filters. However, there are several firms which make only heavy-duty filters and there are several which make only passenger car filters. For the reasons hereinafter noted, it is not critical to determine whether heavy-duty filters are or are not part of the same product line as passenger car filters.

6. As noted by complaint counsel (CPF at 111), "[s]ince the purpose of delineating a line of commerce is to provide an adequate basis for measuring the effects [on competition] of a given acquisition, its contours must, as nearly as possible, conform to competitive reality" (*United States v. Continental Can Co.*, 378 U.S. 441, 457). This may sometimes result in "combining in a single market a number of different products or services where that combination reflects commercial realities" (*United States v. Grinnell Corp.*, 384 U.S. 563, 572), or it may result in dividing the products of an industry into submarkets that are "economically significant" (*Brown Shoe Co. v. United States*, 370 U.S. 294, 325). What is being sought to be ascertained in each instance is "the area of effective competition" that will be affected by the merger (*United States v. Continental Can Co.*, *supra*).

7. The quest for the "area of effective competition" involves, typically, a so-called "horizontal" acquisition, where the acquired and acquiring companies are in competition in a given product line, or a "vertical" acquisition, where the competitors of the acquiring company are foreclosed from access to the acquired company's trade or custom in a particular product line (*Brown Shoe Co. v. United States*, *supra*). While complaint counsel refer here to the existence

Initial Decision

77 F.T.C.

of competition between Bendix and Fram in some aspects of the overall automotive filter market, the gravamen of their case, insofar as the automotive filter market is concerned, is not the elimination of existing horizontal competition between the two companies or the vertical foreclosure of access to Fram's business. Complaint counsel concede that at the time of the acquisition Bendix was "but a small, peripheral member" of the automotive filter industry (CPF at 89). The thrust of their case of adverse competitive impact is based not on the elimination of such insignificant competition as may have existed between the two companies, but on (a) the alleged competitive advantages which Bendix can confer on Fram through its overall position as a manufacturer and marketer of automotive parts, and (b) the elimination of Bendix as a *potential* competitor of Fram's in the passenger car filter aftermarket, in which Bendix had not been a substantial participant.

8. Since Bendix and Fram were not in substantial competition in the manufacture and sale of automotive filters generally, and the gravamen of complaint counsel's case is not the elimination of such competition, it appears to the examiner to be an academic exercise to determine whether the product market should include heavy-duty filters, as well as passenger car filters, and whether filters sold in the OEM market should be considered as part of the same market as those sold in the replacement market. The determination which the examiner makes herein, as to whether competition will be adversely affected by the acquisition, will be the same irrespective of whether heavy-duty filters are included or excluded, and irrespective of whether sales in the OEM market are included or excluded. It may be noted, however, that since the only existing competition between the two companies involved heavy-duty filters sold in the OEM market, and this is the only actual competition which would be eliminated, such filters could, under existing legal authorities, be considered at least a submarket, if not a separate overall market, because of differences in product, price, and production and distributional methods between such filters and those sold in the passenger car aftermarket (*Brown Shoe Co. v. United States*, 370 U.S. at 325; *United States v. Aluminum Co. of America*, 377 U.S. 271, 275). Insofar as the case involves the alleged elimination of potential competition, this relates primarily to passenger car filters sold in the aftermarket. Such product line and distributional area may also, under applicable authorities, be considered to be at least an appropriate submarket.

2. The Geographic Market

9. Complaint counsel contend that the geographic market for all automotive filters is the United States as a whole. However, they also contend that automotive filters which are sold for replacement purposes, in retail gasoline service stations, constitute a separate line of commerce within the overall automotive filter market, and that the various metropolitan areas throughout the United States in which the service stations are located constitute separate geographic submarkets, for purposes of this proceeding (CPF Nos. 88 and 100). While agreeing that the replacement market as a whole (consisting essentially of passenger car filters) is a proper market, respondents oppose complaint counsel's position that the service station segment thereof is a proper line of commerce, or that the metropolitan areas in which the service stations are located constitute proper geographic submarkets (RR at 24-27).

10. In the opinion of the examiner, neither the service station segment of the aftermarket, nor the metropolitan areas in which the stations are located, are relevant lines of commerce or sections of the country for purposes of determining the competitive impact of the present acquisition. The acquisition at issue involves two national companies, whose products were shipped from their respective manufacturing plants to warehouse distributors, jobbers, and other customers located throughout the United States. There is no evidence of any local pattern of distribution, insofar as the vendors of these products are concerned, although their customers may have redistributed the products on a regional or local basis. The facts here are wholly dissimilar to those in *Brown Shoe*, cited by complaint counsel, where "both Brown and Kinney sold shoes at retail through stores they either owned or controlled," and it was, therefore, considered appropriate to measure the competitive impact of the acquisition in terms of local metropolitan areas at the "retail level," since the two companies were in horizontal competition to this extent. However, the geographic area used for measuring the competitive impact of their "manufacturing facilities" and activities was "the Nation as a whole" (370 U.S. at 337). In the instant case there is no evidence that Bendix or Fram owned or controlled distributors or service stations at the local level. The competitive impact of the acquisition, if there is one, would be nationwide in scope since that is the nature of the business and distributional patterns of both companies, and of the manufacturers who might be affected by the acquisition. While the examiner received evidence as to the availability of Fram's products in gasoline service stations in various metropolitan areas, the examiner has considered such evidence only as

reflecting Fram's overall market position in the national replacement market, and not specifically as evidence of its market position in any local, geographic area.

B. *Aerospace Filters*

1. Product Market

11. Complaint counsel contend that all five types of filters used for aerospace purposes (hydraulic, lube oil, fuel, pneumatic and cryogenic) constitute a single appropriate product market, and that hydraulic aerospace filters constitute an appropriate submarket (CPF Nos. 276 and 291). Respondents contend that each of the five different types of aerospace filters constitutes a separate line of commerce and, furthermore, that each such line of commerce should include similar types of filters which are not used for aerospace purposes, but which are similar in design, construction and filtration use to those used in aerospace (RPF No. 194).

12. While there may be what is loosely called an aerospace filter industry, it is by no means clear that the products of the industry are all part of a single product market, as contended by counsel supporting the complaint. As heretofore found (Par. 87-90, pp. 772-73, *supra*), there are substantial differences in the various types of filters, in terms of the liquid or gas which they filter, in their design and operation, in the materials from which they are made, in the type of labor and machinery used in their manufacture, and in the prices at which they are sold. There are also substantial differences in the extent to which the various members of the industry participate in producing various types of filters. There are, for example, companies which specialize in producing fuel and lube filters, and produce no hydraulic filters, or only limited quantities thereof. Conversely, there are companies which produce primarily hydraulic filters and limited, or no, fuel and lube filters.

13. Complaint counsel are presumably interested in establishing a product market that includes all the products of the industry because on that basis Fram's share of the market (3.6%) attains some degree of respectability. Respondents presumably are interested in establishing that there are separate product markets because, for the only type of filter as to which there are severable market-share data, *viz.*, hydraulic filters, Fram's share of the market is negligible (0.9%). Since complaint counsel's case, insofar as aerospace filters are concerned, is based mainly on the elimination of competition and the increase in concentration resulting from the merger, then it is

important, as noted in the cases cited above, to determine what is the "area of effective competition" which will allegedly be affected by the merger. That area will obviously be the area where the two companies competed.

14. Only in the case of fuel filters and hydraulic filters does the record disclose that either company was a significant factor. In the case of fuel filters, which accounted for the major share of Fram's aerospace filter sales, the record discloses limited competition with Bendix, which produced certain specialty fuel filters. Since the record contains no separate, reliable statistical data for aerospace fuel filters, it is of academic interest whether such filters do or do not constitute a separate product market. Only in the case of hydraulic filters are there separate statistical data in the record. The record discloses that Bendix's participation in the aerospace filter market was limited largely to hydraulic filters, and that Fram produced limited quantities of this product. This, then, is the only product, within the overall aerospace filter industry, which can be called in any sense an area of effective competition between the two companies.

15. It is not, in the opinion of the examiner, appropriate to compare Fram's position in the aerospace filter industry as a whole, based on sales which are largely limited to fuel filters, with Bendix's position in the industry, which is based largely on its sales of hydraulic filters. Whatever may be the case with other types of aerospace filters, there is no realistic basis for combining hydraulic and fuel filters into a single market. The differences between them, in terms of their method of operation, function, design, materials, construction, and price are too great to justify any such homogenizing of products. Accordingly, it is the conclusion and finding of the examiner that the only product which is established by the evidence to be an appropriate product market, within the aerospace filter industry, is the hydraulic filter product market.

16. While, as previously noted, complaint counsel contend that hydraulic filters are a separate submarket within the aerospace filter product market, they disagree with respondents as to the extent of the hydraulic filters which should be included in the market. Complaint counsel would limit the product market to hydraulic filters which are intended for use on aircraft (including spacecraft) missiles and ground support installations (CPF No. 288). Respondents contend that the hydraulic filter product market should also include hydraulic filters used on naval vessels, military vehicles such as per-

sonnel carriers and tanks, and on industrial machine tools (RPF No. 212). The statistical marketshare data in the record is limited to hydraulic filters of the type which complaint counsel contend should be included in the product market, except that it includes sales of non-aerospace filters by aerospace filter manufacturers to the extent they are similar in design characteristics to those used for aerospace purposes (CX 308-C).

17. The record discloses that hydraulic filters used on submarines and other naval vessels are similar in design and construction to hydraulic filters used for aerospace purposes, and are considered part of the aerospace filter industry. While some aerospace filter manufacturers also produce hydraulic filters for machine tools and ground vehicles, they differ in design and construction from aerospace hydraulic filters, and are considered to be products of the industrial filter field rather than the aerospace hydraulic filter field (Tr. 854-56, 797-99). It is the conclusion and finding of the examiner that the hydraulic filter market, for purposes of this proceeding, should include hydraulic filters used on naval vessels, to the extent their design characteristics are similar to those of aerospace hydraulic filters, but should not include those used on machine tools and ground vehicles.¹⁷

2. The Geographic Market

18. The record discloses that the manufacturers of aerospace filters, including aerospace hydraulic filters, are located throughout the United States and sell their products throughout the United States. Complaint counsel contend that the United States, as a whole, is the appropriate geographic market in which to judge the competitive impact of the acquisition of Fram by Bendix, insofar as aerospace filters and aerospace hydraulic filters are concerned (CPF No. 307). Respondents do not contest this position. It is concluded and found that the United States, as a whole, is the appropriate section of the country for purposes of determining the competitive impact of the instant acquisition, insofar as aerospace filters, or any portion thereof, are concerned.

¹⁷ Respondents contend that the market-share data in the record understate the market universe to the extent they do not include all hydraulic filter sales (RPF No. 214). However, since the data in the record does include sales of nonaerospace hydraulic filters by aerospace filter manufacturers, to the extent they are similar to those used for aerospace purposes, and there is nothing to indicate that there is any substantial volume of such filters produced by other manufacturers, the examiner is satisfied that the record data provides a reasonably satisfactory basis for market examination and a determination of market shares.

C. Filter Water Separators

1. The Product Market

19. Complaint counsel contend that the filter water separator product market includes not only filter water separator assemblies, but also fuel monitors. They further contend that filter water separator elements constitute an appropriate product submarket (CPF at 156). Respondents contend that fuel monitors are not an appropriate part of the filter water separator market, and that the separator elements do not constitute an appropriate separate submarket (RR at 90-93). While respondents would limit the product market to filter water separator units and assemblies (not including fuel monitors), they contend that the product market is divisible into separate government and commercial lines of commerce (RPF No. 276).

20. Complaint counsel's effort to include fuel monitors in the filter water separator market appears to be influenced by the fact that it would result in a substantial augmentation of Bendix's market share—from 3.7% (without fuel monitors) to 9.7% (with fuel monitors). However, the record does not justify the inclusion of fuel monitors in the filter water separator product market. As heretofore found (Par. 116, p. 783, *supra*), fuel monitors are an entirely different product from, and do not perform the same function as, filter water separators. Their design and construction are entirely different from filter water separators. Most of the companies which manufacture filter water separators do not manufacture fuel monitors, and some of the companies producing fuel monitors do not manufacture filter water separators. Fuel monitors do not filter out water from fuel, but merely detect the presence of various impurities (including water) in the fuel. While they are sometimes used at small airports which cannot afford the purchase of the requisite number of filter water separators, this is not a typical use, and the monitors are not used as a substitute for filter water separators. The fact that they may sometimes be used as an adjunct to a filtration system does not justify their inclusion in the same product market. There are other products which are also sometimes used in connection with such a system, such as centrifugal separators which perform preliminary screening. Complaint counsel have strenuously opposed what they incorrectly understood was respondents' position, that centrifugals are part of the filter water separator product market. There is no more reason, and perhaps less reason, for including fuel monitors than there is for including centrifugal separators (which at least perform some separating function).

21. Respondents' position that there are two different filter water

separator markets, a government and a commercial market, is based on alleged differences in the products sold to each, and in differences in selling methods, prices, and servicing in each area. The record fails to establish that such differences as do exist are of sufficient magnitude to justify considering the two sales areas to constitute separate markets. As heretofore found (Par. 123, p. 786, *supra*), the products sold in each area are essentially the same, although there may be some differences resulting from the requirements of government specifications, as compared to those of commercial customers. Moreover, even these differences are being narrowed as some important non-government customers have begun to adopt government specifications. Some of the commercial customers have also gone to the bid method of purchasing which is used in sales to the government. The range in prices is not of such an order of magnitude as to justify considering the two classes of customers to be in two separate product markets. While there are some companies that sell to the government, but not to commercial customers, this is not a sufficient justification for considering the two types of customers to be in separate markets, although it may have some bearing on the competitive impact of the present acquisition. It is, accordingly, the conclusion and finding of the examiner that filter water separators, consisting of the pressure vessels and their coalescer and separator elements, constitute the relevant product market and line of commerce, for purposes of this proceeding.

22. As previously noted, complaint counsel contend that filter water separator elements constitute a product submarket, within the filter water separator product market. Respondents contend that they are not an appropriate submarket since "all the various filter water separator components 'work as a unit'; no one or two parts are more important" (RR at 93). In the opinion of the examiner, it is appropriate to consider the filter separator elements, particularly the coalescer elements, a separate submarket. As previously found (par. 115, p. 783, *supra*), the coalescer elements, which perform the basic filtration function, are replaced about once a year. Elements may be purchased separately from complete filter water separator units. The manufacture of elements and vessels are separate and distinct operations. There are some manufacturers who manufacture only the separator elements, and who assemble filter water separator units from purchased vessels. There are other manufacturers who sell only the vessels, in which the ultimate customers may place separately purchased separator elements. While the separator elements are, as respondents note, an integral part of a filter water separator

unit, it is appropriate to consider the coalescer elements a separate submarket in view of the fact that they are manufactured and sold separately from the complete units. It is, accordingly, the conclusion and finding of the examiner that coalescer elements constitute a product submarket within the filter water separator product market.

2. The Geographic Market

23. The record discloses that manufacturers of filter water separators and separator elements are located throughout the United States and sell their products throughout the United States. Complaint counsel contend that the United States, as a whole, is the appropriate geographic market in which to judge the competitive impact of the acquisition of Fram by Bendix, insofar as the filter water separator and separator element product lines are concerned (CPF No. 370). Respondents do not contest this position. It is concluded and found that the United States, as a whole, is the appropriate section of the country for purposes of determining the competitive impact of the instant acquisition, insofar as filter water separators and separator elements are concerned.

III. Competitive Impact

A. *Automotive Filters*

24. As previously noted, complaint counsel's case, insofar as the automotive filter product line is concerned, is not based on the elimination of any substantial, actual competition between Bendix and Fram. While Fram was a major producer of automotive filters, consisting mainly of passenger car filters which it sold in the aftermarket, Bendix produced only minor quantities of specialized heavy-duty filters, which it sold mainly in the original equipment (OEM) market. Complaint counsel concede that Bendix was only a "peripheral member" of the automotive filter industry. Complaint counsel's contention that competition may be adversely affected as a result of the acquisition is based, essentially, on (a) the alleged competitive advantages that Bendix, as an important automotive parts producer, will be able to confer on Fram, and (b) the alleged elimination of Bendix as a potential competitor of Fram in the passenger car filter aftermarket. The examiner has heretofore examined these contentions in their factual context and has found them not to be supported by the record. However, consideration will be given at this point to the legal rationale underlying complaint counsel's case.

25. There is no question that, as complaint counsel argue, "the

probable effects of the acquisition cannot be neatly classified as horizontal, vertical or conglomerate" (CPF at 118). As stated in the *Procter & Gamble* case which complaint counsel cite: "All mergers are within the reach of Section 7, and all must be tested by the same standard, whether they are classified as horizontal, vertical, conglomerate or other." *Federal Trade Commission v. Procter & Gamble Co.*, 386 U.S. 568, 577 (1967). In each case, the essential issue is whether there is a "reasonable probability" that the merger will substantially lessen competition or tend to create a monopoly. *Brown Shoe Co. v. United States*, 370 U.S. at 323, n. 39. Of course, in horizontal and vertical combinations, the problem of determining the probable competitive effect is relatively easy, since the removal of a competitor or the foreclosure of access to a customer have a fairly obvious anticompetitive connotation, and the principal issue in such cases is the substantiality of the effect. However, where the combination is of a conglomerate nature (either a "pure" conglomerate or one of the "product-extension" type) the problem of ascertaining the adverse competitive effect is somewhat more difficult. It is clear, however, that the mere fact a large corporation enters a market by acquisition "does not, by that fact alone, render the merger violative of Section 7," even where the company it acquires is the leading factor in its market. *Ekco Products Co. v. Federal Trade Commission*, 7 Cir., 347 F. 2d 745, 751 (1965). As the Commission itself stated in *Beatrice Foods Co.*, Docket 6653 (April 26, 1965) [67 F.T.C. 473, 697], in referring to a "market-extension" type of acquisition:

We do not suggest that every acquisition of a dominant local competitor by a large outside firm may have substantial anticompetitive effects: that will depend on such factors as the position of the outside firm in the markets where it is active, the degree to which the power of the outside firm may be brought to bear in behalf of the local competitor, and competitive methods and conditions in the local market.

26. In each case where a violation has been found to exist in a conglomerate-type situation, it has been because the acquiring company brought something to the market other than its mere size and financial power. The situations where such acquisitions have been held to be illegal have involved combinations in which, (a) the acquiring company's product line was intimately related to that of the acquired company, and the former would be able to bring to bear its advertising, promotional and distributional resources to the competitive advantage of the acquired company (*Federal Trade Commission v. Procter & Gamble Co.*, *supra*; *General Foods Corp. v. Federal Trade Commission*, 386 F. 2d 936; *cert. denied*, 391 U.S. 919), or (b)

the acquiring company was a potential competitor of the acquired company, either through product or market extension (*Federal Trade Commission v. Procter & Gamble Co.*, *supra*; *United States v. El Paso Natural Gas Co.*, 376 U.S. 651; *Ekco Products Co. v. Federal Trade Commission*, *supra*; *Beatrice Foods Co.*, *supra*), or (c) the economic power of the acquiring company could be brought to bear to induce its suppliers to purchase their requirements of a given product line from the acquired company (*Federal Trade Commission v. Consolidated Foods Corp.*, 380 U.S. 592). None of the decided cases has involved a "pure" conglomerate combination, but rather a "mixed" conglomerate situation, with horizontal or vertical overtones (*General Foods Corp. v. Federal Trade Commission*, *supra* at 944). Thus, the first two of the above situations were quasi-horizontal, to the extent the merger would permit a combination of distributional efforts, or result in the elimination of a potential competitor. The third type was quasi-vertical, in that the operation of the principle of business reciprocity would enable the acquiring company to foreclose access to its custom, to those suppliers who did not favor the acquired company with their purchases.

27. The instant complaint is patterned after the *Procter & Gamble* (P&G) case. However, despite some superficial similarities, the facts here are substantially different from those in *P&G*. In that case there was a much closer relationship between the products and selling methods of the two companies than there is here. The product of the acquired company (Clorox), liquid bleach, was used "complementarily" to P&G's detergent-soap product line, and both were found by the Commission to be "low-cost, high-turnover consumer goods marketed chiefly through grocery stores and pre-sold by the manufacturer through massive advertising and sales promotions." There was thus found to be a distinct possibility of "significant integration at both the marketing and distribution levels." In the instant case, while both companies manufacture what might be loosely called automotive parts, there is no such close relationship between the parts they produce, as there was in P&G, and no such possibility for integration at the marketing and distribution levels. The automotive parts which Bendix produces are so-called "hard parts," of relatively high technological content, and they are generally installed by repair garages, while Fram's automotive filters are a "TBA" item which are generally installed in gasoline service stations. The evidence fails to disclose that Bendix played a role in its industry, comparable to that played by P&G in its industry, which was such as to enable it to obtain "preferred shelf space" for Clo-

rox's products in the same distributional outlets as handled P&G's products. The record likewise fails to disclose the possibilities for joint advertising and promotion which existed in *P&G*. Bendix was a relatively small advertiser and its promotional program was, in the main, addressed to a different class of customer than Fram's. The evidence here, unlike *P&G*, fails to disclose that the "interjection" of Bendix is likely to cause any change in the competitive behavior of the company it acquired, to the disadvantage of smaller competitors. Fram, unlike Clorox, was not the dominant company in its industry. A number of its competitors were subsidiaries of strong national companies, such as General Motors, Textron and Tenneco. While it also had a number of smaller competitors, the record fails to establish that Bendix can offer Fram any economic advantage over them which Fram did not already have.

28. In discussing the "Criteria for Determining Probable Competitive Effects" complaint counsel note the congressional concern with stopping the trend toward concentration, and state that in recognition of this the Supreme Court "has struck down mergers in highly concentrated industries when concentration has been increased only slightly as a result of the merger" (CPF at 120). The matter of concentration is typically involved in a horizontal merger case, where an important factor in an industry eliminates a competitor with which it has had some significant degree of competition. Such is not the case here since, as complaint counsel concede, "the increase in concentration in the automotive filter industry is very small (a fraction of one percent), and the increase in concentration in the service station sector is inconsequential." Complaint counsel, nevertheless, argue that an increase in concentration will result since "the acquisition removes Bendix as a probable large and substantial independent future factor in the industry." Contrary to complaint counsel's argument, and as heretofore found (pp. 768-71, *supra*), the record fails to establish that Bendix would have become a broadly-based competitor, by internal expansion, in the automotive filter market, particularly in the production and sale of passenger car-type filters in the aftermarket. As far as existing competition is concerned, and considering the fact that the share of the market accounted for by most of the top-ranking companies has declined in recent years (except for that of General Motors which has increased), it can hardly be contended that there will be any significant increase in concentration in the automotive filter market by the augmentation of Fram's declining market share of 12.4%, with Bendix's 0.35% market share. It is, accordingly, concluded that complaint counsel have failed to

establish that there will be any substantial probable adverse competitive impact, as a result of the merger, in the automotive filter market as a whole or in any segment thereof.

B. *Aerospace Filters*

29. Complaint counsel's approach, insofar as aerospace filters are concerned, is that of the typical horizontal merger case. Complaint counsel argue that "in an industry with high concentration, such as the aerospace filter industry and the aerospace hydraulic filter industry, a violation occurs [even] when there is an acquisition involving low market shares on the part of both merging companies, as in the case of Fram's acquisition of Bendix" (CR at 26). As previously found (pp. 775-6, *supra*), the top four ranking companies in the aerospace filter industry accounted for 56.9% of industry sales in 1966, while in the hydraulic aerospace filter product market the top four companies accounted for 81.9%. Bendix was the seventh ranking company in the aerospace filter industry as a whole, with 6.1% of the market, while Fram was the eighth ranking company, with 3.6%. In the field of aerospace hydraulic filters, Bendix was the fourth ranking company with 7.8% of that market, and Fram ranked ninth with 0.9%.

30. As heretofore indicated (pp. 794-5, *supra*), respondents dispute complaint counsel's contention that all aerospace filters constitute a proper product market, for purposes of determining the competitive impact of the present acquisition. Although the examiner has previously concluded that it is not appropriate to combine all aerospace filters into a single product market, he is of the opinion that even on the basis of the broad product market contended for by them, complaint counsel have failed to make out a case of adverse competitive effect. In actual fact, competition between Fram and Bendix was extremely limited. The greater part of Bendix's sales were of closed-end, non-replaceable, metallic element, hydraulic filters. Two-thirds to three-fourths of Fram's sales were of open-end, replaceable, paper-element fuel filters. To the extent that there was any competition between them, it involved primarily the area of hydraulic filters, in which Fram's total sales in 1966 were only \$127,000.

31. Even overlooking the limited nature of the competition between the two companies in the overall aerospace filter industry, an adverse competitive impact cannot be inferred merely from the mathematical factors stressed by complaint counsel. While concentration among the top four companies in 1966 was relatively high,

viz., 56.9%, it should be noted that such concentration had declined substantially from what it had been four years earlier, *viz.*, 70.7%. Contributing significantly to the remaining high degree of concentration was the fact that one company, Pall Corporation, a relatively small company, accounted for 29.1% of industry sales. Except for Purolator, with 11.6%, all other companies had market shares of under 10%. While, on a mathematical basis, the combined market shares of Bendix and Fram (6.1% and 3.6%) would make them the third ranking company, the examiner cannot infer any adverse competitive impact merely from this fact. As shown by the record, size and financial standing do not necessarily confer any competitive impact on companies in the industry. The customers of the industry (the United States Government, and the large aircraft and engine manufacturers) do not appear to occupy a position of economic inferiority vis-a-vis their suppliers. While the combination would broaden the Bendix-Fram product line in aerospace filters, the record fails to establish that this offers any particular competitive advantage, since purchases are made largely on a bid basis for particular types of aerospace filters, and not on the basis of any combined package of purchases.

32. While concentration in the aerospace hydraulic filters product market is even higher than in the aerospace filter industry as a whole, *viz.*, 81.9%, even here it has declined from the 90% which obtained four years previously. It may also be noted that almost half of the share of the top four companies is accounted for by one company, Pall Corporation, with 40.4% of the market. While Bendix ranked among the top four companies in the aerospace hydraulic filter field, with 7.8% of the market, Fram's market share of 0.9% is almost insignificant.¹⁸ The augmentation of Bendix's market share by that of Fram is hardly of such an order of magnitude as to support any inference that it will probably produce a substantial adverse competitive impact in the industry. Although there are certain technical requirements for participation in the aerospace hydraulic filter market, these were possessed largely by Bendix, rather than Fram. Furthermore, the record fails to establish that technical qualifications are a function of size or financial standing in the aerospace filter industry. It is, accordingly, concluded that complaint counsel

¹⁸ The examiner is not unmindful of respondents' position that the market shares of both companies are overstated because of the failure of the universe figures to contain sales of hydraulic filters for non-aerospace purposes. However, the examiner is not persuaded that such omission would produce a significant reduction in the market share percentage of the two companies.

have failed to establish a probable substantial adverse competitive impact, in either the aerospace filter industry as a whole, or in the hydraulic filter product market, as a result of the Bendix-Fram merger.

C. Filter Water Separators

33. As in the case of aerospace filters, complaint counsel's attack on the acquisition in the filter water separator product line is primarily that of a typical horizontal merger case, *viz*, the elimination of competition in a highly concentrated industry. Thus, complaint counsel note that the top four companies accounted for 90% of the filter water separator market and 95% of the filter water separator element submarket, and that Fram was the top ranking company in separators and the second ranking company in elements, while Bendix ranked fourth in both of these product markets (CPF at 182).¹⁹

34. While the statistical situation referred to by complaint counsel is more impressive than in the product lines previously considered, it does not necessarily follow that a case of probable competitive injury has been established. The degree of concentration, in terms of the top four or eight companies in the filter water separator industry, is admittedly high. However, this is not too unusual considering the relatively small size of the industry and the small number of companies engaged in it. Total industry sales of vessels and elements were only \$9.5 million in 1966. There were only about six companies in the industry which had sales in excess of \$100,000. The fact that Fram was the top-ranking company in combined sales of vessels and elements and the second ranking company in the sale of elements alone, with 38.2% and 34.0%, respectively, of these markets is, again statistically impressive. However, while Bendix was the fourth ranking company in both markets, it was a rather poor fourth, with 3.7% of the overall filter water separator market and 6.6% of the separator element submarket. Furthermore, competition between the two companies was extremely limited, since Bendix's sales were made entirely in the government sector of the market, whereas 75% of Fram's sales were made in the commercial sector.

35. Considering that Fram's predecessor was the developer of the filter water separator, it is not surprising that it is among the top-ranking companies in the business. However, more significant, from the point of view of predicting the probable impact of the merger, is

¹⁹ Complaint counsel suggest that the market includes fuel monitors and cites Bendix's market share including its sales of fuel monitors. However, as the examiner has heretofore found, fuel monitors are not a proper part of the filter water separator product market.

the fact that Fram's share of the overall filter separator market declined from 57.1% in 1962 to 38.2% in 1966, and that its share of the element submarket declined from 49.7% in 1962 to 34% in 1966. Bowser, Inc., and Filters, Inc., which are relatively small companies, have both been able to improve their market position, vis-a-vis Fram. Filters, Inc., has increased its market share in the overall filter water separator market from 7.8% in 1962 to 23.2% in 1966. In the coalescer element submarket, it has improved its position from 14.3% in 1962 to 38% in 1966, and has supplanted Fram as the top ranking company in this area. Bowser, Inc., the second ranking company in the overall filter water separator market, has become the leading company in the sale of separator vessels.

36. The addition of Bendix's market share to that of Fram would hardly suggest, under the circumstances of this industry, that any significant competitive advantage will ensue. Bendix's total sales of filter water separators and elements amounted to only \$350,000 in 1966. Its 1966 share of the overall filter water separator market was only 3.7%, which represented a decline from its 1962 share of 4.6%. While its share of the filter element submarket, 6.6%, represented an improvement over its 1962 share of 4%, this was due largely to its ability to obtain U.S. Government bid business. Since Bendix made no sales outside of the government, whereas Fram made three-fourths of its sales in the commercial sector of the market, the amount of competition between the two companies which may possibly be eliminated will be minimal. There is no indication in the record that the addition of Bendix's relatively small filter water separator volume to that of Fram will result in the combined operation's obtaining any significant advantage not already possessed by Fram, which was a pioneer and leader in the business. It is, accordingly, concluded that complaint counsel have failed to establish that Bendix's acquisition of Fram will result in any probable substantial adverse competitive impact in the filter water separator product market as a whole, or in the filter water separator element submarket.

IV. The Certified Question

37. By its order of March 24, 1969, the Commission remanded to the examiner the application of respondent Bendix for a modification of its agreement of June 16, 1967, made with the Commission, so as to permit said respondent to employ the president of respondent Fram as an executive officer. Under the examiner's proposed disposition of this proceeding, there would be no impediment to Ben-

dix's employment of the individual in question. However, in view of the lack of finality of the examiner's decision, he does not consider it appropriate for him to make any specific recommendation as to modification of the agreement made with the Commission, which will now have the entire record before it for review.

FINAL CONCLUSIONS OF LAW

1. Respondents The Bendix Corporation and Fram Corporation were, at all times material herein, corporations engaged in commerce, as "commerce" is defined in the Clayton Act, as amended, and the Federal Trade Commission Act.

2. Counsel supporting the complaint have failed to sustain the burden of establishing, by substantial, reliable and probative evidence, that the acquisition of the business and assets of respondent Fram by respondent Bendix was in violation of Section 7 of the Clayton Act, as amended, or of Section 5 of the Federal Trade Commission Act.

ORDER

It is ordered, That the complaint in the above-entitled proceeding be, and the same hereby is, dismissed.

OPINION OF THE COMMISSION

JUNE 18, 1970

By ELMAN, *Commissioner*:

I. INTRODUCTION

On June 29, 1967, one day before consummation of a merger between Fram Corporation (Fram) and the Bendix Corporation (Bendix), the Commission issued its complaint herein charging that the merger violated Section 7 of the Clayton Act (15 U.S.C. § 18) and Section 5 of the Federal Trade Commission Act (15 U.S.C. § 45). Although the merger was thereafter consummated, Fram has been operated as a separate subsidiary of Bendix by agreement between the parties.

The complaint alleged that the effect of the Bendix-Fram merger "may be substantially to lessen competition, or to tend to create a monopoly" in three lines of commerce involving filters: automotive filters, aerospace filters, and filter water separators. After extensive hearings, the hearing examiner, on September 12, 1969, dismissed

the complaint. The case is before us on the appeal of complaint counsel.

Complaint counsel have alleged numerous errors, both in the hearing examiner's findings of fact and in his conclusion that the merger was legal in all three lines of commerce. However, since a finding of legality or illegality as to the major line of filters involved, automotive filters,¹ is dispositive of the complaint and order in this case, we shall concern ourselves only with that line of commerce.²

II. FACTS AND BACKGROUND

No dispute exists as to certain basic facts. These facts, as found by the hearing examiner in findings numbered 1 to 57, are amply justified by the evidence in the record. Except where these findings represent disputed conclusions of law,³ we expressly adopt them and they form the sole basis of the following summary.⁴

A. *The Industry*

Three types of automotive filters—oil, air, and fuel—are used on virtually all kinds of engines, from light truck and passenger car engines to heavy truck and off-highway equipment engines. (26) There are two general markets for these filters: sales to the original equipment manufacturers for installation in the new engine (the OEM market) and sales to firms for replacing worn-out filters (the replacement or aftermarket).⁵ (30-36) Sales in the aftermarket are made through a complex maze of distributors: warehouse distributors, who in turn sell to jobbers, who in turn sell to service stations and repair shops; original equipment manufacturers, who in turn sell to their franchised auto dealers and to independent warehouse distributors; oil and tire companies who sell to their franchised service stations as well as through independent warehouses; and mass merchandisers who sell through their retail discount houses. (40)

¹ In 1966, total automotive filter sales were \$297,000,000; aerospace filter sales were \$31,467,000; and filter water separator sales were \$9,558,000. Automotive filter sales represented 55% of Fram's total sales.

² We thus neither affirm nor reverse the hearing examiner's Findings of Fact 86-131 and Conclusions of Law 11-23, 29-36.

³ Findings of Fact, 36, 45, 50, and 55.

⁴ In the text, the examiner's findings will be cited by parenthesized numbers.

The following abbreviations will be used for citations: Transcript of proceedings, "Tr.," Complaint Counsel's Exhibits, "CX," Respondents' Exhibits, "RX."

⁵ The line between these two markets is blurred by the fact that the original equipment manufacturers purchase filters not only for inclusion in the original equipment but also for replacement sales. And, as the examiner found, "There is no significant difference in the manner of selling to original equipment manufacturers for installation as original equipment and selling to them for replacement purposes." (40)

Total sales of automotive filters in 1966 were approximately \$297 million. Of this total, \$189.3 million were sales in the aftermarket of filters for passenger cars and light trucks.⁶ (37)

The automotive filter industry is both a growing one, expanding at an annual rate of 13% since 1963, (37) and a highly profitable one. The pre-tax net profit on sales of most of the companies was in excess of 10%, and has been increasing in recent years. This favorable profit trend includes a number of the smaller companies in the industry, as well as the leading firms. (38)

There are over 30 manufacturers of automotive filters, including the giant auto makers, General Motors and Ford.⁷ Nevertheless, the market is a relatively concentrated one. In 1966, in the broad overall market, the top three companies accounted for 62.9% of industry sales, and the top six companies accounted for 79.6%. The first ranking company in sales was General Motors Corporation, whose AC Division (GMC-AC) accounted for 32.4% of 1966 sales; the second ranking firm was Purolator Products, Inc. (Purolator), with 18.3% and Fram ranked third with 12.4%. Bendix, with sales of slightly over \$1 million, accounted for approximately 0.35% of automotive filter sales in 1966. (41) In the narrower market—passenger car replacement filters—concentration was even higher. The same three firms accounted for 71.3% of total sales as follows: GMC-AC 32.4%; Purolator 21.7%; and Fram 17.2%. (42) However, between 1962 and 1966, the three-firm concentration had declined somewhat: in the total automotive filter market from 69.8% to 62.9%; in the passenger car filter aftermarket from 74.5% to 71.3%. (43)

The manufacture of most automotive filters involves relatively simple, unsophisticated, and well-known technology, and there are no important existing patents. (56) Furthermore, the list prices as well as the discount prices of the leading filter makers do not vary significantly, and the prices of the majors are generally higher than the prices of some smaller companies. (51) Rather, the most important ingredient of success has been a good marketing and merchandising organization. (56) The larger filter makers, as well as some of the smaller, employ over 100 so-called "missionary men" who call on the jobbers and retail service stations to promote filters. (52) The leading filter manufacturers also use such promotional devices as "trading stamp" programs—involving free gifts and filters. (53) Fi-

⁶ The parties are in dispute whether the proper line of commerce is the entire automotive filter market or only the aftermarket sales of passenger car and light truck filters. See pp. 813-14, *infra*.

⁷ Ford began making its own oil filters for aftermarket sales in 1968.

nally, most filter makers expend a sum for advertising which represents approximately 4 or 5 percent of their annual dollar sales. Yet, this advertising is aimed at the trade rather than at ultimate consumers.

B. *The Respondents*

1. *Fram* is a leading United States producer of various kinds of filters, including automotive filters, aerospace filters, and filter water separators. In 1966 *Fram* achieved consolidated net sales of approximately \$66.7 million and consolidated net earnings of \$4.35 million. Its total consolidated assets as of December 31, 1966, were approximately \$39.1 million. Its sales, earnings, and assets in 1966 were the highest in its history, and it was a financially sound, profitable, and growing company. (12) *Fram's* net profit on sales before taxes increased from 10.6% in 1963 to 13.0% in 1966. (38)

Approximately 55% of *Fram's* 1966 sales were in automotive filters. (14) In that field, *Fram* was not only the third-ranking producer, with 12.4% of the market, but a pioneer in technology and promotion. *Fram* developed the dry-type air filter, which has now replaced the "oil-bath" type air filters; and in 1956 *Fram* developed a "throwaway" or "spin-on" oil filter for passenger cars. (13, 41) The net profit on sales of *Fram's* Automotive Division in 1966 was 17.1%, increasing from 14.7% in 1965. (38) Although *Fram* sold filters in all the distributional channels in the industry,⁸ about 90% of *Fram's* filter sales were in the passenger car filter aftermarket, where *Fram* ranked third in sales with 17.2% of the market.⁹ (14, 42)

2. *Bendix* is a diversified manufacturer of components and assemblies for aerospace, automotive, automation, scientific, oceanic, and other uses. In the fiscal year ending September 20, 1966, its consolidated net sales were \$1.05 billion and its consolidated net income was \$38.7 million. In 1966, *Bendix* was the 69th largest industrial corporation in the United States; by 1967, it had become the 61st largest. (2)

Over half of *Bendix's* sales are concentrated in sophisticated equipment for aircraft, missiles, and spacecraft—including aerospace

⁸ To original equipment and manufacturers for installment; to original equipment manufacturers for replacement; to mass merchandisers under both proprietary and private brands; to oil and tire companies both as proprietary and private brands; and to independent warehouse distributors for resale through jobbers to service stations. (14, 34, 50)

⁹ In 1962, *Fram* had 14.8% of the total automotive filter market and 20.6% of the passenger car filter aftermarket. (43)

filters and filter water separators. Bendix is also heavily dependent upon government and defense contracts. (3)

Bendix has always been significantly involved in the automotive parts industry. Bendix was originally founded to sell starter drives for automobiles; it was an early leader in the manufacture of automotive brakes and brake parts; and it continues to be a technological leader in the automotive products field. (3, 5) In 1966, the sales of Bendix automotive products totaled \$229 million and represented about 22% of Bendix's 1966 sales. In contrast, in 1961 total automotive sales were approximately \$102 million. (6)

Bendix sells, through eight separate divisions,¹⁰ a wide variety of automotive parts: fuel pumps, starter drives, ignition components, brakes, brake drums, power steerings, universal joints, carburetors, radios, speed controls, temperature controls, and filters. (5) While the predominant portion of these automotive sales is made to automobile manufacturers and other original equipment makers, Bendix makes substantial sales to the automotive aftermarket, both as proprietary and private brands. Domestic aftermarket sales in 1966 amounted to \$40.6 million; and domestic aftermarket sales under Bendix's label were approximately \$20 million. (7) Indeed, in 1961, Bendix formed an Automotive Services Division to facilitate the distribution of all Bendix automotive parts in the aftermarket. (18) This Automotive Service Division had contracts with 160 warehouse distributors and 1,249 direct jobbers. Several other divisions also had contracts with numerous distributors. (9)

In the automotive filter industry, Bendix focused upon the production and sale of heavy duty oil and fuel filters for original equipment makers. The Bendix Filter Division was one of the company's smallest and in the early 1960's was losing money. Sales of these automotive filters in 1966 amounted to only approximately \$1.1 million.¹¹ Most of these sales were to original equipment makers; only a small amount were made in the lucrative aftermarket. (19, 31, 32) The only filter product manufactured by Bendix specifically for passenger car application was an air filter element made in the late 1950's for Ford and American Motors. After losing money on the venture, Bendix in 1960 began subcontracting these filters, until 1963 when its Ford contract was terminated. (33)

¹⁰ Motor Components, P&D Manufacturing Company (an ignition components firm acquired in 1965), Brake and Steering, Hydraulics, Fuel Devices, Filter Division, Automotive Service, and Automotive Electronics.

¹¹ \$283,011 were sales of filters manufactured for Bendix by a competitor, Wix Corporation. (41)

III. THE LEGAL ISSUE: ELIMINATION OF POTENTIAL COMPETITION

Complaint counsel's principal contentions as to the automotive filter line of commerce are that the examiner erred in failing to find this merger unlawful because it (1) confers upon Fram certain advantages that will be injurious to competition in the automotive filter market; and (2) eliminates substantial potential competition between Bendix and Fram in that market.¹²

A review of the record convinces us that the hearing examiner properly concluded¹³ that Bendix did not confer upon Fram any advantages so significant as substantially to lessen competition in the automotive filter market.¹⁴

Thus, the principal remaining issue in this case is whether the merger may substantially lessen competition by eliminating Bendix as a potential entrant and competitor in the automotive filter market.

With the growing concentration of American markets, and the growing mobility of business investments, the crucial role of "potential competition" as a regulator of economic behavior has been recognized. Not only is actual new entry an essential source of new competition, the potential for which must be preserved, but the mere threat of new entry by firms waiting at the edge of a concentrated, relatively uncompetitive market may be an important support for competition in that market. Thus, Section 7 clearly applies not only to mergers that substantially raise the barriers to new entry, see, e.g., *F.T.C. v. Procter & Gamble Co.*, 386 U.S. 568 (1967), but to mergers which, by eliminating potential competitors and entrants, have the likely effect of substantially lessening competition in the relevant market.

¹² As the hearing examiner noted (Conclusions of Law 7 and 24), complaint counsel, while urging that Bendix and Fram were actual competitors, have not pressed a claim that the merger is illegal merely because of the elimination of that actual competition.

Whether Bendix was an actual competitor of Fram depends upon the definition of the line of commerce. The respondents argue that the market should be defined narrowly to include only passenger car and light truck filters sold in the aftermarket. If such a market definition is used, Bendix was not an actual competitor of Fram. If the market is defined broadly to include all automotive filters, as complaint counsel contend, Bendix was an actual competitor of Fram with a market share of 0.35%.

As will appear (see discussion of the line of commerce, and scope of the order, *infra*), we accept both market definitions, and find the merger illegal because of the elimination of the potential competition offered by Bendix as to the narrower submarket. If we are correct, the merger is no less illegal in the broader market where Bendix was also an actual competitor.

¹³ We accept Findings of Fact 59-78 relevant to this conclusion, except where inconsistent with any subsequent findings in this opinion.

¹⁴ Compare *Procter & Gamble Co.*, 63 F.T.C. 1465 (1963), *aff'd*, 386 U.S. 568 (1967); *Ekco Products Co.*, 65 F.T.C. 1163 (1964), *aff'd*, 347 F. 2d 745 (7th Cir. 1965).

The significance of potential competition as a factor to be considered in merger cases was delineated by the Supreme Court in 1964 in three cases: *United States v. El Paso Natural Gas Co.*, 376 U.S. 651; *United States v. Continental Can Co.*, 378 U.S. 441; and *United States v. Penn-Olin Chemical Co.*, 378 U.S. 158.¹⁵ More recently, in *F.T.C. v. Procter & Gamble Co.*, 386 U.S. 568 (1967), the Court found the Clorox-Procter merger to be illegal not only because of the advantages which would accrue to Clorox by the addition of Procter and the increase in barriers to entry, but also because "the acquisition of Clorox by Procter eliminated Procter as a potential competitor." 386 U.S. at 580.¹⁶

The importance of potential competition as a market regulator has also been established and emphasized in a long line of merger cases decided by the Federal Trade Commission.¹⁷ Indeed, by 1967, the Commission could state in *Diamond Alkali Co.*, F.T.C. Docket 8572, at 12 (cease and desist order, October 2, 1967) [72 F.T.C. 700 at 749], that "We have no reason to dwell at length on the beneficial competitive significance of potential competition. It has received the approval of the courts and represents, we think, sound economic theory...."

IV. ELIMINATION OF POTENTIAL COMPETITION: THE FACTS

A. *The Relevant Line of Commerce*

The hearing examiner properly concluded that the three types of automotive filters—oil, air, and fuel—may be combined, and that the relevant geographic market is the nation as a whole.¹⁸ The hearing examiner, however, failed to resolve the dispute between the parties as to a further delineation of the line of commerce.¹⁹ Complaint counsel contend that all automotive filters constitute the relevant

¹⁵ See the extensive analysis and discussion of these three cases in *Beatrice Foods Co.*,

¹⁶ The adverse effect of mergers eliminating potential entrants or competitors has also been recognized in numerous lower court opinions. See e.g., *United States v. Standard Oil*, 253 F. Supp. 196 (D.N.J. 1966); *Ekco Products Co. v. F.T.C.*, 347 F. 2d 745 (7th Cir. 1965); *United States v. Joseph Schlitz Brewing Co.*, 253 F. Supp. 129 (N.D. Cal. 1966), *aff'd* 385 U.S. 37 (1966); *United States v. Ford Motor Co.*, 286 F. Supp. 407 (E.D. Mich. 1968); *United States v. First National Bank of Maryland*, F. Supp. (D. Md. 1970); *United States v. Wilson Sporting Goods*, 288 F. Supp. 543 (N.D. Ill. 1968).

¹⁷ See, e.g., *Foremost Dairies, Inc.*, 60 F.T.C. 944 (1962); *Procter & Gamble Co.*, 63 F.T.C. 1465 (1963), *aff'd*, 386 U.S. 568 (1967); *Ekco Products Co.*, 65 F.T.C. 1163 (1964), *aff'd*, 347 F. 2d 745 (7th Cir. 1965); *Beatrice Foods Co.*, F.T.C. Docket 6653 (decided April 26, 1965) [67 F.T.C. 473]; *General Foods Corp.*, F.T.C. Docket 8600 (decided March 11, 1966) [69 F.T.C. 381], *aff'd*, 386 F. 2d 936 (3d Cir. 1967), *cert. denied*, 391 U.S. 919 (1968); *National Tea Co.*, F.T.C. Docket 7453 (decided March 4, 1966) [69 F.T.C. 226].

¹⁸ Finding of Fact 30; Conclusion of Law 10.

¹⁹ Finding of Fact 36; Conclusion of Law 8.

market. The respondents contend that the market should be limited to passenger car and light truck filters sold for replacement—thus excluding all heavy duty filters and all filters sold for original equipment. The hearing examiner made his findings on the basis of treating both product markets as relevant.

We agree that both markets are relevant here, and that the legality of this merger can be determined on the basis of its effects on competition in either market. The broader overall automotive filter market is clearly proper;²⁰ and, as the hearing examiner concluded, the passenger car filter aftermarket is “at least an appropriate submarket.”²¹ *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962) *United States v. Continental Can Co.*, 378 U.S. 441 (1964); *General Foods Corp.*, F.T.C. Docket 8600 (decided March 11, 1966) [69 F.T.C. 381], *aff’d*, 386 F. 2d 736 (3d Cir. 1967), *cert. denied*, 391 U.S. 919 (1968); *Seeburg Corp.*, F.T.C. Docket 8682 (decided July 15, 1968), *aff’d*, 425 F. 2d 124 (6th Cir. 1970) (No. 19673). We also agree with the hearing examiner’s conclusion that “[i]nsofar as the case involves the alleged elimination of potential competition, this relates primarily to passenger car filters sold in the aftermarket.”²² We shall only consider the potential competition offered by Bendix—already an actual competitor in the broader automotive filter market—as a likely entrant into the passenger car filter replacement submarket.

B. Bendix as a Likely Entrant and Competitor

The evidence in the record and the hearing examiner’s relevant findings overwhelmingly establish that Bendix was likely and able to enter the passenger car filter aftermarket, one way or another. The probability of its entry into this market was clear: the only question was the form that such entry would take.

Bendix was a major participant in the automotive parts business, with 1966 sales well over \$200 million. Bendix also made substantial sales in the automotive parts replacement market, with 1966 sales of \$40.6 million; and half of these sales were under Bendix’s proprietary label. Bendix was originally formed as an automotive parts company; it had remained a sales and technology leader in automotive parts; and it currently is a substantial automotive parts pro-

²⁰ The broader market is particularly appropriate in light of the customer overlap between the narrower and broader markets: the original equipment makers buy filters not only for installation in new engines, but for sale through franchised dealers as replacements. See note 5, *supra*.

²¹ Conclusion of Law 8.

²² *Ibid*.

ducer. While Bendix had at one time shifted the emphasis of its business away from automotive parts, it had more recently begun to emphasize the private, consumer sector of the economy. This resulted in the formation, in 1961, of an Automotive Service Division to expand Bendix's position in the lucrative replacement parts business; and in the acquisition, in 1965, of P & D Manufacturing Company—a substantial automotive parts maker.²³

Furthermore, Bendix was already a minor participant in the automotive filter industry. In 1966, Bendix's automotive filter sales allowed Bendix to control 0.35% of the market—a share equal to or larger than almost one-third of the firms in that market.²⁴ However, Bendix's automotive filter sales represented only a small portion of Bendix's automotive business or overall business, and the filter division was losing money in the early 1960's. Because of Bendix's financial resources and incentives to expand, this ailing filter division would have been an appropriate base from which Bendix could have entered the more lucrative passenger car filter submarket.

In sum, from the objective evidence only one conclusion is possible: the whole logic of Bendix's corporate development, its size, resources, and direct proximity to the passenger car filter aftermarket, and the unambiguous direction of its business growth, all pointed to expansion into the passenger car filter aftermarket.

The record also establishes that this was recognized by Bendix's management. As the hearing examiner found (18-20):

In late 1960 or early 1961 Bendix established a Marketing and Commercial Product Planning Department, for the purpose of advising management as to possible new markets which would enable Bendix to broaden its activities in the private commercial area, and to aid Bendix's existing divisions in improving their marketing procedures (Tr. 3624-25). Among the fields which Bendix viewed as offering promise for decreasing its dependence on government business was the automotive field, in which it had some experience and competence. It recognized that the market for the servicing and replacement of automotive parts held an "important potential for future sales and profits," and centralized the aftermarket selling activities of the automotive parts manufacturing divisions into a newly-established Automotive Service Division in 1961, in order "to obtain a much larger share of the market" (CX 232, p. 5; CX 3-N).

In the early 1960's, the Bendix Filter Division was one of its smallest divisions and was losing money. Only a small portion of its sales involved automotive-type filters and the bulk of these were sold in the OEM market, rather than in the more profitable and expanding aftermarket. In 1962 and 1963 a se-

²³ The reason for this acquisition was, in the words of Mr. Fontaine, chairman and chief executive officer of Bendix, that "it appeared to be desirable in broadening our aftermarket product capability." Tr. 2569.

²⁴ RX 44.

ries of meetings was held between personnel of the Planning Department and Bendix executives to determine what steps to take to eliminate the losses of this division. The alternatives presented were either to withdraw from the field entirely or to broaden the company's base in the industry. Since the filtration business was considered a large and profitable one, particularly in the replacement market, it was decided that the company should try to expand its operations in this field. Consideration was given to whether this should be done by acquisition or by internal expansion. Eventually it was decided that it would not be feasible to expand by internal development, and that efforts should be made to acquire another company in the field (Tr. 3628-42, 3486-87, 3489-92, 3496-97; CX 135, CX 157, CX 158, CX 160; RX 38).

At various times during the period from 1961 to 1966 Bendix gave consideration to acquiring an interest in one of several filter manufacturers. In 1961 it acquired a small stock interest in Wix Corporation, which was then manufacturing certain types of air filters for it. This stock interest never exceeded 6 or 7% of Wix's outstanding stock, and Bendix continued to hold a stock interest in Wix until February 1967 when it acquired Fram. Negotiations looking toward Bendix's acquisition of Wix were undertaken in 1963, but were broken off when the terms of the acquisition could not be agreed upon. Several further abortive efforts to acquire Wix were made in the succeeding few years. Consideration was given at various times to the acquisition of Walker Manufacturing Company, Donaldson Company, Inc., Hastings Manufacturing Company, and Purolator Products, Inc. No approach was ever actually made to Walker. Meetings were held with Purolator in March 1966 to consider the possibility of a merger or acquisition, but nothing came of the effort. Talks with Donaldson resulted in a counteroffer by Donaldson to buy Bendix's Filter Division. This was rejected. Brief discussions were had with Hastings Manufacturing Company, but resulted in no serious negotiations (Tr. 2575, 2015-27, 3487-89, 3643-47, 632, 2678, 2105; CX 316 A-B, CX 146, CX 165-172, CX 149, CX 152, CX 160 Z9-10, CX 352; RX 38).²⁵

In short, its management was convinced that Bendix should make a substantial entry into the passenger car filter aftermarket, in an attempt to salvage the current Bendix investment in filters, and to bring greater profits and stability to the corporation as a whole.

C. Form of Bendix Entry

Despite this overwhelming evidence as to the likelihood of Bendix's entry into the aftermarket, the hearing examiner concluded

²⁵ The hearing examiner also found (81):

The [internal] reports and memoranda which complaint counsel contend support their position were an outgrowth of the effort, previously referred to, to lessen Bendix's dependence on government business, resulting in the establishment of a planning department around 1961 (par. 18, p. 746, *supra*). Among the areas considered for possible expansion was that of automotive parts, since it was one in which Bendix had some competence (CX 238 A-Z37; Tr. 2434-36). Those engaged in the planning studies specifically considered the area of filters as a desirable business for Bendix to enter. At that time Bendix was losing money in its limited filter operation, and consideration was given to whether it should withdraw from the field entirely or enter it on a larger scale. Studies made by the planning department showed that "replacement-type filters of all types" were a "profitable and growing business", and it was concluded that the filter business was one "in which a company like Bendix can take a significant position" (CX 158-A).

that complaint counsel had failed to establish that Bendix was a potential entrant.

To the hearing examiner it was dispositive of this case that the evidence showed that Bendix would not enter the passenger car filter aftermarket by internal expansion but only through merger with another firm already in that market. The examiner assumed that, from the standpoint of Section 7, it made no difference whether Bendix merged with Fram, an established market leader, or with a smaller firm which, by combining with Bendix's vast resources and managerial skills, would become a new and substantial competitive force in the market confronting Fram and the other established leading firms.

The examiner's analysis of the potential competition problem—focusing exclusively on the probability of Bendix's entry by internal expansion and neglecting the likelihood of entry by merger other than with Fram—was unduly narrow and must be rejected, because it rests upon a misconception of the basic purpose and policy of Section 7. Various forms of merger entry other than through acquisition of a leading company—for example, a "toehold" acquisition of a small company capable of expansion into a substantial competitive force—may be as economically desirable and beneficial to competition as internal expansion into a relevant market, and must be considered in assessing the potential competition of the acquiring firm which has been eliminated as a result of the challenged merger.

Although previous cases (cited page 813, *supra*) have only involved potential entry in one form, *i.e.*, by internal expansion, it is clear that the *form* of entry was not controlling in these decisions. What was determinative in each of these cases was (1) the actual elimination of the additional decision-making, the added capacity, and the other market stimuli which would have resulted had entry taken a procompetitive form, such as internal expansion; and (2) the anticompetitive consequences of the removal of the disciplining effect of a potential competitor from the market's edge. We believe that these adverse effects on competition may result from the elimination of a potential entrant who might have entered by internal expansion or who might have entered by a toehold acquisition.

We think it clear that Congress was concerned in Section 7 with the preservation of new and potential competition in any form: that new entry, if beneficial and procompetitive, is to be encouraged regardless of its form, and that a merger with a leading firm, especially in a concentrated industry, which eliminates the likelihood of such desirable entry through a toehold acquisition is embraced within the prohibitions of the statute.

In enacting Section 7, Congress was pursuing both positive and negative objectives. By prohibiting mergers whose effect may be substantially to lessen competition in any line of commerce, the statute channels merger activity in the direction deemed by Congress to be beneficial as a matter of national economic policy. The enforcement of Section 7 was designed to encourage those mergers which are likely to maintain and expand competition. As the Supreme Court pointed out in *Brown Shoe Co. v. United States*, 370 U.S. 294, 316 (1962), in describing "some of the factors, relevant to a judgment as to the validity of a given merger, specifically discussed by Congress in redrafting § 7":

at the same time that it sought to create an effective tool for preventing all mergers having demonstrable anticompetitive effects, Congress recognized the stimulation to competition that might flow from particular mergers. When concern as to the Act's breadth was expressed, supporters of the amendments indicated that it would not impede, for example, a merger between two small companies to enable the combination to compete more effectively with larger corporations dominating the relevant market, nor a merger between a corporation which is financially healthy and a failing one which no longer can be a vital competitive factor in the market. 370 U.S. at 319.

Congress, as the Supreme Court noted, enacted a law favoring mergers, such as those permitting the survival of small or failing companies, that would promote competition in the long run.²⁶ There are, of course, other types of mergers which may promote competition rather than hinder it: for example, in a highly concentrated, sluggish market, the acquisition of a small industry member by a powerful, innovative firm which, by building upon the base of the smaller firm, can pose a more effective competitive challenge to the industry

²⁶ As Senator O'Connor stated in the floor debate, "Obviously, those mergers which enable small companies to compete more effectively with giant corporations generally do not reduce competition but rather intensify it." 96 Cong. Rec. 16436 (1950). And as Congressman Celler stated on the floor, "Furthermore, the evidence shows that it is only in large acquisitions by large corporations, which would have a tendency to create a monopoly, where resort is had to the device of purchasing assets in lieu of capital stock when a merger is planned." 95 Cong. Rec. 11487 (1949). See also 95 Cong. Rec. 11488 (1949); Statement of FTC General Counsel Kelley, Hearings Before Subcommittee No. 3 of the House Committee of the Judiciary, on H.R. 988, H.R. 1240, H.R. 2006, H.R. 2734, 81st Cong., 1st Sess. (1949), at 41.

Both House and Senate Committee reports also express concern that the new legislation should allow mergers of two small firms, because such mergers would promote, not lessen, competition. S. Rep. No. 1775, 81st Cong., 2d Sess., at 4-5 (1950); H.R. Rep. No. 1191, 81st Cong., 1st Sess., at 6-7 (1949).

This same recognition of the procompetitive aspects of certain mergers can also be seen in the concern over the failing company doctrine. See, e.g., S. Rep., *supra*, at 7; H.R. Rep., *supra*, at 6; 96 Cong. Rec. 16435, 16444 (1950).

giants. Such procompetitive mergers are not only not forbidden by Section 7,²⁷ they are positively encouraged.²⁸

Thus, all likely routes for potential entry into the relevant market must be considered in determining the legality of the merger route which was in fact chosen. A potential entrant may enter not only by internal expansion; he may enter the market by acquiring a failing company, or a small company in difficulty, or by making a toehold acquisition of a small member of the industry. These methods of entry, no less than internal expansion, and in some cases perhaps more than entry by internal expansion, may inject a new competitive element of vigor and strength into an otherwise stagnant market. Indeed, where entry into some markets by internal expansion is foreclosed and/or restricted,²⁹ entry by toehold acquisition may be the most feasible route for developing new competition. Furthermore, in an age of mergers and acquisitions, the threat of a toehold merger by a powerful firm may often serve as a much greater incentive to competitive performance in the affected market than does the prospect of more costly and slower internal, *de novo* expansion.

In short, it is offensive to the merger law to eliminate the potential competition offered by likely entrants at a market's edge that may come into it through a toehold or other procompetitive acquisition, especially where the market is a concentrated one in need of new competition. As stated in *Beatrice Foods, supra*, at 33 [67 F.T.C. at 720]:

[A] merger between a very small factory not one of the few dominant firms—in the market and a small concern from outside the market may increase, rather than lessen, competition by making the merged firm a more viable competitor. . . . [And] when a very small factor in the market is acquired by a substantial potential competitor . . . [t]he merger may increase competition in the market by injecting a substantial firm, one capable of challenging the dominant firms in the market, in place of a firm too small to be a significant competitive factor.

²⁷ See, e.g., *Diamond Crystal Salt Co.*, F.T.C. Docket 7323 (opinion modifying order to allow acquisition, Dec. 9, 1969) [76 F.T.C. 878].

²⁸ As stated in *Beatrice Foods, supra*, at 46 [67 F.T.C. at 730], with regard to the dairy industry, "Congressional policy as expressed in Section 7 will be best served in this industry if merger activity is channeled toward the smaller firms." See also Turner, *Conglomerate Mergers and Section 7 of the Clayton Act*, 78 Harv. L. Rev. 1313 (1965); McLaren, *Antitrust and the Securities Industry*, 11 Boston College L. & C. L. Rev. 187, 191 (1970).

²⁹ For example, in the banking industry, *de novo* entry by branch banking requires regulatory approval. See *United States v. First National Bank of Jackson*, 301 F. Supp. 1161, 1199 (S.D. Miss. 1969).

Thus, the hearing examiner's failure to give due recognition to the importance of toehold acquisition entry in assessing the potential competition eliminated by the present merger was not only poor economics but was contrary to the principles set down in prior cases of this Commission and the courts.

Since the full record is before us, we shall proceed to make findings upon the likelihood of such entry by Bendix, based upon that record and upon the relevant findings of the hearing examiner.

D. Bendix Entry by Toehold Acquisition and Expansion

The hearing examiner found "that complaint counsel have failed to sustain the burden of establishing that Bendix was a potential entrant into the automotive filter replacement market *by internal development*."³⁰ While we have serious doubts as to the evidentiary support for such a finding, we do not deem it necessary to overturn it. For the respondents concede,³¹ and the hearing examiner found,³² that Bendix was a well-recognized and quite capable potential entrant by some form of acquisition. As Mr. Ferguson, Bendix's chief executive officer at the time, stated:³³

Everybody agrees we should grow by acquisition and not attempt it by internal development.

But, more important, we believe that the evidence of record unequivocally shows that Bendix possessed the incentives and capacity, and was likely, to make a toehold acquisition of a small firm in the passenger car filter aftermarket, and to attempt competitively significant expansion of that firm, if acquisition of a market leader like Fram were foreclosed to it by law. The record leaves no doubt that, if Bendix had based its expansion decisions on a correct legal premise, namely, that Section 7 firmly closed the door to entry into the aftermarket by a leading firm acquisition but left the door wide open to a toehold acquisition, Bendix would long ago have entered the market by the latter route.

The evidence as to the likelihood of such an acquisition entry is substantial. As stated earlier, in the 1960's, Bendix management de-

³⁰ Finding of Fact 85 (emphasis supplied).

³¹ Respondents' Answering Brief at 29:

"In April 1963 the Planning Department presented to top Bendix management its findings and conclusions that the Bendix Filter Division was a poor base for growth in filters and that Bendix should attempt to expand its filter business by acquisition. (Ferguson Tr. 3630-43; Fontaine Tr. 3483, 3486-88; Kennedy Tr. 3694; Riley Tr. 3673-75; Bryan Tr. 3706; CX 139-A-H; CX 145-A-H; CX 160-Z9-Z10: RX 38).

³² Findings of Fact 19-20.

³³ RX 38.

cided to diversify into non-government, non-military business. One area seen as not only lucrative but compatible with Bendix's other business was the automotive filter market—particularly the profitable and growing aftermarket. (19–21)

As a result, between 1961 and 1966, Bendix considered the acquisition of numerous filter makers: Wix Manufacturing Company, which ranked fourth in 1966 passenger car aftermarket filter sales, holding 9.5% of the market—a little more than one-half the share of Fram;³⁴ Walker Manufacturing Co., which ranked fifth in passenger car filter aftermarket sales in 1966, with 3.9% of the market;³⁵ Hastings Manufacturing Co., which ranked seventh with 3.2% of the market;³⁶ Donaldson Co., a maker of heavy duty filters for original equipment installation; and Purolator, the second leading automotive filter maker. (21)³⁷

The most serious negotiations were with Wix Manufacturing. In the late 1950's, Bendix and Wix entered into subcontracting arrangements for the manufacture of Bendix air filters.³⁸ In 1961, Bendix acquired a minor stock interest in Wix—as stated by Mr. Fontaine, Bendix's chief executive officer, “for the purpose of continuing a relationship with Wix, with the hope that it would lead to acquisition, which was our original reason for the approach, the reason for the original approach to Wix. . . . We hope that this would provide a continuing relationship which would lead to the acquisition of all of Wix” (Tr. 2575–77).³⁹

The actual negotiations with Wix are aptly described by Mr. Ferguson, president of Bendix at that time:

I visited Wix during the course of the negotiations and surveyed the factory and spent considerable time there. I was very much impressed with the company . . . [S]ome of our people who had an interest in the general filter business mentioned the Wix Company to me, and suggested, well, perhaps a visit might be worthwhile to see if anything could come of it. Such a visit was arranged for and I went down to their plant, met their executive group and was shown through their factory, shown their product and so forth, and this started a series of meetings which were really negotiations tending toward a merger.

³⁴ Finding of Fact 20; RX 44–A.

³⁵ Finding of Fact 20; RX 44–A; CX 152.

³⁶ Finding of Fact 20; RX 44–A.

³⁷ Passing internal consideration was also given to Lee Filter Corporation, which, along with Walker, possessed 3.9% of the market and thus ranked fifth. CX 128–B; CX 153–A, –B, –C; RX 44–A.

³⁸ Tr. 2033.

³⁹ Bendix purchased 12,000 shares which represented approximately 6% of the outstanding shares of Wix. Finding of Fact 20; CX 316.

During one of the early meetings, as I recall it, Mr. Simms, who was the head of the company, suggested that one of the ways to start perhaps getting together would be for us to acquire some Wix shares, and he said that there were several available and he felt in the vicinity of the city, and that if we were to submit, ask a broker in the area to pick up some. Such proved to be the case. My recollection is we bought about 12,000 shares over a period of several months through this broker, and it was on the advice of Mr. Simms this might be a good way to start getting together, and it was, but we were not successful. (Tr. 3645-47.)

However, as Mr. Ferguson stated, these negotiations ended without a merger. While several other efforts were made to renew merger negotiations, these also failed.

Actual discussions were also held with Hastings Manufacturing Company (Tr. 3693), Donaldson, and Purolator. Various internal memoranda also indicated the desire of the Planning Department and executives for information concerning any other possible acquisition candidates.⁴⁰

Finally, the evidence indicates a willingness by Bendix to expand any small firm acquired. For example, one memorandum reports a Bendix executive as stating that "there is an excellent opportunity for Bendix to build up the Wix operation and, within a few years, make it comparable in volume, profit, and stature to either Fram or Purolator in the filter industry."⁴¹ Bendix clearly contemplated a major move into the submarket, since it already maintained a mar-

⁴⁰ As one memorandum stated (CX 149):

Filter Meeting, RCF, APF, WBR. Miscellaneous Unedited Running Notes. (NEW ASSIGNMENT SMALL FILTER ACQUISITIONS).

1. Duke: Recommended Wix, Fram, or Purolator.
2. MPF: THIS IS DIFFICULT.
4. APF: Why not buy a small filter business.
7. WBR assigns: WBR LOOK FOR SMALL FILTER CO. WBR also: look for industrial filter company.
9. APF:
 - a) Suggests we forget Wix.
 - b) Also Fram, Purolator.
 - c) Look for others.

Another memorandum, prepared in 1963 by John V. V. Bryan, then staff engineer, Marketing & Commercial Product Planning Department, detailed the oral presentation of the Planning Department's report on Bendix's future in the filter industry. In that memo, Mr. Malcolm P. Ferguson, then president of Bendix, is reported as stating the following (CX 139):

37. MPF: Any beyond the six candidates.

38. MPF wants a supplementary [sic] list of companies in industrial and consumer over \$1 Million in sales.

A subsequent distillation of this memorandum by Mr. Bryan, CX 145, confirms the accuracy and the importance of these statements by Mr. Ferguson.

⁴¹ CX 146-B. In another memorandum, the recommendation was made that since the filter market in all its aspects was so attractive, Bendix should "Build via all methods" including "Acquisitions—considered essential," "Internal development—with acquisitions," "Licensing, etc.," and "Joint marketing deals." CX 160-B (emphasis supplied). See also RX 41-A.

ginal presence in the broader market. Obviously, putting Section 7 to one side, the quickest and easiest method was to buy a leader. However, Bendix's management did contemplate the small acquisition-plus-expansion route. As one executive was noted as having stated: "If we buy Wix only we must have policy of building via internal development. Must pull all stops."⁴² And as Mr. Fontaine, Bendix's chief executive officer, stated in describing Bendix's motivation and reasoning in approaching Wix: "Well, as I thought I indicated earlier, they were of a size and of a financial structure that we thought we would have a better chance of success in approaching them. They were smaller. They had need for new capital. They needed expansion. They were not able to supply it themselves." (Tr. 3488-89.)

Not only does subjective evidence show the likelihood of acquisition entry accompanied by expansion, the objective evidence clearly confirms the economic capability of Bendix to accomplish this. Bendix possessed the resources and size necessary to engage in any prolonged battle against the major filter makers, which included the nation's industrial giants—Ford and General Motors. Bendix also had the experience and necessary technology for making filters. This could be advantageous in expanding a small filter maker that might not have the experience in producing a full line of filters.⁴³

Bendix also had the 80-man sales force of its Automotive Service Division for distributing and selling in the aftermarket,⁴⁴ the know-how for weaving a way through the automotive parts aftermarket distribution system, and an established name in both the automotive parts business and the automotive aftermarket.⁴⁵ The Bendix name could be useful in expanding a small manufacturer without the necessary brand identification. Bendix could also bring to a small firm its experience in selling to, and contacts with, original equipment makers, defense contractors, and the government, as well as its existing arrangements with warehouse distributors and jobbers in the aftermarket.⁴⁶ While perhaps all of these assets were relatively insignificant in terms of aiding or entrenching Fram,⁴⁷ they might be very significant in developing a smaller and less established filter maker acquired by Bendix.

⁴² CX 160-Z-9.

⁴³ Bendix had a plant already making filters that could be added to or converted to the production of whatever filters were needed by the acquired firm.

⁴⁴ Finding of Fact 60.

⁴⁵ In 1966, Bendix sold over \$20 million under the Bendix proprietary label. RX 80-G.

⁴⁶ Finding of Fact 60.

⁴⁷ The hearing examiner found that none of these assets could have significantly aided Fram. Findings of Fact 59-78.

If any barrier to entry by this acquisition route existed for Bendix, it was, as respondents contend,⁴⁸ due to the mass marketing and promotional techniques necessary to sell filters in the aftermarket. But this was precisely the barrier that Bendix could have surmounted by a toehold acquisition of a firm with substantial promotional facilities. For example, Hastings Company, a firm with only 3.2% of the 1966 passenger car filter aftermarket sales, and a company approached by Bendix, employed approximately 100 salesmen or "missionary men" to promote filters in the aftermarket.⁴⁹ This sales force was equal to the sales force of the AC Division of General Motors—the giant of the automotive filter market.

The picture that emerges from the record is clear: Bendix was doing everything it possibly could to enter the passenger car filter aftermarket through merger. This was a logical and inevitable way for the company to expand. No firm could be more accurately characterized as a potential entrant into that market, actively exploring every possible means of access to it. From the standpoint of Section 7, and the statutory policy of favoring mergers which may increase competition and prohibiting mergers which may lessen competition, it made a crucial difference whether Bendix merged with Fram or another leading firm, or with any one of the various smaller and less established firms with which it unsuccessfully negotiated. The outcome of these negotiations was unquestionably affected by Bendix's erroneous assumption that it was as free under Section 7 to merge with Fram as it was to acquire one of the smaller companies. In any event, under any definition of the term, Bendix was a likely potential entrant into the market which could have come into it through a toehold acquisition; and it was such potential entry, and the competition with Fram that would have resulted, which was eliminated when Bendix bought Fram.

V. THE EFFECT OF THE INSTANT MERGER UPON COMPETITION

On the basis of the findings of the Commission and the hearing examiner, and the applicable legal principles, we hold that the effect of the present merger may be substantially to lessen competition in the passenger car filter replacement market by eliminating the potential competition of Bendix in that market.

This is not a case in which the elimination of potential competition is a matter of theory or conjecture. What we have here, rather, is a merger between Fram, a leading producer in the relevant mar-

⁴⁸ Respondents' Answering Brief at 31.

⁴⁹ Finding of Fact 52.

ket, and Bendix, a firm that already competed in closely related filter and automotive markets, had canvassed the market for all likely acquisition candidates during a five-year period, was committed to entering the market in some fashion, and possessed all the qualities necessary to carry out a successful toehold acquisition followed by expansion.

And if Bendix had been allowed to make such an entry, it would have become an actual competitor of Fram, just as Fram would have become an actual competitor of Bendix. That potential rivalry between a leading firm and a significant, well financed, resourceful, and likely new entrant by toehold acquisition was frustrated and extinguished by Bendix's merger with Fram. In the most fundamental and basic sense, the merger eliminated direct—indeed, one could say horizontal—competition between Fram and Bendix. And this competition is no less substantial and significant for antitrust purposes because it was potential rather than actual.

No real dispute exists as to the imminence, likelihood, or ability of Bendix to have become a real and substantial competitor of Fram in the passenger car filter aftermarket. The only question was the form that new entry would take. Bendix had three choices: (1) to expand internally; (2) to make a toehold acquisition looking toward expansion on that base; and (3) to merge with a leading firm. If Bendix had taken either of the first two routes of entry, it would have become an actual competitor of Fram, and would have provided a beneficial new element in the market. Either of those two routes would have promoted competition; neither violated Section 7; indeed, either was the sort of entry into a new market which Congress intended to encourage. Instead, Bendix chose the third route—acquisition of Fram, a leading firm—and thus the likelihood of substantial competition between these two firms was forever eliminated. By the same token, the competitive input that Bendix could have brought to the entire market, had it entered by a toehold acquisition, was also lost.

The adverse effects on competition resulting from Bendix's merger with Fram are further evidenced by the following factors present in the record.⁵⁰

⁵⁰ Since the hearing examiner closed the potential competition issue after finding Bendix unable to expand internally, no specific findings upon the other considerations relevant to the potential competition issue—*e.g.*, entry barriers—were made in the legal discussion of the initial decision entitled "Competitive Implications of Acquisition."

However, in making his basic Findings of Fact 1-57, the examiner discussed and made partial or indirect findings—but no final conclusions—upon some of the relevant matters. Insofar as these indirect findings and discussions are relevant and supported by the evidence, we shall draw upon them in making our findings. But insofar as they are unsupported and contrary to our view of the record, we shall expressly reverse them.

First, this merger eliminated not merely the competition likely to result from the probable entry of Bendix into the market by another acquisition route, but also the threat of such entry that Bendix was capable of exercising merely by remaining at the market's edge, ready and able to enter at the appropriate moment.⁵¹ The threat of such entry was likely to have a beneficial effect upon the action of competitors in the market, particularly since Bendix's many abilities would give credibility to any threatened entry. This potential competition in the automotive filter market was eliminated by Bendix in acquiring Fram.

Second, evidence in the record and the partial findings of the hearing examiner indicate that competition is quite weak in the passenger car filter aftermarket.⁵² Thus, the elimination of any potential competition is likely to have a much greater effect upon overall competition.⁵³

Respondents' own evidence indicates that the passenger car filter aftermarket is highly concentrated. In 1966, three firms accounted for 71.3% of aftermarket sales; the top four firms for 80.8%; and the top six firms for 88.6%.⁵⁴

Moreover, as the hearing examiner found, "The automotive filter industry is a highly profitable one" and this "favorable profit trend in the industry has included a number of the smaller companies, as

⁵¹ For the distinction between these two forms of potential competition from outsiders, see Turner, *Conglomerate Mergers and Section 7 of the Clayton Act*, 78 Harv. L. Rev. 1313, 1362 (1965).

⁵² Findings of Fact 37-44, 49-50, 51-57. The hearing examiner failed to make any any ultimate or final findings on the state of competition; however, he did discuss this issue when making his basic findings.

⁵³ See *Beatrice Foods Co.*, FTC Docket 6653 (decided April 26, 1965) [67 F.T.C. 473]; *United States v. Penn-Olin Chemical Co.*, 378 U.S. 158, 174 (1964).

When a concentrated, relatively uncompetitive market is involved, any merger with an industry member should be closely scrutinized to ensure that it is productive of new competition, not further stabilization of an oligopolistic situation. See *United States v. Brown Shoe Co.*, 370 U.S. 294 (1962); *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963); *United States v. Aluminum Company of America*, 377 U.S. 271 (1962).

As we stated in *Procter & Gamble Co.*, 63 F.T.C. at 1575: "A merger that aggravates an already oligopolistic market structure, not by affecting the concentration ratio, as was the case in *Philadelphia National Bank*, but by affecting some other market structure variable, such as condition of entry, is highly suspect under Section 7."

⁵⁴ RX 44-A. Concentration had declined slightly since 1962, when three firms held 74.5%, four firms held 84.1% and six firms held 91.5%. This decline, however, occurred when industry sales were increasing significantly—from \$121,967,000 in 1962 to \$189,352,000 in 1966.

The leader, AC Division of General Motors Corporation, had been increasing its share of the market, as the shares of Purolator and Fram had declined. However, the sales of all three had shown steady growth. Furthermore, the statistics in the record submitted by respondents may exaggerate the dominance of General Motors. These figures appear to include in GMC-AC sales the filters sold by the GMC-AC Division to GMC. While it is difficult to ascertain how these sales should be treated, "gross market shares can be deceptive where they include a corporation's interdivisional dealings." *United States v. Ford Motor Co.*, 286 F. Supp. 407, 432 (E.D. Mich. 1968).

well as the industry's leaders."⁵⁵ Apparently not only are the industry leaders content to maintain relatively stable market shares and profits among themselves, they are content to leave the smaller companies with a "living" portion of the remainder.

The competitively lethargic state of the industry is reflected in the stabilized pricing patterns found by the hearing examiner.⁵⁶ Whatever competition there is seems to be in terms of promotion, selling and distribution.⁵⁷ Manufacturers build up sales by brand differentiation, advertising, by large numbers of salesmen and promotional men, and by such promotional gimmicks as bonus stamps, coupons, contests, and prizes.⁵⁸ All these various forms of nonprice competition seem to have contributed to a continued dominance by the leaders in the industry, and the comfortable profits prevalent among all sellers.

However, respondents contend, and the hearing examiner seems to have agreed,⁵⁹ that the entry into the market by Ford Motor Company in 1968⁶⁰ and an alleged increase in private brand sales⁶¹ would be likely to affect the high concentration and oligopolistic performance of the industry. We believe that the respondents and the examiner accord too much weight to these factors in evaluating the competitive environment of the market.

While entry by Ford may inject some badly needed competitive vigor, and while the pressure from private branders' purchasing and selling powers may prove somewhat beneficial to competition, neither is likely—at least in the near future—to transform radically a

⁵⁵ Finding of Fact 38.

⁵⁶ Finding of Fact 51: "In terms of the published price schedules, before the application of discounts, there is considerable uniformity in the distributor prices of the major filter manufacturers. The price schedules of the larger companies reflect prices which are within a fairly close range of one another, and which are substantially higher than those of the smaller manufacturers After the application of schedule discounts, the prices of the . . . major companies vary somewhat, but the differences are not substantial."

There also seems to be little competition in quality. Filter technology is simple and has remained unchanged for a number of years. Finding of Fact 56.

⁵⁷ Finding of Fact 56; Respondents' Witnesses, Tr. 3425, 3633, 3570; Respondents' Answering Brief at 31-35.

⁵⁸ Finding of Fact 52.

⁵⁹ Findings of Fact 45, 50.

⁶⁰ In 1968, Ford Motor Company began manufacturing oil filters for sale under Ford's "Autolite" label. Ford did not, at the time of the trial, make air and fuel filters. Ford expected to produce between six and seven million oil filters in 1968, and hoped to increase this number to 20 million in the future. Finding of Fact 45.

⁶¹ Whether there is such a trend is disputed by complaint counsel. While total sales to private branders had increased in recent years, Finding of Fact 46, the percentage this total represented of all filter sales had not increased to any great degree—from 19.3% in 1962 to 20.8% in 1966. RX 44-A; RX 44-G. The significant market continues to be the proprietary markets.

market characterized by high concentration, high profits, and weak competitive behavior.⁶²

In sum, the record fully supports a finding that competition in the market would be likely to benefit from new entrants, as well as from the presence of potential entrants at the market's edge; and that competition in this market would be likely to suffer from the elimination—by this merger—of a significant potential entrant and competitor such as Bendix.

Third, the record indicates that there are some significant entry barriers to the passenger car filter aftermarket, thus rendering the market even more susceptible to injury from the elimination of Bendix as a potential entrant.⁶³ These barriers result primarily from (a) the presence in the market of the nation's first and third largest industrial corporations—General Motors and Ford; and (b) the distributional and promotional techniques used in the aftermarket.⁶⁴

⁶² There are three reasons to doubt the substantiality of the effect of the Ford entry. First, the immediate impact of the Ford entry would probably be upon the smaller filter manufacturers, who had previously filled Ford's filter requirements. Mr. Latimer of Ford Motor Company, called by respondents, testified that before Ford began manufacturing its own, the majority of Ford's oil filters were purchased from Kralinator, Walker Deluxe, and Wix. Tr. 2970. Second, as stated in another merger case involving the Ford Motor Co., "Ford may well have been more useful as a potential than it would have been as a real producer . . ." *United States v. Ford Motor Co.*, 286 F. Supp. 407, 441 (E.D. Mich. 1968). The threat of Ford's entry, and the influence of Ford upon filter prices as a result of its buyer position, could have been a greater competitive influence on the larger firms than the actual entry of Ford in such a way as to shrink the market available to the smaller firms. Third, it seems that the entry of Ford raised significantly the entry barriers to the automotive filter industry. Entrants henceforth would have to look forward to competing not merely with the largest American industrial corporation, General Motors, but the third largest—Ford Motor Company.

As to the alleged trend toward private branding by major filter purchasers, assuming such a trend exists, it may not have any significant impact upon the competitive conditions or structure of the industry. General Motors had for the most part always avoided the private brand market. And Purolator, and to an extent, Fram, have shown an ability to maintain the same control over this submarket as they hold over the general market. Purolator has for years supplied filters to the most lucrative private brander, Standard Oil-Atlas, and in 1966 maintained 33.3% of all private label sales. Fram, though it originally showed a reluctance toward the private brand market, had more recently been able to capture a substantial portion of this market. As the hearing examiner stated, "[I]n 1968, [Fram] was supplying half of the private brand filters purchased by Shell and Texaco, and all of Conoco's private label filters". Finding of Fact 50.

Furthermore, the quantity requirements of many private branders may often serve as a significant competitive disadvantage for the smaller filter makers, and serve to further entrench the larger makers capable of filling such high-volume orders. Tr. 2194.

⁶³ See *Procter & Gamble Co.*, *supra*; *Beatrice Foods Co.*, *supra*; *Diamond Alkali Co.*, *supra*.

⁶⁴ The record also discloses that a certain amount of resources, technological expertise, and capital may be necessary for entering into production of automotive filters, but that such barriers to entry cannot be regarded as very high. Findings of Fact 56-57. And although many direct purchasers required a volume larger than some firms might be able to attain, see note 62, *supra*, economies of scale could probably be reached at a fairly low level of output. Findings of Fact 56-57.

The auto companies not only could deter smaller companies from entering by sheer size, see *Procter & Gamble Co.*, 63 F.T.C. 1465, 1571-74 (1963), *aff'd*, 386 U.S. 568 (1967), but also could discourage new competitors by their control over automotive design and warranty—and thus over the future of the filter market.⁶⁵

As for the sales practices in the market, brand differentiation advertising is heavy for an industry where most of the advertising is aimed at the trade, rather than at ultimate consumers.⁶⁶ Manufacturers also utilize various promotional schemes, such as quantity purchase bonus stamps, contests, and prizes.⁶⁷ Finally, the industry members employ not merely salesmen, but great numbers of promotional men—termed “missionary men.” The three leading filter makers each employed over one hundred such missionary men.⁶⁸

The purposes of these various promotional programs are twofold: first, to build demand, sales, and brand allegiance at the retail level; and second, to thereby build brand allegiance at the warehouse distributor level. The latter goal—obtaining the service and loyalty of the distributor—was particularly crucial. Many warehouse distributors found it more feasible to carry only one major, or full line of filters.⁶⁹ The prospect of breaking the brand allegiance of either the

⁶⁵ Respondents' Answering Brief of 19.

⁶⁶ The hearing examiner erroneously concluded (Finding of Fact 55) that the industry's average advertising expenditures totaling 4 to 5% of sales was not “inordinately high” and thus was not a barrier to entry.

This error was the result of comparing the percentage of an industry where advertising is aimed at the trade, with the figures of industries where advertising is aimed at the ultimate consumers.

A more telling comparison is that between filter industry advertising and the advertising of Bendix's Automotive Service Division. This division was expressly set up to distribute automotive parts in the aftermarket. Yet it spent only 1.5% of sales on advertising. Finding of Fact 55.

Furthermore, respondents' own exhibit, RX 55, listing the percentage of sales represented by advertising for various manufacturing concerns, illustrates the relatively high percentage of the filter manufacturers. Some trade oriented advertisers listed are the chemical companies, where advertising expenditure percentage ranged from 1.0% to 5.5%, and metals, where advertising percentages ranged from 0.8% to 1.5%.

Indeed, even when compared to industries where advertising is consumer oriented, the filter makers rank relatively high. For example, Ford Motor Co. maintains the highest percentage of advertising of all the car manufacturers with 2.0% of sales; the range of percentages for such large consumer advertisers as tobacco companies is 4.2% to 7.9%; the range of food manufacturers is from 0.6% to 11.6%; appliance, television, and radio manufacturers ranged from 1.0% to 2.9%; and tire makers spent from 1.8% to 2.0% of sales on advertising.

⁶⁷ Finding of Fact 53; CX 91; CX 93-A; CX 266-A through -T; CX 267-A, -F, -G, -H, -I; CX 268-A, -B, -C; CX 269; CX 270; CX 271.

⁶⁸ Finding of Fact 52.

⁶⁹ Tr. 2282, 2330, 2186; CX 344-A-5; CX 344-S; CX 344-N; CX 344-J.

By capturing the key distributors, the filter makers could effectively force the minor filter makers to sell to less lucrative direct purchaser accounts or to smaller warehouse distributors. And the cooperation between the warehouse distributors and the filter makers, after a period of dealing, was such that the warehouse distributors soon had a stake in the well-being of the manufacturer's sales. (Tr. 2282) A drop in the sales or demand of the manufacturer's filters would mean either a loss of customers for the distributor, or adding a full new line of filters—an expensive and cumbersome process.

retailers or the warehouse distributors, through the necessary volume advertising and large use of missionary men, would not be an inviting one for outsiders. As we stated in *Procter & Gamble Co.*, 63 F.T.C. at 1553:

[I]n an industry in which product differentiation is an important factor, not only may the new entrant find it especially difficult to pry customers loose from the established firms, but the higher price obtainable for a brand that has been successfully differentiated in the public mind from competing brands may impart a flexibility in pricing, akin to that imparted by cost advantages, which the newcomer may not be able to achieve for many years.

The record as to recent entries supports a conclusion that entry barriers are indeed significant for this industry. Despite a substantial growth in the sales and profits, the evidence indicates that from 1962 to the time of the hearings there were only three new entrants—and two of these entered before 1963.⁷⁰

In conclusion, the barriers for entry into this market were substantial enough that the elimination of a potential competitor and entrant was likely to have a significant competitive effect. The number of companies with the size, experience, automotive parts brand name, and other necessary capabilities for entry, was likely to be small, and thus any lessening of that number would be substantial. See *Procter & Gamble Co.*, *supra*.

Fourth, the record indicates that few, if any, firms were likely to be as imminent or as substantial potential entrants as Bendix. Thus, the disappearance of Bendix from the market's edge was particularly significant.

The evidence discloses only one firm with the apparent ability to overcome most of the entry barriers and expand internally—Chrysler Corporation.⁷¹ Chrysler at the time of this hearing was in the

⁷⁰ Filter Dynamics began selling filters in 1962, and has experienced substantial growth. Finding of Fact 57. In 1966 it held .9% of the passenger car aftermarket sales. RX 44-A. It had, however, at the time of the hearing decided to merge with Lee Filter Corp. in order "To become a larger company." Tr. 2195.

Approved Prod. Corp. (APCO) entered the market sometime before 1962, and has since 1962 retained a stable .8 or .9% of the market. RX 44-A.

Ford Motor Co. entered the market in 1968 by manufacturing some of its oil filters for the aftermarket.

The respondents erroneously cite Lee Filter as a recent entrant. Respondents' Answering Brief at 17. Lee, as complaint counsel point out (Reply Brief at 3), has been in business for some time. Moody's Industrial Manual for 1968 states that Lee has been in business at least since 1955.

⁷¹ Finding of Fact 45. However, it does not appear that Chrysler had any experience in making filters, or that Chrysler's aftermarket brand name was as well established as that of GM and Ford, or even Fram. Moreover, Chrysler, by virtue of its position as the smallest of the Big Three auto makers, had a much smaller "captive" replacement market; and it could even have found it difficult to sell replacement filters for competing makers' cars. Finally, the toehold acquisition entry route would possibly be foreclosed to Chrysler as a result of its antitrust implications. See, e.g., *United States v. Ford Motor Co.*, *supra*. Nevertheless, the presence of Chrysler at the market's edge surely had some beneficial effects.

midst of a preliminary "make or buy" study for oil filters. No final decision had been reached at the time of this appeal.

As to the potential entrants by a toehold merger, it is likely that few firms possessed the various capabilities of Bendix in this regard: Bendix's size and finances; Bendix's contacts in the original equipment, defense, and military business; the prestige and name of Bendix in automotive parts, including the aftermarket; the automotive aftermarket warehouse and jobber connections; and aftermarket sales force, and actual facilities for making filters.

This likelihood is confirmed for the most part by respondents' own evidence. The respondents submitted a list of *all* the firms *known* to have expressed an interest in acquiring a manufacturer of passenger car filters during the period 1962 to 1967.⁷² This list includes only 23 concerns, other than Chrysler, and none of these firms apparently ever consummated any kind of merger into the market. Furthermore, respondents' evidence indicates that few, if any, of these 23 firms were likely to or probably had the incentives and the ability to overcome all or even most of the significant entry barriers to this industry, particularly the entry barriers resulting from the presence of the giant auto makers, General Motors and Ford, in the market.⁷³

In conclusion, while we do not find nor believe that Bendix was the only potential entrant, internally or by acquisition, or that of all possible entries, that of Bendix would be the most significant, we do conclude that only one likely internal entrant—Chrysler Corporation—existed, and that Bendix was among the most likely of a limited number of possible entrants capable of making a significant entry by acquisition and expansion of a smaller firm. Consequently, the elimi-

⁷² RX 73-A. This list was submitted *in camera* and thus we will not discuss any of the firms by name.

⁷³ Only one of the firms apparently had experience in making any kind of filter— aerospace filters; and this firm was a relatively small one. None of the 23 appear to have had any experience in making automotive filters. Only 14 were connected with automotive parts manufacturing. And of these 14, only 7 had annual sales over \$100 million; only 4 had sales over \$500 million; and only one over \$1 billion. Of these 14, only 5 seem to have had any experience in making or selling large volume, high turnover automotive parts in the aftermarket—the experience which respondents contend is necessary for success in the passenger car filter aftermarket. Two of these firms, however, are relatively small, with annual sales under \$100 million. And two of the three larger firms—one, the largest on respondents' list—seem to have substantial interests in warehouse distributors and, thus, might be precluded by the antitrust laws from any acquisition of a filter maker. (Tr. 3241, RX 73-D.)

Finally, three of the 23 listed firms had discussions only with Purolator—the second largest filter maker; and 22 of the 23 had discussions with only one filter maker; the 23rd had discussions with two filter makers.

nation of that potential entrant and competitor is even more significant for its effect upon competition.⁷⁴

VI. CONCLUSION

The evidence clearly indicates that the passenger car filter aftermarket is in need of new competition. It is an industry characterized by chronically high concentration, high profits, little real competition, substantial entry barriers, few recent entrants, and relatively few firms at the market's edge ready or able to overcome the entry barriers. The evidence also indicates that Bendix was—by virtue of its size, growth pattern, reputation and experience in automotive parts and filters, and its proximity to the market—a significant potential competitor for the passenger car filter aftermarket. In addition, it was a likely entrant by toehold acquisition: Bendix was virtually committed to some kind of entry into the market; it had considered a small firm merger; and it was quite able and likely to expand a small firm so acquired into a substantial competitor able to hold its own with the industry leaders.

Instead, Bendix chose to enter the passenger car filter aftermarket by merging with a leading firm. While the industry was in need of a more beneficial acquisition, and while Bendix was able and likely to make such an acquisition, Bendix effected a merger with Fram—thus eliminating the competition, which clearly would have been substantial, that Fram and other industry members would have had to meet if Bendix had made, and expanded, a toehold acquisition of a small firm.

The respondents admit—even argue—that integration or other efficiency-promoting methods will not result from the merger between Fram and Bendix.⁷⁵ In any event, a toehold merger could surely

⁷⁴ *General Foods Corp.*, F.T.C. Docket 8600 (decided Mar. 11, 1966) [69 F.T.C. 380], *aff'd*, 386 F. 2d 936 (3d Cir., 1967), *cert. denied*, 391 U.S. 919 (1968), makes clear that there is no necessity of finding that the acquiring firm was the only or most likely potential entrant or competitor. Indeed, in *General Foods* the Commission concluded, at page 28 [67 F.T.C. at 426]:

"The record indicates that another major multi-product company—Colgate-Palmolive Company—was engaged in the sale of household steel wool in Canada (Tr. 947-48) and thus could be regarded as a potential competitor of S.O.S. Presumably there were other companies engaged in the sale of low-cost, high-turnover commodities in supermarkets, which could also be considered to have been potential entrants. Therefore, the entry of General Foods into the market did not eliminate all potential competition."

⁷⁵ Respondents' Answering Brief at 47-52. The respondents do seem to argue, however, that the merger will be procompetitive because Fram needs some assistance in fighting the threatened monopolization of the market by General Motors. *Id.* at 13-14. The record hardly supports such an implication. Rather, the record discloses that Fram, along with Purolator and General Motors, have jointly maintained a dominance in the automotive filter aftermarket; and that the Bendix-Fram merger would be unlikely to do anything more than adjust the shares in this triopoly.

have realized the potential competition which Bendix was capable of bringing to this market. But the Bendix-Fram merger removed not only the possibility of such a beneficial entry into the market, but also the threat of such entry by one of the few firms at the market's edge able to carry out that threat.

As we stated in *Beatrice Foods Co.*, *supra*, at 34 [67 F.T.C. at 720-721]:

The competitive effects are likely to be the most serious where the merger is between one of the dominant firms in a concentrated market and a substantial potential competitor. In such a case there is no improvement in the competitive structure of the market—for one dominant firm has simply been replaced by another—and substantial potential competition is eliminated. The dominant firms in the market no longer have to concern themselves with the consequences of entry by the potential competitor; he is already in. Nor need they cope with any additional competition as a result of his entry; he has not increased the number of substantial competitors in the market but simply taken the place of one of those competitors. The potential competitor enters the market in circumstances where there is no change in the competitive structure of the market, except that he is eliminated as a prospective entrant. Such a merger is even more injurious to competition if the acquired firm is a potential competitor in one or more of the acquiring firm's markets. For then potential competition is hurt twice: the merger eliminated the acquiring company as a potential entrant in the acquired firm's markets, and the acquired firm is eliminated as a potential entrant in the acquiring firm's markets.

VII. RELIEF

Only complete divestiture can return the two parties to a position which assures the viability of the potential competition forces derived from Bendix's existence at the edge of the passenger car filter replacement market. *Procter & Gamble Co.*, *supra*; *Diamond Alkali Co.*, F.T.C. Docket 8572 (cease and desist order, Oct. 2, 1967) [72 F.T.C. 700]; *United States v. E. I. duPont de Nemours & Co.*, 366, U.S. 316, 326, 327 (1961).⁷⁶ We see little reason to limit this divestiture to the passenger car filter replacement submarket,⁷⁷ or to the automotive filters line of commerce.⁷⁸ Virtually all of Fram's business related to various types of filters, and it might be damaging to

⁷⁶ "In the absence of proof to the contrary the assumption of this Commission must be that 'only divestiture can reasonably be expected to restore competition and make the affected markets whole again.'" *Diamond Alkali Co.*, *supra*, at 4 [72 F.T.C. at 742], quoting from *National Tea Co.*, F.T.C. Docket 7453, at 16 (decided Mar. 4, 1966) [69 F.T.C. 226].

⁷⁷ As stated in note 12, *supra*, if the merger is illegal because of the effect of the elimination of Bendix's potential competition upon the passenger car filter replacement submarket, it is no less illegal in the broader automotive filter market, where actual competition was eliminated.

⁷⁸ See Note, *Divestiture of Illegally Held Assets*, 65 Mich. L. Rev. 1574, 1578 (1966); Duke, *Scope of Relief Under Section 7 of the Clayton Act*, 63 Colum. L. Rev. 1192, 1209 (1963); *Pillsbury Mills, Inc.*, 57 F.T.C. 1274, 1413 (1960), rev'd on other grounds, 354 F. 2d 952 (5th Cir. 1966).

split off any of these lines to leave with Bendix. Such dismemberment would also be unfair to the new Fram.

We also believe that requiring prior Commission approval for Bendix's acquisitions for the next ten years in the automotive filter industry, as well as the aerospace filter and filter water separator industries is warranted, even though the hearing examiner found that the horizontal aspects of the merger between Bendix and Fram in these latter two lines of commerce were not illegal. While we have not discussed, since there is no need to do so, the merger's effects in those two lines of filter commerce, the close economic relationships between the various lines of filters, justify a prior approval limitation upon future acquisitions in these two lines of commerce as well. See *Luria Brothers*, 62 F.T.C. 243, 635-38 (1962), *aff'd.*, 389 F. 2d 847 (3rd Cir.), *cert. denied*, 393 U.S. 829 (1968); *Seeburg Corp.*, F.T.C. Docket 8682 (decided July 15, 1968), *aff'd.* 425 F. 2d 124 (6th Cir. 1970) (No. 19673).

FINDINGS OF FACT

The Commission adopts the Findings of Fact of the hearing examiner's initial decision, numbered 1-54 (except for the first sentences of Findings of Fact 45 and 50), and 56-57. Except where inconsistent with the findings made in the accompanying opinion, the Commission also adopts Findings of Fact 59-85. The Commission's other findings of fact are set forth in the accompanying opinion.

CONCLUSIONS

1. The Commission has jurisdiction of the subject matter of this proceeding and of the respondents.
2. Section 7 of the Clayton Act, as amended, prohibits any merger or corporate acquisition where the effect in any line of commerce in any section of the country may be substantially to lessen competition or to tend to create a monopoly.
3. The effect of the acquisition of Fram Corporation by The Bendix Corporation may be substantially to lessen competition in the manufacture and sale of automotive filters in the United States in violation of Section 7 of the Clayton Act, as amended.
4. Total divestiture of the acquired assets, as well as a prohibition, without prior approval of the Commission, of future acquisitions by The Bendix Corporation in the relevant lines of commerce as well as related lines of filter commerce, are both necessary and appropriate to remedy the anticompetitive effects of the unlawful acquisition.

It is ordered, That:

I

Respondent, The Bendix Corporation, a corporation, and its officers, directors, agents, representatives, employees, subsidiaries, affiliates, successors and assigns, within one year from the date this order becomes final, shall divest absolutely and in good faith all assets, properties, rights and privileges, tangible and intangible, including but not limited to all plants, equipment, trade names, trademarks and goodwill acquired by The Bendix Corporation as a result of its acquisition of the assets and business of Fram Corporation, together with all plants, machinery, buildings, improvements, equipment and other property of whatever description which has been or hereafter shall be added to the property of Fram Corporation since that acquisition.

II

By such divestiture none of the assets, properties, rights or privileges described in Paragraph I of this order shall be sold or transferred, directly or indirectly, to any person who is at the time of divestiture an officer, director, employee or agent of, or under the control or direction of The Bendix Corporation or any of its subsidiary or affiliate corporations, or who owns or controls, directly or indirectly, more than one(1) per cent of the outstanding shares of common stock of The Bendix Corporation, or to any purchaser who is not approved in advance by the Federal Trade Commission.

III

No method, plan or agreement of divestiture to comply with this order shall be adopted or implemented by The Bendix Corporation save upon such terms and conditions as first shall be approved by the Federal Trade Commission.

IV

Pending divestiture, the assets and business acquired from Fram Corporation shall be operated as a separate corporation, with separate books of account, separate management, separate assets, and separate personnel.

V

Pending divestiture, no substantial property or other assets of the separate corporation referred to in Paragraph IV herein shall be

Final Order

77 F.T.C.

sold, leased, otherwise disposed of or encumbered, other than in the normal course of business, without the consent of the Federal Trade Commission, and The Bendix Corporation shall not commingle any assets owned or controlled by such separate corporation with any assets owned or controlled by The Bendix Corporation.

VI

For a period of three years from the date this order becomes final, no individual employed by Fram Corporation or the separate corporation referred to in Paragraph IV herein shall be employed by The Bendix Corporation.

VII

Pending divestiture, the merchandising, purchasing, pricing and manufacturing policies of the separate corporation referred to in Paragraph IV herein and The Bendix Corporation shall be conducted independently of each other.

VIII

Pending divestiture, The Bendix Corporation shall, by all means consistent with prudent business judgment, maintain the separate corporation referred to in Paragraph IV herein as an independent entity and take no steps to impair such corporation's economic and financial position, so as to permit prompt divestiture and reestablishment of such corporation as an independent enterprise of competitive strength comparable to that which Fram Corporation enjoyed at the time of the acquisition.

IX

For ten (10) years from the date this order becomes final, The Bendix Corporation shall cease and desist from acquiring, directly or indirectly, without the prior approval of the Federal Trade Commission any part of the share capital or assets of any corporation engaged in the manufacture and/or sale of automotive filters, aerospace filters or filter water separators in the United States.

The provisions of this Paragraph IX shall include any arrangement pursuant to which The Bendix Corporation acquires the market share, in whole or in part, of any concern, corporate or noncorporate, which is engaged in the manufacture and/or sale of automotive filters, aerospace filters, or filter water separators, (a) through such concern's discontinuing the manufacture, production, marketing, distribution and/or sale of any of said products under its

own trade name or labels and thereafter distributing such products under The Bendix Corporation's trade name or labels, or (b) by reason of such concern's discontinuing the manufacture, production, marketing, distribution and/or sale of such products and thereafter transferring to The Bendix Corporation customer lists or in any other way making available to The Bendix Corporation access to customers or customer accounts.

X

The Bendix Corporation shall within sixty (60) days after the date of service of this order, and every ninety (90) days thereafter until The Bendix Corporation has fully complied with the provisions of this order, submit in writing to the Federal Trade Commission a report setting forth in detail the manner and form in which The Bendix Corporation intends to comply, is complying, or has complied with this order. All compliance reports shall include, among other things that may from time to time be required, a summary of all contacts and negotiations with potential purchasers of Fram Corporation, the identity of all such potential purchasers, and copies of all written communications to and from such potential purchasers.

XI

As used in this order the word "person" shall include all members of the immediate family of the individuals specified and shall include corporations, partnerships, associations and other legal entities, as well as natural persons.

IN THE MATTER OFRICHARD A. ROMAIN TRADING AS
EDUCATIONAL SERVICE COMPANYCONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF
THE FEDERAL TRADE COMMISSION ACT

*Docket 8781. Amended and Supplemental Complaint, July 31, 1969—
Decision, June 23, 1970*

Consent order requiring an individual trading as the Educational Service Company with headquarters in New York City and engaged in the selling of encyclopedias and children's books by door-to-door salesmen to cease mis-